



# LiDAR Ground Control Survey Report

USGS Ohio Statewide Phase 1 2019 B19 Project

USGS Contract: #G16PC00022

Woolpert Project: #79574

July 2020



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# Section 1: LiDAR Ground Control Survey Report

## Introduction

This report contains an explanation of the LiDAR ground control survey that supported the USGS Ohio Statewide Phase 1 2019 B19 Project. All surveys were performed in such a way as to achieve ground control accuracies that meet or exceed supporting QL1 and QL0 (Cuyahoga County) LiDAR data as defined by the U.S. Geological Survey National Geospatial Program LiDAR Base Specification Version 1.3.

## Project Area

The project area is composed of approximately 12,808.6 square miles in northern Ohio, and consists of the following counties: Allen, Ashland, Auglaize, Crawford, Cuyahoga, Geauga, Hardin, Huron, Lake, Lorain, Marion, Morrow, Paulding, Portage, Richland, Van Wert, Williams, and Wyandot. The partial counties included are Ashtabula, Darke, Defiance, Delaware, Erie, Fulton, Hancock, Henry, Holmes, Knox, Logan, Lucas, Mahoning, Medina, Mercer, Putnam, Sandusky, Seneca, Shelby, Stark, Summit, Trumbull, Union, Wayne, and Wood.

## Purpose

This project will support the 3DEP mission, the Natural Resources Conservation Service (NRCS) high resolution elevation enterprise program and the Federal Emergency Management Agency (FEMA) Risk Mapping, Assessment and Planning (MAP) program. The purpose of this survey was to establish three-dimensional coordinates for two hundred (200) LiDAR control points and four hundred fifty-six (456) LiDAR validation points. LiDAR control stations will be used as quality control for eventual LiDAR data with a minimum of 0.35-meter average point density as outlined in the U.S. Geological Survey National Geospatial Program LiDAR Base Specification Version 1.3.

## Date of Survey

The latest effort of ground control field operations took place on March 27, 2020.

## Monumentation

Woolpert field crews performed field reconnaissance to verify the existence and suitability of preselected existing National Geodetic Survey (NGS) and Continually Operating Reference Stations (CORS). These existing control stations were utilized to ensure that quality x, y, and z coordinate values were computed for each of the newly established LiDAR control stations. Photographs were collected with surveying equipment placed overtop the location of each respective control point.

Recovery information sheets for the newly established LiDAR control stations can be found in Section 4. A control diagram showing the ground control stations used to support this LiDAR project can be found in Section 5 of this report.



## Accuracy Standards

The data collected over the course of the field survey meets the National Standard for Spatial Database Accuracy (NSSDA) standards. The NSSDA standards specify that vertical accuracy be reported at the 95 percent confidence level for data tested by an independent source of higher accuracy.

Coordinates were compared against existing NGS control points and tested 0.159 US feet horizontal accuracy at a 95% confidence level.

Coordinates were compared against existing NGS control points and tested 0.150 US feet vertical accuracy at a 95% confidence level.

## Methodology

### Real-Time Kinematic (RTK) Global Navigation Satellite System (GNSS)

For this field effort, Woolpert field crews utilized multiple Woolpert-owned, Trimble Navigation R8 Series Model 2 and 3 receivers, in addition to Trimble Navigation R10 Series dual frequency GNSS receivers as both base stations and rovers. Woolpert field crews utilized multiple NGS Control Stations within and beyond the Medina County limits to collect all LiDAR control stations and validation points and adhere to required accuracies. RTK observations were performed on all LiDAR calibration points and validation points to collect data efficiently and accurately. Additionally, local geodetic control was recovered to validate the integrity of the survey data. The survey was conducted using a 1-second epoch rate, in a fixed solution RTK mode, with each observation lasting 180 seconds. Each station was occupied twice to ensure the necessary horizontal and vertical accuracies were being met for this project.

RTK surveys were performed where cellular phone coverage was available and where baseline distance accuracy was maintained.

### Static GNSS

In order to improve network geometry and successfully seed project coordinates to published NAD83 positions, CORS were incorporated into the project, allowing for one contiguous network and increased data redundancy.

### GNSS Data Analysis and Processing

All static GNSS observations were processed using Trimble Navigation's Trimble Business Center (TBC) 5.30 baseline processor with precise ephemeris. Both unconstrained and constrained adjustments were computed using trivial and nontrivial baselines. After an acceptable unconstrained least-squares adjustment was obtained, Woolpert performed a fully constrained least-squares adjustment by fixing the GNSS network to existing NGS control stations with known coordinate data. Fixed solutions were obtained for all vector baselines.

During this project, the following stations were constrained during the survey:



<b>1-D STATIONS</b>	
<b>Designation</b>	<b>PID</b>
1523	MB1812
AUG 75 12.45	LA2478
G 321	MB1563
J 272	KZ0966
M 176	MB1317
Y 316	MC1011

<b>2-D STATIONS</b>	
<b>Designation</b>	<b>PID</b>
17G B	AF7792
1061	DG7164
ASHCOPORT	MB2962
EXECPORT	MB2974
MAR 02 01	DG7207
NEW LYME	DG7215
792	MD0026
OHIO 722	MD0420
X 323	MB1620

<b>3-D STATIONS (CORS HAD ELLIPSOID HEIGHT CONSTRAINED)</b>	
<b>Designation</b>	<b>PID</b>
BGOH	DH3473
CELINA	LA0562
D 248	KZ1209
E 281	KY1826
G 18	MC0747
GARF	DF5362
GUST	AJ7190
H 348	LA2545
KNTN	DF4052
MTVR	DF4056
OHAL	DI1846
OHAS	DI1848
OHFN	DI2816
OHHA	DI1083
OHHU	DI2818
OHLA	DK6716
OHLC	DO4957
OHLO	DI2820
OHMA	DM4137
OHMN	DI1860
OHMR	DI2824
OHRI	DI2826
OHSB	DN5844
OHUN	DI1686
OHWI	DI2830
R 344	MC1637



<b>3-D STATIONS (CORS HAD ELLIPSOID HEIGHT CONSTRAINED)</b>	
SIDN	AJ7196
T 23	KZ1449
TIFF	AJ7198
V 349	KZ2418
VNW A	AB6047
W 350	MC1644
ZOB B	AA3881

## Datum Reference and Final Coordinates

All new horizontal GPS control was based on the Ohio North State Plane Coordinate Zone (FIPS 3401), referenced to North American Datum 1983 (2011), expressed in U.S. Survey Feet. All vertical control was based on the North American Vertical Datum of 1988 (NAVD88) with GEOID12B (CONUS) applied to model the elevations, also expressed in U.S. Survey Feet. The coordinates for the ground control survey can be found in Section 2 of this report.

## Quality Assurance

Existing NGS published benchmarks were surveyed to assure that there were no discrepancies in the field observation data. Close examinations of the residuals showed no distortions in orientation or scale. The ground control data meets positional accuracies necessary to the desired mapping at a 95% confidence level as outlined in the Geospatial Positioning Accuracy Standards, Part 3: National Standard for Spatial Data Accuracy (NSSDA), published by the Federal Geographic Data Committee (FGDC-STD-007.3-1998).



## Section 2: Ground Control Station Coordinate Listings

This section includes a complete listing of the final coordinates, orthometric heights, and ellipsoid heights for the USGS Ohio Statewide Phase 1 2019 B19 Project.

**USGS Ohio Statewide Phase 1 2019 B19  
LiDAR Project  
Woolpert Project #: 79574**

*Horizontal Datum: NAD 83(2011)  
Vertical Datum: NAVD 88  
Units: U.S. Survey Feet  
State Plane Zone: Ohio North (3401)  
Geoid Model: Geoid 12B  
Coordinate System: Grid  
Field Survey: Completed March 2020*

<b>LiDAR Calibration Stations:</b>				
<b>Station Name</b>	<b>Northing (USFT)</b>	<b>Easting (USFT)</b>	<b>Elevation (USFT)</b>	<b>Station Description</b>
1001_2019_OH	751801.70	1460556.31	852.86	LIGHT ASPHALT
1002_2019_OH	732535.90	1447277.23	829.58	LIGHT ASPHALT
1003_2019_OH	714971.48	1443837.16	801.62	LIGHT ASPHALT
1004_2019_OH	697219.81	1435374.08	773.46	LIGHT ASPHALT
1005_2019_OH	678891.00	1438943.35	717.27	LIGHT ASPHALT
1006_2019_OH	657550.82	1445512.13	713.38	LIGHT ASPHALT
1007_2019_OH	639671.51	1448678.22	702.08	LIGHT ASPHALT
1008_2019_OH	621629.89	1457755.45	716.82	CORNER OF CONCRETE
1009_2019_OH	603198.84	1457267.87	722.40	CONCRETE
1010_2019_OH	583046.70	1456807.86	712.54	LIGHT ASPHALT
1011_2019_OH	559769.05	1466588.58	715.57	BARE EARTH
1012_2019_OH	537993.28	1481965.99	719.99	GRAVEL
1013_2019_OH	515864.16	1471130.10	721.73	LIGHT ASPHALT
1014_2019_OH	493781.92	1473434.01	724.32	LIGHT ASPHALT
1015_2019_OH	472439.13	1473514.34	739.89	LIGHT ASPHALT
1016_2019_OH	450606.49	1473156.82	752.15	LIGHT ASPHALT
1017_2019_OH	432427.05	1470965.37	775.70	LIGHT ASPHALT
1018_2019_OH	414832.70	1460499.30	797.19	LIGHT ASPHALT
1019_2019_OH	393601.17	1466796.59	812.59	LIGHT ASPHALT
1020_2019_OH	375391.87	1464255.13	869.42	LIGHT ASPHALT
1021_2019_OH	354577.45	1469179.87	848.42	LIGHT ASPHALT
1022_2019_OH	337052.65	1452331.28	866.52	LIGHT ASPHALT
1023_2019_OH	319272.39	1445535.39	868.50	LIGHT ASPHALT



LiDAR Calibration Stations:				
Station Name	Northing (USFT)	Easting (USFT)	Elevation (USFT)	Station Description
1024_2019_OH	298427.26	1446264.66	908.81	LIGHT ASPHALT
1025_2019_OH	280932.59	1445829.15	960.56	END OF STRIPE
1026_2019_OH	262557.14	1429582.03	950.51	LIGHT ASPHALT
1027_2019_OH	582468.68	1772825.56	685.32	GRAVEL
1028_2019_OH	563778.77	1752701.92	724.53	TALL WEEDS
1029_2019_OH	546081.92	1784477.30	729.46	LIGHT ASPHALT
1030_2019_OH	527274.84	1769075.22	769.44	LIGHT ASPHALT
1031_2019_OH	509113.00	1783240.71	789.59	LIGHT ASPHALT
1032_2019_OH	487309.97	1783457.28	837.97	LIGHT ASPHALT
1033_2019_OH	465767.09	1783416.36	845.23	LIGHT ASPHALT
1034_2019_OH	444367.58	1783228.82	871.61	LIGHT ASPHALT
1035_2019_OH	423120.42	1764675.17	862.83	LIGHT ASPHALT
1036_2019_OH	405280.80	1762813.71	893.05	LIGHT ASPHALT
1037_2019_OH	384514.94	1779404.78	907.45	LIGHT ASPHALT
1038_2019_OH	363499.46	1798831.89	977.25	LIGHT ASPHALT
1039_2019_OH	345367.42	1793329.47	964.39	LIGHT ASPHALT
1040_2019_OH	324810.01	1680377.07	1033.78	LIGHT ASPHALT
1041_2019_OH	303870.59	1670128.23	1073.93	END OF STRIPE
1042_2019_OH	289905.24	1769907.44	925.73	CONCRETE
1043_2019_OH	279085.78	1784361.57	924.07	LIGHT ASPHALT
1044_2019_OH	663360.02	1916818.45	578.47	LIGHT ASPHALT
1045_2019_OH	708470.48	1911714.57	579.92	LIGHT ASPHALT
1046_2019_OH	644579.77	1915661.46	591.20	LIGHT ASPHALT
1047_2019_OH	626313.98	1928095.85	636.86	LIGHT ASPHALT
1048_2019_OH	609113.13	1933660.17	647.93	LIGHT ASPHALT
1049_2019_OH	587532.39	1939453.88	673.37	LIGHT ASPHALT
1050_2019_OH	562755.37	1943981.19	824.71	LIGHT ASPHALT
1051_2019_OH	544902.97	1927728.39	819.83	LIGHT ASPHALT
1052_2019_OH	525975.72	1867655.29	907.99	LIGHT ASPHALT
1053_2019_OH	504042.79	1874029.41	936.64	LIGHT ASPHALT
1054_2019_OH	486841.47	1826084.33	949.38	LIGHT ASPHALT
1055_2019_OH	468082.48	1826072.46	972.17	LIGHT ASPHALT
1056_2019_OH	450446.08	1870641.48	1017.39	LIGHT ASPHALT
1057_2019_OH	432926.78	1932991.15	1139.78	LIGHT ASPHALT
1058_2019_OH	415515.20	1944011.96	1261.04	LIGHT ASPHALT
1059_2019_OH	398096.06	1967278.23	1145.22	LIGHT ASPHALT
1060_2019_OH	381034.81	1967413.51	1261.61	LIGHT ASPHALT
1061_2019_OH	363640.95	1963739.18	1400.33	LIGHT ASPHALT
1062_2019_OH	343292.14	1946433.92	1203.67	LIGHT ASPHALT
1063_2019_OH	325795.58	1929866.99	1277.29	LIGHT ASPHALT
1064_2019_OH	308791.25	1921241.50	1230.95	LIGHT ASPHALT
1065_2019_OH	287530.96	1913720.51	1157.40	LIGHT ASPHALT





LiDAR Calibration Stations:				
Station Name	Northing (USFT)	Easting (USFT)	Elevation (USFT)	Station Description
1066_2019_OH	269931.93	1918267.22	1303.98	LIGHT ASPHALT
1067_2019_OH	245641.63	1908926.12	1261.61	GRAVEL
1068_2019_OH	743864.40	2275718.25	623.76	LIGHT ASPHALT
1069_2019_OH	727750.08	2272760.13	627.60	CONCRETE
1070_2019_OH	707672.84	2259144.42	736.02	LIGHT ASPHALT
1071_2019_OH	691783.09	2218828.55	602.49	LIGHT ASPHALT
1072_2019_OH	666115.64	2214873.96	849.43	SHORT GRASS
1073_2019_OH	654495.10	2248032.75	1153.82	LIGHT ASPHALT
1074_2019_OH	646732.95	2251492.03	1207.97	CONCRETE
1075_2019_OH	615740.09	2240793.97	1065.85	LIGHT ASPHALT
1076_2019_OH	596468.65	2237835.97	980.16	LIGHT ASPHALT
1077_2019_OH	574155.04	2243529.26	1020.10	CONCRETE
1078_2019_OH	558308.48	2237340.30	946.05	LIGHT ASPHALT
1079_2019_OH	537177.90	2178840.66	1134.17	LIGHT ASPHALT
1080_2019_OH	520036.05	2204764.75	1066.95	GRAVEL
1081_2019_OH	503256.28	2191588.12	1124.07	TALL WEEDS
1082_2019_OH	482833.94	2211037.88	1119.96	LIGHT ASPHALT
1083_2019_OH	485403.30	2217618.01	963.50	LIGHT ASPHALT
1084_2019_OH	451717.71	2262693.67	1147.18	LIGHT ASPHALT
1085_2019_OH	844705.74	2507201.41	632.76	GRAVEL
1086_2019_OH	826445.73	2494057.19	724.39	LIGHT ASPHALT
1087_2019_OH	805335.26	2467990.24	860.59	LIGHT ASPHALT
1088_2019_OH	784394.82	2467641.92	902.66	LIGHT ASPHALT
1089_2019_OH	763510.39	2456816.81	933.47	LIGHT ASPHALT
1090_2019_OH	746917.89	2495380.44	1044.96	LIGHT ASPHALT
1091_2019_OH	727901.72	2472737.20	975.03	GRAVEL
1092_2019_OH	709364.96	2457177.09	1071.70	LIGHT ASPHALT
1093_2019_OH	689885.07	2457519.19	1086.47	LIGHT ASPHALT
1094_2019_OH	669684.34	2458047.00	1053.02	LIGHT ASPHALT
1095_2019_OH	653101.25	2451763.79	933.22	GRAVEL
1096_2019_OH	632968.61	2460320.23	1050.48	LIGHT ASPHALT
1097_2019_OH	615924.91	2462069.18	1069.59	LIGHT ASPHALT
1098_2019_OH	596239.93	2461765.09	1060.16	LIGHT ASPHALT
1099_2019_OH	579550.37	2461067.25	1089.67	LIGHT ASPHALT
1100_2019_OH	562580.82	2463132.28	1010.18	LIGHT ASPHALT
1101_2019_OH	535244.15	2471116.94	905.63	LONG GRASS
1102_2019_OH	704646.46	1917363.38	598.31	LIGHT ASPHALT
1103_2019_OH	700961.15	1914938.11	592.71	LIGHT ASPHALT
1104_2019_OH	489814.63	1422973.66	729.67	LIGHT ASPHALT
1105_2019_OH	428298.86	1586605.11	890.59	LIGHT ASPHALT
1106_2019_OH	597273.54	2081737.81	774.18	LIGHT ASPHALT
1107_2019_OH	642492.56	1417588.18	718.41	LIGHT ASPHALT



<b>LIDAR Calibration Stations:</b>				
<b>Station Name</b>	<b>Northing (USFT)</b>	<b>Easting (USFT)</b>	<b>Elevation (USFT)</b>	<b>Station Description</b>
1108_2019_OH	388151.46	1394858.88	826.10	LIGHT ASPHALT
1109_2019_OH	423450.40	1681347.00	895.90	LIGHT ASPHALT
1110_2019_OH	404602.21	1885513.46	1143.61	LIGHT ASPHALT
1111_2019_OH	573212.00	1907759.21	734.81	SHORT GRASS
1112_2019_OH	580397.65	2224185.06	879.84	LIGHT ASPHALT
1113_2019_OH	518084.52	2348346.63	1100.16	LIGHT ASPHALT
1114_2019_OH	729760.69	2497503.97	1083.74	LIGHT ASPHALT
1115_2019_OH	252779.72	1429266.28	953.93	LIGHT ASPHALT
1116_2019_OH	362099.59	1582247.61	1045.11	LIGHT ASPHALT
1117_2019_OH	719197.55	2248222.28	615.96	LIGHT ASPHALT
1118_2019_OH	705030.14	2247350.24	722.87	LIGHT ASPHALT
1119_2019_OH	712168.29	2248712.06	653.43	LIGHT ASPHALT
1120_2019_OH	698234.47	2248006.09	837.53	LIGHT ASPHALT
1121_2019_OH	685283.77	2243106.90	976.42	LIGHT ASPHALT
1122_2019_OH	678964.17	2230182.36	947.70	LIGHT ASPHALT
1123_2019_OH	672507.80	2230236.72	994.39	LIGHT ASPHALT
1124_2019_OH	660289.51	2206467.13	689.36	LIGHT ASPHALT
1125_2019_OH	641771.14	2141690.36	746.08	LIGHT ASPHALT
1126_2019_OH	635727.39	2126846.92	776.07	LIGHT ASPHALT
1127_2019_OH	627324.65	2123010.52	781.89	CONCRETE
1128_2019_OH	620979.04	2128423.37	778.34	CONCRETE
1129_2019_OH	608810.34	2241118.90	1011.15	LIGHT ASPHALT
1130_2019_OH	602660.80	2243183.17	1029.97	LIGHT ASPHALT
1131_2019_OH	506806.53	2198265.36	1128.04	CORNER OF STOP BAR
1132_2019_OH	590519.12	2235858.62	963.53	LIGHT ASPHALT
1133_2019_OH	572847.49	2230761.03	703.10	LIGHT ASPHALT
1134_2019_OH	566865.04	2249975.43	1010.82	LIGHT ASPHALT
1135_2019_OH	561807.44	2256222.50	1007.60	LIGHT ASPHALT
1136_2019_OH	586249.41	2268923.38	1076.47	SHORT GRASS
1137_2019_OH	547691.91	2275430.59	1041.82	LIGHT ASPHALT
1138_2019_OH	681360.44	1899125.52	657.56	LIGHT ASPHALT
1139_2019_OH	699603.15	1875511.18	587.87	LIGHT ASPHALT
1140_2019_OH	717552.97	1877896.77	604.86	LIGHT ASPHALT
1141_2019_OH	724383.47	1885477.15	576.08	LIGHT ASPHALT
1142_2019_OH	737024.95	1883620.00	578.99	LIGHT ASPHALT
1143_2019_OH	703982.64	1805461.37	577.83	LIGHT ASPHALT
1144_2019_OH	734690.03	1723876.22	580.64	LIGHT ASPHALT
1145_2019_OH	736599.27	1728300.08	578.92	LIGHT ASPHALT
1146_2019_OH	753303.53	1701201.67	577.70	LIGHT ASPHALT
1147_2019_OH	742264.91	1695864.90	587.34	LIGHT ASPHALT
1148_2019_OH	729711.71	1755513.30	572.41	LIGHT ASPHALT
1149_2019_OH	720992.53	1757141.64	575.16	LIGHT ASPHALT



LiDAR Calibration Stations:				
Station Name	Northing (USFT)	Easting (USFT)	Elevation (USFT)	Station Description
1150_2019_OH	676017.86	1841104.67	576.50	LIGHT ASPHALT
1151_2019_OH	259454.93	1877813.90	1105.36	LIGHT ASPHALT
1152_2019_OH	548939.75	2473158.02	1046.48	LIGHT ASPHALT
1153_2019_OH	501126.82	2334886.72	1135.37	GRAVEL
1154_2019_OH	484192.06	2270645.78	1111.17	LIGHT ASPHALT
1155_2019_OH	467374.66	2288651.43	1170.73	CORNER OF CONCRETE
1156_2019_OH	476757.47	2093936.83	1060.58	LIGHT ASPHALT
1157_2019_OH	497295.94	2126483.36	1110.17	CONCRETE
1158_2019_OH	517285.52	2070524.13	942.51	LIGHT ASPHALT
1159_2019_OH	557543.91	2176684.24	1182.59	LIGHT ASPHALT
1160_2019_OH	577415.38	2139495.45	989.82	CONCRETE
1161_2019_OH	615719.42	2071947.74	738.94	CONCRETE
1162_2019_OH	633533.59	2069099.69	728.20	LIGHT ASPHALT
1163_2019_OH	651639.90	2060259.53	615.55	LIGHT ASPHALT
1164_2019_OH	670328.87	2098985.95	607.43	CONCRETE
1165_2019_OH	658883.45	2115413.24	631.02	CONCRETE
1166_2019_OH	458059.83	1969211.96	1183.92	LIGHT ASPHALT
1167_2019_OH	478053.34	2011147.87	1171.97	LIGHT ASPHALT
1168_2019_OH	739536.58	1565437.24	741.72	LIGHT ASPHALT
1169_2019_OH	512421.95	1582479.99	784.77	LIGHT ASPHALT
1170_2019_OH	457842.82	1396057.40	760.73	GRAVEL
1171_2019_OH	473031.99	1676989.51	812.00	LIGHT ASPHALT
1172_2019_OH	794756.03	2417309.40	671.41	LIGHT ASPHALT
1173_2019_OH	639175.91	2365952.48	1235.16	GRAVEL
1174_2019_OH	551559.16	2009376.72	910.68	LIGHT ASPHALT
1175_2019_OH	705884.05	1802586.75	575.46	LIGHT ASPHALT
1176_2019_OH	670633.39	1836601.10	577.99	LIGHT ASPHALT
1177_2019_OH	670547.79	1868123.39	586.23	LIGHT ASPHALT
1178_2019_OH	680940.78	2273551.83	1081.39	LIGHT ASPHALT
1179_2019_OH	729617.04	2380262.88	1062.18	LIGHT ASPHALT
1180_2019_OH	637341.81	2004404.55	598.85	LIGHT ASPHALT
1181_2019_OH	640939.06	2013615.82	604.70	CONCRETE
1182_2019_OH	363987.26	2074901.54	989.30	ASPHALT
1183_2019_OH	315674.79	2007216.57	1237.50	ASPHALT
1184_2019_OH	294871.51	1552899.31	1011.92	ASPHALT
1185_2019_OH	259949.70	1326460.66	1019.08	LIGHT ASPHALT
1186_2019_OH	750228.70	1336065.64	1088.46	LIGHT ASPHALT
1187_2019_OH	526796.95	1324601.39	756.53	GRAVEL
1188_2019_OH	670554.83	2111843.19	616.71	CONCRETE
1189_2019_OH	585997.06	2139448.77	944.36	LIGHT ASPHALT
1190_2019_OH	629574.01	2274174.85	944.78	LIGHT ASPHALT
1191_2019_OH	574494.03	1334884.79	741.38	GRAVEL



<b>LIDAR Calibration Stations:</b>				
<b>Station Name</b>	<b>Northing (USFT)</b>	<b>Easting (USFT)</b>	<b>Elevation (USFT)</b>	<b>Station Description</b>
1192_2019_OH	418846.71	2038190.24	1048.95	LIGHT ASPHALT
1193_2019_OH	569004.29	2349107.81	1111.13	LIGHT ASPHALT
1194_2019_OH	421678.87	1323483.51	803.92	LIGHT ASPHALT
1195_2019_OH	668602.48	1331754.68	867.32	GRAVEL
1196_2019_OH	394580.19	1586162.38	992.51	LIGHT ASPHALT
1197_2019_OH	326590.32	1323817.59	863.48	GRAVEL
1198_2019_OH	773905.37	2337568.73	649.20	CONCRETE
1199_2019_OH	480730.56	2384019.78	1101.44	TALL WEEDS
1200_2019_OH	456588.78	2200500.05	1130.79	GRAVEL

<b>Independent Non Vegetated Vertical Accuracy Stations:</b>				
<b>Station Name</b>	<b>Northing (USFT)</b>	<b>Easting (USFT)</b>	<b>Elevation (USFT)</b>	<b>Station Description</b>
2001A_2019_OH	556492.46	2445200.71	884.83	CONCRETE
2001B_2019_OH	556445.77	2445200.08	884.24	CONCRETE
2002A_2019_OH	744735.31	2304511.05	677.49	CONCRETE
2002B_2019_OH	744787.91	2304503.10	677.45	CONCRETE
2003A_2019_OH	567317.03	1940380.94	779.33	CONCRETE
2003B_2019_OH	567284.00	1940364.30	779.61	CONCRETE
2004A_2019_OH	398110.64	1952452.41	1278.15	CONCRETE
2004B_2019_OH	398112.18	1952402.93	1276.91	CONCRETE
2005A_2019_OH	359563.55	1660092.25	1000.25	CONCRETE
2005B_2019_OH	359565.29	1660054.76	999.17	CONCRETE
2006A_2019_OH	508037.34	1667260.47	813.86	CONCRETE
2006B_2019_OH	508044.91	1667310.04	814.43	CONCRETE
2007A_2019_OH	391517.73	1534935.10	890.88	CONCRETE
2007B_2019_OH	391517.98	1534875.53	890.73	CONCRETE
2008A_2019_OH	329151.47	1393497.77	876.38	CONCRETE
2008B_2019_OH	329116.59	1393496.93	876.49	CONCRETE
2009A_2019_OH	545994.16	1397277.90	721.71	CONCRETE
2009B_2019_OH	546042.40	1397290.06	721.32	CONCRETE
2010A_2019_OH	702343.75	1910858.97	590.63	BRICK
2010B_2019_OH	702351.58	1910832.10	590.14	BRICK
2011_2019_OH	551522.08	1337167.08	740.25	GRAVEL
2012_2019_OH	556494.66	1342478.72	736.82	CONCRETE
2013_2019_OH	558974.65	1349874.90	733.70	ARROW
2014_2019_OH	557676.14	1353710.78	734.56	GRAVEL
2015_2019_OH	561164.43	1355775.62	731.74	CORNER OF CONCRETE
2016_2019_OH	563421.67	1357972.45	729.74	GRAVEL
2017_2019_OH	650824.32	1347449.27	824.38	GRAVEL
2018_2019_OH	656645.18	1362787.97	849.41	GRAVEL
2019_2019_OH	663417.31	1349696.84	844.87	GRAVEL



Independent Non Vegetated Vertical Accuracy Stations:				
Station Name	Northing	Easting	Elevation	Station Description
	(USFT)	(USFT)	(USFT)	
2020_2019_OH	675162.83	1347007.19	868.23	CORNER OF RR X
2021_2019_OH	686356.78	1352696.11	885.34	GRAVEL
2022_2019_OH	696918.08	1358163.56	875.10	CORNER OF RR X
2023_2019_OH	713325.17	1347717.06	930.75	GRAVEL
2024_2019_OH	735564.12	1354409.46	1021.51	GRAVEL
2025_2019_OH	735039.88	1407356.93	874.73	GRAVEL
2026_2019_OH	736911.37	1460446.99	824.71	GRAVEL
2027_2019_OH	705534.15	1428851.81	825.82	GRAVEL
2028_2019_OH	685075.39	1405519.73	821.55	GRAVEL
2029_2019_OH	675063.01	1381234.53	874.21	GRAVEL
2030_2019_OH	733709.29	1501212.40	734.28	CORNER OF STOP BAR
2031_2019_OH	743493.83	1539059.45	766.03	LIGHT ASPHALT
2032_2019_OH	740905.44	1582553.75	727.31	GRAVEL
2033_2019_OH	733732.29	1557855.25	750.78	GRAVEL
2034_2019_OH	744744.67	1559388.69	744.14	GRAVEL
2035_2019_OH	744275.43	1570643.42	735.00	GRAVEL
2036_2019_OH	738206.13	1526323.71	786.96	LIGHT ASPHALT
2037_2019_OH	653260.43	2180465.82	734.51	CORNER STOP BAR
2038_2019_OH	660507.73	2199835.38	677.53	CORNER CROSSWALK BAR
2039_2019_OH	688229.27	1495131.88	748.32	GRAVEL
2040_2019_OH	674328.62	1484337.78	737.92	LIGHT ASPHALT
2041_2019_OH	681249.84	1454182.78	718.57	LIGHT ASPHALT
2042_2019_OH	648621.36	1406259.99	739.19	CORNER OF CONCRETE
2043_2019_OH	632316.82	1395626.46	727.88	GRAVEL
2044_2019_OH	616883.37	1378388.59	740.09	GRAVEL
2045_2019_OH	617236.50	1351935.55	808.63	GRAVEL
2046_2019_OH	595818.12	1366827.92	725.08	GRAVEL
2047_2019_OH	637661.40	2238604.35	1035.67	CORNER OF STOP BAR
2048_2019_OH	651312.68	2220509.46	930.30	CORNER CROSSWALK BAR
2049_2019_OH	676346.09	2244813.44	1037.22	ARROW
2050_2019_OH	513461.02	1345746.85	751.46	GRAVEL
2051_2019_OH	619628.54	1431086.96	699.63	CORNER OF CONCRETE
2052_2019_OH	502785.31	1407248.14	728.80	GRAVEL
2053_2019_OH	462143.95	1360195.67	782.56	CORNER OF CONCRETE
2054_2019_OH	372978.10	1408228.02	819.94	CORNER STOP BAR
2055_2019_OH	346671.48	1355282.74	864.10	GRAVEL
2056_2019_OH	298575.45	1359172.54	929.76	LIGHT ASPHALT
2057_2019_OH	278319.86	1342692.24	955.73	LIGHT ASPHALT
2058_2019_OH	263322.52	1339563.92	1027.53	LIGHT ASPHALT
2059_2019_OH	271632.16	1371546.86	966.94	LIGHT ASPHALT
2060_2019_OH	274450.27	1413405.87	980.78	CORNER OF CONCRETE
2061_2019_OH	286347.95	1462619.55	963.48	CORNER OF STOP BAR



<b>Independent Non Vegetated Vertical Accuracy Stations:</b>				
<b>Station Name</b>	<b>Northing (USFT)</b>	<b>Easting (USFT)</b>	<b>Elevation (USFT)</b>	<b>Station Description</b>
2062_2019_OH	329936.45	1468973.29	900.75	GRAVEL
2063_2019_OH	327966.76	1528268.98	1004.63	LIGHT ASPHALT
2064_2019_OH	356563.38	1602050.81	972.62	GRAVEL
2065_2019_OH	391379.40	1601784.93	978.66	ARROW
2066_2019_OH	406890.72	1602020.14	953.56	CONCRETE
2067_2019_OH	404774.85	1566469.33	912.42	LIGHT ASPHALT
2068_2019_OH	428703.84	1515258.44	790.06	LIGHT ASPHALT
2069_2019_OH	466876.04	1441251.12	743.66	LIGHT ASPHALT
2070_2019_OH	472145.70	1518313.16	741.30	LIGHT ASPHALT
2071_2019_OH	521363.64	1518869.86	727.26	GRAVEL
2072_2019_OH	491364.78	1576910.89	750.04	GRAVEL
2073_2019_OH	470312.02	1560698.65	774.95	CORNER OF STOP BAR
2074_2019_OH	451937.69	1585350.25	816.44	CORNER OF PAINTED X
2075_2019_OH	452286.30	1629556.58	849.78	CORNER OF PAINT
2076_2019_OH	426863.55	1650088.54	931.85	GRAVEL
2077_2019_OH	395085.73	1663168.29	904.54	LIGHT ASPHALT
2078_2019_OH	378666.67	1692406.83	923.00	LIGHT ASPHALT
2079_2019_OH	370700.73	1724087.33	890.26	CORNER OF STOP BAR
2080_2019_OH	338725.51	1719571.34	930.86	LIGHT ASPHALT
2081_2019_OH	425519.62	1727453.00	825.31	LIGHT ASPHALT
2082_2019_OH	471705.37	1719615.66	833.63	CORNER OF STOP BAR
2083_2019_OH	482019.67	1683596.05	800.30	GRAVEL
2084_2019_OH	498836.68	1747243.46	843.11	GRAVEL
2085_2019_OH	533594.25	1752140.69	772.56	CORNER OF PAINT STRIPE
2086_2019_OH	547931.45	1816892.92	799.50	LIGHT ASPHALT
2087_2019_OH	485501.90	1852447.38	970.65	GRAVEL
2088_2019_OH	422107.12	1854224.75	1029.39	GRAVEL
2089_2019_OH	367756.76	1862464.59	1039.85	GRAVEL
2090_2019_OH	316543.57	1847857.32	998.10	GRAVEL
2091_2019_OH	316850.52	1799709.75	983.45	LIGHT ASPHALT
2092_2019_OH	280353.03	1878288.87	1105.78	GRAVEL
2093_2019_OH	369466.96	1933171.75	1451.02	GRAVEL
2094_2019_OH	359437.25	2021235.58	965.62	LIGHT ASPHALT
2095_2019_OH	386961.43	2054240.68	1090.56	CORNER OF STOP BAR
2096_2019_OH	410465.60	2032984.14	1126.06	GRAVEL
2097_2019_OH	444617.60	2019052.40	1039.13	CORNER STOP BAR
2098_2019_OH	453449.33	1968710.69	1163.64	GRAVEL
2099_2019_OH	496447.92	1961863.27	1040.18	ARROW
2100_2019_OH	548170.38	2021071.38	905.76	CORNER OF STOP BAR
2101_2019_OH	499659.23	2071652.38	1056.72	CORNER OF STOP BAR
2102_2019_OH	500704.58	2106380.32	1062.73	CORNER OF CONCRETE
2103_2019_OH	524515.54	2080596.41	870.26	GRAVEL





Independent Non Vegetated Vertical Accuracy Stations:				
Station Name	Northing	Easting	Elevation	Station Description
	(USFT)	(USFT)	(USFT)	
2104_2019_OH	496378.89	2019936.45	1123.95	GRAVEL
2105_2019_OH	579893.58	1993917.98	860.35	LIGHT ASPHALT
2106_2019_OH	616011.39	2036904.77	790.26	CORNER OF STOP BAR
2107_2019_OH	597616.96	2081641.65	777.69	GRAVEL
2108_2019_OH	638675.02	2094120.60	709.39	CORNER OF STOP BAR
2109_2019_OH	637268.30	2197017.53	696.54	CORNER OF CONCRETE
2110_2019_OH	584064.83	2176138.58	890.78	GRAVEL
2111_2019_OH	572746.41	2129792.97	872.01	GRAVEL
2112_2019_OH	539758.58	2136073.27	1103.69	CORNER OF STOP BAR
2113_2019_OH	536795.70	2175896.57	1121.06	GRAVEL
2114_2019_OH	586275.94	2213596.11	1108.30	GRAVEL
2115_2019_OH	485942.32	2265655.85	1095.75	GRAVEL
2116_2019_OH	497139.47	2293458.42	1183.19	GRAVEL
2117_2019_OH	497635.38	2313217.17	1139.02	GRAVEL
2118_2019_OH	497223.89	2337139.64	1127.72	GRAVEL
2119_2019_OH	497909.02	2368641.31	1069.94	END OF STRIPE
2120_2019_OH	534397.78	2367699.79	1023.88	GRAVEL
2121_2019_OH	549386.55	2404269.42	932.34	LIGHT ASPHALT
2122_2019_OH	577441.65	2484484.02	1133.84	LIGHT ASPHALT
2123_2019_OH	632420.73	2498481.03	946.17	CORNER OF STOP BAR
2124_2019_OH	672982.76	2487660.08	1017.08	GRAVEL
2125_2019_OH	704959.63	2485122.46	1068.60	GRAVEL
2126_2019_OH	727972.55	2457519.07	1017.60	GRAVEL
2127_2019_OH	747101.77	2437897.94	956.48	GRAVEL
2128_2019_OH	774914.81	2417341.88	818.77	ARROW
2129_2019_OH	780000.72	2364246.98	672.15	ARROW
2130_2019_OH	739180.59	2347267.00	1020.91	LIGHT ASPHALT
2131_2019_OH	806191.50	2493511.96	872.70	CORNER OF CONCRETE
2132_2019_OH	768314.96	2494813.12	961.20	GRAVEL
2133_2019_OH	710047.67	2380807.73	1078.04	LIGHT ASPHALT
2134_2019_OH	688853.52	2359529.99	1270.61	CORNER OF STOP BAR
2135_2019_OH	671508.83	2355066.93	1254.18	CORNER OF CONCRETE
2136_2019_OH	670131.87	2315169.49	1272.09	GRAVEL
2137_2019_OH	678164.70	2276666.13	1088.08	CORNER OF STOP BAR
2138_2019_OH	656448.20	2288263.51	1064.63	CORNER OF STOP BAR
2139_2019_OH	616553.88	2295471.49	1076.47	LIGHT ASPHALT
2140_2019_OH	590325.36	2291241.12	1172.69	CORNER OF STOP BAR
2141_2019_OH	554800.85	2286906.96	1080.06	CORNER OF STOP BAR
2142_2019_OH	534220.64	2236829.34	924.62	LIGHT ASPHALT
2143_2019_OH	577942.74	2340271.62	1171.66	GRAVEL
2144_2019_OH	623995.03	2357994.59	1106.77	GRAVEL
2145_2019_OH	601818.44	2388165.05	916.87	CORNER OF STOP BAR



Independent Non Vegetated Vertical Accuracy Stations:				
Station Name	Northing	Easting	Elevation	Station Description
	(USFT)	(USFT)	(USFT)	
2146_2019_OH	628358.81	2415687.23	867.18	GRAVEL
2147_2019_OH	602452.67	2431285.01	930.27	GRAVEL
2148_2019_OH	683667.02	2415989.95	903.64	LIGHT ASPHALT
2149_2019_OH	656697.00	2392085.58	851.54	CORNER OF CONCRETE
2150_2019_OH	564468.06	1970949.03	936.85	GRAVEL
2151_2019_OH	543761.05	1971215.61	945.25	GRAVEL
2152_2019_OH	527335.49	1917163.54	835.53	GRAVEL
2153_2019_OH	563779.18	1850673.25	810.86	GRAVEL
2154_2019_OH	572141.73	1883864.66	789.40	CORNER OF STOP BAR
2155_2019_OH	614157.85	1898868.11	716.49	CORNER OF STOP BAR
2156_2019_OH	635447.12	1889313.01	622.40	GRAVEL
2157_2019_OH	611956.07	1989978.18	758.80	GRAVEL
2158_2019_OH	632991.09	2019295.17	658.29	CORNER OF PAINT
2159_2019_OH	368186.81	1344508.10	824.78	GRAVEL
2160_2019_OH	370109.86	1396758.78	818.08	GRAVEL
2161_2019_OH	399044.22	1378288.50	831.29	CORNE OF STOP BAR
2162_2019_OH	402894.92	1337783.02	797.77	GRAVEL
2163_2019_OH	423699.54	1352026.77	820.78	LIGHT ASPHALT
2164_2019_OH	327064.61	1354832.57	854.72	GRAVEL
2165_2019_OH	351079.17	1392980.80	836.75	GRAVEL
2166_2019_OH	360700.02	1443489.72	830.91	GRAVEL
2167_2019_OH	412798.77	1426923.49	805.93	LIGHT ASPHALT
2168_2019_OH	472910.75	1406551.13	746.72	GRAVEL
2169_2019_OH	510286.95	1380872.53	740.57	GRAVEL
2170_2019_OH	522658.11	1439549.97	715.05	GRAVEL
2171_2019_OH	562555.20	1432501.64	698.74	LIGHT ASPHALT
2172_2019_OH	561407.61	1428906.17	710.94	LIGHT ASPHALT
2173_2019_OH	596156.05	1404226.33	710.41	CENTER OF RR X
2174_2019_OH	581604.55	1348192.39	735.89	GRAVEL
2175_2019_OH	572375.04	1342512.61	732.42	GRAVEL
2176_2019_OH	306913.86	1504670.67	1015.60	LIGHT ASPHALT
2177_2019_OH	302037.15	1479047.31	927.72	GRAVEL
2178_2019_OH	339142.66	1497374.78	921.70	LIGHT ASPHALT
2179_2019_OH	354738.78	1527441.74	911.64	GRAVEL
2180_2019_OH	348562.12	1559587.45	1067.42	GRAVEL
2181_2019_OH	372281.75	1563327.38	983.75	GRAVEL
2182_2019_OH	379974.38	1632677.30	1027.52	GRAVEL
2183_2019_OH	338165.00	1641980.71	1088.75	LIGHT ASPHALT
2184_2019_OH	354502.91	1696039.20	975.77	GRAVEL
2185_2019_OH	357383.50	1745210.31	892.16	LIGHT ASPHALT
2186_2019_OH	345657.12	1773431.38	931.34	GRAVEL
2187_2019_OH	378008.53	1828703.87	998.64	GRAVEL





**Independent Non Vegetated Vertical Accuracy Stations:**

Station Name	Northing (USFT)	Easting (USFT)	Elevation (USFT)	Station Description
2188_2019_OH	418961.64	1799102.31	944.52	GRAVEL
2189_2019_OH	452572.95	1825669.47	993.94	GRAVEL
2190_2019_OH	492073.15	1613487.32	771.02	GRAVEL
2191_2019_OH	452321.57	1676791.94	838.62	GRAVEL
2192_2019_OH	412433.18	1685350.23	930.57	GRAVEL
2193_2019_OH	281539.22	1374621.53	962.62	CORNER OF STOP BAR
2194_2019_OH	509618.85	1640790.95	771.16	CORNER OF STOP BAR
2195_2019_OH	307486.62	1376581.14	901.26	CENTER OF STRIPE
2196_2019_OH	330098.06	1436582.88	912.39	END OF STRIPE
2197_2019_OH	336697.21	1502135.47	888.79	LIGHT ASPHALT
2198_2019_OH	496941.21	1541537.16	729.36	CORNER OF STOP BAR
2199_2019_OH	331593.66	1488600.45	877.88	LIGHT ASPHALT
2200_2019_OH	330235.60	1500516.01	904.75	LIGHT ASPHALT
2201_2019_OH	428493.17	1560156.00	857.18	CENTER OF RR X
2202_2019_OH	430933.50	1456346.38	773.23	CENTERLINE OF STRIPE
2203_2019_OH	413050.43	1499288.89	803.91	CORNER OF PAINT STRIPE
2204_2019_OH	280908.36	1333888.99	932.69	CORNER OF CONCRETE
2205_2019_OH	411841.43	1522956.09	842.38	CORNER OF PAINT STRIPE
2206_2019_OH	375824.33	1517205.02	884.17	LIGHT ASPHALT
2207_2019_OH	483550.09	1499882.31	728.61	CORNER OF PAINT STRIPE
2208_2019_OH	683908.66	1471075.77	723.12	END OF STRIPE
2209_2019_OH	376957.46	1373199.43	812.59	CORNER OF STOP BAR
2210_2019_OH	706377.22	1395997.16	868.53	CORNER OF CROSSWALK BAR
2211_2019_OH	665168.43	1410559.75	745.65	CORNER OF CONCRETE
2212_2019_OH	649152.08	1909666.89	596.96	CORNER OF STOP BAR
2213_2019_OH	620236.06	2078568.23	714.15	CENTER OF STRIPE
2214_2019_OH	635406.92	2048172.77	649.62	CORNER OF STOP BAR
2215_2019_OH	591748.55	1436183.01	709.57	CENTER OF STRIPE
2216_2019_OH	647232.98	2060587.52	635.49	CORNER OF CONCRETE
2217_2019_OH	653889.29	2125993.71	699.64	ARROW
2218_2019_OH	622462.94	2138472.27	778.74	CENTERLINE OF STRIPE
2219_2019_OH	583872.52	2149714.03	1195.34	ARROW
2220_2019_OH	568817.98	2149651.20	1155.49	ARROW
2221_2019_OH	597935.35	2154967.01	946.52	ARROW
2222_2019_OH	672725.25	2232142.46	999.21	CORNER OF STOP BAR
2223_2019_OH	631215.52	2222472.60	941.87	CORNER OF CONCRETE
2224_2019_OH	625349.49	2262389.82	1040.67	ARROW
2225_2019_OH	706286.60	2235073.10	610.00	CENTERLINE OF STRIPE
2226_2019_OH	760209.43	2440739.26	951.21	CORNER OF STOP BAR
2227_2019_OH	358350.59	1934881.27	1296.65	CORNER OF STOP BAR
2228_2019_OH	409506.45	1904136.31	1144.69	CORNER OF RR X
2229_2019_OH	835476.37	2497957.66	659.85	CORNER OF STOP BAR



**Independent Non Vegetated Vertical Accuracy Stations:**

Station Name	Northing (USFT)	Easting (USFT)	Elevation (USFT)	Station Description
2230_2019_OH	497424.27	2236727.42	976.23	ARROW
2231_2019_OH	497593.01	1904974.04	946.56	CORNER OF CONCRETE
2232_2019_OH	462542.67	1905879.82	1056.77	CORNER OF STOP BAR
2233_2019_OH	444131.66	1897310.63	1156.48	CORNER OF STOP BAR
2234_2019_OH	594734.75	2259756.83	1091.97	ARROW
2235_2019_OH	352952.36	1838783.00	993.54	CORNER OF STOP BAR
2236_2019_OH	811617.22	2445398.91	689.64	ARROW
2237_2019_OH	335392.19	1989664.66	1082.24	CORNER OF STOP BAR
2238_2019_OH	377740.95	1991462.15	1086.99	CORNER OF STOP BAR
2239_2019_OH	811829.50	2431853.89	633.16	ARROW
2240_2019_OH	526556.73	2258439.91	1116.87	CORNER OF STOP BAR
2241_2019_OH	378814.30	2039718.29	1169.13	CORNER OF STOP BAR
2242_2019_OH	353128.76	2040800.56	944.22	CORNER OF STOP BAR
2243_2019_OH	546331.04	2260156.66	1101.72	ARROW
2244_2019_OH	328471.58	1982210.93	1131.07	CORNER OF STOP BAR
2245_2019_OH	566291.87	2264637.97	1128.73	ARROW
2246_2019_OH	303969.31	1855969.08	1005.62	CORNER OF STOP BAR
2247_2019_OH	316580.33	1771397.94	914.40	CORNER OF STOP BAR
2248_2019_OH	522604.39	2275688.35	1131.74	CORNER OF STOP BAR
2249_2019_OH	387640.96	1895105.80	1176.59	ARROW
2250_2019_OH	409799.30	1836078.91	993.50	ARROW
2251_2019_OH	390966.67	1885122.16	1138.34	CORNER OF STOP BAR
2252_2019_OH	417487.79	1845161.26	1025.90	ARROW
2253_2019_OH	422495.34	1836894.60	1003.12	LIGHT ASPHALT
2254_2019_OH	547181.05	2046271.85	857.41	ARROW
2255_2019_OH	677771.19	1878238.96	592.92	LIGHT ASPHALT
2256_2019_OH	738830.91	1711610.54	580.41	CENTER OF RR X
2257_2019_OH	702737.46	1807429.40	582.42	CORNER OF CONCRETE
2258_2019_OH	584070.94	2176146.30	890.93	GRAVEL
2259_2019_OH	661727.75	2196984.86	649.47	CORNER OF STRIPE
2260_2019_OH	603133.47	1457209.37	714.70	BARE EARTH
2261_2019_OH	535400.36	1461091.15	719.38	LIGHT ASPHALT
2262_2019_OH	486525.16	1651142.51	791.75	GRAVEL
2263_2019_OH	338732.96	1719640.59	929.21	LIGHT ASPHALT

**Independent Vegetated Vertical Accuracy Stations:**

Station Name	Northing (USFT)	Easting (USFT)	Elevation (USFT)	Station Description
3001_2019_OH	369517.37	1900024.33	1288.42	FOREST
3002_2019_OH	462843.94	1768953.96	807.68	FOREST
3003_2019_OH	519709.46	2366254.38	1039.13	FOREST
3004_2019_OH	732859.00	2390850.82	974.97	FOREST



Independent Vegetated Vertical Accuracy Stations:				
Station Name	Northing	Easting	Elevation	Station Description
	(USFT)	(USFT)	(USFT)	
3005_2019_OH	731785.62	2425896.11	861.15	FOREST
3006_2019_OH	708922.12	2428483.93	875.70	FOREST
3007_2019_OH	755654.41	2479181.74	1010.16	FOREST
3008_2019_OH	724760.35	2437031.62	925.36	FOREST
3009_2019_OH	729601.59	2380306.04	1060.99	FOREST
3010_2019_OH	720320.11	2357359.09	1249.37	FOREST
3011_2019_OH	712254.85	2339625.84	1303.86	FOREST
3012_2019_OH	766562.24	2386888.68	842.06	FOREST
3013_2019_OH	794848.40	2439474.23	825.75	FOREST
3014_2019_OH	584181.19	2406806.24	891.53	FOREST
3015_2019_OH	595983.91	2357902.04	984.95	FOREST
3016_2019_OH	469854.35	2214668.11	1008.05	FOREST
3017_2019_OH	514117.49	2307860.98	1084.42	FOREST
3018_2019_OH	527648.70	2180571.72	1047.85	FOREST
3019_2019_OH	573673.02	2178818.89	991.31	FOREST
3020_2019_OH	550804.21	2102787.10	1005.33	FOREST
3021_2019_OH	485638.77	2049053.29	1198.60	FOREST
3022_2019_OH	456088.39	2049923.22	1240.28	FOREST
3023_2019_OH	339813.12	1969699.91	1146.32	FOREST
3024_2019_OH	306483.56	1889110.51	1192.60	FOREST
3025_2019_OH	430977.24	1974084.19	1042.60	FOREST
3026_2019_OH	439051.94	1814957.18	947.26	FOREST
3027_2019_OH	542369.86	1734312.88	752.65	FOREST
3028_2019_OH	328798.85	1699678.20	976.42	FOREST
3029_2019_OH	396212.86	1723219.81	871.26	FOREST
3030_2019_OH	441849.17	1714253.71	867.33	FOREST
3031_2019_OH	469958.16	1646809.97	812.13	FOREST
3032_2019_OH	438493.49	1610683.28	870.90	FOREST
3033_2019_OH	341593.20	1612178.99	1030.72	FOREST
3034_2019_OH	344037.81	1541592.22	1005.76	FOREST
3035_2019_OH	294202.00	1392101.76	899.55	FOREST
3036_2019_OH	353743.15	1420230.90	838.97	FOREST
3037_2019_OH	411508.56	1412465.61	792.23	FOREST
3038_2019_OH	383273.46	1373629.75	802.96	FOREST
3039_2019_OH	696538.86	1378891.42	839.29	FOREST
3040_2019_OH	699260.89	1486412.70	741.64	FOREST
3041_2019_OH	721609.55	1459182.05	756.23	FOREST
3042_2019_OH	647692.57	1463480.61	716.43	FOREST
3043_2019_OH	633978.09	1367491.28	796.46	FOREST
3044_2019_OH	600812.58	1340407.37	772.50	FOREST
3045_2019_OH	585102.57	1378669.64	719.60	FOREST
3046_2019_OH	532016.93	1372851.15	725.90	FOREST



Independent Vegetated Vertical Accuracy Stations:				
Station Name	Northing	Easting	Elevation	Station Description
	(USFT)	(USFT)	(USFT)	
3047_2019_OH	493420.32	1433596.89	724.97	SHORT GRASS
3048_2019_OH	591864.32	2137449.60	895.93	TALL WEEDS
3049_2019_OH	611201.47	2113897.20	795.50	TALL WEEDS
3050_2019_OH	591361.84	2100162.36	811.15	TALL WEEDS
3051_2019_OH	641419.27	2321871.73	1247.15	TALL WEEDS
3052_2019_OH	486638.93	2285975.91	1161.06	TALL WEEDS
3053_2019_OH	518025.86	2337251.39	1185.35	TALL WEEDS
3054_2019_OH	560595.11	2381638.28	941.39	TALL GRASS
3055_2019_OH	279588.42	1846635.06	981.80	TALL WEEDS
3056_2019_OH	295025.03	1897097.13	1204.50	BARE EARTH
3057_2019_OH	319467.75	1907199.18	1357.21	TALL WEEDS
3058_2019_OH	340388.08	1933943.45	1368.57	TALL WEEDS
3059_2019_OH	330989.25	1948689.57	1390.94	BARE EARTH
3060_2019_OH	334352.16	2013980.62	1168.71	TALL GRASS
3061_2019_OH	352002.27	1983463.85	1150.94	SHORT GRASS
3062_2019_OH	369264.05	1981244.92	1229.66	TALL WEEDS
3063_2019_OH	393689.82	1927748.36	1360.85	TALL WEEDS
3064_2019_OH	375048.11	1951710.66	1249.98	TALL WEEDS
3065_2019_OH	427335.21	1889575.09	1115.20	TALL WEEDS
3066_2019_OH	393954.66	1816376.05	978.39	TALL WEEDS
3067_2019_OH	367557.63	1769317.78	898.91	TALL WEEDS
3068_2019_OH	364307.31	1634067.37	986.38	LONG GRASS
3069_2019_OH	406588.92	1633535.59	938.92	LONG GRASS
3070_2019_OH	433332.53	1686257.53	877.07	TALL WEEDS
3071_2019_OH	448412.14	1658514.53	868.77	TALL WEEDS
3072_2019_OH	468173.21	1602800.61	802.14	SHORT GRASS
3073_2019_OH	512590.91	1529524.89	733.86	TALL WEEDS
3074_2019_OH	528615.50	1497737.49	715.13	TALL WEEDS
3075_2019_OH	732933.28	1586484.26	719.45	TALL WEEDS
3076_2019_OH	735589.73	1516408.17	807.06	TALL WEEDS
3077_2019_OH	727780.69	1479951.77	729.07	TALL WEEDS
3078_2019_OH	718694.25	1423046.82	877.05	TALL WEEDS
3079_2019_OH	711083.86	1367722.34	890.93	TALL WEEDS
3080_2019_OH	659994.20	1397430.28	786.70	TALL WEEDS
3081_2019_OH	600899.13	1383078.50	722.62	TALL WEEDS
3082_2019_OH	577914.80	1361203.46	726.19	TALL WEEDS
3083_2019_OH	542431.34	1352413.33	738.55	TALL WEEDS
3084_2019_OH	484373.85	1360909.55	762.04	SHORT GRASS
3085_2019_OH	459964.91	1385224.34	762.75	SHORT GRASS
3086_2019_OH	284790.82	1362509.48	1002.74	SHORT GRASS
3087_2019_OH	271116.36	1358232.80	972.52	TALL WEEDS
3088_2019_OH	270581.19	1432563.36	967.78	TALL WEEDS



<b>Independent Vegetated Vertical Accuracy Stations:</b>				
<b>Station Name</b>	<b>Northing (USFT)</b>	<b>Easting (USFT)</b>	<b>Elevation (USFT)</b>	<b>Station Description</b>
3089_2019_OH	298279.74	1419310.05	903.45	SHORT GRASS
3090_2019_OH	291757.23	1474821.45	972.10	TALL WEEDS
3091_2019_OH	311731.22	1463308.98	896.93	TALL WEEDS
3092_2019_OH	315080.37	1485018.73	914.75	TALL WEEDS
3093_2019_OH	318018.54	1530945.58	1015.31	TALL WEEDS
3094_2019_OH	338284.77	1575921.81	1029.38	TALL GRASS
3095_2019_OH	362240.86	1580232.31	1044.45	TALL WEEDS
3096_2019_OH	367873.22	1539375.00	916.32	TALL WEEDS
3097_2019_OH	364171.86	1490887.18	843.65	TALL WEEDS
3098_2019_OH	476669.64	1997412.84	1108.07	TALL WEEDS
3099_2019_OH	457821.42	1942218.44	1042.45	TALL WEEDS
3100_2019_OH	434009.72	1953653.06	1182.84	TALL WEEDS
3101_2019_OH	354419.16	1897757.54	1296.36	TALL WEEDS
3102_2019_OH	335363.88	1858808.27	1022.76	TALL WEEDS
3103_2019_OH	356604.17	1815535.36	983.71	TALL WEEDS
3104_2019_OH	476669.59	1879866.06	961.92	TALL WEEDS
3105_2019_OH	489167.19	1932208.55	1035.62	TALL WEEDS
3106_2019_OH	530911.04	1950774.89	958.96	TALL WEEDS
3107_2019_OH	551757.68	1896376.60	790.87	TALL WEEDS
3108_2019_OH	523047.48	1993887.31	952.29	TALL WEEDS
3109_2019_OH	552717.68	1997008.49	916.37	TALL WEEDS
3110_2019_OH	579265.76	2048610.38	802.77	TALL WEEDS
3111_2019_OH	603711.90	2061790.97	781.87	TALL WEEDS
3112_2019_OH	635256.49	2166350.07	806.17	TALL WEEDS
3113_2019_OH	568304.99	2322978.56	1152.81	SHORT GRASS
3114_2019_OH	783385.09	2494025.94	947.23	LONG GRASS
3115_2019_OH	794242.57	2451369.47	851.02	TALL WEEDS
3116_2019_OH	795082.41	2484195.03	886.42	TALL WEEDS
3117_2019_OH	750814.73	2404246.12	824.09	TALL WEEDS
3118_2019_OH	670109.75	2431372.10	887.13	TALL WEEDS
3119_2019_OH	558321.57	2492119.39	1043.52	TALL WEEDS
3120_2019_OH	605701.86	2490921.43	1051.62	LONG GRASS
3121_2019_OH	487684.33	1497174.38	726.29	TALL WEEDS
3122_2019_OH	492339.71	1520955.58	730.22	TALL WEEDS
3123_2019_OH	452269.54	1535877.01	776.41	TALL WEEDS
3124_2019_OH	419751.75	1485981.84	791.48	SHORT GRASS
3125_2019_OH	395191.16	1442858.62	816.04	SHORT GRASS
3126_2019_OH	525936.08	1418489.82	707.29	TALL WEEDS
3127_2019_OH	539956.27	1433053.08	713.25	TALL WEEDS
3128_2019_OH	548192.57	1450733.69	717.87	TALL WEEDS
3129_2019_OH	556431.93	1487588.87	721.37	TALL WEEDS
3130_2019_OH	563211.90	1403392.55	719.70	TALL WEEDS



Independent Vegetated Vertical Accuracy Stations:				
Station Name	Northing	Easting	Elevation	Station Description
	(USFT)	(USFT)	(USFT)	
3131_2019_OH	558387.17	1376422.88	726.04	TALL WEEDS
3132_2019_OH	632407.22	1425801.85	707.67	TALL WEEDS
3133_2019_OH	462053.13	1417188.56	752.82	TALL WEEDS
3134_2019_OH	450665.43	1450241.08	758.23	SHORT GRASS
3135_2019_OH	319636.45	1366207.09	872.09	TALL WEEDS
3136_2019_OH	304340.24	1343729.94	915.25	SHORT GRASS
3137_2019_OH	357202.20	1355513.45	841.74	SHORT GRASS
3138_2019_OH	412596.27	1365710.35	814.20	SHORT GRASS
3139_2019_OH	390559.30	1404940.93	820.06	TALL WEEDS
3140_2019_OH	384580.68	1345631.57	806.92	SHORT GRASS
3141_2019_OH	500329.57	1354214.09	755.69	TALL WEEDS
3142_2019_OH	679197.57	1427194.53	747.12	TALL WEEDS
3143_2019_OH	464498.94	1844910.35	991.84	TALL WEEDS
3144_2019_OH	507538.29	1843544.68	926.87	TALL WEEDS
3145_2019_OH	561457.37	1826809.12	790.77	TALL WEEDS
3146_2019_OH	563436.26	1783939.22	697.83	CULTIVATED FIELD
3147_2019_OH	513484.96	1757178.36	796.93	TALL GRASS
3148_2019_OH	481441.02	1747904.42	797.03	TALL WEEDS
3149_2019_OH	442939.71	1753585.97	828.24	TALL WEEDS
3150_2019_OH	494222.91	1800408.40	825.04	TALL GRASS
3151_2019_OH	531310.43	1842508.58	893.23	TALL GRASS
3152_2019_OH	592489.50	1915708.92	700.56	TALL GRASS
3153_2019_OH	594600.88	1888196.83	730.55	SHORT GRASS
3154_2019_OH	601640.74	1978139.57	788.49	TALL WEEDS
3155_2019_OH	597455.33	2015228.62	825.54	TALL WEEDS
3156_2019_OH	600420.65	2040643.47	801.81	TALL WEEDS
3157_2019_OH	559937.47	2067654.21	840.30	TALL WEEDS
3158_2019_OH	521030.97	2045589.87	982.64	TALL WEEDS
3159_2019_OH	375083.22	2060242.57	1082.75	TALL WEEDS
3160_2019_OH	272299.02	1901896.14	1251.27	TALL WEEDS
3161_2019_OH	371727.19	2037222.82	1301.94	TALL WEEDS
3162_2019_OH	418192.45	2008860.42	1309.28	TALL WEEDS
3163_2019_OH	428559.50	2053208.30	1178.64	CULTIVATED FIELD
3164_2019_OH	392835.22	2039112.19	1170.65	TALL WEEDS
3165_2019_OH	508908.48	2085433.84	913.74	TALL WEEDS
3166_2019_OH	492779.02	2115611.15	1058.59	TALL WEEDS
3167_2019_OH	607616.27	2420052.86	938.98	TALL WEEDS
3168_2019_OH	651828.98	2373647.47	1161.45	TALL WEEDS
3169_2019_OH	673680.77	2386803.92	1003.89	TALL WEEDS
3170_2019_OH	692479.21	2436345.46	916.02	LONG GRASS
3171_2019_OH	628147.68	2392509.22	846.93	TALL WEEDS
3172_2019_OH	668492.92	2184103.69	580.86	TALL WEEDS





<b>Independent Vegetated Vertical Accuracy Stations:</b>				
<b>Station Name</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	<b>Station Description</b>
	<b>(USFT)</b>	<b>(USFT)</b>	<b>(USFT)</b>	
3173_2019_OH	664719.01	2172822.13	634.38	TALL WEEDS
3174_2019_OH	705237.52	2294488.33	1103.98	TALL WEEDS
3175_2019_OH	681433.82	2339784.65	1322.80	TALL GRASS
3176_2019_OH	679060.01	2363956.60	1156.16	TALL GRASS
3177_2019_OH	639400.97	1931285.54	586.24	BRUSH
3178_2019_OH	316885.14	1504263.89	957.29	BRUSH
3179_2019_OH	586758.51	2413130.54	897.06	BRUSH
3180_2019_OH	725365.05	1877857.76	595.88	FOREST
3181_2019_OH	710537.73	1918696.82	582.81	FOREST
3182_2019_OH	719359.89	1762413.05	572.17	TALL WEEDS
3183_2019_OH	563040.33	1403452.45	720.13	TALL WEEDS

<b>Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:</b>				
<b>Station Name</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	<b>PID</b>
	<b>(USFT)</b>	<b>(USFT)</b>	<b>(USFT)</b>	
4 1	274865.07	1748524.65	941.18	AE3417
12 0028	271990.15	1836628.21	973.00	KZ2305
14 DWP	558870.20	2521166.27	997.91	MB0416
17G B	406518.93	1838456.61	1009.03	AF7792
85 027 1 P CO	598587.90	2311363.77	1214.00	MB2770
792	704126.16	1439435.45	790.41	MD0026
906 3097 E	725728.49	1879015.44	589.31	MC1582
1001	329332.43	1496101.56	902.22	TSM
1001_3T7	736916.73	1883502.47	577.53	TSM
1001_89D	705699.71	1917214.84	595.39	TSM
1002	682952.47	1908046.66	584.51	TSM
1002_3T7	736766.87	1885123.54	575.91	TSM
1002_89D	705622.79	1918858.99	580.69	TSM
1061	610174.88	1874151.44	769.09	DG7164
1519	657062.54	2316107.74	1214.00	MB3100
1523	614987.35	2235695.99	1043.86	MB1812
A 290	381809.04	1545227.98	966.96	LA0005
A 314	526297.59	1552758.23	770.50	MD0088
A 319	636586.97	1998393.42	594.90	MC0927
A 320	673015.76	2100312.51	591.74	MC0891
ASHCOPORT	775017.30	2459272.88	908.06	MB2962
AUG 75 12.45	364807.55	1515992.37	897.91	LA2478
B 161	658152.74	2415741.62	897.28	MB0637
B 315	526124.28	1397100.22	728.06	MD0227
BAXTER	453253.26	1331942.20	814.08	LA0691
BERLIN M5	505005.56	2379729.05	1048.40	DL1914



<b>Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:</b>				
<b>Station Name</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	<b>PID</b>
	<b>(USFT)</b>	<b>(USFT)</b>	<b>(USFT)</b>	
BGOH	626327.53	1654939.31	810.86	DH3473
CAUSEWAY	310380.84	1973068.65	1102.92	AB5587
CELINA	329996.61	1380069.36	902.79	LA0562
D 248	417404.52	1968348.76	1279.37	KZ1209
DEF 66	586368.23	1456840.40	712.00	AB6017
E 182	740193.83	1688030.65	594.07	MC0734
E 281	471404.65	2167257.36	963.30	KY1826
E 348	284776.00	1504032.00	1018.28	LA2517
EXECPORT	511918.89	2428889.12	982.26	MB2974
F 152	577080.87	2512358.49	1087.60	MB0924
FULTON NO 04	667279.13	1510156.29	726.00	AB5533
G 18	705708.01	1600721.54	671.00	MC0747
G 249	441189.84	1914294.54	1120.77	KZ1049
G 321	683681.53	2205531.86	583.34	MB1563
GARF	638479.18	2211263.80	946.14	DF5362
GUST	659361.16	2457381.91	1040.11	AJ7190
H 294	327554.46	1671536.75	1054.24	KZ0652
H 348	407283.56	1527351.42	869.60	LA2545
HEISLER	500106.25	1904578.07	963.51	MC0215
HI 14	573649.11	2165194.78	1196.00	DF7205
HOMER AZ MK	505591.89	2071796.17	1046.89	MC0069
HUDSON	574970.66	2258711.62	1061.65	MB1083
J 272	238095.12	1914989.40	1241.65	KZ0966
J 318	643606.53	1914039.33	599.74	MC0957
J 337	604387.59	2240743.45	1016.74	MB1815
KILLDEER	380959.56	1724209.15	878.94	AB6140
KNTN	353109.01	1659083.83	987.00	DF4052
L 227 RESET	328092.64	1293172.32	854.80	LA0533
L 321	757013.44	2301666.49	610.33	MB1618
LAKE	330406.69	1425117.91	897.00	AE2615
LANDO	257112.19	1391138.11	962.00	AE2641
LCB 528	727476.10	1746469.00	576.00	MC1778
LIMA	392815.99	1530656.36	888.26	LA0048
M 163	593982.00	2401189.00	941.79	MB0664
M 176	505734.14	2110123.67	1131.63	MB1317
M 323	741298.87	2285577.53	626.86	MB1605
MAR 02 01	478572.60	2323855.03	1100.27	DG7207
MILFORD 2 RM A	633020.52	1351519.11	869.75	MD1780
MTVR	260755.07	1965529.82	1050.89	DF4056
NEW LYME	703998.74	2441741.15	989.87	DG7215
OH21 A	575490.77	1954123.97	840.80	AB6039
OHAL	405841.32	1523429.69	884.80	DI1846





<b>Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:</b>				
<b>Station Name</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	<b>PID</b>
	<b>(USFT)</b>	<b>(USFT)</b>	<b>(USFT)</b>	
OHAS	828753.72	2498861.93	709.21	DI1848
OHFN	693364.18	1521088.45	787.89	DI2816
OHHA	502921.92	1644125.86	805.32	DI1083
OHHU	550170.80	1951607.78	948.76	DI2818
OHIO 722	632225.23	1399669.36	720.50	MD0420
OHLA	752788.05	2299778.61	649.04	DK6716
OHLC	750195.29	1688329.64	614.28	DO4957
OHLO	592800.00	2041897.31	839.02	DI2820
OHMA	345608.69	1806910.54	988.77	DM4137
OHMN	499055.56	2445069.23	1189.50	DI1860
OHMR	327594.57	1376399.78	886.45	DI2824
OHRI	401300.96	1951699.69	1309.94	DI2826
OHSB	717826.07	1878354.27	603.53	DN5844
OHUN	207523.98	1728135.54	1027.52	DI1686
OHWI	704413.96	1405645.63	924.24	DI2830
PATMOS	709640.20	1917706.43	581.90	MC1586
Q 62	668913.34	2531769.26	988.17	MB0284
R 176	490818.72	2127739.76	1014.76	MB1307
R 344	532987.55	1765323.08	766.03	MC1637
REINHART	258600.99	1429425.92	950.00	AE2644
RICHMOND	739495.82	2495547.29	1031.00	DG7224
RIDG31	646905.24	1463549.04	715.00	DG7225
RND HEAD	332611.06	1596864.21	1028.00	AB6088
S 238	441727.62	2076854.30	1156.22	KZ0175
S 321	835566.24	2506736.13	676.73	MB1708
SHINDEL	388159.91	1391868.07	837.00	AE2618
SIDN	238977.99	1502466.63	1071.36	AJ7196
T 23	338920.67	1769283.02	916.98	KZ1449
T 161	592262.59	2432108.00	920.03	MB0615
T 322	713332.99	2241008.44	609.53	MB1585
T 344	531554.35	1821186.52	846.26	MC1639
T 348	418345.04	1548257.38	862.03	LA2550
T 350	479146.77	1628578.85	809.42	KZ2428
TIFF	513746.60	1789185.90	809.39	AJ7198
V 198	648828.89	1318326.01	875.55	MD0373
V 314	525384.87	1439605.72	713.43	MD0125
V 349	446839.01	1587491.46	849.56	KZ2418
VICTORY	719907.15	1876325.91	575.13	MC1588
VNW A	443786.32	1382763.74	779.80	AB6047
W 350	492591.49	1641716.00	790.05	MC1644
WYA 30 0050	427477.69	1690029.29	899.74	KZ2273
WYA 30 0880	425844.26	1733646.31	847.77	KZ2277



Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:				
Station Name	Northing	Easting	Elevation	PID
	(USFT)	(USFT)	(USFT)	
X 150	567675.70	2386761.30	934.75	MB1449
X 323	762364.73	2299123.81	576.65	MB1620
Y 316	676468.94	1797173.92	584.13	MC1011
ZOB B	594300.05	2049395.04	805.34	AA3881

**USGS Ohio Statewide Phase 1 2019 B19**  
**LiDAR Project**  
**Woolpert Project #: 79574**

*Horizontal Datum: NAD 83(2011)*  
*Vertical Datum: NAVD 88*  
*Units: U.S. Survey Feet*  
*State Plane Zone: Ohio North (3401)*  
*Geoid Model: Geoid 12B*  
*Coordinate System: Geographic*  
*Field Survey: Completed March 2020*

LiDAR Control Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
1001_2019_OH	N41°42'55.03332"	W84°21'37.96340"	740.32	LIGHT ASPHALT
1002_2019_OH	N41°39'41.90815"	W84°24'27.45609"	717.38	LIGHT ASPHALT
1003_2019_OH	N41°36'47.67427"	W84°25'07.67608"	689.41	LIGHT ASPHALT
1004_2019_OH	N41°33'50.48070"	W84°26'53.84349"	661.33	LIGHT ASPHALT
1005_2019_OH	N41°30'50.22229"	W84°26'01.55565"	604.91	LIGHT ASPHALT
1006_2019_OH	N41°27'20.85899"	W84°24'29.09351"	600.63	LIGHT ASPHALT
1007_2019_OH	N41°24'24.93031"	W84°23'42.42023"	589.07	LIGHT ASPHALT
1008_2019_OH	N41°21'28.64373"	W84°21'38.27144"	603.34	CORNER OF CONCRETE
1009_2019_OH	N41°18'26.47356"	W84°21'39.50712"	608.90	CONCRETE
1010_2019_OH	N41°15'07.30504"	W84°21'39.89896"	599.13	LIGHT ASPHALT
1011_2019_OH	N41°11'19.39568"	W84°19'25.49922"	601.96	BARE EARTH
1012_2019_OH	N41°07'47.40313"	W84°15'58.63545"	605.90	GRAVEL
1013_2019_OH	N41°04'06.59855"	W84°18'14.23113"	608.08	LIGHT ASPHALT
1014_2019_OH	N41°00'28.91628"	W84°17'38.22722"	610.59	LIGHT ASPHALT
1015_2019_OH	N40°56'58.08365"	W84°17'31.45947"	626.22	LIGHT ASPHALT
1016_2019_OH	N40°53'22.32105"	W84°17'30.27279"	638.72	LIGHT ASPHALT
1017_2019_OH	N40°50'22.27515"	W84°17'53.92088"	662.62	LIGHT ASPHALT
1018_2019_OH	N40°47'26.30121"	W84°20'05.25004"	684.71	LIGHT ASPHALT
1019_2019_OH	N40°43'57.84807"	W84°18'37.66371"	700.43	LIGHT ASPHALT
1020_2019_OH	N40°40'57.42875"	W84°19'05.73936"	757.71	LIGHT ASPHALT
1021_2019_OH	N40°37'32.80306"	W84°17'56.25566"	737.05	LIGHT ASPHALT



LiDAR Control Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
1022_2019_OH	N40°34'36.17769"	W84°21'29.87694"	755.79	LIGHT ASPHALT
1023_2019_OH	N40°31'39.08104"	W84°22'52.95851"	758.22	LIGHT ASPHALT
1024_2019_OH	N40°28'13.30071"	W84°22'37.70699"	798.99	LIGHT ASPHALT
1025_2019_OH	N40°25'20.37285"	W84°22'38.46846"	851.12	END OF STRIPE
1026_2019_OH	N40°22'15.32955"	W84°26'03.21757"	841.45	LIGHT ASPHALT
1027_2019_OH	N41°15'47.65052"	W83°12'42.35577"	570.34	GRAVEL
1028_2019_OH	N41°12'41.28101"	W83°17'03.66015"	609.45	TALL WEEDS
1029_2019_OH	N41°09'49.04137"	W83°10'06.13098"	614.64	LIGHT ASPHALT
1030_2019_OH	N41°06'42.00028"	W83°13'25.46656"	654.40	LIGHT ASPHALT
1031_2019_OH	N41°03'43.66725"	W83°10'18.57551"	674.42	LIGHT ASPHALT
1032_2019_OH	N41°00'08.25067"	W83°10'13.56025"	722.76	LIGHT ASPHALT
1033_2019_OH	N40°56'35.38306"	W83°10'11.93548"	730.13	LIGHT ASPHALT
1034_2019_OH	N40°53'03.91920"	W83°10'12.23685"	756.73	LIGHT ASPHALT
1035_2019_OH	N40°49'32.49576"	W83°14'11.45883"	748.03	LIGHT ASPHALT
1036_2019_OH	N40°46'36.06459"	W83°14'33.69645"	778.49	LIGHT ASPHALT
1037_2019_OH	N40°43'12.21262"	W83°10'55.92840"	793.39	LIGHT ASPHALT
1038_2019_OH	N40°39'45.97679"	W83°06'41.70808"	863.78	LIGHT ASPHALT
1039_2019_OH	N40°36'46.42091"	W83°07'51.40596"	851.11	LIGHT ASPHALT
1040_2019_OH	N40°33'12.61763"	W83°32'12.76016"	920.18	LIGHT ASPHALT
1041_2019_OH	N40°29'44.49288"	W83°34'22.18838"	960.93	END OF STRIPE
1042_2019_OH	N40°27'36.59798"	W83°12'49.21782"	813.08	CONCRETE
1043_2019_OH	N40°25'50.81364"	W83°09'41.16870"	811.79	LIGHT ASPHALT
1044_2019_OH	N41°29'14.22893"	W82°41'19.07465"	462.31	LIGHT ASPHALT
1045_2019_OH	N41°36'39.80152"	W82°42'27.54862"	463.42	LIGHT ASPHALT
1046_2019_OH	N41°26'08.65180"	W82°41'33.73181"	475.26	LIGHT ASPHALT
1047_2019_OH	N41°23'08.41920"	W82°38'50.07276"	521.33	LIGHT ASPHALT
1048_2019_OH	N41°20'18.55328"	W82°37'36.74474"	532.73	LIGHT ASPHALT
1049_2019_OH	N41°16'45.39898"	W82°36'20.44741"	558.62	LIGHT ASPHALT
1050_2019_OH	N41°12'40.63338"	W82°35'20.81692"	710.52	LIGHT ASPHALT
1051_2019_OH	N41°09'44.01760"	W82°38'53.08011"	705.71	LIGHT ASPHALT
1052_2019_OH	N41°06'35.24911"	W82°51'57.47827"	793.38	LIGHT ASPHALT
1053_2019_OH	N41°02'58.78544"	W82°50'33.07957"	822.44	LIGHT ASPHALT
1054_2019_OH	N41°00'06.48635"	W83°00'57.54336"	834.72	LIGHT ASPHALT
1055_2019_OH	N40°57'01.12652"	W83°00'56.25163"	857.72	LIGHT ASPHALT
1056_2019_OH	N40°54'09.05329"	W82°51'14.46044"	903.90	LIGHT ASPHALT
1057_2019_OH	N40°51'17.64267"	W82°37'42.11597"	1027.84	LIGHT ASPHALT
1058_2019_OH	N40°48'25.72682"	W82°35'18.46027"	1149.64	LIGHT ASPHALT
1059_2019_OH	N40°45'33.72235"	W82°30'15.87730"	1034.49	LIGHT ASPHALT
1060_2019_OH	N40°42'45.13140"	W82°30'14.10941"	1151.04	LIGHT ASPHALT
1061_2019_OH	N40°39'53.24880"	W82°31'01.78041"	1289.78	LIGHT ASPHALT
1062_2019_OH	N40°36'32.07572"	W82°34'46.10743"	1092.87	LIGHT ASPHALT
1063_2019_OH	N40°33'38.97698"	W82°38'20.55125"	1166.31	LIGHT ASPHALT



LiDAR Control Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
1064_2019_OH	N40°30'50.79619"	W82°40'11.87842"	1119.82	LIGHT ASPHALT
1065_2019_OH	N40°27'20.55459"	W82°41'48.63466"	1046.11	LIGHT ASPHALT
1066_2019_OH	N40°24'26.74555"	W82°40'49.34716"	1192.73	LIGHT ASPHALT
1067_2019_OH	N40°20'26.51100"	W82°42'49.32757"	1150.16	GRAVEL
1068_2019_OH	N41°42'10.56948"	W81°22'29.84874"	510.82	LIGHT ASPHALT
1069_2019_OH	N41°39'31.75632"	W81°23'11.55434"	514.96	CONCRETE
1070_2019_OH	N41°36'15.09371"	W81°26'14.13787"	623.55	LIGHT ASPHALT
1071_2019_OH	N41°33'42.63122"	W81°35'06.98254"	489.65	LIGHT ASPHALT
1072_2019_OH	N41°29'29.45679"	W81°36'02.48214"	737.02	SHORT GRASS
1073_2019_OH	N41°27'31.04644"	W81°28'48.57647"	1042.08	LIGHT ASPHALT
1074_2019_OH	N41°26'13.95778"	W81°28'04.35232"	1096.37	CONCRETE
1075_2019_OH	N41°21'08.98338"	W81°30'29.43162"	954.51	LIGHT ASPHALT
1076_2019_OH	N41°17'58.91324"	W81°31'11.05657"	869.06	LIGHT ASPHALT
1077_2019_OH	N41°14'17.81466"	W81°29'59.81958"	909.40	CONCRETE
1078_2019_OH	N41°11'41.94074"	W81°31'23.15062"	835.61	LIGHT ASPHALT
1079_2019_OH	N41°08'18.92916"	W81°44'10.79264"	1024.13	LIGHT ASPHALT
1080_2019_OH	N41°05'27.17712"	W81°38'34.18071"	957.26	GRAVEL
1081_2019_OH	N41°02'42.62546"	W81°41'28.30088"	1014.73	TALL WEEDS
1082_2019_OH	N40°59'18.97858"	W81°37'17.14817"	1010.87	LIGHT ASPHALT
1083_2019_OH	N40°59'43.70183"	W81°35'50.99838"	854.33	LIGHT ASPHALT
1084_2019_OH	N40°54'05.84357"	W81°26'08.53573"	1038.05	LIGHT ASPHALT
1085_2019_OH	N41°58'05.90659"	W80°31'08.76692"	518.98	GRAVEL
1086_2019_OH	N41°55'08.48325"	W80°34'08.06135"	610.99	LIGHT ASPHALT
1087_2019_OH	N41°51'45.54581"	W80°39'58.63443"	747.52	LIGHT ASPHALT
1088_2019_OH	N41°48'18.79510"	W80°40'09.04533"	790.02	LIGHT ASPHALT
1089_2019_OH	N41°44'54.73898"	W80°42'37.60335"	821.14	LIGHT ASPHALT
1090_2019_OH	N41°42'02.73097"	W80°34'13.83303"	933.14	LIGHT ASPHALT
1091_2019_OH	N41°38'59.74506"	W80°39'17.56372"	863.38	GRAVEL
1092_2019_OH	N41°35'59.84805"	W80°42'47.48460"	960.24	LIGHT ASPHALT
1093_2019_OH	N41°32'47.36068"	W80°42'48.23473"	975.22	LIGHT ASPHALT
1094_2019_OH	N41°29'27.71193"	W80°42'46.73784"	941.94	LIGHT ASPHALT
1095_2019_OH	N41°26'45.16531"	W80°44'13.68863"	822.21	GRAVEL
1096_2019_OH	N41°23'24.56651"	W80°42'26.78847"	939.51	LIGHT ASPHALT
1097_2019_OH	N41°20'35.84690"	W80°42'08.45573"	958.61	LIGHT ASPHALT
1098_2019_OH	N41°17'21.45083"	W80°42'17.75333"	949.15	LIGHT ASPHALT
1099_2019_OH	N41°14'36.72274"	W80°42'31.38330"	978.61	LIGHT ASPHALT
1100_2019_OH	N41°11'48.66553"	W80°42'08.93404"	899.04	LIGHT ASPHALT
1101_2019_OH	N41°07'16.97361"	W80°40'31.98462"	794.33	LONG GRASS
1102_2019_OH	N41°36'02.14747"	W82°41'13.07750"	481.89	LIGHT ASPHALT
1103_2019_OH	N41°35'25.68493"	W82°41'44.89070"	476.27	LIGHT ASPHALT
1104_2019_OH	N40°59'38.94692"	W84°28'35.10425"	617.54	LIGHT ASPHALT
1105_2019_OH	N40°50'02.31053"	W83°52'48.65577"	775.19	LIGHT ASPHALT



LiDAR Control Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
1106_2019_OH	N41°18'19.17789"	W82°05'16.21344"	661.72	LIGHT ASPHALT
1107_2019_OH	N41°24'45.92210"	W84°30'31.17508"	606.43	LIGHT ASPHALT
1108_2019_OH	N40°42'48.19917"	W84°34'10.20306"	715.72	LIGHT ASPHALT
1109_2019_OH	N40°49'27.38150"	W83°32'15.39854"	780.53	LIGHT ASPHALT
1110_2019_OH	N40°46'36.60442"	W82°47'58.72566"	1031.10	LIGHT ASPHALT
1111_2019_OH	N41°14'23.31703"	W82°43'15.10927"	619.88	SHORT GRASS
1112_2019_OH	N41°15'21.60739"	W81°34'12.14725"	768.93	LIGHT ASPHALT
1113_2019_OH	N41°04'49.71649"	W81°07'19.53453"	989.88	LIGHT ASPHALT
1114_2019_OH	N41°39'12.80314"	W80°33'50.86628"	972.16	LIGHT ASPHALT
1115_2019_OH	N40°20'38.66776"	W84°26'04.49418"	845.04	LIGHT ASPHALT
1116_2019_OH	N40°39'07.56023"	W83°53'31.59309"	931.44	LIGHT ASPHALT
1117_2019_OH	N41°38'10.23672"	W81°28'36.11690"	503.07	LIGHT ASPHALT
1118_2019_OH	N41°35'50.37724"	W81°28'49.78128"	610.23	LIGHT ASPHALT
1119_2019_OH	N41°37'00.73777"	W81°28'30.75489"	540.67	LIGHT ASPHALT
1120_2019_OH	N41°34'43.16614"	W81°28'42.19760"	725.06	LIGHT ASPHALT
1121_2019_OH	N41°32'35.78501"	W81°29'48.61637"	864.12	LIGHT ASPHALT
1122_2019_OH	N41°31'34.78544"	W81°32'39.48506"	835.30	LIGHT ASPHALT
1123_2019_OH	N41°30'30.99418"	W81°32'39.70051"	882.12	LIGHT ASPHALT
1124_2019_OH	N41°28'32.73857"	W81°37'53.70825"	576.93	LIGHT ASPHALT
1125_2019_OH	N41°25'35.28290"	W81°52'06.43897"	633.54	LIGHT ASPHALT
1126_2019_OH	N41°24'36.58653"	W81°55'21.81585"	663.48	LIGHT ASPHALT
1127_2019_OH	N41°23'13.81383"	W81°56'12.87631"	669.41	CONCRETE
1128_2019_OH	N41°22'10.76656"	W81°55'02.41981"	666.06	CONCRETE
1129_2019_OH	N41°20'00.48172"	W81°30'26.20546"	899.92	LIGHT ASPHALT
1130_2019_OH	N41°18'59.49170"	W81°30'00.07136"	918.83	LIGHT ASPHALT
1131_2019_OH	N41°03'17.08331"	W81°40'00.71348"	1018.63	CORNER OF STOP BAR
1132_2019_OH	N41°17'00.35044"	W81°31'37.83184"	852.50	LIGHT ASPHALT
1133_2019_OH	N41°14'06.30883"	W81°32'47.13141"	592.33	LIGHT ASPHALT
1134_2019_OH	N41°13'05.04971"	W81°28'36.56529"	900.27	LIGHT ASPHALT
1135_2019_OH	N41°12'14.34783"	W81°27'15.61621"	897.17	LIGHT ASPHALT
1136_2019_OH	N41°16'14.29674"	W81°24'25.45562"	965.75	SHORT GRASS
1137_2019_OH	N41°09'52.53377"	W81°23'06.69643"	931.62	LIGHT ASPHALT
1138_2019_OH	N41°32'11.63047"	W82°45'12.23870"	541.09	LIGHT ASPHALT
1139_2019_OH	N41°35'11.07185"	W82°50'23.68722"	471.14	LIGHT ASPHALT
1140_2019_OH	N41°38'08.50065"	W82°49'53.19199"	488.08	LIGHT ASPHALT
1141_2019_OH	N41°39'16.25565"	W82°48'13.67697"	459.35	LIGHT ASPHALT
1142_2019_OH	N41°41'21.08200"	W82°48'38.73474"	462.28	LIGHT ASPHALT
1143_2019_OH	N41°35'50.62609"	W83°05'45.87979"	461.05	LIGHT ASPHALT
1144_2019_OH	N41°40'47.10094"	W83°23'43.77296"	464.30	LIGHT ASPHALT
1145_2019_OH	N41°41'06.40696"	W83°22'45.73089"	462.53	LIGHT ASPHALT
1146_2019_OH	N41°43'48.57294"	W83°28'45.31950"	461.57	LIGHT ASPHALT
1147_2019_OH	N41°41'58.92767"	W83°29'54.03215"	471.25	LIGHT ASPHALT





LiDAR Control Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
1148_2019_OH	N41°40'00.92118"	W83°16'46.28142"	455.79	LIGHT ASPHALT
1149_2019_OH	N41°38'34.92593"	W83°16'23.80917"	458.53	LIGHT ASPHALT
1150_2019_OH	N41°31'16.48446"	W82°57'54.79705"	459.81	LIGHT ASPHALT
1151_2019_OH	N40°22'42.05731"	W82°49'31.76840"	993.64	LIGHT ASPHALT
1152_2019_OH	N41°09'31.84688"	W80°40'01.55963"	935.27	LIGHT ASPHALT
1153_2019_OH	N41°02'04.23871"	W81°10'18.65366"	1025.33	GRAVEL
1154_2019_OH	N40°59'25.73518"	W81°24'19.67366"	1001.76	LIGHT ASPHALT
1155_2019_OH	N40°56'37.27334"	W81°20'27.80061"	1061.31	CORNER OF CONCRETE
1156_2019_OH	N40°58'27.77870"	W82°02'44.59432"	951.21	LIGHT ASPHALT
1157_2019_OH	N41°01'48.82695"	W81°55'38.51583"	1000.67	CONCRETE
1158_2019_OH	N41°05'09.33227"	W82°07'47.59532"	831.90	LIGHT ASPHALT
1159_2019_OH	N41°11'40.34222"	W81°44'36.66741"	1072.14	LIGHT ASPHALT
1160_2019_OH	N41°14'59.58604"	W81°52'41.27557"	878.64	CONCRETE
1161_2019_OH	N41°21'21.86914"	W82°07'23.44947"	625.93	CONCRETE
1162_2019_OH	N41°24'17.99910"	W82°07'59.81441"	614.79	LIGHT ASPHALT
1163_2019_OH	N41°27'17.24447"	W82°09'54.91199"	501.65	LIGHT ASPHALT
1164_2019_OH	N41°30'20.11295"	W82°01'24.98160"	493.83	CONCRETE
1165_2019_OH	N41°28'26.09071"	W81°57'50.00233"	517.83	CONCRETE
1166_2019_OH	N40°55'26.24981"	W82°29'50.72484"	1072.40	LIGHT ASPHALT
1167_2019_OH	N40°58'43.43842"	W82°20'43.93618"	1061.10	LIGHT ASPHALT
1168_2019_OH	N41°41'13.70011"	W83°58'32.52064"	626.29	LIGHT ASPHALT
1169_2019_OH	N41°03'52.79975"	W83°53'59.88378"	668.27	LIGHT ASPHALT
1170_2019_OH	N40°54'16.93799"	W84°34'16.13347"	649.50	GRAVEL
1171_2019_OH	N40°57'36.76336"	W83°33'19.88239"	696.12	LIGHT ASPHALT
1172_2019_OH	N41°50'11.04604"	W80°51'10.91452"	558.12	LIGHT ASPHALT
1173_2019_OH	N41°24'43.21311"	W81°03'03.38723"	1124.20	GRAVEL
1174_2019_OH	N41°10'49.78502"	W82°21'05.39746"	797.98	LIGHT ASPHALT
1175_2019_OH	N41°36'09.21531"	W83°06'23.88777"	458.67	LIGHT ASPHALT
1176_2019_OH	N41°30'23.04493"	W82°58'53.61108"	461.32	LIGHT ASPHALT
1177_2019_OH	N41°30'23.71339"	W82°51'59.29918"	469.66	LIGHT ASPHALT
1178_2019_OH	N41°31'49.22839"	W81°23'09.00303"	969.67	LIGHT ASPHALT
1179_2019_OH	N41°39'34.24450"	W80°59'35.08989"	950.21	LIGHT ASPHALT
1180_2019_OH	N41°24'57.44910"	W82°22'08.74143"	484.26	LIGHT ASPHALT
1181_2019_OH	N41°25'32.83681"	W82°20'07.75185"	490.21	CONCRETE
1182_2019_OH	N40°39'54.36358"	W82°06'59.23262"	880.35	ASPHALT
1183_2019_OH	N40°31'58.96609"	W82°21'38.57554"	1127.59	ASPHALT
1184_2019_OH	N40°27'58.53271"	W83°59'37.37488"	901.03	ASPHALT
1185_2019_OH	N40°21'24.81486"	W84°48'14.16187"	909.56	LIGHT ASPHALT
1186_2019_OH	N41°42'10.05025"	W84°48'58.30425"	978.16	LIGHT ASPHALT
1187_2019_OH	N41°05'20.23351"	W84°50'10.49014"	647.07	GRAVEL
1188_2019_OH	N41°30'21.61736"	W81°58'35.98078"	503.26	CONCRETE
1189_2019_OH	N41°16'24.38036"	W81°52'41.08552"	832.99	LIGHT ASPHALT



LiDAR Control Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
1190_2019_OH	N41°23'21.67710"	W81°23'09.43888"	833.59	LIGHT ASPHALT
1191_2019_OH	N41°13'14.06168"	W84°48'12.68422"	631.63	GRAVEL
1192_2019_OH	N40°48'57.77567"	W82°14'53.57474"	939.51	LIGHT ASPHALT
1193_2019_OH	N41°13'12.67046"	W81°06'59.04749"	1000.54	LIGHT ASPHALT
1194_2019_OH	N40°48'01.60747"	W84°49'48.41028"	694.17	LIGHT ASPHALT
1195_2019_OH	N41°28'42.75252"	W84°49'26.44439"	757.50	GRAVEL
1196_2019_OH	N40°44'29.09293"	W83°52'47.47486"	877.94	LIGHT ASPHALT
1197_2019_OH	N40°32'22.40706"	W84°49'11.18319"	753.70	GRAVEL
1198_2019_OH	N41°46'58.64120"	W81°08'48.43051"	536.07	CONCRETE
1199_2019_OH	N40°58'34.84033"	W80°59'42.17962"	990.95	TALL WEEDS
1200_2019_OH	N40°55'00.68081"	W81°39'37.85394"	1022.03	GRAVEL

Independent Non Vegetated Vertical Accuracy Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
2001A_2019_OH	N41°10'52.10433"	W80°46'05.04392"	773.66	CONCRETE
2001B_2019_OH	N41°10'51.64322"	W80°46'05.06421"	773.07	CONCRETE
2002A_2019_OH	N41°42'15.33154"	W81°16'10.15076"	564.87	CONCRETE
2002B_2019_OH	N41°42'15.85224"	W81°16'10.24584"	564.83	CONCRETE
2003A_2019_OH	N41°13'25.66726"	W82°36'07.99446"	664.98	CONCRETE
2003B_2019_OH	N41°13'25.34063"	W82°36'08.21166"	665.26	CONCRETE
2004A_2019_OH	N40°45'33.81409"	W82°33'28.54415"	1167.16	CONCRETE
2004B_2019_OH	N40°45'33.82896"	W82°33'29.18725"	1165.92	CONCRETE
2005A_2019_OH	N40°38'53.54307"	W83°36'41.26904"	885.62	CONCRETE
2005B_2019_OH	N40°38'53.55555"	W83°36'41.75577"	884.54	CONCRETE
2006A_2019_OH	N41°03'21.44855"	W83°35'32.40359"	697.81	CONCRETE
2006B_2019_OH	N41°03'21.52944"	W83°35'31.75784"	698.38	CONCRETE
2007A_2019_OH	N40°43'50.29115"	W84°03'52.19102"	777.36	CONCRETE
2007B_2019_OH	N40°43'50.28309"	W84°03'52.96468"	777.21	CONCRETE
2008A_2019_OH	N40°33'05.03147"	W84°34'09.69596"	766.50	CONCRETE
2008B_2019_OH	N40°33'04.68671"	W84°34'09.69610"	766.62	CONCRETE
2009A_2019_OH	N41°08'48.01732"	W84°34'27.54555"	610.41	CONCRETE
2009B_2019_OH	N41°08'48.49669"	W84°34'27.40167"	610.02	CONCRETE
2010A_2019_OH	N41°35'39.25079"	W82°42'38.61713"	474.14	BRICK
2010B_2019_OH	N41°35'39.32748"	W82°42'38.97108"	473.66	BRICK
2011_2019_OH	N41°09'27.75163"	W84°47'34.92483"	630.48	GRAVEL
2012_2019_OH	N41°10'18.24253"	W84°46'27.19962"	626.90	CONCRETE
2013_2019_OH	N41°10'44.63314"	W84°44'51.35011"	623.57	ARROW
2014_2019_OH	N41°10'32.78059"	W84°44'00.76551"	624.33	GRAVEL
2015_2019_OH	N41°11'07.75835"	W84°43'34.93590"	621.45	CORNER OF CONCRETE
2016_2019_OH	N41°11'30.60775"	W84°43'06.96292"	619.38	GRAVEL



**Independent Non Vegetated Vertical Accuracy Stations:**

Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
2017_2019_OH	N41°25'51.24032"	W84°45'54.25567"	714.27	GRAVEL
2018_2019_OH	N41°26'52.62047"	W84°42'34.88525"	738.93	GRAVEL
2019_2019_OH	N41°27'56.19607"	W84°45'29.03867"	734.69	GRAVEL
2020_2019_OH	N41°29'51.51468"	W84°46'08.36925"	758.06	CORNER OF RR X
2021_2019_OH	N41°31'43.53018"	W84°44'57.42585"	774.98	GRAVEL
2022_2019_OH	N41°33'29.22802"	W84°43'49.11443"	764.58	CORNER OF RR X
2023_2019_OH	N41°36'08.61084"	W84°46'12.09563"	820.37	GRAVEL
2024_2019_OH	N41°39'49.96258"	W84°44'51.57792"	910.92	GRAVEL
2025_2019_OH	N41°39'57.68356"	W84°33'14.02191"	763.22	GRAVEL
2026_2019_OH	N41°40'27.93563"	W84°21'35.21820"	712.23	GRAVEL
2027_2019_OH	N41°35'11.15592"	W84°28'22.09568"	713.91	GRAVEL
2028_2019_OH	N41°31'43.75503"	W84°33'22.70137"	710.09	GRAVEL
2029_2019_OH	N41°29'59.08354"	W84°38'38.66874"	763.29	GRAVEL
2030_2019_OH	N41°40'04.54980"	W84°12'37.32022"	620.66	CORNER OF STOP BAR
2031_2019_OH	N41°41'48.23577"	W84°04'21.05733"	651.21	LIGHT ASPHALT
2032_2019_OH	N41°41'30.02227"	W83°54'47.25123"	611.73	GRAVEL
2033_2019_OH	N41°40'15.08585"	W84°00'11.11622"	635.42	GRAVEL
2034_2019_OH	N41°42'04.12691"	W83°59'53.40639"	628.86	GRAVEL
2035_2019_OH	N41°42'01.37543"	W83°57'24.95733"	619.56	GRAVEL
2036_2019_OH	N41°40'53.70302"	W84°07'07.61331"	672.52	LIGHT ASPHALT
2037_2019_OH	N41°27'25.71082"	W81°43'36.10004"	622.02	CORNER STOP BAR
2038_2019_OH	N41°28'35.53780"	W81°39'20.79960"	565.01	CORNER CROSSWALK BAR
2039_2019_OH	N41°32'34.12149"	W84°13'45.53959"	634.31	GRAVEL
2040_2019_OH	N41°30'14.67251"	W84°16'03.75580"	624.09	LIGHT ASPHALT
2041_2019_OH	N41°31'16.81249"	W84°22'41.94865"	605.78	LIGHT ASPHALT
2042_2019_OH	N41°25'43.85579"	W84°33'01.70378"	627.55	CORNER OF CONCRETE
2043_2019_OH	N41°23'00.31407"	W84°35'16.13608"	616.44	GRAVEL
2044_2019_OH	N41°20'23.73242"	W84°38'57.21876"	629.08	GRAVEL
2045_2019_OH	N41°20'20.63592"	W84°44'44.02579"	698.39	GRAVEL
2046_2019_OH	N41°16'52.81858"	W84°41'21.80090"	614.42	GRAVEL
2047_2019_OH	N41°24'45.80635"	W81°30'54.89597"	924.01	CORNER OF STOP BAR
2048_2019_OH	N41°27'02.62848"	W81°34'50.48367"	818.21	CORNER CROSSWALK BAR
2049_2019_OH	N41°31'07.29216"	W81°29'27.53538"	925.11	ARROW
2050_2019_OH	N41°03'14.00846"	W84°45'29.90814"	641.51	GRAVEL
2051_2019_OH	N41°21'03.10669"	W84°27'27.31770"	587.11	CORNER OF CONCRETE
2052_2019_OH	N41°01'43.50630"	W84°32'04.07886"	617.24	GRAVEL
2053_2019_OH	N40°54'50.74756"	W84°42'04.45798"	672.37	CORNER OF CONCRETE
2054_2019_OH	N40°40'21.40108"	W84°31'12.06977"	709.45	CORNER STOP BAR
2055_2019_OH	N40°35'48.84497"	W84°42'30.34940"	754.42	GRAVEL
2056_2019_OH	N40°27'54.69944"	W84°41'24.28421"	820.21	LIGHT ASPHALT
2057_2019_OH	N40°24'30.46400"	W84°44'50.68263"	846.24	LIGHT ASPHALT
2058_2019_OH	N40°22'01.51772"	W84°45'26.09166"	918.08	LIGHT ASPHALT





Independent Non Vegetated Vertical Accuracy Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
2059_2019_OH	N40°23'31.57619"	W84°38'35.66859"	857.55	LIGHT ASPHALT
2060_2019_OH	N40°24'09.22396"	W84°29'35.66518"	871.51	CORNER OF CONCRETE
2061_2019_OH	N40°26'17.38745"	W84°19'02.88084"	853.84	CONER OF STOP BAR
2062_2019_OH	N40°33'29.32043"	W84°17'52.34696"	789.93	GRAVEL
2063_2019_OH	N40°33'21.22124"	W84°05'03.77205"	893.06	LIGHT ASPHALT
2064_2019_OH	N40°38'15.90344"	W83°49'13.60102"	858.72	GRAVEL
2065_2019_OH	N40°43'59.86031"	W83°49'23.90159"	863.90	ARROW
2066_2019_OH	N40°46'33.15305"	W83°49'23.90368"	838.44	CONCRETE
2067_2019_OH	N40°46'06.65958"	W83°57'05.49249"	797.93	LIGHT ASPHALT
2068_2019_OH	N40°49'54.11353"	W84°08'16.81183"	676.03	LIGHT ASPHALT
2069_2019_OH	N40°55'56.36263"	W84°24'30.24993"	630.96	LIGHT ASPHALT
2070_2019_OH	N40°57'03.86859"	W84°07'47.63959"	626.33	LIGHT ASPHALT
2071_2019_OH	N41°05'10.21823"	W84°07'52.38213"	611.89	GRAVEL
2072_2019_OH	N41°00'23.86833"	W83°55'08.10897"	633.77	GRAVEL
2073_2019_OH	N40°56'53.21034"	W83°58'34.90256"	659.20	CORNER OF STOP BAR
2074_2019_OH	N40°53'55.66917"	W83°53'09.86692"	700.60	CORNER OF PAINTED X
2075_2019_OH	N40°54'05.65511"	W83°43'34.30008"	733.71	CORNER OF PAINT
2076_2019_OH	N40°49'57.23077"	W83°39'02.56169"	816.17	GRAVEL
2077_2019_OH	N40°44'44.91443"	W83°36'07.18783"	789.29	LIGHT ASPHALT
2078_2019_OH	N40°42'06.15540"	W83°29'44.88928"	808.24	LIGHT ASPHALT
2079_2019_OH	N40°40'50.81283"	W83°22'52.52347"	775.78	CORNER OF STOP BAR
2080_2019_OH	N40°35'34.40905"	W83°23'46.87226"	816.86	LIGHT ASPHALT
2081_2019_OH	N40°49'52.81249"	W83°22'15.94608"	710.22	LIGHT ASPHALT
2082_2019_OH	N40°57'28.38026"	W83°24'04.10854"	718.05	CORNER OF STOP BAR
2083_2019_OH	N40°59'06.34789"	W83°31'55.15957"	684.44	GRAVEL
2084_2019_OH	N41°01'59.12370"	W83°18'07.26464"	727.61	GRAVEL
2085_2019_OH	N41°07'42.99240"	W83°17'07.44671"	657.39	CORNER OF PAINT STRIPE
2086_2019_OH	N41°10'09.55447"	W83°03'02.45594"	684.45	LIGHT ASPHALT
2087_2019_OH	N40°59'54.64845"	W82°55'13.60894"	856.39	GRAVEL
2088_2019_OH	N40°49'28.31414"	W82°54'46.51339"	916.05	GRAVEL
2089_2019_OH	N40°40'31.62765"	W82°52'56.23058"	927.40	GRAVEL
2090_2019_OH	N40°32'04.89022"	W82°56'02.50708"	885.92	GRAVEL
2091_2019_OH	N40°32'05.08308"	W83°06'26.10206"	870.71	LIGHT ASPHALT
2092_2019_OH	N40°26'08.57983"	W82°49'26.63464"	994.09	GRAVEL
2093_2019_OH	N40°40'50.56848"	W82°37'38.55944"	1339.90	GRAVEL
2094_2019_OH	N40°39'11.14642"	W82°18'35.77842"	856.02	LIGHT ASPHALT
2095_2019_OH	N40°43'42.19299"	W82°11'26.28754"	981.51	CORNER OF STOP BAR
2096_2019_OH	N40°47'35.10129"	W82°16'01.57862"	1016.62	GRAVEL
2097_2019_OH	N40°53'12.89885"	W82°19'01.78726"	928.97	CORNER STOP BAR
2098_2019_OH	N40°54'40.69199"	W82°29'57.25579"	1052.18	GRAVEL
2099_2019_OH	N41°01'45.56332"	W82°31'26.59912"	927.75	ARROW
2100_2019_OH	N41°10'16.07591"	W82°18'32.54734"	793.36	CORNER OF STOP BAR



Independent Non Vegetated Vertical Accuracy Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
2101_2019_OH	N41°02'15.11876"	W82°07'33.84788"	946.60	CORNER OF STOP BAR
2102_2019_OH	N41°02'23.72899"	W82°00'00.57408"	953.00	CORNER OF CONCRETE
2103_2019_OH	N41°06'20.32863"	W82°05'35.61578"	759.62	GRAVEL
2104_2019_OH	N41°01'44.34702"	W82°18'48.83594"	1012.91	GRAVEL
2105_2019_OH	N41°15'29.96290"	W82°24'27.18021"	746.74	LIGHT ASPHALT
2106_2019_OH	N41°21'25.99650"	W82°15'02.96752"	676.68	CORNER OF STOP BAR
2107_2019_OH	N41°18'22.57564"	W82°05'17.45216"	665.21	GRAVEL
2108_2019_OH	N41°25'07.62868"	W82°02'31.11204"	596.28	CORNER OF STOP BAR
2109_2019_OH	N41°24'46.20480"	W81°40'00.73370"	584.45	CORNER OF CONCRETE
2110_2019_OH	N41°16'02.42681"	W81°44'40.80046"	779.76	GRAVEL
2111_2019_OH	N41°14'14.11825"	W81°54'48.71046"	760.82	GRAVEL
2112_2019_OH	N41°08'47.75220"	W81°53'29.51785"	993.34	CORNER OF STOP BAR
2113_2019_OH	N41°08'15.40574"	W81°44'49.31387"	1011.02	GRAVEL
2114_2019_OH	N41°16'20.77852"	W81°36'29.99865"	997.31	GRAVEL
2115_2019_OH	N40°59'43.64232"	W81°25'24.45976"	986.35	GRAVEL
2116_2019_OH	N41°01'30.72395"	W81°19'19.92559"	1073.52	GRAVEL
2117_2019_OH	N41°01'32.90697"	W81°15'02.05402"	1029.19	GRAVEL
2118_2019_OH	N41°01'25.33764"	W81°09'50.03784"	1017.69	GRAVEL
2119_2019_OH	N41°01'27.13449"	W81°02'58.93221"	959.56	END OF STRIPE
2120_2019_OH	N41°07'27.78838"	W81°03'03.30512"	913.29	GRAVEL
2121_2019_OH	N41°09'49.58922"	W80°55'01.96380"	821.40	LIGHT ASPHALT
2122_2019_OH	N41°14'11.02701"	W80°37'25.50060"	1022.79	LIGHT ASPHALT
2123_2019_OH	N41°23'11.10510"	W80°34'06.39473"	835.20	CORNER OF STOP BAR
2124_2019_OH	N41°29'54.11731"	W80°36'16.76185"	905.98	GRAVEL
2125_2019_OH	N41°35'10.51681"	W80°36'41.00363"	957.25	GRAVEL
2126_2019_OH	N41°39'03.57723"	W80°42'37.95950"	905.89	GRAVEL
2127_2019_OH	N41°42'16.42501"	W80°46'51.40163"	844.33	GRAVEL
2128_2019_OH	N41°46'55.06334"	W80°51'15.43100"	705.92	ARROW
2129_2019_OH	N41°47'54.61237"	W81°02'55.01155"	558.96	ARROW
2130_2019_OH	N41°41'14.12232"	W81°06'47.72559"	908.71	LIGHT ASPHALT
2131_2019_OH	N41°51'48.56645"	W80°34'21.19124"	759.78	CORNER OF CONCRETE
2132_2019_OH	N41°45'34.19153"	W80°34'15.07123"	849.04	GRAVEL
2133_2019_OH	N41°36'20.84170"	W80°59'32.36952"	966.39	LIGHT ASPHALT
2134_2019_OH	N41°32'55.01504"	W81°04'16.98849"	1159.27	CORNER OF STOP BAR
2135_2019_OH	N41°30'04.38991"	W81°05'19.36966"	1142.97	CORNER OF CONCRETE
2136_2019_OH	N41°29'56.83622"	W81°14'03.92452"	1160.88	GRAVEL
2137_2019_OH	N41°31'21.40787"	W81°22'28.52986"	976.46	CORNER OF STOP BAR
2138_2019_OH	N41°27'45.35946"	W81°19'59.89572"	953.35	CORNER OF STOP BAR
2139_2019_OH	N41°21'10.26293"	W81°18'32.38577"	965.62	LIGHT ASPHALT
2140_2019_OH	N41°16'51.70038"	W81°19'32.48298"	1062.08	CORNER OF STOP BAR
2141_2019_OH	N41°11'01.29396"	W81°20'35.42042"	969.76	CORNER OF STOP BAR
2142_2019_OH	N41°07'44.00173"	W81°31'33.35339"	814.61	LIGHT ASPHALT



**Independent Non Vegetated Vertical Accuracy Stations:**

Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
2143_2019_OH	N41°14'42.34775"	W81°08'52.85328"	1061.09	GRAVEL
2144_2019_OH	N41°22'14.53313"	W81°04'51.05869"	995.90	GRAVEL
2145_2019_OH	N41°18'30.41203"	W80°58'20.49010"	805.90	CORNER OF STOP BAR
2146_2019_OH	N41°22'47.67993"	W80°52'13.40853"	756.15	GRAVEL
2147_2019_OH	N41°18'28.83195"	W80°48'55.39712"	819.29	GRAVEL
2148_2019_OH	N41°31'53.98526"	W80°51'55.84163"	792.29	LIGHT ASPHALT
2149_2019_OH	N41°27'31.86837"	W80°57'16.38196"	740.37	CORNER OF CONCRETE
2150_2019_OH	N41°12'57.67870"	W82°29'27.95334"	823.16	GRAVEL
2151_2019_OH	N41°09'33.07481"	W82°29'24.49561"	831.99	GRAVEL
2152_2019_OH	N41°06'50.23379"	W82°41'10.72221"	721.57	GRAVEL
2153_2019_OH	N41°12'48.01469"	W82°55'41.76068"	695.56	GRAVEL
2154_2019_OH	N41°14'12.02659"	W82°48'27.84211"	674.24	CORNER OF STOP BAR
2155_2019_OH	N41°21'07.64774"	W82°45'13.05366"	600.83	CORNER OF STOP BAR
2156_2019_OH	N41°24'37.70027"	W82°47'19.26885"	506.32	GRAVEL
2157_2019_OH	N41°20'46.79829"	W82°25'18.39087"	644.45	GRAVEL
2158_2019_OH	N41°24'14.19596"	W82°18'53.41920"	544.05	CORNER OF PAINT
2159_2019_OH	N40°39'18.66031"	W84°44'57.17330"	714.97	GRAVEL
2160_2019_OH	N40°39'50.41468"	W84°33'40.00066"	707.84	GRAVEL
2161_2019_OH	N40°44'31.86304"	W84°37'48.78230"	721.15	CORNE OF STOP BAR
2162_2019_OH	N40°44'59.79027"	W84°46'36.15575"	687.91	GRAVEL
2163_2019_OH	N40°48'28.93618"	W84°43'38.04251"	710.89	LIGHT ASPHALT
2164_2019_OH	N40°32'35.04727"	W84°42'29.74829"	745.10	GRAVEL
2165_2019_OH	N40°36'41.52969"	W84°34'23.14292"	726.73	GRAVEL
2166_2019_OH	N40°38'27.91886"	W84°23'31.08126"	719.88	GRAVEL
2167_2019_OH	N40°46'58.99821"	W84°27'21.08279"	694.33	LIGHT ASPHALT
2168_2019_OH	N40°56'48.22832"	W84°32'04.07873"	635.12	GRAVEL
2169_2019_OH	N41°02'51.38739"	W84°37'50.52565"	629.80	GRAVEL
2170_2019_OH	N41°05'07.05520"	W84°25'08.40003"	602.49	GRAVEL
2171_2019_OH	N41°11'39.63688"	W84°26'52.06055"	586.26	LIGHT ASPHALT
2172_2019_OH	N41°11'27.50455"	W84°27'38.74414"	598.58	LIGHT ASPHALT
2173_2019_OH	N41°17'05.14378"	W84°33'12.17938"	598.70	CENTER OF RR X
2174_2019_OH	N41°14'27.73185"	W84°45'21.00096"	625.77	GRAVEL
2175_2019_OH	N41°12'55.10986"	W84°46'32.17434"	622.47	GRAVEL
2176_2019_OH	N40°29'48.87338"	W84°10'04.23082"	905.06	LIGHT ASPHALT
2177_2019_OH	N40°28'55.71811"	W84°15'34.56186"	817.55	GRAVEL
2178_2019_OH	N40°35'05.89593"	W84°11'46.76537"	810.26	LIGHT ASPHALT
2179_2019_OH	N40°37'45.57879"	W84°05'20.80705"	799.24	GRAVEL
2180_2019_OH	N40°36'50.12897"	W83°58'22.58621"	954.59	GRAVEL
2181_2019_OH	N40°40'45.10460"	W83°57'39.24943"	870.15	GRAVEL
2182_2019_OH	N40°42'11.60870"	W83°42'40.58322"	912.57	GRAVEL
2183_2019_OH	N40°35'19.76309"	W83°40'32.47745"	974.76	LIGHT ASPHALT
2184_2019_OH	N40°38'07.80204"	W83°28'54.19785"	861.45	GRAVEL



**Independent Non Vegetated Vertical Accuracy Stations:**

Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
2185_2019_OH	N40°38'41.24140"	W83°18'16.76472"	778.01	LIGHT ASPHALT
2186_2019_OH	N40°36'47.78023"	W83°12'09.44072"	817.77	GRAVEL
2187_2019_OH	N40°42'11.23419"	W83°00'15.17067"	885.47	GRAVEL
2188_2019_OH	N40°48'54.03226"	W83°06'43.24944"	830.26	GRAVEL
2189_2019_OH	N40°54'27.85095"	W83°01'00.30606"	879.66	GRAVEL
2190_2019_OH	N41°00'36.47230"	W83°47'11.19446"	654.59	GRAVEL
2191_2019_OH	N40°54'12.10850"	W83°33'19.19104"	722.90	GRAVEL
2192_2019_OH	N40°47'38.99025"	W83°31'21.64723"	815.36	GRAVEL
2193_2019_OH	N40°25'10.18910"	W84°37'59.07527"	853.16	CORNER OF STOP BAR
2194_2019_OH	N41°03'33.65464"	W83°41'18.17899"	654.83	CORNER OF STOP BAR
2195_2019_OH	N40°29'26.98753"	W84°37'41.93268"	791.61	CENTER OF STRIPE
2196_2019_OH	N40°33'24.10570"	W84°24'51.94342"	802.03	END OF STRIPE
2197_2019_OH	N40°34'42.64577"	W84°10'44.46214"	777.35	LIGHT ASPHALT
2198_2019_OH	N41°01'13.01828"	W84°02'50.74151"	613.56	CORNER OF STOP BAR
2199_2019_OH	N40°33'49.61239"	W84°13'38.53178"	766.77	LIGHT ASPHALT
2200_2019_OH	N40°33'38.49809"	W84°11'03.82920"	793.51	LIGHT ASPHALT
2201_2019_OH	N40°49'59.95140"	W83°58'32.75199"	742.23	CENTER OF RR X
2202_2019_OH	N40°50'04.49793"	W84°21'03.67453"	660.54	CENTERLINE OF STRIPE
2203_2019_OH	N40°47'16.44849"	W84°11'40.57262"	690.62	CORNER OF PAINT STRIPE
2204_2019_OH	N40°24'53.77666"	W84°46'45.31735"	823.16	CORNER OF CONCRETE
2205_2019_OH	N40°47'08.93305"	W84°06'32.63886"	728.60	CORNER OF PAINT STRIPE
2206_2019_OH	N40°41'12.03642"	W84°07'38.65615"	771.41	LIGHT ASPHALT
2207_2019_OH	N40°58'53.06413"	W84°11'50.69650"	614.04	CORNER OF PAINT STRIPE
2208_2019_OH	N41°31'46.61114"	W84°19'00.64263"	609.85	END OF STRIPE
2209_2019_OH	N40°40'52.44471"	W84°38'47.81743"	702.69	CORNER OF STOP BAR
2210_2019_OH	N41°35'11.91778"	W84°35'34.58770"	757.32	CORNER OF CROSSWALK BAR
2211_2019_OH	N41°28'28.29495"	W84°32'10.34352"	633.98	CORNER OF CONCRETE
2212_2019_OH	N41°26'53.68896"	W82°42'52.58350"	480.90	CORNER OF STOP BAR
2213_2019_OH	N41°22'06.20359"	W82°05'56.36124"	601.15	CENTER OF STRIPE
2214_2019_OH	N41°24'37.28714"	W82°12'34.35744"	535.83	CORNER OF STOP BAR
2215_2019_OH	N41°16'28.82850"	W84°26'12.39562"	596.82	CENTER OF STRIPE
2216_2019_OH	N41°26'33.69095"	W82°09'50.82737"	521.69	CORNER OF CONCRETE
2217_2019_OH	N41°27'36.08281"	W81°55'31.44296"	586.67	ARROW
2218_2019_OH	N41°22'24.74358"	W81°52'50.48295"	666.56	CENTERLINE OF STRIPE
2219_2019_OH	N41°16'02.64404"	W81°50'26.85684"	1084.15	ARROW
2220_2019_OH	N41°13'33.90272"	W81°50'29.16830"	1044.62	ARROW
2221_2019_OH	N41°18'21.19186"	W81°49'16.63440"	835.05	ARROW
2222_2019_OH	N41°30'32.93545"	W81°32'14.62172"	886.97	CORNER OF STOP BAR
2223_2019_OH	N41°23'43.86822"	W81°34'27.50583"	830.11	CORNER OF CONCRETE
2224_2019_OH	N41°22'41.39885"	W81°25'44.72724"	929.41	ARROW
2225_2019_OH	N41°36'04.17661"	W81°31'31.17408"	497.13	CENTERLINE OF STRIPE
2226_2019_OH	N41°44'25.33964"	W80°46'10.52286"	838.82	CORNER OF STOP BAR



Independent Non Vegetated Vertical Accuracy Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
2227_2019_OH	N40°39'00.74555"	W82°37'16.16947"	1185.61	CORNER OF STOP BAR
2228_2019_OH	N40°47'25.62667"	W82°43'56.82207"	1032.48	CORNER OF RR X
2229_2019_OH	N41°56'36.81393"	W80°33'13.81887"	546.25	CORNER OF STOP BAR
2230_2019_OH	N41°01'40.44726"	W81°31'40.04537"	866.80	ARROW
2231_2019_OH	N41°01'56.05856"	W82°43'48.95407"	832.93	CORNER OF CONCRETE
2232_2019_OH	N40°56'09.74222"	W82°43'35.94604"	943.77	CORNER OF STOP BAR
2233_2019_OH	N40°53'07.58237"	W82°45'26.89447"	1043.61	CORNER OF STOP BAR
2234_2019_OH	N41°17'39.24908"	W81°26'24.14431"	981.08	ARROW
2235_2019_OH	N40°38'04.19875"	W82°58'02.55817"	880.86	CORNER OF STOP BAR
2236_2019_OH	N41°52'52.17709"	W80°44'55.45710"	576.25	ARROW
2237_2019_OH	N40°35'14.01969"	W82°25'25.66984"	972.11	CORNER OF STOP BAR
2238_2019_OH	N40°42'12.47549"	W82°25'01.85000"	976.87	CORNER OF STOP BAR
2239_2019_OH	N41°52'56.92231"	W80°47'54.41969"	519.64	ARROW
2240_2019_OH	N41°06'25.79906"	W81°26'52.17150"	1007.01	CORNER OF STOP BAR
2241_2019_OH	N40°42'22.15323"	W82°14'35.23397"	1059.90	CORNER OF STOP BAR
2242_2019_OH	N40°38'08.30947"	W82°14'22.17698"	834.88	CORNER OF STOP BAR
2243_2019_OH	N41°09'40.96923"	W81°26'26.60837"	991.57	ARROW
2244_2019_OH	N40°34'05.68608"	W82°27'02.33359"	1020.83	CORNER OF STOP BAR
2245_2019_OH	N41°12'57.64283"	W81°25'24.80034"	1018.27	ARROW
2246_2019_OH	N40°30'01.02315"	W82°54'16.69339"	893.61	CORNER OF STOP BAR
2247_2019_OH	N40°32'00.30204"	W83°12'32.74161"	801.28	CORNER OF STOP BAR
2248_2019_OH	N41°05'44.63179"	W81°23'07.51848"	1021.89	CORNER OF STOP BAR
2249_2019_OH	N40°43'49.30938"	W82°45'53.36803"	1064.51	ARROW
2250_2019_OH	N40°47'25.78043"	W82°58'41.67552"	880.01	ARROW
2251_2019_OH	N40°44'21.85237"	W82°48'03.20056"	1026.02	CORNER OF STOP BAR
2252_2019_OH	N40°48'42.22819"	W82°56'44.10400"	912.47	ARROW
2253_2019_OH	N40°49'31.27802"	W82°58'31.97059"	889.46	LIGHT ASPHALT
2254_2019_OH	N41°10'05.62461"	W82°13'03.05577"	745.55	ARROW
2255_2019_OH	N41°31'35.47908"	W82°49'46.70550"	476.34	LIGHT ASPHALT
2256_2019_OH	N41°41'26.73281"	W83°26'25.99252"	464.17	CENTER OF RR X
2257_2019_OH	N41°35'38.45639"	W83°05'19.86710"	465.63	CORNER OF CONCRETE
2258_2019_OH	N41°16'02.48652"	W81°44'40.69877"	779.90	GRAVEL
2259_2019_OH	N41°28'47.86215"	W81°39'58.09317"	536.91	CORNER OF STRIPE
2260_2019_OH	N41°18'25.81548"	W84°21'40.25518"	601.19	BARE EARTH
2261_2019_OH	N41°07'17.52158"	W84°20'30.65888"	606.06	LIGHT ASPHALT
2262_2019_OH	N40°59'46.85333"	W83°38'59.08300"	675.56	GRAVEL
2263_2019_OH	N40°35'34.48965"	W83°23'45.97566"	815.22	LIGHT ASPHALT





Independent Vegetated Vertical Accuracy Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
3001_2019_OH	N40°40'50.36381"	W82°44'48.81175"	1176.71	FOREST
3002_2019_OH	N40°56'05.35876"	W83°13'20.07989"	692.43	FOREST
3003_2019_OH	N41°05'02.90910"	W81°03'25.36549"	928.66	FOREST
3004_2019_OH	N41°40'04.43803"	W80°57'14.86730"	862.91	FOREST
3005_2019_OH	N41°39'47.44443"	W80°49'33.47132"	749.18	FOREST
3006_2019_OH	N41°36'01.11068"	W80°49'05.19186"	764.10	FOREST
3007_2019_OH	N41°43'32.50827"	W80°37'44.85285"	898.13	FOREST
3008_2019_OH	N41°38'35.91379"	W80°47'08.60931"	813.58	FOREST
3009_2019_OH	N41°39'34.08449"	W80°59'34.52488"	949.02	FOREST
3010_2019_OH	N41°38'06.20753"	W81°04'38.78621"	1137.61	FOREST
3011_2019_OH	N41°36'49.32736"	W81°08'33.94461"	1192.19	FOREST
3012_2019_OH	N41°45'38.04384"	W80°57'59.25595"	729.26	FOREST
3013_2019_OH	N41°50'07.72158"	W80°46'18.15237"	712.67	FOREST
3014_2019_OH	N41°15'32.87562"	W80°54'20.48420"	780.55	FOREST
3015_2019_OH	N41°17'37.81930"	W81°04'58.24210"	874.17	FOREST
3016_2019_OH	N40°57'10.36649"	W81°36'31.54055"	899.08	FOREST
3017_2019_OH	N41°04'16.50514"	W81°16'08.89847"	974.48	FOREST
3018_2019_OH	N41°06'44.62436"	W81°43'49.26749"	938.01	FOREST
3019_2019_OH	N41°14'19.52110"	W81°44'06.89475"	880.52	FOREST
3020_2019_OH	N41°10'38.95834"	W82°00'43.80974"	894.40	FOREST
3021_2019_OH	N40°59'57.43331"	W82°12'29.37869"	1088.47	FOREST
3022_2019_OH	N40°55'05.41040"	W82°12'19.33461"	1130.68	FOREST
3023_2019_OH	N40°35'57.79660"	W82°29'44.44424"	1035.88	FOREST
3024_2019_OH	N40°30'27.16355"	W82°47'07.79358"	1081.04	FOREST
3025_2019_OH	N40°50'58.63036"	W82°28'47.33256"	931.60	FOREST
3026_2019_OH	N40°52'13.59690"	W83°03'18.70436"	832.97	FOREST
3027_2019_OH	N41°09'08.04820"	W83°21'01.52964"	637.18	FOREST
3028_2019_OH	N40°33'54.22290"	W83°28'03.30001"	862.71	FOREST
3029_2019_OH	N40°45'02.81201"	W83°23'07.14473"	756.50	FOREST
3030_2019_OH	N40°52'32.82417"	W83°25'09.89188"	752.02	FOREST
3031_2019_OH	N40°57'02.59685"	W83°39'52.69761"	695.98	FOREST
3032_2019_OH	N40°51'46.68328"	W83°47'37.40085"	755.07	FOREST
3033_2019_OH	N40°35'49.48463"	W83°46'59.37999"	917.10	FOREST
3034_2019_OH	N40°36'02.35948"	W84°02'14.85839"	893.43	FOREST
3035_2019_OH	N40°27'19.44452"	W84°34'17.02352"	789.96	FOREST
3036_2019_OH	N40°37'14.09581"	W84°28'30.67863"	728.51	FOREST
3037_2019_OH	N40°46'43.00606"	W84°30'28.59930"	681.04	FOREST
3038_2019_OH	N40°41'54.94228"	W84°38'44.25026"	693.02	FOREST
3039_2019_OH	N41°33'30.62999"	W84°39'16.42430"	728.40	FOREST
3040_2019_OH	N41°34'21.36694"	W84°15'43.11037"	628.08	FOREST
3041_2019_OH	N41°37'56.52772"	W84°21'47.57549"	643.72	FOREST
3042_2019_OH	N41°25'47.29579"	W84°20'30.42716"	602.97	FOREST



Independent Vegetated Vertical Accuracy Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
3043_2019_OH	N41°23'09.90554"	W84°41'25.66707"	685.82	FOREST
3044_2019_OH	N41°17'35.45373"	W84°47'09.46491"	662.56	FOREST
3045_2019_OH	N41°15'09.88135"	W84°38'43.28741"	608.62	FOREST
3046_2019_OH	N41°06'24.08809"	W84°39'42.21851"	615.29	FOREST
3047_2019_OH	N41°00'16.92219"	W84°26'17.64030"	612.50	SHORT GRASS
3048_2019_OH	N41°17'22.49142"	W81°53'06.72613"	784.40	TALL WEEDS
3049_2019_OH	N41°20'35.07645"	W81°58'13.72110"	683.23	TALL WEEDS
3050_2019_OH	N41°17'19.83718"	W82°01'15.22146"	699.12	TALL WEEDS
3051_2019_OH	N41°25'12.21062"	W81°12'41.42801"	1136.20	TALL WEEDS
3052_2019_OH	N40°59'47.96198"	W81°20'59.35315"	1051.53	TALL WEEDS
3053_2019_OH	N41°04'50.84371"	W81°09'44.41726"	1075.17	TALL WEEDS
3054_2019_OH	N41°11'44.27617"	W80°59'55.30149"	830.57	TALL GRASS
3055_2019_OH	N40°25'59.65828"	W82°56'15.93454"	869.84	TALL WEEDS
3056_2019_OH	N40°28'34.18065"	W82°45'23.96109"	1093.05	BARE EARTH
3057_2019_OH	N40°32'35.98614"	W82°43'14.04001"	1245.95	TALL WEEDS
3058_2019_OH	N40°36'03.23476"	W82°37'28.00421"	1257.61	TALL WEEDS
3059_2019_OH	N40°34'30.52292"	W82°34'16.73035"	1280.22	BARE EARTH
3060_2019_OH	N40°35'03.41200"	W82°20'10.51925"	1058.99	TALL GRASS
3061_2019_OH	N40°37'58.19927"	W82°26'45.90980"	1040.74	SHORT GRASS
3062_2019_OH	N40°40'48.78523"	W82°27'14.57270"	1119.41	TALL WEEDS
3063_2019_OH	N40°44'49.84287"	W82°38'49.48492"	1249.39	TALL WEEDS
3064_2019_OH	N40°41'45.91626"	W82°33'37.97544"	1139.15	TALL WEEDS
3065_2019_OH	N40°50'21.37289"	W82°47'06.89618"	1002.43	TALL WEEDS
3066_2019_OH	N40°44'48.06784"	W83°02'56.53943"	864.78	TALL WEEDS
3067_2019_OH	N40°40'23.85344"	W83°13'05.11715"	784.94	TALL WEEDS
3068_2019_OH	N40°39'36.99886"	W83°42'19.72402"	871.77	LONG GRASS
3069_2019_OH	N40°46'34.69301"	W83°42'34.23229"	823.49	LONG GRASS
3070_2019_OH	N40°51'05.59674"	W83°31'13.03007"	761.65	TALL WEEDS
3071_2019_OH	N40°53'31.22743"	W83°37'16.55505"	752.89	TALL WEEDS
3072_2019_OH	N40°56'38.75721"	W83°49'25.85087"	685.92	SHORT GRASS
3073_2019_OH	N41°03'45.49420"	W84°05'31.16244"	618.21	TALL WEEDS
3074_2019_OH	N41°06'17.86355"	W84°12'30.16683"	600.48	TALL WEEDS
3075_2019_OH	N41°40'11.89753"	W83°53'53.76655"	603.77	TALL WEEDS
3076_2019_OH	N41°40'26.02044"	W84°09'17.60877"	692.96	TALL WEEDS
3077_2019_OH	N41°39'01.77753"	W84°17'15.78792"	616.04	TALL WEEDS
3078_2019_OH	N41°37'19.83638"	W84°29'42.42762"	765.30	TALL WEEDS
3079_2019_OH	N41°35'51.53514"	W84°41'48.11274"	780.19	TALL WEEDS
3080_2019_OH	N41°27'34.12329"	W84°35'01.15274"	675.34	TALL WEEDS
3081_2019_OH	N41°17'46.98321"	W84°37'50.63266"	611.48	TALL WEEDS
3082_2019_OH	N41°13'54.57592"	W84°42'29.51209"	615.71	TALL WEEDS
3083_2019_OH	N41°08'01.86839"	W84°44'12.61473"	628.40	TALL WEEDS
3084_2019_OH	N40°58'30.51587"	W84°42'02.46783"	651.77	SHORT GRASS



**Independent Vegetated Vertical Accuracy Stations:**

Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
3085_2019_OH	N40°54'35.33514"	W84°36'37.84956"	651.84	SHORT GRASS
3086_2019_OH	N40°25'39.35330"	W84°40'36.67347"	893.24	SHORT GRASS
3087_2019_OH	N40°23'23.21210"	W84°41'27.51482"	863.08	TALL WEEDS
3088_2019_OH	N40°23'35.25206"	W84°25'26.99609"	858.57	TALL WEEDS
3089_2019_OH	N40°28'05.96316"	W84°28'26.33932"	793.77	SHORT GRASS
3090_2019_OH	N40°27'13.31090"	W84°16'26.53266"	862.25	TALL WEEDS
3091_2019_OH	N40°30'28.30236"	W84°19'00.80479"	786.64	TALL WEEDS
3092_2019_OH	N40°31'05.76357"	W84°14'20.66520"	804.14	TALL WEEDS
3093_2019_OH	N40°31'43.41192"	W84°04'26.77469"	904.03	TALL WEEDS
3094_2019_OH	N40°35'11.25721"	W83°54'48.64802"	916.54	TALL GRASS
3095_2019_OH	N40°39'08.63734"	W83°53'57.76633"	930.81	TALL WEEDS
3096_2019_OH	N40°39'57.46670"	W84°02'49.07946"	803.31	TALL WEEDS
3097_2019_OH	N40°39'11.92042"	W84°13'17.23934"	731.69	TALL WEEDS
3098_2019_OH	N40°58'29.96732"	W82°23'43.04166"	996.88	TALL WEEDS
3099_2019_OH	N40°55'23.75246"	W82°35'42.38437"	930.29	TALL WEEDS
3100_2019_OH	N40°51'28.55672"	W82°33'13.22845"	1071.35	TALL WEEDS
3101_2019_OH	N40°38'21.10609"	W82°45'17.66168"	1184.78	TALL WEEDS
3102_2019_OH	N40°35'11.37707"	W82°53'41.78132"	910.57	TALL WEEDS
3103_2019_OH	N40°38'38.94228"	W83°03'04.39506"	870.61	TALL WEEDS
3104_2019_OH	N40°58'28.52665"	W82°49'15.58231"	848.19	TALL WEEDS
3105_2019_OH	N41°00'33.35976"	W82°37'53.40431"	922.68	TALL WEEDS
3106_2019_OH	N41°07'26.04110"	W82°33'51.61730"	845.57	TALL WEEDS
3107_2019_OH	N41°10'51.01991"	W82°45'43.26541"	676.17	TALL WEEDS
3108_2019_OH	N41°06'08.27313"	W82°24'28.36798"	839.95	TALL WEEDS
3109_2019_OH	N41°11'01.40886"	W82°23'47.13605"	803.41	TALL WEEDS
3110_2019_OH	N41°15'22.57051"	W82°12'31.07572"	690.16	TALL WEEDS
3111_2019_OH	N41°19'23.64164"	W82°09'37.25091"	668.95	TALL WEEDS
3112_2019_OH	N41°24'29.02837"	W81°46'43.43911"	694.01	TALL WEEDS
3113_2019_OH	N41°13'09.71663"	W81°12'41.08029"	1042.36	SHORT GRASS
3114_2019_OH	N41°48'03.20670"	W80°34'21.06085"	834.79	LONG GRASS
3115_2019_OH	N41°49'59.37995"	W80°43'41.21444"	738.06	TALL WEEDS
3116_2019_OH	N41°50'00.86312"	W80°36'27.47445"	773.67	TALL WEEDS
3117_2019_OH	N41°42'59.41834"	W80°54'14.07268"	711.69	TALL WEEDS
3118_2019_OH	N41°29'37.16695"	W80°48'37.08097"	775.96	TALL WEEDS
3119_2019_OH	N41°11'00.51475"	W80°35'51.04009"	932.33	TALL WEEDS
3120_2019_OH	N41°18'48.81429"	W80°35'53.19209"	940.63	LONG GRASS
3121_2019_OH	N40°59'33.38551"	W84°12'27.05381"	611.78	TALL WEEDS
3122_2019_OH	N41°00'23.86267"	W84°07'18.10034"	614.93	TALL WEEDS
3123_2019_OH	N40°53'50.67738"	W84°03'54.11796"	661.44	TALL WEEDS
3124_2019_OH	N40°48'20.06319"	W84°14'35.28348"	678.32	SHORT GRASS
3125_2019_OH	N40°44'08.52886"	W84°23'48.99694"	704.39	SHORT GRASS
3126_2019_OH	N41°05'34.76712"	W84°29'44.34333"	595.43	TALL WEEDS

**Independent Vegetated Vertical Accuracy Stations:**

Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
3127_2019_OH	N41°07'56.51546"	W84°26'38.26026"	600.88	TALL WEEDS
3128_2019_OH	N41°09'21.70860"	W84°22'49.56918"	604.87	TALL WEEDS
3129_2019_OH	N41°10'50.67657"	W84°14'49.99532"	607.00	TALL WEEDS
3130_2019_OH	N41°11'39.52651"	W84°33'12.93789"	608.13	TALL WEEDS
3131_2019_OH	N41°10'45.44453"	W84°39'04.06840"	615.21	TALL WEEDS
3132_2019_OH	N41°23'08.15573"	W84°28'40.39944"	595.39	TALL WEEDS
3133_2019_OH	N40°55'03.39736"	W84°29'42.24966"	640.91	TALL WEEDS
3134_2019_OH	N40°53'18.14419"	W84°22'28.60419"	645.42	SHORT GRASS
3135_2019_OH	N40°31'24.48701"	W84°40'00.06833"	762.45	TALL WEEDS
3136_2019_OH	N40°28'47.76587"	W84°44'45.93442"	805.68	SHORT GRASS
3137_2019_OH	N40°37'32.92945"	W84°42'30.81613"	732.01	SHORT GRASS
3138_2019_OH	N40°46'42.66804"	W84°40'36.54071"	704.16	SHORT GRASS
3139_2019_OH	N40°43'14.32884"	W84°32'00.03849"	709.41	TALL WEEDS
3140_2019_OH	N40°42'00.88950"	W84°44'48.07992"	697.08	SHORT GRASS
3141_2019_OH	N41°01'06.44826"	W84°43'35.04324"	645.56	TALL WEEDS
3142_2019_OH	N41°30'50.64842"	W84°28'36.04477"	635.09	TALL WEEDS
3143_2019_OH	N40°56'26.74462"	W82°56'50.50340"	877.74	TALL WEEDS
3144_2019_OH	N41°03'31.95056"	W82°57'11.21296"	812.22	TALL WEEDS
3145_2019_OH	N41°12'23.79860"	W83°00'53.83640"	675.53	TALL WEEDS
3146_2019_OH	N41°12'40.47175"	W83°10'14.91138"	583.04	CULTIVATED FIELD
3147_2019_OH	N41°04'24.74220"	W83°15'59.30684"	681.65	TALL GRASS
3148_2019_OH	N40°59'07.30076"	W83°17'56.56029"	681.52	TALL WEEDS
3149_2019_OH	N40°52'47.38005"	W83°16'38.00297"	713.07	TALL WEEDS
3150_2019_OH	N41°01'17.78576"	W83°06'33.09981"	709.99	TALL GRASS
3151_2019_OH	N41°07'26.78812"	W82°57'26.36563"	778.28	TALL GRASS
3152_2019_OH	N41°17'33.97787"	W82°41'31.60222"	585.41	TALL GRASS
3153_2019_OH	N41°17'54.08475"	W82°47'32.12132"	615.08	SHORT GRASS
3154_2019_OH	N41°19'04.95310"	W82°27'53.66607"	674.14	TALL WEEDS
3155_2019_OH	N41°18'23.16771"	W82°19'47.69342"	711.93	TALL WEEDS
3156_2019_OH	N41°18'51.84384"	W82°14'14.55561"	688.61	TALL WEEDS
3157_2019_OH	N41°12'10.88996"	W82°08'22.77376"	728.51	TALL WEEDS
3158_2019_OH	N41°05'47.25894"	W82°13'13.06979"	871.50	TALL WEEDS
3159_2019_OH	N40°41'44.60118"	W82°10'08.91321"	973.71	TALL WEEDS
3160_2019_OH	N40°24'49.74700"	W82°44'21.05524"	1139.85	TALL WEEDS
3161_2019_OH	N40°41'12.19327"	W82°15'07.89878"	1192.64	TALL WEEDS
3162_2019_OH	N40°48'51.97127"	W82°21'15.06601"	1199.26	TALL WEEDS
3163_2019_OH	N40°50'33.27676"	W82°11'37.80057"	1069.39	CULTIVATED FIELD
3164_2019_OH	N40°44'40.71825"	W82°14'42.57200"	1061.43	TALL WEEDS
3165_2019_OH	N41°03'45.88801"	W82°04'33.41381"	803.56	TALL WEEDS
3166_2019_OH	N41°01'04.87639"	W81°58'00.74109"	949.08	TALL WEEDS
3167_2019_OH	N41°19'21.95976"	W80°51'21.27895"	828.00	TALL WEEDS
3168_2019_OH	N41°26'46.93582"	W81°01'19.59477"	1050.40	TALL WEEDS



Independent Vegetated Vertical Accuracy Stations:				
Station Name	Latitude	Longitude	Height	Station Description
			(USFT)	
3169_2019_OH	N41°30'20.56353"	W80°58'21.83412"	892.64	TALL WEEDS
3170_2019_OH	N41°33'17.17801"	W80°47'25.97802"	804.67	LONG GRASS
3171_2019_OH	N41°22'49.76214"	W80°57'17.46149"	735.88	TALL WEEDS
3172_2019_OH	N41°29'55.88267"	W81°42'46.51844"	468.08	TALL WEEDS
3173_2019_OH	N41°29'19.57694"	W81°45'15.19830"	521.60	TALL WEEDS
3174_2019_OH	N41°35'46.52202"	W81°18'29.38558"	992.22	TALL WEEDS
3175_2019_OH	N41°31'44.83225"	W81°08'38.16279"	1211.49	TALL GRASS
3176_2019_OH	N41°31'17.54824"	W81°03'20.91103"	1044.90	TALL GRASS
3177_2019_OH	N41°25'17.77445"	W82°38'08.49357"	470.55	BRUSH
3178_2019_OH	N40°31'27.31069"	W84°10'11.96656"	846.42	BRUSH
3179_2019_OH	N41°15'57.18657"	W80°52'57.06194"	786.07	BRUSH
3180_2019_OH	N41°39'25.67902"	W82°49'54.09702"	479.10	FOREST
3181_2019_OH	N41°37'00.37946"	W82°40'55.68824"	466.38	FOREST
3182_2019_OH	N41°38'19.25271"	W83°15'14.19684"	455.51	TALL WEEDS
3183_2019_OH	N41°11'37.84561"	W84°33'12.10165"	608.55	TALL WEEDS

Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:				
Station Name	Latitude	Longitude	Height	PID
			(USFT)	
4 1	N40°25'06.16104"	W83°17'24.07277"	828.80	AE3417
12 0028	N40°24'44.05960"	W82°58'24.80530"	861.62	KZ2305
14 DWP	N41°10'59.50047"	W80°29'31.07148"	886.69	MB0416
17G B	N40°46'53.49363"	W82°58'10.53282"	895.63	AF7792
85 027 1 P CO	N41°18'10.57078"	W81°15'07.38719"	1103.36	MB2770
792	N41°34'59.59056"	W84°26'02.44388"	678.22	MD0026
906 3097 E	N41°39'29.31280"	W82°49'38.86424"	472.54	MC1582
1001	N40°33'28.72857"	W84°12'00.78610"	791.07	TSM
1001_3T7	N41°41'20.00871"	W82°48'40.27870"	460.81	TSM
1001_89D	N41°36'12.55015"	W82°41'15.06244"	478.96	TSM
1002	N41°32'27.59919"	W82°43'14.98378"	468.10	TSM
1002_3T7	N41°41'18.58486"	W82°48'18.90615"	459.21	TSM
1002_89D	N41°36'11.82463"	W82°40'53.41863"	464.28	TSM
1061	N41°20'27.45802"	W82°50'36.94438"	653.25	DG7164
1519	N41°27'47.58833"	W81°13'54.09298"	1102.91	MB3100
1523	N41°21'02.11385"	W81°31'36.38552"	932.48	MB1812
A 290	N40°42'16.17194"	W84°01'36.30218"	853.48	LA0005
A 314	N41°06'04.99024"	W84°00'30.99039"	654.30	MD0088
A 319	N41°24'50.07268"	W82°23'27.65174"	480.22	MC0927
A 320	N41°30'46.58727"	W82°01'07.35163"	478.12	MC0891
ASHCOPORT	N41°46'47.89455"	W80°42'02.07768"	795.54	MB2962
AUG 75 12.45	N40°39'22.96862"	W84°07'51.72064"	785.46	LA2478
B 161	N41°27'41.99185"	W80°52'05.38271"	786.13	MB0637



**Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:**

Station Name	Latitude	Longitude	Height	PID
			(USFT)	
B 315	N41°05'31.69645"	W84°34'23.69375"	616.84	MD0227
BAXTER	N40°53'15.71696"	W84°48'09.29521"	704.46	LA0691
BERLIN M5	N41°02'35.39935"	W81°00'32.70378"	937.86	DL1914
BGOH	N41°22'48.59519"	W83°38'33.45644"	694.91	DH3473
CAUSEWAY	N40°31'06.95467"	W82°29'00.84355"	992.47	AB5587
CELINA	N40°33'10.19542"	W84°37'03.87190"	793.03	LA0562
D 248	N40°48'44.51874"	W82°30'01.96702"	1168.46	KZ1209
DEF 66	N41°15'40.12355"	W084°21'40.40108"	598.47	AB6017
E 182	N41°41'37.56931"	W83°31'36.97679"	478.03	MC0734
E 281	N40°57'30.01126"	W81°46'49.27577"	854.38	KY1826
E 348	N40°26'10.03516"	W84°10'07.01424"	908.45	LA2517
EXECPORT	N41°03'34.89876"	W80°49'49.49557"	871.24	MB2974
F 152	N41°14'01.37856"	W80°31'20.83826"	976.50	MB0924
FULTON NO 04	N41°29'10.06779"	W84°10'22.70959"	611.22	AB5533
G 18	N41°35'45.16620"	W83°50'40.66383"	555.09	MC0747
G 249	N40°52'38.94952"	W82°41'45.67663"	1008.36	KZ1049
G 321	N41°32'23.93358"	W81°38'02.94382"	470.48	MB1563
GARF	N41°24'56.78157"	W81°36'53.60423"	834.15	DF5362
GUST	N41°27'45.87327"	W80°42'58.24973"	929.08	AJ7190
H 294	N40°33'38.68075"	W83°34'07.71483"	940.44	KZ0652
H 348	N40°46'24.69938"	W84°05'34.42461"	755.85	LA2545
HEISLER	N41°02'20.88184"	W82°43'54.20827"	849.83	MC0215
HI 14	N41°14'20.42697"	W 81°47'05.23060"	1085.11	DF7205
HOMER AZ MK	N41°03'13.73367"	W82°07'31.63888"	936.62	MC0069
HUDSON	N41°14'24.10545"	W81°26'40.96956"	951.03	MB1083
J 272	N40°19'12.07918"	W82°41'30.81318"	1130.20	KZ0966
J 318	N41°25'59.00000"	W82°41'55.00000"	483.80	MC0957
J 337	N41°19'16.82750"	W81°30'31.78576"	905.56	MB1815
KILLDEER	N40°42'32.19298"	W83°22'52.28774"	764.78	AB6140
KNTN	N40°37'49.64006"	W83°36'53.28058"	872.52	DF4052
L 227 RESET	N40°32'29.00170"	W84°55'48.50184"	744.70	LA0533
L 321	N41°44'17.01429"	W81°16'45.38201"	497.38	MB1618
LAKE	N40°33'24.64125"	W84°27'20.53311"	896.98	AE2615
LANDO	N40°21'12.81535"	W84°34'18.08986"	852.89	AE2641
LCB 528	N41°39'38.01973"	W83°18'45.16662"	459.45	MC1778
LIMA	N40°44'02.35571"	W84°04'48.06700"	774.80	LA0048
M 163	N41°17'10.70675"	W80°55'31.70776"	830.83	MB0664
M 176	N41°03'13.21109"	W81°59'11.33563"	1021.85	MB1317
M 323	N41°41'43.94917"	W81°20'20.33622"	514.12	MB1605
MAR 02 01	N40°58'23.03486"	W81°12'46.93882"	990.47	DG7207
MILFORD 2 RM A	N41°22'56.43180"	W84°44'54.81791"	759.66	MD1780
MTVR	N40°22'56.57514"	W82°30'38.38040"	940.02	DF4056



**Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:**

Station Name	Latitude	Longitude	Height	PID
			(USFT)	
NEW LYME	N41°35'09.91626"	W80°46'12.01646"	878.41	DG7215
OH21 A	N41°14'46.55042"	W82°33'08.20342"	726.55	AB6039
OHAL	N40°46'09.73942"	W84°06'25.04574"	771.17	DI1846
OHAS	N41°55'30.22144"	W80°33'03.84440"	595.78	DI1848
OHFN	N41°33'29.79039"	W84°08'05.51766"	673.08	DI2816
OHHA	N41°02'27.93401"	W83°40'33.46887"	689.03	DI1083
OHHU	N41°10'36.35191"	W82°33'40.91087"	834.97	DI2818
OHIO 722	N41°23'00.36217"	W84°34'23.08443"	608.96	MD0420
OHLA	N41°43'35.53472"	W81°17'11.05629"	536.18	DK6716
OHLC	N41°43'16.40558"	W83°31'34.58723"	498.24	DO4957
OHLO	N41°17'36.50982"	W82°13'58.43001"	726.00	DI2820
OHMA	N40°36'49.73826"	W83°04'55.32888"	875.70	DM4137
OHMN	N41°01'24.70496"	W80°46'21.63976"	1078.35	DI1860
OHMR	N40°32'45.58330"	W84°37'50.63693"	776.73	DI2824
OHRI	N40°46'05.33414"	W82°33'38.35489"	1198.90	DI2826
OHSB	N41°38'11.21595"	W82°49'47.18064"	486.75	DN5844
OHUN	N40°13'58.84899"	W83°21'39.07470"	917.38	DI1686
OHWI	N41°34'54.79455"	W84°33'27.04432"	812.84	DI2830
PATMOS	N41°36'51.49151"	W82°41'08.70211"	465.46	MC1586
Q 62	N41°29'04.04994"	W80°26'38.50895"	877.30	MB0284
R 176	N41°00'44.74391"	W81°55'22.68101"	905.37	MB1307
R 344	N41°07'38.13509"	W83°14'15.11678"	651.03	MC1637
REINHART	N40°21'36.21191"	W84°26'04.10035"	841.01	AE2644
RICHMOND	N41°40'49.38647"	W80°34'13.79843"	919.29	DG7224
RIDG31	N41°25'39.53273"	W84°20'29.31077"	601.53	DG7225
RND HEAD	N40°34'18.46298"	W83°50'16.10573"	914.95	AB6088
S 238	N40°52'42.46027"	W82°06'29.35963"	1047.23	KZ0175
S 321	N41°56'35.75056"	W80°31'17.66811"	563.17	MB1708
SHINDEL	N40°42'47.57958"	W84°34'49.03428"	726.69	AE2618
SIDN	N40°18'37.26523"	W84°10'15.90683"	962.65	AJ7196
T 161	N41°16'48.00900"	W80°48'47.19738"	809.02	MB0615
T 23	N40°35'40.88196"	W83°13'02.51128"	803.45	KZ1449
T 322	N41°37'13.12596"	W81°30'11.99578"	496.63	MB1585
T 344	N41°07'28.00000"	W83°02'05.00000"	731.23	MC1639
T 348	N40°48'17.67000"	W84°01'05.23000"	747.55	LA2550
T 350	N40°58'30.90930"	W83°43'51.96976"	693.12	KZ2428
TIFF	N41°04'29.89639"	W83°09'01.41465"	694.28	AJ7198
V 198	N41°25'23.88483"	W84°52'15.74121"	766.02	MD0373
V 314	N41°05'34.00408"	W84°25'08.45560"	600.88	MD0125
V 349	N40°53'05.62883"	W83°52'40.93687"	733.78	KZ2418
VICTORY	N41°38'31.69950"	W82°50'13.99899"	458.19	MC1588
VNW A	N40°51'54.92605"	W84°37'04.77230"	669.07	AB6047



<b>Geodetic Control Stations, Geodetic Control Checks and/or Woolpert Base Stations:</b>				
<b>Station Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Height</b>	<b>PID</b>
			<b>(USFT)</b>	
W 350	N41°00'45.54437"	W83°41'03.08608"	673.76	MC1644
WYA 30 0050	N40°50'08.17954"	W83°30'23.07060"	784.42	KZ2273
WYA 30 0880	N40°49'56.62366"	W83°20'55.41937"	733.04	KZ2277
X 150	N41°12'53.35102"	W80°58'46.68075"	823.88	MB1449
X 323	N41°45'10.22622"	W81°17'17.93623"	463.56	MB1620
Y 316	N41°31'18.22668"	W83°07'32.35604"	467.43	MC1011
ZOB B	N41°17'51.09272"	W82°12'20.13743"	692.41	AA3881



## Section 3: Existing NGS Control Information Sheets

This section contains the published National Geodetic Survey (NGS) Datasheets used in the final control network for the USGS Ohio Statewide Phase 1 2019 B19 Project. The stations appear as they are ordered in the final coordinate listing of Section 2.





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = JANUARY 23, 2020

AE3417 \*\*\*\*\*

AE3417 DESIGNATION - 4 1

AE3417 PID - AE3417

AE3417 STATE/COUNTY- OH/UNION

AE3417 COUNTRY - US

AE3417 USGS QUAD - RICHWOOD (2016)

AE3417

AE3417 \*CURRENT SURVEY CONTROL

AE3417

AE3417\* NAD 83(2011) POSITION- 40 25 06.16104(N) 083 17 24.07277(W) ADJUSTED

AE3417\* NAD 83(2011) ELLIP HT- 252.618 (meters) (06/27/12) ADJUSTED

AE3417\* NAD 83(2011) EPOCH - 2010.00

AE3417\* [NAVD 88](#) ORTHO HEIGHT - 286.9 (meters) 941. (feet) GPS OBS

AE3417

AE3417 NAVD 88 orthometric height was determined with geoid model GEOID96

AE3417 GEOID HEIGHT - -34.202 (meters) GEOID96

AE3417 GEOID HEIGHT - -34.237 (meters) GEOID18

AE3417 NAD 83(2011) X - 568,200.386 (meters) COMP

AE3417 NAD 83(2011) Y - -4,829,599.424 (meters) COMP

AE3417 NAD 83(2011) Z - 4,113,627.485 (meters) COMP

AE3417 LAPLACE CORR - -0.04 (seconds) DEFLEC18

AE3417

AE3417 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

AE3417 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	0.41	1.12	0.19	0.14	0.57	0.03823740

AE3417 -----

AE3417 NETWORK 0.41 1.12 0.19 0.14 0.57 0.03823740

AE3417 -----

AE3417 Click [here](#) for local accuracies and other accuracy information.

AE3417

AE3417

AE3417.The horizontal coordinates were established by GPS observations

AE3417.and adjusted by the National Geodetic Survey in June 2012.

AE3417

AE3417.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has  
AE3417.been affixed to the stable North American tectonic plate. See

AE3417.[NA2011](#) for more information.

AE3417

AE3417.The horizontal coordinates are valid at the epoch date displayed above  
AE3417.which is a decimal equivalence of Year/Month/Day.

AE3417

AE3417.The orthometric height was determined by GPS observations and a  
AE3417.high-resolution geoid model.

AE3417

AE3417.Significant digits in the geoid height do not necessarily reflect accuracy.

AE3417.GEOID18 height accuracy estimate available [here](#).

AE3417



AE3417.Click [photographs](#) - Photos may exist for this station.

AE3417

AE3417.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AE3417

AE3417.The Laplace correction was computed from DEFLEC18 derived deflections.

AE3417

AE3417.The ellipsoidal height was determined by GPS observations

AE3417.and is referenced to NAD 83.

AE3417

AE3417. The following values were computed from the NAD 83(2011) position.

AE3417

AE3417;		North	East	Units	Scale	Factor	Converg.
AE3417;SPC OH N	-	83,779.041	532,951.380	MT	1.00000290	-0 31	08.4
AE3417;SPC OH N	-	274,865.07	1,748,524.65	sFT	1.00000290	-0 31	08.4
AE3417;UTM 17	-	4,476,712.869	305,714.436	MT	1.00006466	-1 29	06.8
AE3417!	-	Elev Factor x Scale Factor = Combined Factor					
AE3417!SPC OH N	-	0.99996037	x	1.00000290	=	0.99996327	
AE3417!UTM 17	-	0.99996037	x	1.00006466	=	1.00002503	

AE3417

AE3417\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLE0571476712 (NAD 83)

AE3417

AE3417	PID	Reference Object	Distance	Geod. Az
AE3417				dddmss.s
AE3417	AE3420 4 1	AZ MK	368.128 METERS	09238

AE3417

AE3417

SUPERSEDED SURVEY CONTROL

AE3417

AE3417	NAD 83(2007)-	40 25 06.16113(N)	083 17 24.07349(W)	AD(2002.00)	0
AE3417	ELLIP H (02/10/07)	252.632 (m)		GP(2002.00)	
AE3417	ELLIP H (10/07/05)	252.622 (m)		GP( )	3 1
AE3417	NAD 83(1995)-	40 25 06.16139(N)	083 17 24.07335(W)	AD( )	1
AE3417	ELLIP H (10/02/97)	252.668 (m)		GP( )	3 1

AE3417.No superseded survey control is available for this station.

AE3417

AE3417\_MARKER: DD = SURVEY DISK

AE3417\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

AE3417\_STAMPING: TWP 4 STATION 1

AE3417\_MARK LOGO: OH-159

AE3417\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT

AE3417\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

AE3417+STABILITY: SURFACE MOTION

AE3417\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AE3417+SATELLITE: SATELLITE OBSERVATIONS - 1997

AE3417

AE3417 HISTORY - Date Condition Report By

AE3417 HISTORY - 1997 MONUMENTED WOOLPT

AE3417

STATION DESCRIPTION

AE3417

AE3417'DESCRIBED BY WOOLPERT CONSULTANTS 1997 (ARJ)

AE3417'THE MONUMENT IS IN THE SOUTHEAST CORNER OF THE CITY LIMITS OF

AE3417'RICHWOOD. FROM THE INTERSECTION OF STATE ROUTE 47 AND STATE ROUTE 37



AE3417'IN RICHWOOD, PROCEED SOUTHEAST ON STATE ROUTE 37 FOR 1.1 KM (0.70 MI)  
AE3417'TO CO.RD.264 (TAWA RD.) . TURN LEFT AND PROCEED EAST ON TAWA RD. FOR  
AE3417'0.8 KM (0.50 MI) TO THE STATION ON THE LEFT. MARKER IS 40.2 M (131.9  
AE3417'FT) NORTHWEST OF THE CENTERLINE INTERSECTION OF TAWA RD. AND KELLS  
AE3417'LN., 32 M (105.0 FT) WEST OF A FIRE HYDRANT, 8.2 M (26.9 FT) NORTH OF  
AE3417'THE CENTERLINE OF TAWA RD. AND 19.8 M (65.0 FT) EAST OF THE EAST EDGE  
AE3417'OF A GRAVEL PARKING LOT. CONTROL POINT IS FLUSH WITH THE GROUND.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = JANUARY 6, 2020

KZ2305 \*\*\*\*\*

KZ2305 DESIGNATION - 12 0028

KZ2305 PID - KZ2305

KZ2305 STATE/COUNTY- OH/DELAWARE

KZ2305 COUNTRY - US

KZ2305 USGS QUAD - ASHLEY (1995)

KZ2305

KZ2305 \*CURRENT SURVEY CONTROL

KZ2305

KZ2305\* NAD 83(2011) POSITION- 40 24 44.05960(N) 082 58 24.80531(W) ADJUSTED

KZ2305\* NAD 83(2011) ELLIP HT- 262.622 (meters) (06/27/12) ADJUSTED

KZ2305\* NAD 83(2011) EPOCH - 2010.00

KZ2305\* [NAVD 88](#) ORTHO HEIGHT - 296.7 (meters) 973. (feet) GPS OBS

KZ2305

KZ2305 NAVD 88 orthometric height was determined with geoid model GEOID90

KZ2305 GEOID HEIGHT - -34.330 (meters) GEOID90

KZ2305 GEOID HEIGHT - -34.113 (meters) GEOID18

KZ2305 NAD 83(2011) X - 594,922.028 (meters) COMP

KZ2305 NAD 83(2011) Y - -4,826,833.652 (meters) COMP

KZ2305 NAD 83(2011) Z - 4,113,114.910 (meters) COMP

KZ2305 LAPLACE CORR - 0.54 (seconds) DEFLEC18

KZ2305

KZ2305 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

KZ2305 Standards:

KZ2305 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

KZ2305 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

KZ2305 -----

KZ2305 NETWORK 1.48 4.37 0.68 0.50 2.23 0.06466519

KZ2305 -----

KZ2305 Click [here](#) for local accuracies and other accuracy information.

KZ2305

KZ2305

KZ2305.The horizontal coordinates were established by GPS observations

KZ2305.and adjusted by the National Geodetic Survey in June 2012.

KZ2305

KZ2305.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

KZ2305.been affixed to the stable North American tectonic plate. See

KZ2305.[NA2011](#) for more information.

KZ2305

KZ2305.The horizontal coordinates are valid at the epoch date displayed above

KZ2305.which is a decimal equivalence of Year/Month/Day.

KZ2305

KZ2305.The orthometric height was determined by GPS observations and a

KZ2305.high-resolution geoid model.

KZ2305

KZ2305.Significant digits in the geoid height do not necessarily reflect accuracy.

KZ2305.GEOID18 height accuracy estimate available [here](#).

KZ2305

KZ2305.Click [here](#) to see if photographs exist for this station.



KZ2305  
 KZ2305.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 KZ2305  
 KZ2305.The Laplace correction was computed from DEFLEC18 derived deflections.  
 KZ2305  
 KZ2305.The ellipsoidal height was determined by GPS observations  
 KZ2305.and is referenced to NAD 83.

KZ2305  
 KZ2305. The following values were computed from the NAD 83(2011) position.

KZ2305;		North	East	Units	Scale	Factor	Converg.
KZ2305;SPC OH N	-	82,902.764	559,805.398	MT	1.00000411	-0 18	40.0
KZ2305;SPC OH N	-	271,990.15	1,836,628.21	sFT	1.00000411	-0 18	40.0
KZ2305;UTM 17	-	4,475,383.319	332,549.830	MT	0.99994516	-1 16	47.0

KZ2305  
 KZ2305!  
 KZ2305!SPC OH N  
 KZ2305!UTM 17

	-	Elev Factor	x	Scale Factor	=	Combined Factor
KZ2305!SPC OH N	-	0.99995880	x	1.00000411	=	0.99996291
KZ2305!UTM 17	-	0.99995880	x	0.99994516	=	0.99990397

KZ2305:		Primary Azimuth Mark	Grid Az
KZ2305:SPC OH N	-	12 0027	322 19 31.5
KZ2305:UTM 17	-	12 0027	323 17 38.5

KZ2305  
 KZ2305\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLE3254975383(NAD 83)

KZ2305	PID	Reference Object	Distance	Geod. Az
KZ2305				ddmmss.s
KZ2305	KZ2304 12 0027		APPROX. 0.6 KM	3220051.5

KZ2305  
 KZ2305 SUPERSEDED SURVEY CONTROL

KZ2305	NAD 83(2007)-	40 24 44.05976(N)	082 58 24.80602(W)	AD(2002.00)	0
KZ2305	ELLIP H (02/10/07)	262.642 (m)		GP(2002.00)	
KZ2305	ELLIP H (10/07/05)	262.642 (m)		GP( )	4 1
KZ2305	NAD 83(1995)-	40 24 44.06018(N)	082 58 24.80584(W)	AD( )	1
KZ2305	ELLIP H (04/01/98)	262.650 (m)		GP( )	4 1
KZ2305	NAD 83(1986)-	40 24 44.06723(N)	082 58 24.81410(W)	AD( )	1

KZ2305  
 KZ2305.Superseded values are not recommended for survey control.  
 KZ2305  
 KZ2305.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 KZ2305.See file [dsdata.pdf](#) to determine how the superseded data were derived.

KZ2305  
 KZ2305\_MARKER: DE = TRAVERSE STATION DISK  
 KZ2305\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 KZ2305\_STAMPING: DELAWARE COUNTY ENGINEER 12-0028 1991  
 KZ2305\_MARK LOGO: DCE  
 KZ2305\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT  
 KZ2305\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 KZ2305+STABILITY: SURFACE MOTION  
 KZ2305\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 KZ2305+SATELLITE: SATELLITE OBSERVATIONS - 1991  
 KZ2305



KZ2305	HISTORY	- Date	Condition	Report By
KZ2305	HISTORY	- 1991	MONUMENTED	WOOLPT

KZ2305

KZ2305

KZ2305

STATION DESCRIPTION

KZ2305'DESCRIBED BY WOOLPERT CONSULTANTS 1991

KZ2305'STATION IS LOCATED ON THE EAST SIDE OF SMITH ROAD, 0.10 MI (0.16 KM)

KZ2305'NORTH OF S.R. 229, 90.5 FT (27.6 M) SOUTHWEST OF A SOUTH CORNER OF THE

KZ2305'HOUSE NO. 9400 ON THE WEST SIDE OF SAID SMITH ROAD, 12.0 FT (3.7 M)

KZ2305'WEST OF POLE ON THE WEST SIDE OF SAID ROAD AND 90.5 FT (27.6 M)

KZ2305'NORTHWEST OF ANOTHER POLE ON WEST SIDE OF SAID ROAD.

KZ2305'TO REACH FROM THE COUNTY COURTHOUSE IN DELAWARE, PROCEED EAST ALONG

KZ2305'S.R. 37 FOR 0.57 MI (0.92 KM) TO U.S. HWY 42. TURN LEFT ON U.S.HWY 42

KZ2305'FOR 9.57 MI (15.40 KM) TO S.R. 229. TURN LEFT ON S.R. 229 FOR 0.91 MI

KZ2305'(1.46 KM) TO SMITH ROAD. TURN RIGHT ON SMITH ROAD FOR 0.10 MI

KZ2305'(0.16 KM) TO THE STATION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB0416 \*\*\*\*\*

MB0416 DESIGNATION - 14 DWP

MB0416 PID - MB0416

MB0416 STATE/COUNTY- PA/MERCER

MB0416 COUNTRY - US

MB0416 USGS QUAD - SHARON EAST (1981)

MB0416

MB0416 \*CURRENT SURVEY CONTROL

MB0416

MB0416\* NAD 83(1992) POSITION- 41 10 59.50041(N) 080 29 31.07146(W) ADJUSTED

MB0416\* [NAVD 88](#) ORTHO HEIGHT - 304.163 (meters) 997.91 (feet) ADJUSTED

MB0416

MB0416 GEOID HEIGHT - -33.916 (meters) GEOID18

MB0416 LAPLACE CORR - 0.35 (seconds) DEFLEC18

MB0416 DYNAMIC HEIGHT - 304.027 (meters) 997.46 (feet) COMP

MB0416 MODELED GRAVITY - 980,168.6 (mgal) NAVD 88

MB0416

MB0416 HORZ ORDER - SECOND

MB0416 VERT ORDER - SECOND CLASS 0

MB0416

MB0416.The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in June 2002.

MB0416.

MB0416.The orthometric height was determined by differential leveling and adjusted by the NATIONAL GEODETIC SURVEY

MB0416.in June 1991.

MB0416

MB0416.Significant digits in the geoid height do not necessarily reflect accuracy.

MB0416.GEOID18 height accuracy estimate available [here](#).

MB0416

MB0416.Click [here](#) to see if photographs exist for this station.

MB0416

MB0416.The Laplace correction was computed from DEFLEC18 derived deflections.

MB0416

MB0416.The dynamic height is computed by dividing the NAVD 88

MB0416.geopotential number by the normal gravity value computed on the

MB0416.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB0416.degrees latitude (g = 980.6199 gals.).

MB0416

MB0416.The modeled gravity was interpolated from observed gravity values.

MB0416

MB0416. The following values were computed from the NAD 83(1992) position.

MB0416

MB0416;		North	East	Units	Scale	Factor	Converg.
MB0416;SPC PA N	-	116,530.229	369,990.700	MT	0.99996515	-1 48 50.1	
MB0416;SPC PA N	-	382,316.26	1,213,877.82	sFT	0.99996515	-1 48 50.1	
MB0416;SPC PA S	-	208,980.919	369,971.738	MT	1.00004121	-1 46 44.3	
MB0416;SPC PA S	-	685,631.57	1,213,815.61	sFT	1.00004121	-1 46 44.3	
MB0416;UTM 17	-	4,559,218.107	542,608.136	MT	0.99962234	+0 20 04.3	



MB0416  
MB0416! - Elev Factor x Scale Factor = Combined Factor  
MB0416!SPC PA N - 0.99995761 x 0.99996515 = 0.99992276  
MB0416!SPC PA S - 0.99995761 x 1.00004121 = 0.99999882  
MB0416!UTM 17 - 0.99995761 x 0.99962234 = 0.99957997  
MB0416  
MB0416\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF4260859218 (NAD 83)  
MB0416  
MB0416 SUPERSEDED SURVEY CONTROL  
MB0416  
MB0416 NAD 83(1995)- 41 10 59.50091(N) 080 29 31.07135(W) AD( ) 2  
MB0416 NAD 83(1986)- 41 10 59.50570(N) 080 29 31.07431(W) AD( ) 2  
MB0416 NAD 27 - 41 10 59.30020(N) 080 29 31.82840(W) AD( ) 2  
MB0416 NGVD 29 (??/??/92) 304.331 (m) 998.46 (f) ADJ UNCH 2 0  
MB0416 NGVD 29 304.33 (m) 998.5 (f) LEVELING 3

MB0416  
MB0416.Superseded values are not recommended for survey control.  
MB0416  
MB0416.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB0416.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB0416  
MB0416\_MARKER: DB = BENCH MARK DISK  
MB0416\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
MB0416\_STAMPING: TT 14 DWP 1958  
MB0416\_MARK LOGO: USGS  
MB0416\_PROJECTION: PROJECTING 8 CENTIMETERS  
MB0416\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
MB0416+STABILITY: SURFACE MOTION  
MB0416\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MB0416+SATELLITE: SATELLITE OBSERVATIONS - August 11, 2007

MB0416  
MB0416 HISTORY - Date Condition Report By  
MB0416 HISTORY - 1958 MONUMENTED USGS  
MB0416 HISTORY - 1958 GOOD CGS  
MB0416 HISTORY - 20070811 GOOD GEOCAC

MB0416  
MB0416 STATION DESCRIPTION  
MB0416  
MB0416'DESCRIBED BY US GEOLOGICAL SURVEY 1958 (DWP)  
MB0416'SEE STATION MIKE  
MB0416  
MB0416 STATION RECOVERY (1958)  
MB0416  
MB0416'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1958  
MB0416'1.1 MI S FROM WHEATLAND.  
MB0416'ABOUT 1.1 MILES SOUTH ALONG STATE HIGHWAY 718 FROM THE  
MB0416'INTERSECTION OF BROADWAY AND COUNCIL AVENUE IN WHEATLAND. 16.0  
MB0416'FEET SOUTH-SOUTHWEST OF A UTILITY POLE, 19.0 FEET EAST OF  
MB0416'CENTER LINE OF THE HIGHWAY AND 339 FEET SOUTH OF THE CENTER OF A  
MB0416'CROSSROAD. A U.S. GEOLOGICAL SURVEY BRONZE DISK IN THE TOP OF A  
MB0416'CONCRETE POST PROJECTING 3-INCHES.

MB0416  
MB0416 STATION RECOVERY (2007)  
MB0416  
MB0416'RECOVERY NOTE BY GEOCACHING 2007 (RLM)



MB0416'ADD TO DESCRIPTION, THE CROSSROAD IS PULLAM DRIVE TO THE EAST AND  
MB0416'WANSACK ROAD TO THE WEST. THE CONCRETE POST IS LEANING SLIGHTLY TO THE  
MB0416'NORTH.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = JANUARY 27, 2020
AF7792 *****
AF7792 SACS          - This is a Secondary Airport Control Station.
AF7792 DESIGNATION - 17G B
AF7792 PID          - AF7792
AF7792 STATE/COUNTY- OH/CRAWFORD
AF7792 COUNTRY      - US
AF7792 USGS QUAD    - BUCYRUS (2016)
AF7792
AF7792                      *CURRENT SURVEY CONTROL
AF7792
AF7792* NAD 83(2011) POSITION- 40 46 53.49363(N) 082 58 10.53282(W) ADJUSTED
AF7792* NAD 83(2011) ELLIP HT- 272.975 (meters) (06/27/12) ADJUSTED
AF7792* NAD 83(2011) EPOCH   - 2010.00
AF7792* NAVD 88 ORTHO HEIGHT - 307.56 (meters) 1009.1 (feet) GPS OBS
AF7792
AF7792 NAVD 88 orthometric height was determined with geoid model GEOID96
AF7792 GEOID HEIGHT - -34.495 (meters) GEOID96
AF7792 GEOID HEIGHT - -34.552 (meters) GEOID18
AF7792 NAD 83(2011) X - 591,990.686 (meters) COMP
AF7792 NAD 83(2011) Y - -4,800,314.643 (meters) COMP
AF7792 NAD 83(2011) Z - 4,144,260.488 (meters) COMP
AF7792 LAPLACE CORR - 3.01 (seconds) DEFLEC18
AF7792
AF7792 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AF7792 Standards:
AF7792          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
AF7792          Horiz Ellip                SD_N   SD_E   SD_h          (unitless)
AF7792 -----
AF7792 NETWORK      1.61   3.39                0.74   0.55   1.73          -0.08590890
AF7792 -----
AF7792 Click here for local accuracies and other accuracy information.
AF7792
AF7792
AF7792.This mark is at Port Bucyrus-Crawford Co Airport (17G)
AF7792
AF7792.The horizontal coordinates were established by GPS observations
AF7792.and adjusted by the National Geodetic Survey in June 2012.
AF7792
AF7792.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AF7792.been affixed to the stable North American tectonic plate. See
AF7792.NA2011 for more information.
AF7792
AF7792.The horizontal coordinates are valid at the epoch date displayed above
AF7792.which is a decimal equivalence of Year/Month/Day.
AF7792
AF7792.The orthometric height was determined by GPS observations and a
AF7792.high-resolution geoid model.
AF7792

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AF7792.GPS derived orthometric heights for airport stations designated as AF7792.PACS or SACS are published to 2 decimal places. This maintains AF7792.centimeter relative accuracy between the PACS and SACS. It does AF7792.not indicate centimeter accuracy relative to other marks which are AF7792.part of the NAVD 88 network.

AF7792

AF7792.Significant digits in the geoid height do not necessarily reflect accuracy.

AF7792.GEOID18 height accuracy estimate available [here](#).

AF7792

AF7792.Click [photographs](#) - Photos may exist for this station.

AF7792

AF7792.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AF7792

AF7792.The Laplace correction was computed from DEFLEC18 derived deflections.

AF7792

AF7792.The ellipsoidal height was determined by GPS observations

AF7792.and is referenced to NAD 83.

AF7792

AF7792. The following values were computed from the NAD 83(2011) position.

AF7792

AF7792;		North	East	Units	Scale	Factor	Converg.
AF7792;SPC OH N	-	123,907.216	560,362.694	MT	0.99995155	-0 18	30.6
AF7792;SPC OH N	-	406,518.92	1,838,456.61	sFT	0.99995155	-0 18	30.6
AF7792;UTM 17	-	4,516,371.081	333,803.640	MT	0.99993998	-1 17	12.4

AF7792

AF7792! - Elev Factor x Scale Factor = Combined Factor

AF7792!SPC OH N - 0.99995718 x 0.99995155 = 0.99990873

AF7792!UTM 17 - 0.99995718 x 0.99993998 = 0.99989716

AF7792

AF7792:		Primary Azimuth Mark	Grid Az
AF7792:SPC OH N	-	17G A	004 46 34.5
AF7792:UTM 17	-	17G A	005 45 16.3

AF7792

AF7792\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF3380316371(NAD 83)

AF7792

AF7792	PID	Reference Object	Distance	Geod. Az
AF7792				dddmmss.s
AF7792	AB6037	17G A	APPROX. 0.6 KM	0042803.9

AF7792

AF7792

SUPERSEDED SURVEY CONTROL

AF7792

AF7792	NAD 83(2007)-	40 46 53.49381(N)	082 58 10.53350(W)	AD(2002.00)	0
AF7792	ELLIP H (02/10/07)	272.989 (m)		GP(2002.00)	
AF7792	ELLIP H (10/07/05)	273.027 (m)		GP( )	4 2
AF7792	NAD 83(1995)-	40 46 53.49356(N)	082 58 10.53306(W)	AD( )	1
AF7792	ELLIP H (05/28/98)	273.042 (m)		GP( )	4 2

AF7792.No superseded survey control is available for this station.

AF7792

AF7792\_MARKER: DD = SURVEY DISK

AF7792\_SETTING: 17 = SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND

AF7792\_STAMPING: 17G B 1995

AF7792\_MARK LOGO: NGS

AF7792\_PROJECTION: FLUSH



AF7792\_MAGNETIC: P = MARKER IS A STEEL PIPE  
AF7792\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
AF7792+STABILITY: SURFACE MOTION  
AF7792\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
AF7792+SATELLITE: SATELLITE OBSERVATIONS - August 11, 2011  
AF7792\_ROD/PIPE-DEPTH: 1.0 meters

AF7792  
AF7792 HISTORY - Date Condition Report By  
AF7792 HISTORY - 1995 MONUMENTED NGS  
AF7792 HISTORY - 20090514 GOOD JCLS  
AF7792 HISTORY - 20110811 GOOD JCLS

AF7792

AF7792 STATION DESCRIPTION

AF7792

AF7792'DESCRIBED BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
AF7792'THE STATION IS LOCATED ABOUT 2.5 KM (1.55 MI) SOUTH OF BUCYRUS AT THE  
AF7792'PORT BUCYRUS AIRPORT, AT THE CENTER OF THE EAST SIDE OF THE AIRPORT,  
AF7792'SOUTH OF TURF RUNWAY APPROACH 27, IN GRASS BETWEEN ISAAC BEAL ROAD AND  
AF7792'THE AIR EXPLORER HANGER. OWNERSHIP--CRAWFORD COUNTY, 2254 ISAAC BEAL  
AF7792'ROAD, P.O. BOX 1244, BUCYRUS OH 44820. AIRPORT MANAGER IS KEVIN  
AF7792'DETRAY, PHONE (419) 562-7596. TO REACH THE STATION FROM THE BUCYRUS  
AF7792'SQUARE LOCATED AT THE JUNCTION OF US HIGHWAY 30 BUSINESS AND COMBINED  
AF7792'STATE HIGHWAYS 98 AND 4, GO SOUTH ON STATE HIGHWAY 98 (SANDUSKY  
AF7792'AVENUE) FOR A TOTAL OF 2.1 KM (1.30 MI) PASSING STATE HIGHWAY 4 AT  
AF7792'1.05 KM (0.65 MI) TO A CROSSROAD. TURN LEFT AND GO EAST ON BEAL  
AF7792'AVENUE FOR 0.8 KM (0.50 MI) TO ITS TERMINUS AT A TEE JUNCTION. TURN  
AF7792'RIGHT AND GO SOUTH ON ISAAC BEAL ROAD FOR 1.0 KM (0.60 MI) TO A GRAVEL  
AF7792'ROAD RIGHT. TURN RIGHT AND GO WEST ON THE HANGER ACCESS ROAD FOR 0.08  
AF7792'KM (0.05 MI) TO THE STATION ON LEFT. THE MARK IS THE CENTER PUNCH OF  
AF7792'A 5 CM (2 IN) SURVEY DISK SET INTO THE TOP OF A 1 M (3.3 FT) LONG FENO  
AF7792'PIPE ENCASED IN A 12.7 CM (5 IN) PVC PIPE WITH A NGS LOGO CAP  
AF7792'SURROUNDED BY CONCRETE. THE LOGO CAP AND CONCRETE ARE FLUSH WITH THE  
AF7792'GROUND. THE MARK IS RECESSED 6 CM BELOW THE TOP OF THE LOGO CAP.  
AF7792'THREE CIRCULAR PRONGS EXTEND FROM THE BOTTOM OF THE PIPE. THE STATION  
AF7792'IS LOCATED 60.9 M (199.8 FT) WEST FROM ISAAC BEAL ROAD CENTER, 32.7 M  
AF7792'(107.3 FT) EAST-NORTHEAST FROM THE NORTHEAST CORNER OF A STEEL HANGER,  
AF7792'10.4 M (34.1 FT) SOUTH FROM THE GRAVEL ROAD CENTER, AND 8.2 M (26.9  
AF7792'FT) NORTH FROM A FLAG POLE. THIS STATION IS DESIGNATED A SECONDARY  
AF7792'AIRPORT CONTROL STATION.

AF7792

AF7792 STATION RECOVERY (2009)

AF7792

AF7792'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2009 (MRY)  
AF7792'RECOVERED IN GOOD CONDITION.

AF7792

AF7792 STATION RECOVERY (2011)

AF7792

AF7792'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011  
AF7792'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB2770 \*\*\*\*\*

MB2770 DESIGNATION - 85 027 1 P CO

MB2770 PID - MB2770

MB2770 STATE/COUNTY- OH/PORTAGE

MB2770 COUNTRY - US

MB2770 USGS QUAD - AURORA (1964)

MB2770

MB2770 \*CURRENT SURVEY CONTROL

MB2770

MB2770\* NAD 83(1995) POSITION- 41 18 10.56967(N) 081 15 07.38724(W) ADJUSTED

MB2770\* [NAVD 88](#) ORTHO HEIGHT - 370. (meters) 1214. (feet) VERTCON

MB2770

MB2770 GEOID HEIGHT - -33.737 (meters) GEOID18

MB2770 LAPLACE CORR - 0.30 (seconds) DEFLEC18

MB2770 HORZ ORDER - SECOND

MB2770

MB2770.The horizontal coordinates were established by classical geodetic methods

MB2770.and adjusted by the National Geodetic Survey in April 1998.

MB2770.

MB2770.The NAVD 88 height was computed by applying the VERTCON shift value to

MB2770.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

MB2770

MB2770.Significant digits in the geoid height do not necessarily reflect accuracy.

MB2770.GEOID18 height accuracy estimate available [here](#).

MB2770

MB2770.Click [here](#) to see if photographs exist for this station.

MB2770

MB2770.The Laplace correction was computed from DEFLEC18 derived deflections.

MB2770

MB2770. The following values were computed from the NAD 83(1995) position.

MB2770

MB2770; North East Units Scale Factor Converg.

MB2770;SPC OH N - 182,449.921 704,505.084 MT 0.99994755 +0 49 11.4

MB2770;SPC OH N - 598,587.78 2,311,363.76 sFT 0.99994755 +0 49 11.4

MB2770;UTM 17 - 4,572,417.355 478,899.384 MT 0.99960548 -0 09 58.9

MB2770

MB2770! - Elev Factor x Scale Factor = Combined Factor

MB2770!SPC OH N - 0.99994729 x 0.99994755 = 0.99989484

MB2770!UTM 17 - 0.99994729 x 0.99960548 = 0.9995279

MB2770

MB2770\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF7889972417(NAD 83)

MB2770

MB2770 SUPERSEDED SURVEY CONTROL

MB2770

MB2770 NAD 83(1986)- 41 18 10.57825(N) 081 15 07.38649(W) AD( ) 2

MB2770 NAD 27 - 41 18 10.37802(N) 081 15 08.01731(W) AD( ) 2

MB2770 NGVD 29 (07/19/86) 370. (m) 1214. (f) VERT ANG

MB2770

MB2770.Superseded values are not recommended for survey control.



MB2770  
MB2770.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB2770.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB2770  
MB2770\_MARKER: DD = SURVEY DISK  
MB2770\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
MB2770\_STAMPING: 85-027-1 1977  
MB2770\_MARK LOGO: OH-133  
MB2770\_PROJECTION: RECESSED 13 CENTIMETERS  
MB2770\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
MB2770+STABILITY: SURFACE MOTION  
MB2770\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MB2770+SATELLITE: SATELLITE OBSERVATIONS - April 15, 2017

MB2770  
MB2770 HISTORY - Date Condition Report By  
MB2770 HISTORY - 1977 MONUMENTED OH-133  
MB2770 HISTORY - 20170415 GOOD GEOCAC

MB2770  
MB2770 STATION DESCRIPTION  
MB2770  
MB2770'DESCRIBED BY PORTAGE COUNTY OHIO 1977 (GLW)  
MB2770'THE STATION IS ABOUT 5-1/2 MILES EAST-SOUTHEAST OF AURORA,  
MB2770'2 MILES NORTHWEST OF MANTUA, 1-1/2 MILES WEST OF MANTUA  
MB2770'CORNERS, AND ON THE RIGHT-OF-WAY OF DIAGONAL ROAD, COUNTY  
MB2770'HIGHWAY 155.  
MB2770'  
MB2770'TO REACH THE STATION FROM THE INTERSECTION OF STATE ROUTES 44  
MB2770'AND 82 AT MANTUA CORNERS, GO WEST ON STATE ROUTE 82 FOR 1.2  
MB2770'MILES TO THE INTERSECTION OF DIAGONAL ROAD. TURN LEFT AND GO  
MB2770'SOUTHWEST ON DIAGONAL ROAD FOR 0.6 MILE TO THE STATION ON THE  
MB2770'RIGHT.  
MB2770'  
MB2770'STATION MARK, STAMPED---85-027-1 1977---, IS A PORTAGE COUNTY  
MB2770'BRASS DISK SET IN THE TOP OF A 12-INCH CYLINDRICAL CONCRETE  
MB2770'POST THAT IS FLUSH WITH THE GROUND SURFACE, IT IS 58.0 FEET  
MB2770'WEST-NORTHWEST OF A 30-INCH MAPLE TREE, 76.7 FEET SOUTHWEST  
MB2770'OF A 30-INCH MAPLE TREE, 33.6 FEET WEST OF THAE CENTERLINE OF  
MB2770'DIAGONAL ROAD, AND 4.7 FEET NORTH OF POWER POLE NUMBER MU 1955.  
MB2770'  
MB2770'NO REFERENCE MARKS ESTABLISHED FOR THIS STATION. HEIGHT OF  
MB2770'LIGHT ABOVE STATION MARK WAS 1.5 METERS. STATION 85 021 1 P CO  
MB2770'CAN BE USED AS AN AZIMUTH MARK.

MB2770'  
MB2770'DESCRIBED BY F.J. PINTER  
MB2770  
MB2770 STATION RECOVERY (2017)  
MB2770  
MB2770'RECOVERY NOTE BY GEOCACHING 2017 (RLM)  
MB2770'THE MARK IS 6.5 FT (2.0 M) NORTH OF POWER POLE NUMBER 73/12.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 20, 2019

MD0026 \*\*\*\*\*

MD0026 DESIGNATION - 792

MD0026 PID - MD0026

MD0026 STATE/COUNTY- OH/WILLIAMS

MD0026 COUNTRY - US

MD0026 USGS QUAD - WEST UNITY (1973)

MD0026

MD0026 \*CURRENT SURVEY CONTROL

MD0026

MD0026\* NAD 83(2011) POSITION- 41 34 59.59058(N) 084 26 02.44389(W) ADJUSTED

MD0026\* NAD 83(2011) ELLIP HT- 206.720 (meters) (06/27/12) ADJUSTED

MD0026\* NAD 83(2011) EPOCH - 2010.00

MD0026\* [NAVD 88](#) ORTHO HEIGHT - 241.156 (meters) 791.19 (feet) ADJUSTED

MD0026

MD0026 GEOID HEIGHT - -34.266 (meters) GEOID18

MD0026 NAD 83(2011) X - 463,428.526 (meters) COMP

MD0026 NAD 83(2011) Y - -4,755,475.691 (meters) COMP

MD0026 NAD 83(2011) Z - 4,211,227.409 (meters) COMP

MD0026 LAPLACE CORR - -4.57 (seconds) DEFLEC18

MD0026 DYNAMIC HEIGHT - 241.065 (meters) 790.89 (feet) COMP

MD0026 MODELED GRAVITY - 980,237.2 (mgal) NAVD 88

MD0026

MD0026 VERT ORDER - SECOND CLASS 0

MD0026

MD0026 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MD0026 Standards:

MD0026 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

MD0026 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

MD0026 NETWORK 1.66 2.04 0.74 0.60 1.04 0.13600564

MD0026

MD0026 Click [here](#) for local accuracies and other accuracy information.

MD0026

MD0026

MD0026.The horizontal coordinates were established by GPS observations

MD0026.and adjusted by the National Geodetic Survey in June 2012.

MD0026

MD0026.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MD0026.been affixed to the stable North American tectonic plate. See

MD0026.[NA2011](#) for more information.

MD0026

MD0026.The horizontal coordinates are valid at the epoch date displayed above

MD0026.which is a decimal equivalence of Year/Month/Day.

MD0026

MD0026.The orthometric height was determined by differential leveling and

MD0026.adjusted by the NATIONAL GEODETIC SURVEY

MD0026.in June 1991.

MD0026

MD0026.Significant digits in the geoid height do not necessarily reflect accuracy.



MD0026.GEOID18 height accuracy estimate available [here](#).  
MD0026  
MD0026.Click [here](#) to see if photographs exist for this station.  
MD0026  
MD0026.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
MD0026  
MD0026.The Laplace correction was computed from DEFLEC18 derived deflections.  
MD0026  
MD0026.The ellipsoidal height was determined by GPS observations  
MD0026.and is referenced to NAD 83.  
MD0026  
MD0026.The dynamic height is computed by dividing the NAVD 88  
MD0026.geopotential number by the normal gravity value computed on the  
MD0026.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
MD0026.degrees latitude (g = 980.6199 gals.).  
MD0026  
MD0026.The modeled gravity was interpolated from observed gravity values.  
MD0026  
MD0026. The following values were computed from the NAD 83(2011) position.  
MD0026  
MD0026;  

	North	East	Units	Scale	Factor	Converg.
MD0026;SPC OH N	- 214,618.083	438,740.803	MT	0.99997957	-1 16	14.0
MD0026;SPC OH N	- 704,126.16	1,439,435.45	sFT	0.99997957	-1 16	14.0
MD0026;UTM 16	- 4,606,683.365	713,898.692	MT	1.00016307	+1 42	13.4

MD0026  
MD0026!  

MD0026!SPC OH N	- 0.99996758	x	0.99997957	=	0.99994715
MD0026!UTM 16	- 0.99996758	x	1.00016307	=	1.00013064

MD0026  
MD0026\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGM1389806683(NAD 83)  
MD0026  
MD0026 SUPERSEDED SURVEY CONTROL  
MD0026  
MD0026  

MD0026	NAD 83(2007)-	41 34 59.59085(N)	084 26 02.44458(W)	AD(2002.00)	0
MD0026	ELLIP H (02/10/07)	206.769 (m)		GP(2002.00)	
MD0026	ELLIP H (10/07/05)	206.773 (m)		GP( )	4 1
MD0026	NAD 83(1995)-	41 34 59.59054(N)	084 26 02.44410(W)	AD( )	1
MD0026	ELLIP H (04/01/98)	206.834 (m)		GP( )	4 1
MD0026	NAD 83(1994)-	41 34 59.59050(N)	084 26 02.44403(W)	AD( )	1
MD0026	NAD 83(1986)-	41 34 59.59735(N)	084 26 02.45936(W)	AD( )	1
MD0026	NAVD 88 (07/11/96)	240.9 (m)	GEOID93 model used	GPS OBS	
MD0026	NGVD 29 (??/??/92)	241.304 (m)	791.68 (f)	ADJ UNCH	2 0

MD0026  
MD0026.Superseded values are not recommended for survey control.  
MD0026  
MD0026.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MD0026.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
MD0026  
MD0026\_MARKER: P = PIPE CAP  
MD0026\_SETTING: 17 = SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND  
MD0026\_STAMPING: OHIO 792  
MD0026\_MARK LOGO: USGS  
MD0026\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MD0026\_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY  
MD0026\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR



MD0026+SATELLITE: SATELLITE OBSERVATIONS - January 17, 2001

MD0026

MD0026	HISTORY	- Date	Condition	Report By
MD0026	HISTORY	- 1911	MONUMENTED	USGS
MD0026	HISTORY	- 1934	GOOD	CGS
MD0026	HISTORY	- 19960130	GOOD	WOOLPT
MD0026	HISTORY	- 20010117	GOOD	LOCENG

MD0026

MD0026

MD0026

STATION DESCRIPTION

MD0026'DESCRIBED BY COAST AND GEODETIC SURVEY 1934

MD0026'AT WEST UNITY.

MD0026'AT WEST UNITY, WILLIAMS COUNTY, ON THE WABASH RAILROAD, 33 YARDS  
MD0026'WEST OF THE NORTHWEST CORNER OF THE STATION, AT A ROAD CROSSING,  
MD0026'15 YARDS NORTH OF THE NORTH RAIL, 15 YARDS EAST OF THE CENTERLINE  
MD0026'OF THE BITUMINOUS ROAD, AND ABOUT 1/2 FOOT LOWER THAN THE  
MD0026'TRACK. A UNITED STATES GEOLOGICAL SURVEY STANDARD CAP, STAMPED  
MD0026'OHIO 792 AND RIVETED ON THE TOP OF A 3-1/2 INCH IRON PIPE.

MD0026

MD0026

STATION RECOVERY (1996)

MD0026

MD0026'RECOVERY NOTE BY WOOLPERT CONSULTANTS 1996 (BS)

MD0026'RECOVERED AS DESCRIBED.

MD0026

MD0026

STATION RECOVERY (2001)

MD0026

MD0026'RECOVERY NOTE BY LOCAL ENGINEER (INDIVIDUAL OR FIRM) 2001 (JDL)

MD0026'RAILROAD TRACKS ARE NOW GONE. MARKER IS ABOUT 3 METERS EAST-SOUTHEAST  
MD0026'OF A UTILITY POLE, 14 METERS EAST OF THE CENTERLINE OF THE NORTH-SOUTH  
MD0026'ROAD.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.6

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = MARCH 30, 2020

MC1582 \*\*\*\*\*

MC1582 DESIGNATION - 906 3097 E

MC1582 PID - MC1582

MC1582 STATE/COUNTY- OH/OTTAWA

MC1582 COUNTRY - US

MC1582 USGS QUAD - PUT-IN-BAY (2016)

MC1582

MC1582 \*CURRENT SURVEY CONTROL

MC1582

MC1582\* NAD 83(2011) POSITION- 41 39 29.31280(N) 082 49 38.86424(W) ADJUSTED

MC1582\* NAD 83(2011) ELLIP HT- 144.029 (meters) (06/27/12) ADJUSTED

MC1582\* NAD 83(2011) EPOCH - 2010.00

MC1582\* [NAVD 88](#) ORTHO HEIGHT - 179.7 (meters) 590. (feet) VERTCON

MC1582

MC1582 GEOID HEIGHT - -35.589 (meters) GEOID18

MC1582 NAD 83(2011) X - 595,874.493 (meters) COMP

MC1582 NAD 83(2011) Y - -4,735,083.328 (meters) COMP

MC1582 NAD 83(2011) Z - 4,217,406.654 (meters) COMP

MC1582 LAPLACE CORR - 0.94 (seconds) DEFLEC18

MC1582

MC1582 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MC1582 Standards:

MC1582 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

MC1582 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

MC1582 -----

MC1582 NETWORK 5.51 6.45 2.22 2.25 3.29 -0.24029761

MC1582 -----

MC1582 Click [here](#) for local accuracies and other accuracy information.

MC1582

MC1582

MC1582.The horizontal coordinates were established by GPS observations

MC1582.and adjusted by the National Geodetic Survey in June 2012.

MC1582

MC1582.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MC1582.been affixed to the stable North American tectonic plate. See

MC1582.[NA2011](#) for more information.

MC1582

MC1582.The horizontal coordinates are valid at the epoch date displayed above

MC1582.which is a decimal equivalence of Year/Month/Day.

MC1582

MC1582.The NAVD 88 height was computed by applying the VERTCON shift value to

MC1582.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

MC1582

MC1582.Significant digits in the geoid height do not necessarily reflect accuracy.

MC1582.GEOID18 height accuracy estimate available [here](#).

MC1582

MC1582.Click [photographs](#) - Photos may exist for this station.

MC1582





MC1582.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
MC1582

MC1582.The Laplace correction was computed from DEFLEC18 derived deflections.  
MC1582

MC1582.The ellipsoidal height was determined by GPS observations  
MC1582.and is referenced to NAD 83.

MC1582

MC1582. The following values were computed from the NAD 83(2011) position.

MC1582

MC1582;		North	East	Units	Scale	Factor	Converg.
MC1582;SPC OH N	-	221,202.486	572,725.051	MT	0.99999220	-0 12	54.5
MC1582;SPC OH N	-	725,728.49	1,879,015.44	sFT	0.99999220	-0 12	54.5
MC1582;UTM 17	-	4,613,434.477	347,843.519	MT	0.99988491	-1 12	53.7
MC1582!	-	Elev Factor	x Scale Factor	=	Combined Factor		
MC1582!SPC OH N	-	0.99997741	x 0.99999220	=	0.99996961		
MC1582!UTM 17	-	0.99997741	x 0.99988491	=	0.99986232		

MC1582

MC1582\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLG4784313434 (NAD 83)

MC1582

SUPERSEDED SURVEY CONTROL

MC1582

MC1582	NAD 83(2007)-	41 39 29.31296(N)	082 49 38.86362(W)	AD(2002.00)	0
MC1582	ELLIP H (02/10/07)	144.025 (m)		GP(2002.00)	
MC1582	ELLIP H (10/07/05)	144.027 (m)		GP( )	4 1
MC1582	NAD 83(1995)-	41 39 29.31290(N)	082 49 38.86377(W)	AD( )	2
MC1582	ELLIP H (04/01/98)	144.039 (m)		GP( )	4 1
MC1582	NAD 83(1994)-	41 39 29.31287(N)	082 49 38.86387(W)	AD( )	2
MC1582	NAD 83(1986)-	41 39 29.32117(N)	082 49 38.88275(W)	AD( )	2
MC1582	NGVD 29 (08/25/89)	179.9 (m)	RAPSU86 model used	GPS OBS	

MC1582

MC1582.Superseded values are not recommended for survey control.

MC1582

MC1582.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC1582.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC1582

MC1582\_MARKER: DB = BENCH MARK DISK

MC1582\_SETTING: 66 = SET IN ROCK OUTCROP

MC1582\_STAMPING: 3097-E 1979

MC1582\_MARK LOGO: NOS

MC1582\_MAGNETIC: N = NO MAGNETIC MATERIAL

MC1582\_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD

MC1582+STABILITY: POSITION/ELEVATION WELL

MC1582\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MC1582+SATELLITE: SATELLITE OBSERVATIONS - August 05, 2019

MC1582

MC1582	HISTORY	- Date	Condition	Report By
MC1582	HISTORY	- 1979	MONUMENTED	NOS
MC1582	HISTORY	- 19881001	GOOD	OHDNR
MC1582	HISTORY	- 20050625	GOOD	USPSQD
MC1582	HISTORY	- 20070527	GOOD	GEOCAC
MC1582	HISTORY	- 20091020	GOOD	OHDT
MC1582	HISTORY	- 20150725	GOOD	USPSQD
MC1582	HISTORY	- 20170805	GOOD	USPSQD
MC1582	HISTORY	- 20190805	GOOD	USPSQD



MC1582  
MC1582 STATION DESCRIPTION  
MC1582  
MC1582'DESCRIBED BY OHIO DEPARTMENT OF NATURAL RESOURCES 1988  
MC1582'THE STATION IS LOCATED ON SOUTH BASS ISLAND, ON PEACH ORCHARD POINT,  
MC1582'73.2 M (240.2 FT) SOUTHWEST OF THE FISHERIES BUILDING IN A ROCK  
MC1582'OUTCROP LOCATED ON THE WEST CORNER OF THE OHIO STATE UNIVERSITYS LAKE  
MC1582'ERIE RESEARCH CENTER, 12.65 M (41.5 FT) SOUTHEAST OF THE ROAD, 28.96 M  
MC1582'(95.0 FT) SOUTHWEST OF THE WEST CORNER OF THE LAB GARAGE AND 7.92 M  
MC1582'(26.0 FT) NORTHEAST OF THE CENTERLINE OF BAYVIEW AVENUE.  
MC1582  
MC1582 STATION RECOVERY (2005)  
MC1582  
MC1582'RECOVERY NOTE BY US POWER SQUADRON 2005  
MC1582'RECOVERED IN GOOD CONDITION.  
MC1582  
MC1582 STATION RECOVERY (2007)  
MC1582  
MC1582'RECOVERY NOTE BY GEOCACHING 2007 (RLM)  
MC1582'RECOVERED IN GOOD CONDITION.  
MC1582  
MC1582 STATION RECOVERY (2009)  
MC1582  
MC1582'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2009 (MJW)  
MC1582'RECOVERED IN GOOD CONDITION.  
MC1582  
MC1582 STATION RECOVERY (2015)  
MC1582  
MC1582'RECOVERY NOTE BY US POWER SQUADRON 2015 (MLG)  
MC1582'RECOVERED IN GOOD CONDITION.  
MC1582  
MC1582 STATION RECOVERY (2017)  
MC1582  
MC1582'RECOVERY NOTE BY US POWER SQUADRON 2017 (TJH)  
MC1582'RECOVERED IN GOOD CONDITION.  
MC1582  
MC1582 STATION RECOVERY (2019)  
MC1582  
MC1582'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)  
MC1582'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.7

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = MAY 21, 2020

DG7164 \*\*\*\*\*

DG7164 CBN - This is a Cooperative Base Network Control Station.

DG7164 DESIGNATION - **1061**

DG7164 PID - DG7164

DG7164 STATE/COUNTY- OH/ERIE

DG7164 COUNTRY - US

DG7164 USGS QUAD - BELLEVUE (2016)

DG7164

DG7164 \*CURRENT SURVEY CONTROL

DG7164

DG7164\* NAD 83(2011) POSITION- 41 20 27.45802(N) 082 50 36.94438(W) ADJUSTED

DG7164\* NAD 83(2011) ELLIP HT- 199.130 (meters) (06/27/12) ADJUSTED

DG7164\* NAD 83(2011) EPOCH - 2010.00

DG7164\* [NAVD 88](#) ORTHO HEIGHT - 234.4 (meters) 769. (feet) GPS OBS

DG7164

DG7164 NAVD 88 orthometric height was determined with geoid model GEOID03

DG7164 GEOID HEIGHT - -35.252 (meters) GEOID03

DG7164 GEOID HEIGHT - -35.290 (meters) GEOID18

DG7164 NAD 83(2011) X - 597,454.303 (meters) COMP

DG7164 NAD 83(2011) Y - -4,758,452.774 (meters) COMP

DG7164 NAD 83(2011) Z - 4,191,058.576 (meters) COMP

DG7164 LAPLACE CORR - 1.82 (seconds) DEFLEC18

DG7164

DG7164 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DG7164 Standards:

DG7164 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

DG7164 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

DG7164 -----

DG7164 NETWORK 0.57 1.43 0.26 0.20 0.73 0.05470151

DG7164 -----

DG7164 Click [here](#) for local accuracies and other accuracy information.

DG7164

DG7164

DG7164.The horizontal coordinates were established by GPS observations

DG7164.and adjusted by the National Geodetic Survey in June 2012.

DG7164

DG7164.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

DG7164.been affixed to the stable North American tectonic plate. See

DG7164.[NA2011](#) for more information.

DG7164

DG7164.The horizontal coordinates are valid at the epoch date displayed above

DG7164.which is a decimal equivalence of Year/Month/Day.

DG7164

DG7164.The orthometric height was determined by GPS observations and a

DG7164.high-resolution geoid model.

DG7164

DG7164.Significant digits in the geoid height do not necessarily reflect accuracy.

DG7164.GEOID18 height accuracy estimate available [here](#).



DG7164  
 DG7164.Click [photographs](#) - Photos may exist for this station.  
 DG7164  
 DG7164.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 DG7164  
 DG7164.The Laplace correction was computed from DEFLEC18 derived deflections.  
 DG7164  
 DG7164.The ellipsoidal height was determined by GPS observations  
 DG7164.and is referenced to NAD 83.  
 DG7164  
 DG7164. The following values were computed from the NAD 83(2011) position.  
 DG7164  
 DG7164;  

	North	East	Units	Scale	Factor	Converg.
DG7164;SPC OH N	- 185,981.675	571,242.500	MT	0.99995049	-0 13	32.6
DG7164;SPC OH N	- 610,174.88	1,874,151.44	sFT	0.99995049	-0 13	32.6
DG7164;UTM 17	- 4,578,247.572	345,749.099	MT	0.99989282	-1 13	04.8

 DG7164  
 DG7164!  

	Elev Factor	x	Scale Factor	=	Combined Factor
DG7164!SPC OH N	- 0.99996877	x	0.99995049	=	0.99991926
DG7164!UTM 17	- 0.99996877	x	0.99989282	=	0.99986159

 DG7164  
 DG7164\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF4574978247 (NAD 83)  
 DG7164  
 DG7164  
 SUPERSEDED SURVEY CONTROL  
 DG7164  

DG7164	NAD 83(2007)-	41 20 27.45816(N)	082 50 36.94517(W)	AD(2002.00)	0
DG7164	ELLIP H (02/10/07)	199.143 (m)		GP(2002.00)	
DG7164	NAD 83(1995)-	41 20 27.45816(N)	082 50 36.94524(W)	AD( )	A
DG7164	ELLIP H (09/23/04)	199.143 (m)		GP( )	4 1

 DG7164  
 DG7164.Superseded values are not recommended for survey control.  
 DG7164  
 DG7164.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 DG7164.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 DG7164  
 DG7164\_MARKER: DB = BENCH MARK DISK  
 DG7164\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 DG7164\_STAMPING: 769.99  
 DG7164\_MARK LOGO: OH-043  
 DG7164\_PROJECTION: FLUSH  
 DG7164\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 DG7164\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 DG7164+STABILITY: SURFACE MOTION  
 DG7164\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 DG7164+SATELLITE: SATELLITE OBSERVATIONS - April 15, 2003  
 DG7164  

DG7164	HISTORY	- Date	Condition	Report By
DG7164	HISTORY	- 20030415	MONUMENTED	OH-043

 DG7164  
 DG7164  
 STATION DESCRIPTION  
 DG7164  
 DG7164'DESCRIBED BY ERIE COUNTY OH 2003 (GTF)  
 DG7164'DESCRIBED BY WOOLPERT LLP IN 2003. (GTF)  
 DG7164'  
 DG7164'THE STATION IS LOCATED IN GROTON TOWNSHIP, 3.4 MI NORTH OF BELLEVUE,



DG7164'6.6 MI NORTHEAST OF CLYDE, 8.0 MI SOUTHWEST OF SANDUSKY, AND 4.6 MI  
DG7164'SOUTHWEST OF SAND HILL IN THE SOUTHEAST QUADRANT OF THE INTERSECTION  
DG7164'OF NORTHWEST ROAD AND PORTLAND ROAD.

DG7164'

DG7164'TO REACH THE STATION FROM THE INTERSECTION OF US 20 AND STATE ROUTE  
DG7164'269 IN BELLEVUE, GO NORTH ALONG STATE ROUTE 269 FOR 0.1 MI TO  
DG7164'NORTHWEST ROAD. BEAR LEFT AND GO NORTH ALONG NORTHWEST ROAD FOR 4.5  
DG7164'MI TO THE STATION ON THE RIGHT JUST BEFORE PORTLAND ROAD (COUNTY ROAD  
DG7164'32).

DG7164'

DG7164'THE STATION IS AN ERIE COUNTY BENCH MARK DISK SET IN CONCRETE AND  
DG7164'FLUSH WITH THE GROUND. THE STATION IS 26.5 FT SOUTH OF A POWER POLE,  
DG7164'32.0 FT SOUTHWEST OF A VERIZON SIGN READING -DO NOT DIG, 47.4 FT  
DG7164'SOUTH OF THE CENTERLINE OF PORTLAND ROAD, AND 18.2 FT EAST OF THE  
DG7164'CENTERLINE OF NORTHWEST ROAD.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB3100 \*\*\*\*\*

MB3100 DESIGNATION - 1519

MB3100 PID - MB3100

MB3100 STATE/COUNTY- OH/GEAUGA

MB3100 COUNTRY - US

MB3100 USGS QUAD - BURTON (1966)

MB3100

MB3100 \*CURRENT SURVEY CONTROL

MB3100

MB3100\* NAD 83(2011) POSITION- 41 27 47.58831(N) 081 13 54.09298(W) ADJUSTED

MB3100\* NAD 83(2011) ELLIP HT- 336.024 (meters) (06/27/12) ADJUSTED

MB3100\* NAD 83(2011) EPOCH - 2010.00

MB3100\* NAVD 88 ORTHO HEIGHT - 370.0 (meters) 1214. (feet) VERTCON

MB3100

MB3100 GEOID HEIGHT - -33.888 (meters) GEOID18

MB3100 NAD 83(2011) X - 729,716.583 (meters) COMP

MB3100 NAD 83(2011) Y - -4,730,990.090 (meters) COMP

MB3100 NAD 83(2011) Z - 4,201,334.386 (meters) COMP

MB3100 LAPLACE CORR - -0.11 (seconds) DEFLEC18

MB3100

MB3100 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MB3100 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	7.98	7.02	3.92	1.91	3.58	-0.11084285

MB3100 -----

MB3100 NETWORK 7.98 7.02 3.92 1.91 3.58 -0.11084285

MB3100 -----

MB3100 Click [here](#) for local accuracies and other accuracy information.

MB3100

MB3100

MB3100.The horizontal coordinates were established by GPS observations

MB3100.and adjusted by the National Geodetic Survey in June 2012.

MB3100

MB3100.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MB3100.been affixed to the stable North American tectonic plate. See

MB3100.[NA2011](#) for more information.

MB3100

MB3100.The horizontal coordinates are valid at the epoch date displayed above

MB3100.which is a decimal equivalence of Year/Month/Day.

MB3100

MB3100.The NAVD 88 height was computed by applying the VERTCON shift value to

MB3100.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

MB3100

MB3100.Significant digits in the geoid height do not necessarily reflect accuracy.

MB3100.GEOID18 height accuracy estimate available [here](#).

MB3100

MB3100.Click [here](#) to see if photographs exist for this station.

MB3100

MB3100.The X, Y, and Z were computed from the position and the ellipsoidal ht.







MB3100'CHERRY AVENUE. TURN LEFT ON CHERRY AVENUE AND PROCEED SOUTH FOR .17  
MB3100'MILES TO WATER STREET OR CHARDON ROAD. TURN RIGHT ON CHARDON ROAD AND  
MB3100'PROCEED WEST FOR 1.56 MILES TO AUBURN ROAD. TURN LEFT ON AUBURN ROAD  
MB3100'AND PROCEED SOUTH FOR 8.24 MILES TO KINSMAN ROAD. PROCEED EAST ON  
MB3100'KINSMAN ROAD FOR .5 MILES TO ELM DRIVE AND THE MARK.

MB3100

MB3100 STATION RECOVERY (2014)

MB3100

MB3100'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2014 (GA)

MB3100'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB1812 \*\*\*\*\*

MB1812 DESIGNATION - 1523

MB1812 PID - MB1812

MB1812 STATE/COUNTY- OH/CUYAHOGA

MB1812 COUNTRY - US

MB1812 USGS QUAD - NORTHFIELD (1994)

MB1812

MB1812 \*CURRENT SURVEY CONTROL

MB1812

MB1812\* NAD 83(2011) POSITION- 41 21 02.11180(N) 081 31 36.38758(W) ADJUSTED

MB1812\* NAD 83(2011) ELLIP HT- 284.263 (meters) (06/27/12) ADJUSTED

MB1812\* NAD 83(2011) EPOCH - 2010.00

MB1812\* [NAVD 88](#) ORTHO HEIGHT - 318.168 (meters) 1043.86 (feet) ADJUSTED

MB1812

MB1812 GEOID HEIGHT - -33.941 (meters) GEOID18

MB1812 NAD 83(2011) X - 706,555.135 (meters) COMP

MB1812 NAD 83(2011) Y - -4,742,830.753 (meters) COMP

MB1812 NAD 83(2011) Z - 4,191,917.439 (meters) COMP

MB1812 LAPLACE CORR - 1.75 (seconds) DEFLEC18

MB1812 DYNAMIC HEIGHT - 318.034 (meters) 1043.42 (feet) COMP

MB1812 MODELED GRAVITY - 980,194.4 (mgal) NAVD 88

MB1812

MB1812 VERT ORDER - FIRST CLASS II

MB1812

MB1812 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MB1812 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	4.04	7.86	1.88	1.27	4.01	0.27354805

MB1812

MB1812 -----

MB1812

Click [here](#) for local accuracies and other accuracy information.

MB1812

MB1812

MB1812.The horizontal coordinates were established by GPS observations

MB1812.and adjusted by the National Geodetic Survey in June 2012.

MB1812

MB1812.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MB1812.been affixed to the stable North American tectonic plate. See

MB1812.[NA2011](#) for more information.

MB1812

MB1812.The horizontal coordinates are valid at the epoch date displayed above

MB1812.which is a decimal equivalence of Year/Month/Day.

MB1812

MB1812.The orthometric height was determined by differential leveling and

MB1812.adjusted by the NATIONAL GEODETIC SURVEY

MB1812.in June 1991.

MB1812

MB1812.Significant digits in the geoid height do not necessarily reflect accuracy.



MB1812.GEOID18 height accuracy estimate available [here](#).  
 MB1812  
 MB1812.Click [here](#) to see if photographs exist for this station.  
 MB1812  
 MB1812.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MB1812  
 MB1812.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MB1812  
 MB1812.The ellipsoidal height was determined by GPS observations  
 MB1812.and is referenced to NAD 83.  
 MB1812  
 MB1812.The dynamic height is computed by dividing the NAVD 88  
 MB1812.geopotential number by the normal gravity value computed on the  
 MB1812.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 MB1812.degrees latitude (g = 980.6199 gals.).

MB1812  
 MB1812.The modeled gravity was interpolated from observed gravity values.  
 MB1812  
 MB1812. The following values were computed from the NAD 83(2011) position.  
 MB1812  

MB1812;		North	East	Units	Scale	Factor	Converg.
MB1812;SPC OH N	-	187,448.455	681,441.454	MT	0.99995130	+0 38	21.7
MB1812;SPC OH N	-	614,987.14	2,235,695.84	sFT	0.99995130	+0 38	21.7
MB1812;UTM 17	-	4,577,810.526	455,932.971	MT	0.99962390	-0 20	52.9

MB1812  
 MB1812!  
 MB1812!SPC OH N  
 MB1812!UTM 17

MB1812  
 MB1812\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF5593277810 (NAD 83)  
 MB1812

MB1812  
 MB1812 SUPERSEDED SURVEY CONTROL

MB1812	NAD 83(2007)-	41 21 02.11186(N)	081 31 36.38828(W)	AD(2002.00)	0
MB1812	ELLIP H (02/10/07)	284.278 (m)		GP(2002.00)	
MB1812	ELLIP H (10/07/05)	284.252 (m)		GP( )	4 1
MB1812	NAD 83(1995)-	41 21 02.11166(N)	081 31 36.38587(W)	AD( )	1
MB1812	ELLIP H (04/01/98)	284.309 (m)		GP( )	4 1
MB1812	NAD 83(1994)-	41 21 02.12108(N)	081 31 36.38659(W)	AD( )	1
MB1812	NAD 83(1986)-	41 21 02.12150(N)	081 31 36.38600(W)	AD( )	1
MB1812	NGVD 29 (06/03/92)	318.383 (m)	1044.56	(f) ADJUSTED	1 2
MB1812	NGVD 29	318.35 (m)	1044.5	(f) LEVELING	3

MB1812  
 MB1812.Superseded values are not recommended for survey control.  
 MB1812  
 MB1812.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MB1812.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MB1812

MB1812\_MARKER: DD = SURVEY DISK  
 MB1812\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 MB1812\_STAMPING: 1523  
 MB1812\_MARK LOGO: CRGS  
 MB1812\_PROJECTION: RECESSED 30 CENTIMETERS  
 MB1812\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 MB1812\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO



MB1812+STABILITY: SURFACE MOTION  
MB1812\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MB1812+SATELLITE: SATELLITE OBSERVATIONS - March 26, 2019

MB1812

MB1812	HISTORY	- Date	Condition	Report By
MB1812	HISTORY	- 1957	MONUMENTED	CRGS
MB1812	HISTORY	- 1983	GOOD	NGS
MB1812	HISTORY	- 19900915	GOOD	RDA
MB1812	HISTORY	- 20090523	GOOD	JCLS
MB1812	HISTORY	- 20110713	GOOD	JCLS
MB1812	HISTORY	- 20190326	GOOD	USPSQD

MB1812

MB1812 STATION DESCRIPTION

MB1812

MB1812'DESCRIBED BY NATIONAL GEODETIC SURVEY 1983

MB1812'IN WALTON HILLS.

MB1812'IN WALTON HILLS, AT THE NORTHWEST CORNER OF THE INTERSECTION OF STATE  
MB1812'HIGHWAY 8 AND SAGAMORE ROAD AND ACROSS THE HIGHWAY FROM THE NORTHFIELD  
MB1812'PARK RACE TRACK, IN TOP OF A CONCRETE POST AND PROTECTED BY A 9-INCH  
MB1812'CAST IRON BOX WITH A COVER, 10.79 METERS (35.4 FT) WEST OF THE  
MB1812'CENTERLINE OF THE HIGHWAY, 10.45 METERS (34.3 FT) NORTH OF THE  
MB1812'CENTERLINE OF SAGAMORE ROAD, 9.36 METERS (30.7 FT) NORTHEAST OF  
MB1812'UTILITY POLE 629756 WITH A STREET LAMP, 0.91 METER (3.0 FT) NORTH OF A  
MB1812'STREET SIGN POLE.

MB1812

MB1812 STATION RECOVERY (1990)

MB1812

MB1812'RECOVERY NOTE BY RINKER DETWILER AND ASSOCIATES 1990

MB1812'RECOVERED IN GOOD CONDITION.

MB1812

MB1812 STATION RECOVERY (2009)

MB1812

MB1812'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2009 (MRY)

MB1812'RECOVERED IN GOOD CONDITION.

MB1812

MB1812 STATION RECOVERY (2011)

MB1812

MB1812'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011

MB1812'RECOVERED IN GOOD CONDITION.

MB1812

MB1812 STATION RECOVERY (2019)

MB1812

MB1812'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)

MB1812'THE ACCESS COVER IS BROKEN. THE STREET SIGN HAS BEEN REMOVED BUT THE  
MB1812'CONCRETE BASE REMAINS. UTILITY POLE 629756 HAS BEEN REMOVED. THE  
MB1812'MARK IS 11 FT (3.4 M) NORTHEAST OF THE WESTBOUND TRAFFIC SIGNAL POST,  
MB1812'9 FT (2.7 M) NORTHWEST OF A CURB AND 4 FT (1.2 M) EAST OF THE NORTH  
MB1812'END OF CATV COVER.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
LA0005 *****
LA0005 CBN          - This is a Cooperative Base Network Control Station.
LA0005 PACS        - This is a Primary Airport Control Station.
LA0005 DESIGNATION - A 290
LA0005 PID         - LA0005
LA0005 STATE/COUNTY- OH/ALLEN
LA0005 COUNTRY     - US
LA0005 USGS QUAD   - LIMA (1983)
LA0005
LA0005                                *CURRENT SURVEY CONTROL
LA0005
LA0005* NAD 83(2011) POSITION- 40 42 16.17192(N) 084 01 36.30218(W) ADJUSTED
LA0005* NAD 83(2011) ELLIP HT- 260.147 (meters) (06/27/12) ADJUSTED
LA0005* NAD 83(2011) EPOCH - 2010.00
LA0005* NAVD 88 ORTHO HEIGHT - 294.730 (meters) 966.96 (feet) ADJUSTED
LA0005
LA0005 GEOID HEIGHT - -34.592 (meters) GEOID18
LA0005 NAD 83(2011) X - 503,904.896 (meters) COMP
LA0005 NAD 83(2011) Y - -4,815,963.213 (meters) COMP
LA0005 NAD 83(2011) Z - 4,137,770.557 (meters) COMP
LA0005 LAPLACE CORR - -3.60 (seconds) DEFLEC18
LA0005 DYNAMIC HEIGHT - 294.582 (meters) 966.47 (feet) COMP
LA0005 MODELED GRAVITY - 980,116.8 (mgal) NAVD 88
LA0005
LA0005 VERT ORDER - SECOND CLASS 0
LA0005
LA0005 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
LA0005 Standards:
LA0005          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
LA0005          Horiz Ellip                SD_N   SD_E   SD_h          (unitless)
LA0005 -----
LA0005 NETWORK      1.28   2.72                0.59   0.43   1.39          -0.04532427
LA0005 -----
LA0005 Click here for local accuracies and other accuracy information.
LA0005
LA0005
LA0005.This mark is at Lima Allen County Airport (AOH)
LA0005
LA0005.The horizontal coordinates were established by GPS observations
LA0005.and adjusted by the National Geodetic Survey in June 2012.
LA0005
LA0005.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
LA0005.been affixed to the stable North American tectonic plate. See
LA0005.NA2011 for more information.
LA0005
LA0005.The horizontal coordinates are valid at the epoch date displayed above
LA0005.which is a decimal equivalence of Year/Month/Day.
LA0005
LA0005.The orthometric height was determined by differential leveling and

```



LA0005.adjusted by the NATIONAL GEODETIC SURVEY  
 LA0005.in June 1991.

LA0005

LA0005.Significant digits in the geoid height do not necessarily reflect accuracy.  
 LA0005.GEOID18 height accuracy estimate available [here](#).

LA0005

LA0005.Click [here](#) to see if photographs exist for this station.

LA0005

LA0005.The X, Y, and Z were computed from the position and the ellipsoidal ht.

LA0005

LA0005.The Laplace correction was computed from DEFLEC18 derived deflections.

LA0005

LA0005.The ellipsoidal height was determined by GPS observations

LA0005.and is referenced to NAD 83.

LA0005

LA0005.The dynamic height is computed by dividing the NAVD 88

LA0005.geopotential number by the normal gravity value computed on the

LA0005.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

LA0005.degrees latitude (g = 980.6199 gals.).

LA0005

LA0005.The modeled gravity was interpolated from observed gravity values.

LA0005

LA0005. The following values were computed from the NAD 83(2011) position.

LA0005

LA0005;		North	East	Units	Scale	Factor	Converg.
LA0005;SPC OH N	-	116,375.627	470,986.430	MT	0.99995912	-1 00	10.8
LA0005;SPC OH N	-	381,809.04	1,545,227.98	sFT	0.99995912	-1 00	10.8
LA0005;UTM 16	-	4,510,206.162	751,185.344	MT	1.00037667	+1 56	24.1
LA0005;UTM 17	-	4,510,360.666	244,294.151	MT	1.00040488	-1 58	30.0

LA0005

LA0005! - Elev Factor x Scale Factor = Combined Factor

LA0005!SPC OH N - 0.99995919 x 0.99995912 = 0.99991832

LA0005!UTM 16 - 0.99995919 x 1.00037667 = 1.00033585

LA0005!UTM 17 - 0.99995919 x 1.00040488 = 1.00036406

LA0005

LA0005\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL5118510206(NAD 83)

LA0005

LA0005	PID	Reference Object	Distance	Geod. Az
LA0005				dddmss.s
LA0005	LA0004	AOH ARP	310.194 METERS	00205

LA0005

LA0005

SUPERSEDED SURVEY CONTROL

LA0005

LA0005	NAD 83(2007)-	40 42 16.17204(N)	084 01 36.30297(W)	AD(2002.00)	0
LA0005	ELLIP H (02/10/07)	260.164 (m)		GP(2002.00)	
LA0005	ELLIP H (03/08/05)	260.154 (m)		GP( )	4 2
LA0005	NAD 83(1995)-	40 42 16.17199(N)	084 01 36.30285(W)	AD( )	B
LA0005	ELLIP H (08/20/96)	260.176 (m)		GP( )	4 2
LA0005	NAVD 88	294.73 (m)	967.0 (f)	LEVELING	3
LA0005	NGVD 29 (??/??/92)	294.900 (m)	967.52 (f)	ADJ UNCH	2 0

LA0005

LA0005.Superseded values are not recommended for survey control.

LA0005



LA0005.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
LA0005.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
LA0005

LA0005\_MARKER: DB = BENCH MARK DISK  
LA0005\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
LA0005\_STAMPING: A 290 1934  
LA0005\_MARK LOGO: CGS  
LA0005\_MAGNETIC: N = NO MAGNETIC MATERIAL  
LA0005\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
LA0005+STABILITY: SURFACE MOTION  
LA0005\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
LA0005+SATELLITE: SATELLITE OBSERVATIONS - December 01, 1999

LA0005

LA0005	HISTORY	- Date	Condition	Report By
LA0005	HISTORY	- 1964	MONUMENTED	CGS
LA0005	HISTORY	- 1987	GOOD	USPSQD
LA0005	HISTORY	- 19951109	GOOD	NGS
LA0005	HISTORY	- 19991201	GOOD	NGS

LA0005

STATION DESCRIPTION

LA0005

LA0005'DESCRIBED BY COAST AND GEODETIC SURVEY 1964  
LA0005'4.3 MI E FROM LIMA.

LA0005'THE STATION IS LOCATED AT THE ALLEN COUNTY AIRPORT, IN THE CIRCLING  
LA0005'AREA SOUTH OF THE PASSENGER TERMINAL BUILDING, 150.8 FEET WEST  
LA0005'OF THE CENTER OF THE AIRPORT BEACON, 92.3 FEET SOUTH OF THE MAIN  
LA0005'ENTRANCE TO THE PASSENGER TERMINAL, 10.0 FEET SOUTH OF THE FLAG  
LA0005'POLE. THE MARK IS SET IN A 10-INCH SQUARE CONCRETE POST FLUSH  
LA0005'WITH THE GROUND.

LA0005

STATION RECOVERY (1987)

LA0005

LA0005'RECOVERY NOTE BY US POWER SQUADRON 1987 (PMB)  
LA0005'RECOVERED IN GOOD CONDITION.

LA0005

STATION RECOVERY (1995)

LA0005

LA0005'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
LA0005'NOTE--THIS IS THE PAC STATION. THE STATION IS LOCATED ABOUT 4 KM  
LA0005'(2.50 MI) SOUTHEAST OF LIMA AT THE ALLEN COUNTY AIRPORT, ALONG THE  
LA0005'NORTH SIDE OF RUNWAY 9-27, IN THE GRASS ISLAND CREATED BY THE CIRCLE  
LA0005'DRIVE ON THE SOUTH SIDE OF THE TERMINAL. OWNERSHIP--ALLEN COUNTY,  
LA0005'ALLEN COUNTY AIRPORT, 700 AIRPORT DRIVE, LIMA, OH. 45804. PHONE  
LA0005'419-227-3225. TO REACH FROM THE OVERPASS AT THE JUNCTION OF  
LA0005'INTERSTATE HIGHWAY 7 AND FOURTH STREET (EXIT 124) ON THE SOUTH SIDE OF  
LA0005'LIMA, GO EAST ON FOURTH STREET FOR 1.37 KM (0.85 MI) TO THE T-JUNCTION  
LA0005'OF BOWMAN ROAD. TURN RIGHT, SOUTH, ON BOWMAN ROAD FOR 1.61 KM (1.00  
LA0005'MI) TO A PAVED CROSSROAD (HANTHORNE ROAD) . TURN LEFT, EAST, ON  
LA0005'HANTHORNE ROAD FOR 1.93 KM (1.20 MI) TO THE AIRPORT ENTRANCE ROAD ON  
LA0005'THE LEFT. TURN LEFT, NORTH, ON AIRPORT DRIVE FOR 0.16 KM (0.10 MI) TO  
LA0005'A PAVED Y-JUNCTION RIGHT. TURN RIGHT, NORTHEAST, ON THE DRIVE FOR  
LA0005'0.08 KM (0.05 MI) TO THE STATION ON THE LEFT. THE STATION IS SET IN  
LA0005'THE TOP OF A 30 CM SQUARE CONCRETE POST SET FLUSH WITH THE GROUND. IT  
LA0005'IS 28.2 M (92.5 FT) SOUTH OF THE SOUTH ENTRANCE OF THE TERMINAL, 27.2  
LA0005'M (89.2 FT) NORTH-NORTHEAST OF A FIBERGLASS WITNESS POST AT A POWER





LA0005'POLE WITH A LIGHT, AND 3.1 M (10.2 FT) SOUTH OF THE FLAGPOLE.  
LA0005'DESCRIBED BY D.G. AUG  
LA0005  
LA0005 STATION RECOVERY (1999)  
LA0005  
LA0005'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1999 (AJL)  
LA0005'RECOVERED AS DESCRIBED.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = JANUARY 6, 2020

MD0088 \*\*\*\*\*

MD0088 DESIGNATION - **A 314**

MD0088 PID - MD0088

MD0088 STATE/COUNTY- OH/PUTNAM

MD0088 COUNTRY - US

MD0088 USGS QUAD - OTTAWA (1977)

MD0088

MD0088 \*CURRENT SURVEY CONTROL

MD0088

MD0088\* NAD 83(1986) POSITION- 41 06 05. (N) 084 00 31. (W) SCALED

MD0088\* [NAVD 88](#) ORTHO HEIGHT - 234.850 (meters) 770.50 (feet) ADJUSTED

MD0088

MD0088 GEOID HEIGHT - -35.418 (meters) GEOID18

MD0088 DYNAMIC HEIGHT - 234.739 (meters) 770.14 (feet) COMP

MD0088 MODELED GRAVITY - 980,146.0 (mgal) NAVD 88

MD0088

MD0088 VERT ORDER - FIRST CLASS I

MD0088

MD0088.The horizontal coordinates were scaled from a map and have

MD0088.an estimated accuracy of +/- 6 seconds.

MD0088.

MD0088.The orthometric height was determined by differential leveling and

MD0088.adjusted by the NATIONAL GEODETIC SURVEY

MD0088.in April 1995.

MD0088

MD0088.Significant digits in the geoid height do not necessarily reflect accuracy.

MD0088.GEOID18 height accuracy estimate available [here](#).

MD0088

MD0088.Click [here](#) to see if photographs exist for this station.

MD0088

MD0088.The dynamic height is computed by dividing the NAVD 88

MD0088.geopotential number by the normal gravity value computed on the

MD0088.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MD0088.degrees latitude (g = 980.6199 gals.).

MD0088

MD0088.The modeled gravity was interpolated from observed gravity values.

MD0088

MD0088;	North	East	Units	Estimated Accuracy
MD0088;SPC OH N -	160,420.	473,280.	MT	(+/- 180 meters Scaled)

MD0088

MD0088\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL512543(NAD 83)

MD0088

MD0088 SUPERSEDED SURVEY CONTROL

MD0088

MD0088	NAVD 88 (06/15/91)	234.848 (m)	770.50 (f)	SUPERSEDED	1 1
MD0088	NGVD 29 (01/19/93)	235.030 (m)	771.09 (f)	ADJUSTED	1 1
MD0088	NGVD 29 (??/??/92)	235.030 (m)	771.09 (f)	SUPERSEDED	1 1

MD0088

MD0088.Superseded values are not recommended for survey control.



MD0088  
MD0088.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MD0088.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MD0088  
MD0088\_MARKER: DB = BENCH MARK DISK  
MD0088\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
MD0088\_STAMPING: A 314 1968  
MD0088\_MARK LOGO: CGS  
MD0088\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MD0088\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
MD0088+STABILITY: SURFACE MOTION  
MD0088\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MD0088+SATELLITE: SATELLITE OBSERVATIONS - October 22, 1992

MD0088  
MD0088 HISTORY - Date Condition Report By  
MD0088 HISTORY - 1968 MONUMENTED CGS  
MD0088 HISTORY - 19921022 GOOD NGS

MD0088  
MD0088 STATION DESCRIPTION  
MD0088  
MD0088'DESCRIBED BY COAST AND GEODETIC SURVEY 1968  
MD0088'0.8 MI W FROM LEIPSIC.  
MD0088'ABOUT 0.75 MILE WEST ALONG STATE HIGHWAY 113 FROM THE CROSSING  
MD0088'OF THE DETROIT, TOLEDO AND IRONTON RAILROAD AT LEIPSIC, NEAR  
MD0088'THE INTERSECTION OF COUNTY ROAD NO. 7 D, 81 FEET SOUTHWEST OF  
MD0088'THE CENTER OF THE INTERSECTION, 71 FEET WEST OF THE CENTER LINE  
MD0088'OF THE COUNTY ROAD, 29 FEET SOUTH OF THE CENTER LINE OF THE  
MD0088'HIGHWAY, 1.3 FEET NORTH OF THE RIGHT-OF-WAY FENCE LINE, 2 FEET EAST  
MD0088'OF A METAL WITNESS POST, 2 FEET BELOW THE LEVEL OF THE HIGHWAY  
MD0088'AND SET IN THE TOP OF A CONCRETE POST PROJECTING 3 INCHES ABOVE  
MD0088'THE LEVEL OF THE GROUND. IN SECTION 25, R 7 E, T 2 N.

MD0088  
MD0088 STATION RECOVERY (1992)  
MD0088  
MD0088'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1992  
MD0088'2.1 KM (1.30 MI) WESTERLY ALONG STATE HIGHWAY 613 FROM THE JUNCTION  
MD0088'OF STATE HIGHWAY 65 IN LEIPSIC, 23.0 M (75.5 FT) WEST OF THE CENTER  
MD0088'OF COUNTY ROAD 7 D, 8.6 M (28.2 FT) SOUTH OF THE HIGHWAY CENTERLINE,  
MD0088'0.6 M (2.0 FT) BELOW THE LEVEL OF THE HIGHWAY, 0.2 M (0.7 FT) NORTH  
MD0088'OF A WITNESS POST, AND THE MONUMENT PROJECTS 0.05 M (0.16 FT) ABOVE  
MD0088'THE GROUND SURFACE.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MC0927 *****
MC0927 CBN - This is a Cooperative Base Network Control Station.
MC0927 DESIGNATION - A 319
MC0927 PID - MC0927
MC0927 STATE/COUNTY- OH/ERIE
MC0927 COUNTRY - US
MC0927 USGS QUAD - VERMILION WEST (1979)
MC0927
MC0927 *CURRENT SURVEY CONTROL
MC0927
MC0927* NAD 83(2011) POSITION- 41 24 50.07264(N) 082 23 27.65178(W) ADJUSTED
MC0927* NAD 83(2011) ELLIP HT- 146.337 (meters) (06/27/12) ADJUSTED
MC0927* NAD 83(2011) EPOCH - 2010.00
MC0927* NAVD 88 ORTHO HEIGHT - 181.327 (meters) 594.90 (feet) ADJUSTED
MC0927
MC0927 GEOID HEIGHT - -34.923 (meters) GEOID18
MC0927 NAD 83(2011) X - 634,308.069 (meters) COMP
MC0927 NAD 83(2011) Y - -4,748,237.418 (meters) COMP
MC0927 NAD 83(2011) Z - 4,197,103.165 (meters) COMP
MC0927 LAPLACE CORR - 3.08 (seconds) DEFLEC18
MC0927 DYNAMIC HEIGHT - 181.254 (meters) 594.66 (feet) COMP
MC0927 MODELED GRAVITY - 980,217.1 (mgal) NAVD 88
MC0927
MC0927 VERT ORDER - FIRST CLASS II
MC0927
MC0927 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MC0927 Standards:
MC0927 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MC0927 Horiz Ellip SD_N SD_E SD_h (unitless)
MC0927 -----
MC0927 NETWORK 0.33 0.74 0.15 0.12 0.38 -0.01280040
MC0927 -----
MC0927 Click here for local accuracies and other accuracy information.
MC0927
MC0927
MC0927.The horizontal coordinates were established by GPS observations
MC0927.and adjusted by the National Geodetic Survey in June 2012.
MC0927
MC0927.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MC0927.been affixed to the stable North American tectonic plate. See
MC0927.NA2011 for more information.
MC0927
MC0927.The horizontal coordinates are valid at the epoch date displayed above
MC0927.which is a decimal equivalence of Year/Month/Day.
MC0927
MC0927.The orthometric height was determined by differential leveling and
MC0927.adjusted by the NATIONAL GEODETIC SURVEY
MC0927.in June 1991.
MC0927

```



MC0927.Significant digits in the geoid height do not necessarily reflect accuracy.  
 MC0927.GEOID18 height accuracy estimate available [here](#).

MC0927

MC0927.Click [here](#) to see if photographs exist for this station.

MC0927

MC0927.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC0927

MC0927.The Laplace correction was computed from DEFLEC18 derived deflections.

MC0927

MC0927.The ellipsoidal height was determined by GPS observations

MC0927.and is referenced to NAD 83.

MC0927

MC0927.The dynamic height is computed by dividing the NAVD 88

MC0927.geopotential number by the normal gravity value computed on the

MC0927.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC0927.degrees latitude (g = 980.6199 gals.).

MC0927

MC0927.The modeled gravity was interpolated from observed gravity values.

MC0927

MC0927. The following values were computed from the NAD 83(2011) position.

MC0927

MC0927;		North	East	Units	Scale Factor	Converg.
MC0927;SPC OH N	-	194,032.095	609,111.532	MT	0.99995736	+0 04 17.8
MC0927;SPC OH N	-	636,586.97	1,998,393.42	sFT	0.99995736	+0 04 17.8
MC0927;UTM 17	-	4,585,640.138	383,747.014	MT	0.99976632	-0 55 12.9
MC0927!	-	Elev Factor	x Scale Factor	=	Combined Factor	
MC0927!SPC OH N	-	0.99997705	x 0.99995736	=	0.99993441	
MC0927!UTM 17	-	0.99997705	x 0.99976632	=	0.99974337	

MC0927

MC0927\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF8374785640 (NAD 83)

MC0927

SUPERSEDED SURVEY CONTROL

MC0927

MC0927	NAD 83(2007)-	41 24 50.07277(N)	082 23 27.65259(W)	AD(2002.00)	0
MC0927	ELLIP H (02/10/07)	146.349 (m)		GP(2002.00)	
MC0927	ELLIP H (09/23/04)	146.364 (m)		GP( )	4 1
MC0927	NAD 83(1995)-	41 24 50.07271(N)	082 23 27.65256(W)	AD( )	B
MC0927	ELLIP H (04/12/04)	146.345 (m)		GP( )	3 1
MC0927	NAVD 88 (09/23/04)	181.3 (m)	GEOID03 model used	GPS OBS	
MC0927	NAVD 88	181.33 (m)	594.9 (f)	LEVELING	3
MC0927	NGVD 29 (06/03/92)	181.562 (m)	595.67 (f)	ADJUSTED	1 2

MC0927

MC0927.Superseded values are not recommended for survey control.

MC0927

MC0927.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC0927.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC0927

MC0927\_MARKER: F = FLANGE-ENCASED ROD

MC0927\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

MC0927\_STAMPING: A 319 1980

MC0927\_MARK LOGO: NGS

MC0927\_PROJECTION: FLUSH

MC0927\_MAGNETIC: N = NO MAGNETIC MATERIAL

MC0927\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL



MC0927\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MC0927+SATELLITE: SATELLITE OBSERVATIONS - October 21, 2019  
MC0927\_ROD/PIPE-DEPTH: 3.3 meters

MC0927

MC0927	HISTORY	- Date	Condition	Report By
MC0927	HISTORY	- 1980	MONUMENTED	NGS
MC0927	HISTORY	- 20030606	GOOD	WOOLPT
MC0927	HISTORY	- 20031028	GOOD	NGS+SS
MC0927	HISTORY	- 20040819	POOR	OHDT
MC0927	HISTORY	- 20091002	GOOD	GEOCAC
MC0927	HISTORY	- 20160603	GOOD	USPSQD
MC0927	HISTORY	- 20180708	GOOD	USPSQD
MC0927	HISTORY	- 20191021	GOOD	USPSQD

MC0927

MC0927 STATION DESCRIPTION

MC0927

MC0927'DESCRIBED BY NATIONAL GEODETIC SURVEY 1980  
MC0927'2.9 KM SW FROM VERMILION.  
MC0927'2.9 KILOMETERS (1.8 MILES) SOUTHWEST ALONG US HIGHWAY 6 FROM THE EAST  
MC0927'END OF THE BRIDGE OVER THE VERMILION RIVER IN VERMILION, AT THE  
MC0927'SOUTHWEST CORNER OF THE JUNCTION OF COEN ROAD, ON THE PROPERTY OF THE  
MC0927'GRACE UNITED METHODIST CHURCH, 28.6 METERS (94.0 FEET) WEST OF THE  
MC0927'CENTER OF COEN ROAD, 17.7 METERS (58 FEET) SOUTHEAST OF THE CENTER  
MC0927'LINE OF THE HIGHWAY, 0.95 METER (3.1 FEET) NORTHWEST OF THE NORTHWEST  
MC0927'FACE OF THE MOST NORTHWESTERLY OF 2-BRICK PILLARS SUPPORTING A SIGN  
MC0927'FOR THE CHURCH.  
MC0927'THE MARK IS ABOVE LEVEL WITH HIGHWAY.

MC0927

MC0927 STATION RECOVERY (2003)

MC0927

MC0927'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2003 (GTF)  
MC0927'RECOVERED AS DESCRIBED.

MC0927

MC0927 STATION RECOVERY (2003)

MC0927

MC0927'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2003 (DAC)  
MC0927'RECOVERED IN GOOD CONDITION.

MC0927

MC0927 STATION RECOVERY (2004)

MC0927

MC0927'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)  
MC0927'CONCRETE COLLAR HAS BEEN DISTURBED, BUT STAINLESS STEEL ROD APPEARS  
MC0927'UNAFFECTED.

MC0927'

MC0927

MC0927 STATION RECOVERY (2009)

MC0927

MC0927'RECOVERY NOTE BY GEOCACHING 2009 (RLM)  
MC0927'RECOVERED IN GOOD CONDITION.

MC0927

MC0927 STATION RECOVERY (2016)

MC0927

MC0927'RECOVERY NOTE BY US POWER SQUADRON 2016 (JTH)  
MC0927'COLLAR IS DAMAGED, BUT THE STAINLESS STEEL ROD IS IN GOOD CONDITION.

MC0927



MC0927 STATION RECOVERY (2018)  
MC0927  
MC0927'RECOVERY NOTE BY US POWER SQUADRON 2018 (TJH)  
MC0927'PART OF THE ACCESS COVER IS CRACKED AND BROKEN OFF.  
MC0927  
MC0927 STATION RECOVERY (2019)  
MC0927  
MC0927'RECOVERY NOTE BY US POWER SQUADRON 2019 (DLG)  
MC0927'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MC0891 *****
MC0891 DESIGNATION - A 320
MC0891 PID - MC0891
MC0891 STATE/COUNTY- OH/LORAIN
MC0891 COUNTRY - US
MC0891 USGS QUAD - GRAFTON (1979)
MC0891
MC0891 *CURRENT SURVEY CONTROL
MC0891
MC0891* NAD 83(2011) POSITION- 41 30 46.58732(N) 082 01 07.35162(W) ADJUSTED
MC0891* NAD 83(2011) ELLIP HT- 145.718 (meters) (06/27/12) ADJUSTED
MC0891* NAD 83(2011) EPOCH - 2010.00
MC0891* NAVD 88 ORTHO HEIGHT - 180.363 (meters) 591.74 (feet) ADJUSTED
MC0891
MC0891 GEOID HEIGHT - -34.628 (meters) GEOID18
MC0891 NAD 83(2011) X - 664,137.017 (meters) COMP
MC0891 NAD 83(2011) Y - -4,736,802.676 (meters) COMP
MC0891 NAD 83(2011) Z - 4,205,345.180 (meters) COMP
MC0891 LAPLACE CORR - 2.34 (seconds) DEFLEC18
MC0891 DYNAMIC HEIGHT - 180.294 (meters) 591.51 (feet) COMP
MC0891 MODELED GRAVITY - 980,236.4 (mgal) NAVD 88
MC0891
MC0891 VERT ORDER - FIRST CLASS II
MC0891
MC0891 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MC0891 Standards:
MC0891 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MC0891 Horiz Ellip SD_N SD_E SD_h (unitless)
MC0891 -----
MC0891 NETWORK 8.86 7.27 4.36 2.07 3.71 -0.16661934
MC0891 -----
MC0891 Click here for local accuracies and other accuracy information.
MC0891
MC0891
MC0891.The horizontal coordinates were established by GPS observations
MC0891.and adjusted by the National Geodetic Survey in June 2012.
MC0891
MC0891.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MC0891.been affixed to the stable North American tectonic plate. See
MC0891.NA2011 for more information.
MC0891
MC0891.The horizontal coordinates are valid at the epoch date displayed above
MC0891.which is a decimal equivalence of Year/Month/Day.
MC0891
MC0891.The orthometric height was determined by differential leveling and
MC0891.adjusted by the NATIONAL GEODETIC SURVEY
MC0891.in June 1991.
MC0891
MC0891.Significant digits in the geoid height do not necessarily reflect accuracy.

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MC0891.GEOID18 height accuracy estimate available [here](#).  
 MC0891  
 MC0891.Click [here](#) to see if photographs exist for this station.  
 MC0891  
 MC0891.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MC0891  
 MC0891.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MC0891  
 MC0891.The ellipsoidal height was determined by GPS observations  
 MC0891.and is referenced to NAD 83.  
 MC0891  
 MC0891.The dynamic height is computed by dividing the NAVD 88  
 MC0891.geopotential number by the normal gravity value computed on the  
 MC0891.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 MC0891.degrees latitude (g = 980.6199 gals.).

MC0891  
 MC0891.The modeled gravity was interpolated from observed gravity values.  
 MC0891  
 MC0891. The following values were computed from the NAD 83(2011) position.  
 MC0891  

MC0891;		North	East	Units	Scale	Factor	Converg.
MC0891;SPC OH N	-	205,135.615	640,176.534	MT	0.99996929	+0 18	58.3
MC0891;SPC OH N	-	673,015.76	2,100,312.51	sFT	0.99996929	+0 18	58.3
MC0891;UTM 17	-	4,596,201.820	414,992.118	MT	0.99968893	-0 40	30.8

MC0891  
 MC0891!  
 MC0891!SPC OH N  
 MC0891!UTM 17

MC0891  
 MC0891\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF1499296201 (NAD 83)  
 MC0891

MC0891  
 MC0891 SUPERSEDED SURVEY CONTROL

MC0891	NAD 83(2007)-	41 30 46.58733(N)	082 01 07.35260(W)	AD(2002.00)	0
MC0891	ELLIP H (02/10/07)	145.739 (m)		GP(2002.00)	
MC0891	ELLIP H (10/07/05)	145.735 (m)		GP( )	4 1
MC0891	NAD 83(1995)-	41 30 46.58563(N)	082 01 07.35381(W)	AD( )	1
MC0891	ELLIP H (04/01/98)	145.792 (m)		GP( )	4 1
MC0891	NAD 83(1994)-	41 30 46.58685(N)	082 01 07.35434(W)	AD( )	1
MC0891	NAD 83(1986)-	41 30 46.59586(N)	082 01 07.35821(W)	AD( )	1
MC0891	NAD 83(1986)-	41 30 46.59406(N)	082 01 07.37102(W)	AD( )	3
MC0891	NAD 27	- 41 30 46.39658(N)	082 01 07.82359(W)	AD( )	3
MC0891	NGVD 29 (06/03/92)	180.609 (m)	592.55 (f)	ADJUSTED	1 2
MC0891	NGVD 29	180.59 (m)	592.5 (f)	LEVELING	3

MC0891  
 MC0891.Superseded values are not recommended for survey control.  
 MC0891  
 MC0891.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MC0891.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MC0891

MC0891\_MARKER: I = METAL ROD  
 MC0891\_SETTING: 15 = METAL ROD DRIVEN INTO GROUND. SEE TEXT FOR ADDITIONAL  
 MC0891+WITH SETTING: INFORMATION.  
 MC0891\_STAMPING: A 320 1980  
 MC0891\_MARK LOGO: NGS



MC0891\_PROJECTION: FLUSH  
MC0891\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MC0891\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
MC0891\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MC0891+SATELLITE: SATELLITE OBSERVATIONS - August 30, 2004  
MC0891\_ROD/PIPE-DEPTH: 2.2 meters

MC0891	HISTORY	- Date	Condition	Report By
MC0891	HISTORY	- 1980	MONUMENTED	NGS
MC0891	HISTORY	- 1986	GOOD	NGS
MC0891	HISTORY	- 19871020	GOOD	
MC0891	HISTORY	- 19900325	GOOD	AEROS
MC0891	HISTORY	- 20040830	GOOD	OHDT

MC0891

MC0891 STATION DESCRIPTION

MC0891

MC0891'DESCRIBED BY NATIONAL GEODETIC SURVEY 1980  
MC0891'14.45 KM EAST FROM LORAIN.  
MC0891'14.45 KILOMETERS (9.05 MILES) EAST ALONG US HIGHWAY 6 FROM THE  
MC0891'SOUTHWEST END OF THE BRIDGE OVER BLACK RIVER IN LORAIN, AT THE  
MC0891'SOUTHWEST CORNER OF THE T-JUNCTION OF STATE HIGHWAY 83 (AVON BELDEN  
MC0891'ROAD), SET IN THE LAWN NORTHEAST OF THE OLD FIREHOUSE (THE AVON LAKE  
MC0891'CIVIC CENTER), 8.55 METERS (28.0 FEET) SOUTH OF THE SOUTH CURB OF  
MC0891'US HIGHWAY 6, 14.8 METERS (48.5 FEET) WEST OF THE CENTER LINE OF  
MC0891'STATE HIGHWAY 83, 11.6 METERS (38.0 FEET) NORTHEAST OF THE NORTHEAST  
MC0891'CORNER OF THE CIVIC CENTER, 2.35 METERS (7.7 FEET) NORTH-NORTHEAST OF  
MC0891'THE NORTHEAST LEG OF A TWO-LEGGED SIGN FOR THE OLD FIREHOUSE.  
MC0891'ROD DRIVEN TO REFUSAL AT 2.2 METERS.  
MC0891'THE MARK IS ABOVE LEVEL WITH HIGHWAY.

MC0891

MC0891 STATION RECOVERY (1986)

MC0891

MC0891'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1986  
MC0891'THE STATION IS LOCATED ABOUT 9 MILES NORTHEAST OF LORAIN IN THE TOWN  
MC0891'OF AVON LAKE. IT IS IN THE SOUTHWEST ANGLE OF THE JUNCTION OF US  
MC0891'HIGHWAY 6 AND STATE HIGHWAY 83 SET THE LAWN OF THE OLD FIREHOUSE  
MC0891'(THE AVON LAKE CIVIC CENTER). OWNERSHIP TOWN OF AVON LAKE.  
MC0891'THE STATION IS A NGS FLANGE-ENCASED ROD WITH THE METAL FLANGE STAMPED  
MC0891'--A 320 1980-- SET FLUSH WITH GROUND. IT IS 14.8 METERS WEST OF  
MC0891'THE CENTERLINE OF STATE HIGHWAY 83, 11.6 METERS NORTHEAST OF THE  
MC0891'NORTHEAST CORNER OF THE OLD FIREHOUSE, 8.5 METERS SOUTH OF THE SOUTH  
MC0891'CURB OF US HIGHWAY 6 AND 2.4 METERS NORTH-NORTHEAST OF THE NORTHEAST  
MC0891'LEG OF A TWO LEGGED SIGN FOR THE OLD FIREHOUSE.  
MC0891'DESCRIBED BY B.L. LAMBERT. TYPED BY JAMES MALONEY 9/09/87.

MC0891

MC0891 STATION RECOVERY (1987)

MC0891

MC0891'RECOVERED 1987  
MC0891'RECOVERED IN GOOD CONDITION.

MC0891

MC0891 STATION RECOVERY (1990)

MC0891

MC0891'RECOVERY NOTE BY AERO SERVICE CORPORATION 1990  
MC0891'RECOVERED IN GOOD CONDITION.

MC0891





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MC0891 \*\*\*\*\*

MC0891 DESIGNATION - **A 320**

MC0891 PID - MC0891

MC0891 STATE/COUNTY- OH/LORAIN

MC0891 COUNTRY - US

MC0891 USGS QUAD - GRAFTON (1979)

MC0891

MC0891 \*CURRENT SURVEY CONTROL

MC0891

MC0891\* NAD 83(2011) POSITION- 41 30 46.58732(N) 082 01 07.35162(W) ADJUSTED

MC0891\* NAD 83(2011) ELLIP HT- 145.718 (meters) (06/27/12) ADJUSTED

MC0891\* NAD 83(2011) EPOCH - 2010.00

MC0891\* [NAVD 88](#) ORTHO HEIGHT - 180.363 (meters) 591.74 (feet) ADJUSTED

MC0891

MC0891 GEOID HEIGHT - -34.628 (meters) GEOID18

MC0891 NAD 83(2011) X - 664,137.017 (meters) COMP

MC0891 NAD 83(2011) Y - -4,736,802.676 (meters) COMP

MC0891 NAD 83(2011) Z - 4,205,345.180 (meters) COMP

MC0891 LAPLACE CORR - 2.34 (seconds) DEFLEC18

MC0891 DYNAMIC HEIGHT - 180.294 (meters) 591.51 (feet) COMP

MC0891 MODELED GRAVITY - 980,236.4 (mgal) NAVD 88

MC0891

MC0891 VERT ORDER - FIRST CLASS II

MC0891

MC0891 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MC0891 Standards:

MC0891 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

MC0891 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

MC0891 -----

MC0891 NETWORK 8.86 7.27 4.36 2.07 3.71 -0.16661934

MC0891 -----

MC0891 Click [here](#) for local accuracies and other accuracy information.

MC0891

MC0891

MC0891.The horizontal coordinates were established by GPS observations

MC0891.and adjusted by the National Geodetic Survey in June 2012.

MC0891

MC0891.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MC0891.been affixed to the stable North American tectonic plate. See

MC0891.[NA2011](#) for more information.

MC0891

MC0891.The horizontal coordinates are valid at the epoch date displayed above

MC0891.which is a decimal equivalence of Year/Month/Day.

MC0891

MC0891.The orthometric height was determined by differential leveling and

MC0891.adjusted by the NATIONAL GEODETIC SURVEY

MC0891.in June 1991.

MC0891

MC0891.Significant digits in the geoid height do not necessarily reflect accuracy.



MC0891.GEOID18 height accuracy estimate available [here](#).  
 MC0891  
 MC0891.Click [here](#) to see if photographs exist for this station.  
 MC0891  
 MC0891.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MC0891  
 MC0891.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MC0891  
 MC0891.The ellipsoidal height was determined by GPS observations  
 MC0891.and is referenced to NAD 83.  
 MC0891  
 MC0891.The dynamic height is computed by dividing the NAVD 88  
 MC0891.geopotential number by the normal gravity value computed on the  
 MC0891.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 MC0891.degrees latitude (g = 980.6199 gals.).

MC0891  
 MC0891.The modeled gravity was interpolated from observed gravity values.  
 MC0891  
 MC0891. The following values were computed from the NAD 83(2011) position.  
 MC0891  
 MC0891;  

	North	East	Units	Scale	Factor	Converg.
MC0891;SPC OH N	- 205,135.615	640,176.534	MT	0.99996929	+0 18	58.3
MC0891;SPC OH N	- 673,015.76	2,100,312.51	sFT	0.99996929	+0 18	58.3
MC0891;UTM 17	- 4,596,201.820	414,992.118	MT	0.99968893	-0 40	30.8

MC0891  
 MC0891!  
 MC0891!SPC OH N  
 MC0891!UTM 17

MC0891  
 MC0891\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF1499296201 (NAD 83)  
 MC0891

MC0891  
 MC0891 SUPERSEDED SURVEY CONTROL

MC0891	NAD 83(2007)-	41 30 46.58733(N)	082 01 07.35260(W)	AD(2002.00)	0
MC0891	ELLIP H (02/10/07)	145.739 (m)		GP(2002.00)	
MC0891	ELLIP H (10/07/05)	145.735 (m)		GP( )	4 1
MC0891	NAD 83(1995)-	41 30 46.58563(N)	082 01 07.35381(W)	AD( )	1
MC0891	ELLIP H (04/01/98)	145.792 (m)		GP( )	4 1
MC0891	NAD 83(1994)-	41 30 46.58685(N)	082 01 07.35434(W)	AD( )	1
MC0891	NAD 83(1986)-	41 30 46.59586(N)	082 01 07.35821(W)	AD( )	1
MC0891	NAD 83(1986)-	41 30 46.59406(N)	082 01 07.37102(W)	AD( )	3
MC0891	NAD 27	- 41 30 46.39658(N)	082 01 07.82359(W)	AD( )	3
MC0891	NGVD 29 (06/03/92)	180.609 (m)	592.55 (f)	ADJUSTED	1 2
MC0891	NGVD 29	180.59 (m)	592.5 (f)	LEVELING	3

MC0891  
 MC0891.Superseded values are not recommended for survey control.  
 MC0891  
 MC0891.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MC0891.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MC0891

MC0891\_MARKER: I = METAL ROD  
 MC0891\_SETTING: 15 = METAL ROD DRIVEN INTO GROUND. SEE TEXT FOR ADDITIONAL  
 MC0891+WITH SETTING: INFORMATION.  
 MC0891\_STAMPING: A 320 1980  
 MC0891\_MARK LOGO: NGS



MC0891\_PROJECTION: FLUSH  
 MC0891\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 MC0891\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 MC0891\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 MC0891+SATELLITE: SATELLITE OBSERVATIONS - August 30, 2004  
 MC0891\_ROD/PIPE-DEPTH: 2.2 meters

MC0891	HISTORY	- Date	Condition	Report By
MC0891	HISTORY	- 1980	MONUMENTED	NGS
MC0891	HISTORY	- 1986	GOOD	NGS
MC0891	HISTORY	- 19871020	GOOD	
MC0891	HISTORY	- 19900325	GOOD	AEROS
MC0891	HISTORY	- 20040830	GOOD	OHDT

MC0891  
 MC0891 STATION DESCRIPTION  
 MC0891  
 MC0891'DESCRIBED BY NATIONAL GEODETIC SURVEY 1980  
 MC0891'14.45 KM EAST FROM LORAIN.  
 MC0891'14.45 KILOMETERS (9.05 MILES) EAST ALONG US HIGHWAY 6 FROM THE  
 MC0891'SOUTHWEST END OF THE BRIDGE OVER BLACK RIVER IN LORAIN, AT THE  
 MC0891'SOUTHWEST CORNER OF THE T-JUNCTION OF STATE HIGHWAY 83 (AVON BELDEN  
 MC0891'ROAD), SET IN THE LAWN NORTHEAST OF THE OLD FIREHOUSE (THE AVON LAKE  
 MC0891'CIVIC CENTER), 8.55 METERS (28.0 FEET) SOUTH OF THE SOUTH CURB OF  
 MC0891'US HIGHWAY 6, 14.8 METERS (48.5 FEET) WEST OF THE CENTER LINE OF  
 MC0891'STATE HIGHWAY 83, 11.6 METERS (38.0 FEET) NORTHEAST OF THE NORTHEAST  
 MC0891'CORNER OF THE CIVIC CENTER, 2.35 METERS (7.7 FEET) NORTH-NORTHEAST OF  
 MC0891'THE NORTHEAST LEG OF A TWO-LEGGED SIGN FOR THE OLD FIREHOUSE.  
 MC0891'ROD DRIVEN TO REFUSAL AT 2.2 METERS.  
 MC0891'THE MARK IS ABOVE LEVEL WITH HIGHWAY.

MC0891  
 MC0891 STATION RECOVERY (1986)  
 MC0891  
 MC0891'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1986  
 MC0891'THE STATION IS LOCATED ABOUT 9 MILES NORTHEAST OF LORAIN IN THE TOWN  
 MC0891'OF AVON LAKE. IT IS IN THE SOUTHWEST ANGLE OF THE JUNCTION OF US  
 MC0891'HIGHWAY 6 AND STATE HIGHWAY 83 SET THE LAWN OF THE OLD FIREHOUSE  
 MC0891'(THE AVON LAKE CIVIC CENTER). OWNERSHIP TOWN OF AVON LAKE.  
 MC0891'THE STATION IS A NGS FLANGE-ENCASED ROD WITH THE METAL FLANGE STAMPED  
 MC0891'--A 320 1980-- SET FLUSH WITH GROUND. IT IS 14.8 METERS WEST OF  
 MC0891'THE CENTERLINE OF STATE HIGHWAY 83, 11.6 METERS NORTHEAST OF THE  
 MC0891'NORTHEAST CORNER OF THE OLD FIREHOUSE, 8.5 METERS SOUTH OF THE SOUTH  
 MC0891'CURB OF US HIGHWAY 6 AND 2.4 METERS NORTH-NORTHEAST OF THE NORTHEAST  
 MC0891'LEG OF A TWO LEGGED SIGN FOR THE OLD FIREHOUSE.  
 MC0891'DESCRIBED BY B.L. LAMBERT. TYPED BY JAMES MALONEY 9/09/87.

MC0891  
 MC0891 STATION RECOVERY (1987)  
 MC0891  
 MC0891'RECOVERED 1987  
 MC0891'RECOVERED IN GOOD CONDITION.

MC0891  
 MC0891 STATION RECOVERY (1990)  
 MC0891  
 MC0891'RECOVERY NOTE BY AERO SERVICE CORPORATION 1990  
 MC0891'RECOVERED IN GOOD CONDITION.  
 MC0891







# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MB2962 *****
MB2962 FBN          - This is a Federal Base Network Control Station.
MB2962 PACS        - This is a Primary Airport Control Station.
MB2962 DESIGNATION - ASHCOPORT
MB2962 PID         - MB2962
MB2962 STATE/COUNTY- OH/ASHTABULA
MB2962 COUNTRY     - US
MB2962 USGS QUAD   - GAGEVILLE (1994)
MB2962
MB2962                                *CURRENT SURVEY CONTROL
MB2962
MB2962* NAD 83(2011) POSITION- 41 46 47.89457(N) 080 42 02.07768(W) ADJUSTED
MB2962* NAD 83(2011) ELLIP HT- 242.482 (meters) (06/27/12) ADJUSTED
MB2962* NAD 83(2011) EPOCH - 2010.00
MB2962* NAVD 88 ORTHO HEIGHT - 276.77 (meters) 908.0 (feet) GPS OBS
MB2962
MB2962 NAVD 88 orthometric height was determined with an earlier geoid model
MB2962 GEOID HEIGHT - -34.319 (meters) GEOID18
MB2962 NAD 83(2011) X - 769,752.078 (meters) COMP
MB2962 NAD 83(2011) Y - -4,700,892.686 (meters) COMP
MB2962 NAD 83(2011) Z - 4,227,572.394 (meters) COMP
MB2962 LAPLACE CORR - 1.42 (seconds) DEFLEC18
MB2962
MB2962 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB2962 Standards:
MB2962          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
MB2962          Horiz Ellip                    SD_N   SD_E   SD_h          (unitless)
MB2962 -----
MB2962 NETWORK      0.46   1.08                    0.20   0.17   0.55          0.12689519
MB2962 -----
MB2962 Click here for local accuracies and other accuracy information.
MB2962
MB2962
MB2962.This mark is at Ashtabula Airport (7G2)
MB2962
MB2962.The horizontal coordinates were established by GPS observations
MB2962.and adjusted by the National Geodetic Survey in June 2012.
MB2962
MB2962.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB2962.been affixed to the stable North American tectonic plate. See
MB2962.NA2011 for more information.
MB2962
MB2962.The horizontal coordinates are valid at the epoch date displayed above
MB2962.which is a decimal equivalence of Year/Month/Day.
MB2962
MB2962.The orthometric height was determined by GPS observations and a
MB2962.high-resolution geoid model.
MB2962
MB2962.GPS derived orthometric heights for airport stations designated as

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MB2962.PACS or SACS are published to 2 decimal places. This maintains MB2962.centimeter relative accuracy between the PACS and SACS. It does MB2962.not indicate centimeter accuracy relative to other marks which are MB2962.part of the NAVD 88 network.

MB2962

MB2962.Significant digits in the geoid height do not necessarily reflect accuracy. MB2962.GEOID18 height accuracy estimate available [here](#).

MB2962

MB2962.Click [here](#) to see if photographs exist for this station.

MB2962

MB2962.The X, Y, and Z were computed from the position and the ellipsoidal ht. MB2962

MB2962.The Laplace correction was computed from DEFLEC18 derived deflections. MB2962

MB2962.The ellipsoidal height was determined by GPS observations MB2962.and is referenced to NAD 83.

MB2962

MB2962. The following values were computed from the NAD 83(2011) position.

MB2962

MB2962;		North	East	Units	Scale	Factor	Converg.
MB2962;SPC OH N	-	236,225.746	749,587.873	MT	1.00001640	+1 10	55.7
MB2962;SPC OH N	-	775,017.30	2,459,272.88	sFT	1.00001640	+1 10	55.7
MB2962;UTM 17	-	4,625,390.414	524,882.744	MT	0.99960762	+0 11	58.2

MB2962

MB2962! - Elev Factor x Scale Factor = Combined Factor

MB2962!SPC OH N - 0.99996197 x 1.00001640 = 0.99997837

MB2962!UTM 17 - 0.99996197 x 0.99960762 = 0.99956960

MB2962

MB2962:		Primary Azimuth Mark	Grid Az
MB2962:SPC OH N	-	ASHCOPORT AZ MK	229 26 40.8
MB2962:UTM 17	-	ASHCOPORT AZ MK	230 25 38.3

MB2962

MB2962\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNG2488225390 (NAD 83)

MB2962

MB2962	PID	Reference Object	Distance	Geod. Az
MB2962				dddmmss.s
MB2962	AD9680	ASHTABULA CBL 1000	205.464 METERS	12838
MB2962	MB2965	ASHCOPORT AZ MK	455.397 METERS	2303736.5

MB2962

MB2962 SUPERSEDED SURVEY CONTROL

MB2962

MB2962	NAD 83(2007)-	41 46 47.89465(N)	080 42 02.07847(W)	AD(2002.00)	0
MB2962	ELLIP H (02/10/07)	242.498 (m)		GP(2002.00)	
MB2962	ELLIP H (09/23/04)	242.535 (m)		GP( )	4 1
MB2962	ELLIP H (07/24/97)	242.526 (m)		GP( )	2 1
MB2962	NAD 83(1995)-	41 46 47.89399(N)	080 42 02.07831(W)	AD( )	A
MB2962	ELLIP H (07/31/92)	242.476 (m)		GP( )	1 1
MB2962	NAD 83(1986)-	41 46 47.90821(N)	080 42 02.09770(W)	AD( )	3
MB2962	NAD 27	- 41 46 47.70784(N)	080 42 02.75611(W)	AD( )	3
MB2962	NAVD 88 (04/16/93)	276.61 (m)	GEOID93 model used	GPS OBS	
MB2962	NGVD 29 (02/23/89)	276.85 (m)	RAPSU86 model used	GPS OBS	

MB2962

MB2962.Superseded values are not recommended for survey control.



MB2962

MB2962.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MB2962.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB2962

MB2962\_MARKER: DH = HORIZONTAL CONTROL DISK

MB2962\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MB2962\_STAMPING: ASHCOPORT 1986

MB2962\_MARK LOGO: NGS

MB2962\_PROJECTION: FLUSH

MB2962\_MAGNETIC: N = NO MAGNETIC MATERIAL

MB2962\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MB2962+STABILITY: SURFACE MOTION

MB2962\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB2962+SATELLITE: SATELLITE OBSERVATIONS - May 06, 2009

MB2962

MB2962	HISTORY	- Date	Condition	Report By
MB2962	HISTORY	- 1986	MONUMENTED	NGS
MB2962	HISTORY	- 1987	GOOD	NGS
MB2962	HISTORY	- 19900503	GOOD	NGS
MB2962	HISTORY	- 19921014	GOOD	NGS
MB2962	HISTORY	- 19931008	GOOD	OHDT
MB2962	HISTORY	- 19940810	GOOD	NGS
MB2962	HISTORY	- 19950726	GOOD	NGS
MB2962	HISTORY	- 19960507	GOOD	OHDT
MB2962	HISTORY	- 20030710	GOOD	OHDT
MB2962	HISTORY	- 20090506	GOOD	GEOCAC

MB2962

MB2962

#### STATION DESCRIPTION

MB2962

MB2962'DESCRIBED BY NATIONAL GEODETIC SURVEY 1986

MB2962'TO REACH FROM THE JUNCTION OF STATE HIGHWAYS 11 AND 167, GO EAST  
MB2962'ON HIGHWAY 167 FOR 2.22 KM (1.4 MILE) TO A CROSSROAD. TURN LEFT,  
MB2962'NORTH, ON BROWN ROAD FOR 4.15 KM (2.6 MILES) TO THE AIRPORT ON THE  
MB2962'RIGHT.

MB2962'STATION MARKS ARE STANDARD NGS STATION DISKS STAMPED---ASHCOPORT 1986  
MB2962'---.THE SURFACE DISK IS SET IN THE TOP OF A 25 CM ROUND CONCRETE POST  
MB2962'FLUSH WITH THE GROUND. IT IS 49.7 METERS EAST OF THE SOUTHEAST CORNER  
MB2962'OF THE ADMINISTRATION BUILDING, 8.8 METERS WEST OF THE ROAD CENTER,  
MB2962'5.5 METERS SOUTH OF 20 CM METAL WELL HEAD, AND 2.0 METERS NORTH OF  
MB2962'A FIBERGLASS WITNESS POST SET IN THE FENCE LINE. THE SUBSURFACE DISK  
MB2962'IS SET N THE TOP OF AN IRREGULAR CONCRETE MASS 0.4 METERS BELOW  
MB2962'GROUND.

MB2962'DESCRIBED BY G.R. HEID, TYPED BY JAMES MALONEY 9/03/87.

MB2962

MB2962

#### STATION RECOVERY (1987)

MB2962

MB2962'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1987 (REP)

MB2962'THE STATION WAS RECOVERED ON THIS DATE.

MB2962'THE STATION IS LOCATED ABOUT 13.0 KM (8.0 MI.) SOUTHEAST  
MB2962'OF ASHTABULA, 3.2 KM (2.0 MI.) NORTH-NORTHEAST OF THE JUNCTION  
MB2962'OF STATE HIGHWAYS 11 AND 167 AND AT THE ASHTABULA COUNTY  
MB2962'AIRPORT. IT IS IN T 11 N, R 2 W.

MB2962'OWNERSHIP --- COUNTY OF ASHTABULA, W.J. KISS, AIRPORT

MB2962'MANAGER, 1968 BROWN ROAD, JEFFERSON, OH 44047, PHONE

MB2962'216-275-3821.





MB2962'ASHTABULA COUNTY AIRPORT, JEFFERSON, OHIO. PHONE 216-576-9271.  
MB2962'TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAYS 11 AND 167,  
MB2962'GO EAST ON HIGHWAY FOR 2.22 KM (1.35 MI) TO A CROSSROADS. TURN LEFT  
MB2962'AND GO NORTH ON BROWN ROAD FOR 4.15 KM (2.55 MI) TO THE AIRPORT ON  
MB2962'THE RIGHT. TURN RIGHT ON AIRPORT ROAD AND GO 0.8 KM (0.50 MI) TO A  
MB2962'PARKING LOT ON THE RIGHT, BY THE ADMINISTRATIVE BUILDING. MARK IS  
MB2962'NEAR THE EASTERN END OF PARKING LOT.

MB2962'THE SURFACE MARK IS SET IN THE TOP OF A 25 CM ROUND CONCRETE POST  
MB2962'FLUSH WITH THE GROUND. LOCATED 49.7 M (163.1 FT) EAST OF THE  
MB2962'SOUTHEAST CORNER OF THE ADMINISTRATION BUILDING, 8.8 M (28.9 FT) WEST  
MB2962'OF THE ROAD CENTER, 5.5 M (18.0 FT) SOUTH OF A 20 CM METAL WELL HEAD  
MB2962'AND 2.0 M (6.6 FT) NORTH OF A FIBERGLASS WITNESS POST SET IN THE  
MB2962'FENCE LINE. NOTE, THE 1987 DESCRIPTION STATES A SUBSURFACE DISK 0.4  
MB2962'M (1.3 FT) BELOW GROUND.

MB2962

MB2962 STATION RECOVERY (1993)

MB2962

MB2962'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1993 (BM)  
MB2962'RECOVERED IN GOOD CONDITION.

MB2962

MB2962 STATION RECOVERY (1994)

MB2962

MB2962'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1994 (CFS)  
MB2962'THE STATION IS LOCATED ABOUT 10.2 KM (6.35 MI) NORTHEAST OF JEFFERSON,  
MB2962'AND ABOUT 21.7 KM (13.50 MI) SOUTHEAST OF ASHTABULA.  
MB2962'OWNERSHIP--ASHTABULA COUNTY. CONTACT JOHN SLANINKA, AIRPORT MANAGER,  
MB2962'ASHTABULA COUNTY AIRPORT, JEFFERSON OH, PHONE 216-576-9271.

MB2962'

MB2962'TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAYS 11 AND 167,  
MB2962'ABOUT 16 KM (9.95 MI) SOUTH OF ASHTABULA, GO EAST ON HIGHWAY 167 FOR  
MB2962'2.22 KM (1.35 MI) TO A CROSSROAD. TURN LEFT AND GO NORTH ON BROWN ROAD  
MB2962'FOR 4.15 KM (2.55 MI) TO THE AIRPORT ON THE RIGHT. TURN RIGHT ON  
MB2962'AIRPORT ROAD AND GO 0.8 KM (0.50 MI) TO A PARKING LOT ON THE RIGHT, BY  
MB2962'THE ADMINISTRATIVE BUILDING. MARK IS NEAR THE EASTERN END OF PARKING  
MB2962'LOT.

MB2962'

MB2962'THE SURFACE MARK IS SET IN THE TOP OF A 25 CM ROUND CONCRETE POST  
MB2962'FLUSH WITH THE GROUND. LOCATED 49.7 M (163.1 FT) EAST OF THE  
MB2962'SOUTHEAST CORNER OF THE ADMINISTRATION BUILDING, 8.8 M (28.9 FT) WEST  
MB2962'OF THE ROAD CENTER, 5.5 M (18.0 FT) SOUTH OF A 20 CM METAL WELL HEAD  
MB2962'AND 2.0 M (6.6 FT) NORTH OF A FIBERGLASS WITNESS POST SET IN THE FENCE  
MB2962'LINE. NOTE, THE 1987 DESCRIPTION STATES A SUBSURFACE DISK 0.4 M (1.3  
MB2962'FT) BELOW GROUND.

MB2962

MB2962 STATION RECOVERY (1995)

MB2962

MB2962'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
MB2962'THE STATION IS LOCATED ABOUT 13.0 KM (8.05 MI) SOUTHEAST OF ASHTABULA,  
MB2962'AT THE ASHTABULA COUNTY AIRPORT. IN THE GRASS EAST OF THE OFFICE,  
MB2962'BETWEEN A WELL HEAD AND A CHAINLINK FENCE, NORTHWEST OF THE ENTRANCE  
MB2962'GATE. OWNERSHIP--COUNTY OF ASHTABULA, 2382 AIRPORT ROAD, JEFFERSON,  
MB2962'OH. 44047. AIRPORT MANAGER STEPHEN B. VIBBARD, PHONE 216-275-3821.  
MB2962'TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAYS 11 AND 167,  
MB2962'ABOUT 16.1 KM (10.00 MI) SOUTH OF ASHTABULA, GO EAST ON HIGHWAY 167,  
MB2962'2.2 KM (1.35 MI) TO A CROSSROAD. TURN LEFT, NORTHERLY, ON BROWN ROAD



MB2962'4.2 KM (2.60 MI) TO AIRPORT ROAD. TURN RIGHT, EAST, THEN SOUTH, 1.1  
MB2962'KM (0.70 MI) ALONG AIRPORT ROAD TO THE ENTRANCE GATE AND THE STATION  
MB2962'ON THE RIGHT. STATION IS 49.7 M (163.1 FT) EAST OF THE SOUTHEAST  
MB2962'CORNER OF THE AIRPORT OFFICE, 21.9 M (71.9 FT) WEST OF THE SOUTHWEST  
MB2962'CORNER OF A HANGAR, 8.5 M (27.9 FT) WEST OF THE ROAD CENTER, 5.5 M  
MB2962'(18.0 FT) SOUTH OF A 20-INCH METAL WELL HEAD, 2.0 M (6.6 FT) NORTH OF  
MB2962'A WITNESS POST AND FENCE, AND THE MONUMENT IS LEVEL WITH THE ROAD  
MB2962'CENTER AND FLUSH WITH THE GROUND SURFACE. BY R.G. HAYES

MB2962

MB2962

STATION RECOVERY (1996)

MB2962

MB2962'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1996 (CFS)  
MB2962'THE STATION IS LOCATED ABOUT 13.0 KM (8.05 MI) SOUTHEAST OF ASHTABULA,  
MB2962'AT THE ASHTABULA COUNTY AIRPORT. IN THE GRASS EAST OF THE OFFICE,  
MB2962'BETWEEN A WELL HEAD AND A CHAINLINK FENCE, NORTHWEST OF THE ENTRANCE  
MB2962'GATE. OWNERSHIP--COUNTY OF ASHTABULA, 2382 AIRPORT ROAD, JEFFERSON,  
MB2962'OH. 44047. AIRPORT MANAGER STEPHEN B. VIBBARD, PHONE 216-275-3821.  
MB2962'TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAYS 11 AND 167,  
MB2962'ABOUT 16.1 KM (10.00 MI) SOUTH OF ASHTABULA, GO EAST ON HIGHWAY 167,  
MB2962'2.2 KM (1.35 MI) TO A CROSSROAD. TURN LEFT, NORTHERLY, ON BROWN ROAD  
MB2962'4.2 KM (2.60 MI) TO AIRPORT ROAD. TURN RIGHT, EAST, THEN SOUTH, 1.1  
MB2962'KM (0.70 MI) ALONG AIRPORT ROAD TO THE ENTRANCE GATE AND THE STATION  
MB2962'ON THE RIGHT. STATION IS 49.7 M (163.1 FT) EAST OF THE SOUTHEAST  
MB2962'CORNER OF THE AIRPORT OFFICE, 21.9 M (71.9 FT) WEST OF THE SOUTHWEST  
MB2962'CORNER OF A HANGAR, 8.5 M (27.9 FT) WEST OF THE ROAD CENTER, 5.5 M  
MB2962'(18.0 FT) SOUTH OF A 20-INCH METAL WELL HEAD, 2.0 M (6.6 FT) NORTH OF  
MB2962'A WITNESS POST AND FENCE, AND THE MONUMENT IS LEVEL WITH THE ROAD  
MB2962'CENTER AND FLUSH WITH THE GROUND SURFACE. RECOVERED AS DESCRIBED BY  
MB2962'R.G. HAYES

MB2962

MB2962

STATION RECOVERY (2003)

MB2962

MB2962'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2003 (JAS)  
MB2962'RECOVERED AS DESCRIBED.

MB2962

MB2962

STATION RECOVERY (2009)

MB2962

MB2962'RECOVERY NOTE BY GEOCACHING 2009 (RLM)  
MB2962'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

LA2478 \*\*\*\*\*

LA2478 DESIGNATION - **AUG 75 12.45**

LA2478 PID - LA2478

LA2478 STATE/COUNTY- OH/AUGLAIZE

LA2478 COUNTRY - US

LA2478 USGS QUAD - CRIDERSVILLE (1983)

LA2478

LA2478 \*CURRENT SURVEY CONTROL

LA2478

LA2478\* NAD 83(2011) POSITION- 40 39 22.96933(N) 084 07 51.71789(W) ADJUSTED

LA2478\* NAD 83(2011) ELLIP HT- 239.392 (meters) (06/27/12) ADJUSTED

LA2478\* NAD 83(2011) EPOCH - 2010.00

LA2478\* NAVD 88 ORTHO HEIGHT - 273.682 (meters) 897.91 (feet) ADJUSTED

LA2478

LA2478 GEOID HEIGHT - -34.277 (meters) GEOID18

LA2478 NAD 83(2011) X - 495,493.205 (meters) COMP

LA2478 NAD 83(2011) Y - -4,820,321.190 (meters) COMP

LA2478 NAD 83(2011) Z - 4,133,705.188 (meters) COMP

LA2478 LAPLACE CORR - -3.37 (seconds) DEFLEC18

LA2478 DYNAMIC HEIGHT - 273.546 (meters) 897.46 (feet) COMP

LA2478 MODELED GRAVITY - 980,121.0 (mgal) NAVD 88

LA2478

LA2478 VERT ORDER - FIRST CLASS II

LA2478

LA2478 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

LA2478 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	4.65	5.39	1.87	1.92	2.75	-0.18807693

LA2478

LA2478 -----

LA2478

LA2478 Click [here](#) for local accuracies and other accuracy information.

LA2478

LA2478

LA2478.The horizontal coordinates were established by GPS observations

LA2478.and adjusted by the National Geodetic Survey in June 2012.

LA2478

LA2478.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

LA2478.been affixed to the stable North American tectonic plate. See

LA2478.[NA2011](#) for more information.

LA2478

LA2478.The horizontal coordinates are valid at the epoch date displayed above

LA2478.which is a decimal equivalence of Year/Month/Day.

LA2478

LA2478.The orthometric height was determined by differential leveling and

LA2478.adjusted by the NATIONAL GEODETIC SURVEY

LA2478.in January 1994.

LA2478

LA2478.Significant digits in the geoid height do not necessarily reflect accuracy.



LA2478.GEOID18 height accuracy estimate available [here](#).  
 LA2478  
 LA2478.Click [here](#) to see if photographs exist for this station.  
 LA2478  
 LA2478.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 LA2478  
 LA2478.The Laplace correction was computed from DEFLEC18 derived deflections.  
 LA2478  
 LA2478.The ellipsoidal height was determined by GPS observations  
 LA2478.and is referenced to NAD 83.  
 LA2478  
 LA2478.The dynamic height is computed by dividing the NAVD 88  
 LA2478.geopotential number by the normal gravity value computed on the  
 LA2478.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 LA2478.degrees latitude (g = 980.6199 gals.).  
 LA2478  
 LA2478.The modeled gravity was interpolated from observed gravity values.  
 LA2478  
 LA2478. The following values were computed from the NAD 83(2011) position.  
 LA2478  

LA2478;		North	East	Units	Scale	Factor	Converg.
LA2478;SPC OH N	-	111,193.584	462,075.463	MT	0.99996476	-1 04	17.4
LA2478;SPC OH N	-	364,807.62	1,515,992.58	sFT	0.99996476	-1 04	17.4
LA2478;UTM 16	-	4,504,571.358	742,548.767	MT	1.00032418	+1 52	12.4

LA2478!		Elev Factor	x	Scale Factor	=	Combined Factor
LA2478!SPC OH N	-	0.99996245	x	0.99996476	=	0.99992721
LA2478!UTM 16	-	0.99996245	x	1.00032418	=	1.00028662

  
 LA2478\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL4254804571 (NAD 83)  
 LA2478  
 LA2478 SUPERSEDED SURVEY CONTROL  
 LA2478  

LA2478	NAD 83(2007)-	40 39 22.96947(N)	084 07 51.71862(W)	AD(2002.00)	0
LA2478	ELLIP H (02/10/07)	239.400 (m)		GP(2002.00)	
LA2478	ELLIP H (10/07/05)	239.386 (m)		GP( )	4 1
LA2478	NAD 83(1995)-	40 39 22.96910(N)	084 07 51.71903(W)	AD( )	1
LA2478	ELLIP H (04/01/98)	239.377 (m)		GP( )	4 1
LA2478	NAD 83(1986)-	40 39 22.97865(N)	084 07 51.73712(W)	AD( )	1
LA2478	NGVD 29 (07/23/91)	273.8 (m)	UNKNOWN model used	GPS OBS	

  
 LA2478.Superseded values are not recommended for survey control.  
 LA2478  
 LA2478.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 LA2478.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 LA2478  
 LA2478\_MARKER: I = METAL ROD  
 LA2478\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.+)  
 LA2478\_STAMPING: AUG. 75 12.45  
 LA2478\_MARK LOGO: OHDT  
 LA2478\_PROJECTION: FLUSH  
 LA2478\_MAGNETIC: I = MARKER IS A STEEL ROD  
 LA2478\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 LA2478\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 LA2478+SATELLITE: SATELLITE OBSERVATIONS - December 18, 2009



LA2478\_ROD/PIPE-DEPTH: 8.7 meters

LA2478\_SLEEVE-DEPTH : 1.0 meters

LA2478

LA2478	HISTORY	- Date	Condition	Report By
LA2478	HISTORY	- 1990	MONUMENTED	OHDT
LA2478	HISTORY	- 19930630	GOOD	NGS
LA2478	HISTORY	- 20091218	GOOD	OHDT

LA2478

LA2478

LA2478

STATION DESCRIPTION

LA2478'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1990

LA2478'STATION IS LOCATED 4 MI (6.4 KM) SOUTH OF LIMA, 0.1 MI (0.2 KM) EAST

LA2478'OF CRIDERSVILLE, IN THE NORTHWEST QUARTER OF SECTION 35, T 4 S, R 6

LA2478'E, DUCHOUQUET TWP., ON INTERSTATE 75 R/W.

LA2478'TO REACH FROM CRIDERSVILLE I-75 INTERCHANGE, GO NORTH ON THE NORTH

LA2478'BOUND RAMP TO MARK ON LEFT NEAR JUNCTION OF WEST EDGE OF PAVEMENT OF

LA2478'RAMP AND EAST EDGE OF PAVEMENT OF I-75.

LA2478'MARK IS 0.1 MI (0.2 KM) SOUTH OF ALLEN COUNTY LINE, 30.5 FT (9.3 M)

LA2478'EAST OF NORTH BOUND I-75 EDGE OF PAVEMENT, 22.5 FT (6.9 M)

LA2478'SOUTH-SOUTHWEST OF RAMP EDGE OF PAVEMENT, AND 0.5 FT (0.2 M) WEST OF

LA2478'AN ORANGE FIBERGLASS WITNESS POST.

LA2478

LA2478

STATION RECOVERY (1993)

LA2478

LA2478'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1993

LA2478'11.4 KM (7.10 MI) SOUTHERLY ALONG INTERSTATE HIGHWAY 75 FROM THE

LA2478'JUNCTION OF STATE HIGHWAY 117 IN LIMA (EXIT 117), 207.0 M (679.1 FT)

LA2478'NORTH OF THE CENTER OF AMHERST ROAD (EXIT 118), 16.6 M (54.5 FT) EAST

LA2478'OF THE CENTERLINE OF THE NORTHBOUND LANES OF THE HIGHWAY, 11.5 M

LA2478'(37.7 FT) SOUTHWEST OF THE CENTER OF A NORTHBOUND ON RAMP, 0.3 M (1.0

LA2478'FT) BELOW THE LEVEL OF THE HIGHWAY, AND 0.2 M (0.7 FT) WEST OF A

LA2478'WITNESS POST. NOTE--ACCESS TO THE DATUM POINT IS THROUGH A 5-INCH

LA2478'LOGO CAP. THE SLEEVE DEPTH DOES NOT MEET THE SPECIFICATIONS FOR A

LA2478'CLASS A MARK.

LA2478

LA2478

STATION RECOVERY (2009)

LA2478

LA2478'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2009 (RDS)

LA2478'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019  
 MB0637 \*\*\*\*\*  
 MB0637 DESIGNATION - **B 161**  
 MB0637 PID - MB0637  
 MB0637 STATE/COUNTY- OH/TRUMBULL  
 MB0637 COUNTRY - US  
 MB0637 USGS QUAD - BRISTOLVILLE (1994)

MB0637 \*CURRENT SURVEY CONTROL

MB0637\* NAD 83(1995) POSITION- 41 27 41.99107(N) 080 52 05.38285(W) ADJUSTED  
 MB0637\* [NAVD 88](#) ORTHO HEIGHT - 273.490 (meters) 897.28 (feet) ADJUSTED  
 MB0637  
 MB0637 GEOID HEIGHT - -33.923 (meters) GEOID18  
 MB0637 LAPLACE CORR - 1.05 (seconds) DEFLEC18  
 MB0637 DYNAMIC HEIGHT - 273.381 (meters) 896.92 (feet) COMP  
 MB0637 MODELED GRAVITY - 980,217.0 (mgal) NAVD 88  
 MB0637  
 MB0637 HORZ ORDER - SECOND  
 MB0637 VERT ORDER - SECOND CLASS 0  
 MB0637

MB0637.The horizontal coordinates were established by classical geodetic methods  
 MB0637.and adjusted by the National Geodetic Survey in April 1998.  
 MB0637.

MB0637.The orthometric height was determined by differential leveling and  
 MB0637.adjusted by the NATIONAL GEODETIC SURVEY  
 MB0637.in June 1991.

MB0637  
 MB0637.Significant digits in the geoid height do not necessarily reflect accuracy.  
 MB0637.GEOID18 height accuracy estimate available [here](#).

MB0637  
 MB0637.Click [here](#) to see if photographs exist for this station.  
 MB0637

MB0637.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MB0637

MB0637.The dynamic height is computed by dividing the NAVD 88  
 MB0637.geopotential number by the normal gravity value computed on the  
 MB0637.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 MB0637.degrees latitude (g = 980.6199 gals.).

MB0637  
 MB0637.The modeled gravity was interpolated from observed gravity values.  
 MB0637

MB0637. The following values were computed from the NAD 83(1995) position.

MB0637;		North	East	Units	Scale	Factor	Converg.
MB0637;SPC OH N	-	200,605.332	736,319.516	MT	0.99996274	+1 04	19.3
MB0637;SPC OH N	-	658,152.66	2,415,741.61	sFT	0.99996274	+1 04	19.3
MB0637;UTM 17	-	4,590,016.614	511,010.061	MT	0.99960149	+0 05	14.3
MB0637							
MB0637!	-	Elev Factor x Scale Factor =		Combined Factor			



MB0637!SPC OH N - 0.99996242 x 0.99996274 = 0.99992517  
 MB0637!UTM 17 - 0.99996242 x 0.99960149 = 0.99956393

MB0637  
 MB0637\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF1101090016(NAD 83)

MB0637  
 MB0637 SUPERSEDED SURVEY CONTROL

MB0637 NAD 83(1986)- 41 27 41.99910(N) 080 52 05.37885(W) AD( ) 2  
 MB0637 NAD 27 - 41 27 41.80100(N) 080 52 06.05900(W) AD( ) 2  
 MB0637 NGVD 29 (??/??/92) 273.674 (m) 897.88 (f) ADJ UNCH 2 0  
 MB0637 NGVD 29 273.67 (m) 897.9 (f) LEVELING 3

MB0637  
 MB0637.Superseded values are not recommended for survey control.  
 MB0637  
 MB0637.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MB0637.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB0637  
 MB0637\_MARKER: DB = BENCH MARK DISK  
 MB0637\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 MB0637\_STAMPING: B 161 1950  
 MB0637\_MARK LOGO: CGS  
 MB0637\_PROJECTION: PROJECTING 10 CENTIMETERS  
 MB0637\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
 MB0637\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 MB0637+STABILITY: SURFACE MOTION  
 MB0637\_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR  
 MB0637+SATELLITE: SATELLITE OBSERVATIONS - April 03, 2019

MB0637

HISTORY	- Date	Condition	Report By
MB0637	1950	MONUMENTED	CGS
MB0637	1951	GOOD	CGS
MB0637	19900706	GOOD	OHDT
MB0637	20070204	GOOD	GEOCAC
MB0637	20170810	GOOD	USPSQD
MB0637	20190403	GOOD	USPSQD

MB0637  
 MB0637 STATION DESCRIPTION  
 MB0637  
 MB0637'DESCRIBED BY COAST AND GEODETIC SURVEY 1950  
 MB0637'AT NORTH BLOOMFIELD.  
 MB0637'AT THE INTERSECTION OF STATE HIGHWAYS 45 AND 87. IT IS 75 FEET  
 MB0637'EAST OF THE CENTERLINE OF HIGHWAY 45, 37 FEET SOUTH OF THE  
 MB0637'CENTERLINE OF HIGHWAY 87, 4.8 FEET NORTHEAST OF A POWER LINE  
 MB0637'POLE, 3 FEET NORTH OF A WHITE WITNESS POST AND 1 FOOT HIGHER  
 MB0637'THAN THE ROADS. A STANDARD DISK SET IN THE TOP OF A CONCRETE  
 MB0637'POST PROJECTING 3 INCHES.

MB0637  
 MB0637 STATION RECOVERY (1951)  
 MB0637  
 MB0637'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1951 (LWS)  
 MB0637'STATION IS LOCATED IN THE TOWN OF BLOOMFIELD. IT IS 85 FEET  
 MB0637'SOUTHEAST OF THE  
 MB0637'INTERSECTION OF STATE HIGHWAYS NO. 45 AND NO. 87, 76 FEET EAST OF THE  
 MB0637'CENTER OF STATE HIGHWAY NO. 45, 36  
 MB0637'FEET SOUTH OF THE CENTER OF STATE HIGHWAY NO. 87 AND



MB0637'3 FEET NORTHEAST OF A WHITE WITNESS POST. THE MARK  
MB0637'IS A 12 AND 12 INCH CONCRETE POST  
MB0637'WHICH PROJECTS 4 INCHES WITH A BRONZE USC AND GS BENCH MARK DISK SET  
MB0637'IN THE TOP STAMPED B 161 1950. A  
MB0637'TRAVERSE CONNECTION WAS MADE FROM TRIANGULATION STATION BLOOMFIELD  
MB0637'AND THE DISTANCE WAS FOUND TO BE  
MB0637'88.642 METERS (290.82 FEET).

MB0637

MB0637 STATION RECOVERY (1990)

MB0637

MB0637'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1990 (JF)

MB0637'RECOVERED IN GOOD CONDITION.

MB0637

MB0637 STATION RECOVERY (2007)

MB0637

MB0637'RECOVERY NOTE BY GEOCACHING 2007 (RLM)

MB0637'RECOVERED IN GOOD CONDITION.

MB0637

MB0637 STATION RECOVERY (2017)

MB0637

MB0637'RECOVERY NOTE BY US POWER SQUADRON 2017 (TJH)

MB0637'RECOVERED IN GOOD CONDITION.

MB0637

MB0637 STATION RECOVERY (2019)

MB0637

MB0637'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)

MB0637'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = DECEMBER 9, 2019

MD0227 \*\*\*\*\*

MD0227 DESIGNATION - **B 315**

MD0227 PID - MD0227

MD0227 STATE/COUNTY- OH/PAULDING

MD0227 COUNTRY - US

MD0227 USGS QUAD - LATTY (1973)

MD0227

MD0227 \*CURRENT SURVEY CONTROL

MD0227

MD0227\* NAD 83(1986) POSITION- 41 05 31.7 (N) 084 34 23.7 (W) HD\_HELD2

MD0227\* [NAVD 88](#) ORTHO HEIGHT - 221.914 (meters) 728.06 (feet) ADJUSTED

MD0227

MD0227 GEOID HEIGHT - -33.892 (meters) GEOID18

MD0227 DYNAMIC HEIGHT - 221.820 (meters) 727.75 (feet) COMP

MD0227 MODELED GRAVITY - 980,197.3 (mgal) NAVD 88

MD0227

MD0227 VERT ORDER - FIRST CLASS I

MD0227

MD0227.The horizontal coordinates were established by autonomous hand held GPS observations and have an estimated accuracy of +/- 10 meters.

MD0227.

MD0227.The orthometric height was determined by differential leveling and adjusted by the NATIONAL GEODETIC SURVEY

MD0227.in April 1995.

MD0227

MD0227.Significant digits in the geoid height do not necessarily reflect accuracy.

MD0227.GEOID18 height accuracy estimate available [here](#).

MD0227

MD0227.Click [here](#) to see if photographs exist for this station.

MD0227

MD0227.The dynamic height is computed by dividing the NAVD 88

MD0227.geopotential number by the normal gravity value computed on the

MD0227.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MD0227.degrees latitude (g = 980.6199 gals.).

MD0227

MD0227.The modeled gravity was interpolated from observed gravity values.

MD0227

MD0227;	North	East	Units	Estimated Accuracy
MD0227;SPC OH N -	160,363.	425,837.	MT	(+/- 10 meters HH2 GPS)

MD0227

MD0227\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL0381751823(NAD 83)

MD0227

MD0227 SUPERSEDED SURVEY CONTROL

MD0227

MD0227	NAVD 88 (06/15/91)	221.910 (m)	728.05 (f)	SUPERSEDED	1 1
MD0227	NGVD 29 (01/19/93)	222.070 (m)	728.57 (f)	ADJUSTED	1 1
MD0227	NGVD 29 (??/??/92)	222.070 (m)	728.57 (f)	SUPERSEDED	1 1

MD0227

MD0227.Superseded values are not recommended for survey control.





MD0227  
MD0227.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MD0227.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MD0227  
MD0227\_MARKER: DB = BENCH MARK DISK  
MD0227\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
MD0227\_STAMPING: B 315 1968  
MD0227\_MARK LOGO: CGS  
MD0227\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MD0227\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
MD0227+STABILITY: SURFACE MOTION  
MD0227\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MD0227+SATELLITE: SATELLITE OBSERVATIONS - April 10, 2010

MD0227  
MD0227 HISTORY - Date Condition Report By  
MD0227 HISTORY - 1968 MONUMENTED CGS  
MD0227 HISTORY - 19921020 GOOD NGS  
MD0227 HISTORY - 20100410 GOOD GEOCAC

MD0227  
MD0227 STATION DESCRIPTION  
MD0227

MD0227'DESCRIBED BY COAST AND GEODETIC SURVEY 1968  
MD0227'0.5 MI E FROM LATTY.  
MD0227'ABOUT 0.5 MILE EAST ALONG STATE HIGHWAY 113 FROM THE CROSSING  
MD0227'OF THE PENN CENTRAL RAILROAD AT LATTY, NEAR THE INTERSECTION OF  
MD0227'U.S. HIGHWAY 127, 178 FEET NORTHEAST OF THE CENTER OF THE  
MD0227'INTERSECTION, 170 FEET NORTH OF THE CENTER LINE OF HIGHWAY 113,  
MD0227'36 FEET EAST OF THE CENTER LINE OF U.S. HIGHWAY 127, 2 1/2 FEET  
MD0227'SOUTH OF CABLE LINE POLE (SECOND POLE NORTH OF THE INTERSECTION  
MD0227'OF HIGHWAYS), 2.0 FEET NORTH OF A METAL WITNESS POST, 1 1/2 FEET  
MD0227'BELOW THE LEVEL OF THE U.S. HIGHWAY AND SET IN THE TOP OF A  
MD0227'CONCRETE POST PROJECTING 2 INCHES ABOVE THE LEVEL OF THE GROUND.  
MD0227'IN SECTION 30, R3E, T2N.

MD0227  
MD0227 STATION RECOVERY (1992)  
MD0227

MD0227'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1992  
MD0227'13.4 KM (8.30 MI) EASTERLY ALONG STATE HIGHWAY 613 FROM THE POST  
MD0227'OFFICE IN PAYNE, 51.8 M (169.9 FT) NORTH OF THE HIGHWAY CENTERLINE,  
MD0227'11.2 M (36.7 FT) EAST OF THE CENTERLINE OF U.S. HIGHWAY 127, 1.4 M  
MD0227'(4.6 FT) SOUTH OF A UTILITY POLE WITH A GUY CABLE AN UNDERGROUND  
MD0227'CABLE JUNCTION BOX, 0.5 M (1.6 FT) BELOW THE LEVEL OF THE U.S.  
MD0227'HIGHWAY, 0.3 M (1.0 FT) WEST OF A WITNESS POST, AND THE MONUMENT IS  
MD0227'FLUSH WITH THE GROUND SURFACE.

MD0227  
MD0227 STATION RECOVERY (2010)  
MD0227

MD0227'RECOVERY NOTE BY GEOCACHING 2010 (RLM)  
MD0227'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = DECEMBER 11, 2019
LA0691 *****
LA0691 CBN - This is a Cooperative Base Network Control Station.
LA0691 DESIGNATION - BAXTER
LA0691 PID - LA0691
LA0691 STATE/COUNTY- OH/VAN WERT
LA0691 COUNTRY - US
LA0691 USGS QUAD - DIXON (1994)
LA0691
LA0691 *CURRENT SURVEY CONTROL
LA0691
LA0691* NAD 83(2011) POSITION- 40 53 15.71699(N) 084 48 09.29516(W) ADJUSTED
LA0691* NAD 83(2011) ELLIP HT- 214.709 (meters) (06/27/12) ADJUSTED
LA0691* NAD 83(2011) EPOCH - 2010.00
LA0691* NAVD 88 ORTHO HEIGHT - 248.131 (meters) 814.08 (feet) ADJUSTED
LA0691
LA0691 GEOID HEIGHT - -33.404 (meters) GEOID18
LA0691 NAD 83(2011) X - 437,441.309 (meters) COMP
LA0691 NAD 83(2011) Y - -4,809,071.814 (meters) COMP
LA0691 NAD 83(2011) Z - 4,153,143.504 (meters) COMP
LA0691 LAPLACE CORR - -2.32 (seconds) DEFLEC18
LA0691 DYNAMIC HEIGHT - 248.024 (meters) 813.73 (feet) COMP
LA0691 MODELED GRAVITY - 980,188.0 (mgal) NAVD 88
LA0691
LA0691 VERT ORDER - SECOND CLASS 0
LA0691
LA0691 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
LA0691 Standards:
LA0691 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
LA0691 Horiz Ellip SD_N SD_E SD_h (unitless)
LA0691 -----
LA0691 NETWORK 0.68 1.39 0.32 0.22 0.71 -0.05886965
LA0691 -----
LA0691 Click here for local accuracies and other accuracy information.
LA0691
LA0691
LA0691.The horizontal coordinates were established by GPS observations
LA0691.and adjusted by the National Geodetic Survey in June 2012.
LA0691
LA0691.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
LA0691.been affixed to the stable North American tectonic plate. See
LA0691.NA2011 for more information.
LA0691
LA0691.The horizontal coordinates are valid at the epoch date displayed above
LA0691.which is a decimal equivalence of Year/Month/Day.
LA0691
LA0691.The orthometric height was determined by differential leveling and
LA0691.adjusted by the NATIONAL GEODETIC SURVEY
LA0691.in June 1991.
LA0691

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LA0691. Significant digits in the geoid height do not necessarily reflect accuracy.  
 LA0691.GEOID18 height accuracy estimate available [here](#).

LA0691

LA0691. Click [here](#) to see if photographs exist for this station.

LA0691

LA0691. The X, Y, and Z were computed from the position and the ellipsoidal ht.

LA0691

LA0691. The Laplace correction was computed from DEFLEC18 derived deflections.

LA0691

LA0691. The ellipsoidal height was determined by GPS observations

LA0691. and is referenced to NAD 83.

LA0691

LA0691. The dynamic height is computed by dividing the NAVD 88

LA0691. geopotential number by the normal gravity value computed on the

LA0691. Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

LA0691. degrees latitude (g = 980.6199 gals.).

LA0691

LA0691. The modeled gravity was interpolated from observed gravity values.

LA0691

LA0691. The following values were computed from the NAD 83(2011) position.

LA0691

LA0691;		North	East	Units	Scale	Factor	Converg.
LA0691;SPC OH N	-	138,151.871	405,976.796	MT	0.99994405	-1 30	45.7
LA0691;SPC OH N	-	453,253.26	1,331,942.20	sFT	0.99994405	-1 30	45.7
LA0691;UTM 16	-	4,528,615.091	685,126.118	MT	1.00002183	+1 26	19.6

LA0691

LA0691! - Elev Factor x Scale Factor = Combined Factor

LA0691!SPC OH N - 0.99996632 x 0.99994405 = 0.99991037

LA0691!UTM 16 - 0.99996632 x 1.00002183 = 0.99998815

LA0691

LA0691:		Primary Azimuth Mark	Grid Az
LA0691:SPC OH N	-	BAXTER AZ MK 2	358 50 58.8
LA0691:UTM 16	-	BAXTER AZ MK 2	355 53 53.5

LA0691

LA0691\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TFL8512628615(NAD 83)

LA0691

LA0691	PID	Reference Object	Distance	Geod. Az
LA0691				dddmmss.s
LA0691	MD1787	PAYNE MUNICIPAL TANK	APPROX.22.5 KM	0165244.4
LA0691	LA0692	BAXTER RM 1	67.995 METERS	08425
LA0691	LA0693	BAXTER AZ MK		0873707.8
LA0691	LA2362	VAN WERT NW MUNICIPAL TANK	APPROX.18.7 KM	0922100.6
LA0691	LA2363	VAN WERT E FOUNDATION SCH TK	APPROX.20.1 KM	0952352.8
LA0691	LA2365	VAN WERT SW MUNICIPAL TANK	APPROX.18.1 KM	0982831.7
LA0691	LA0690	BAXTER RM 2	59.991 METERS	18143
LA0691	LA2398	PTS 20	5.221 METERS	32443
LA0691	LA2396	MONROEVILLE MUNICIPAL TANK	APPROX.11.2 KM	3300408.1
LA0691	CF2833	BAXTER AZ MK 2		3572013.1
LA0691	MD1802	EDGERTON PANHANDLE PIPE MAST	APPROX.16.6 KM	3583549.2

LA0691

LA0691

LA0691

LA0691 SUPERSEDED SURVEY CONTROL  
 LA0691 NAD 83(2007)- 40 53 15.71709(N) 084 48 09.29596(W) AD(2002.00) 0



LA0691 ELLIP H (02/10/07) 214.726 (m) GP(2002.00)  
 LA0691 ELLIP H (03/08/05) 214.723 (m) GP ( ) 4 2  
 LA0691 NAD 83(1995)- 40 53 15.71705(N) 084 48 09.29567(W) AD( ) B  
 LA0691 ELLIP H (08/20/96) 214.740 (m) GP( ) 4 2  
 LA0691 NAD 83(1986)- 40 53 15.71915(N) 084 48 09.31155(W) AD( ) 1  
 LA0691 NAD 27 - 40 53 15.54600(N) 084 48 09.44600(W) AD( ) 1  
 LA0691 NAVD 88 248.13 (m) 814.1 (f) LEVELING 3  
 LA0691 NGVD 29 (??/??/92) 248.287 (m) 814.59 (f) ADJ UNCH 2 0  
 LA0691 NGVD 29 248.29 (m) 814.6 (f) LEVELING 3

LA0691

LA0691.Superseded values are not recommended for survey control.

LA0691

LA0691.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

LA0691.See file [dsdata.pdf](#) to determine how the superseded data were derived.

LA0691

LA0691\_MARKER: DS = TRIANGULATION STATION DISK

LA0691\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

LA0691\_STAMPING: BAXTER 1932

LA0691\_MARK LOGO: CGS

LA0691\_MAGNETIC: N = NO MAGNETIC MATERIAL

LA0691\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

LA0691+STABILITY: SURFACE MOTION

LA0691\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

LA0691+SATELLITE: SATELLITE OBSERVATIONS - August 13, 1997

LA0691

HISTORY	- Date	Condition	Report By
LA0691	HISTORY - 1932	MONUMENTED	CGS
LA0691	HISTORY - 1947	SEE DESCRIPTION	CGS
LA0691	HISTORY - 1955	SEE DESCRIPTION	CGS
LA0691	HISTORY - 1963	SEE DESCRIPTION	CGS
LA0691	HISTORY - 1970	GOOD	NGS
LA0691	HISTORY - 1970	SEE DESCRIPTION	NGS
LA0691	HISTORY - 1972	SEE DESCRIPTION	NGS
LA0691	HISTORY - 19950507	GOOD	ABW
LA0691	HISTORY - 19950804	GOOD	NGS
LA0691	HISTORY - 19970813	GOOD	NGS

LA0691

STATION DESCRIPTION

LA0691

LA0691'DESCRIBED BY COAST AND GEODETIC SURVEY 1932 (HCW)

LA0691'THE STATION IS

LA0691'ABOUT 2 MILES

LA0691'SOUTH AND 5 MILES WEST OF CONVOY, OHIO, 1 MILE

LA0691'NORTH AND 11 MILES WEST OF VAN

LA0691'WERT, OHIO. IT IS IN THE SOUTHEAST

LA0691'CORNER OF THE INTERSECTION OF AN EAST-WEST ROAD

LA0691'AND THE

LA0691'OHIO-INDIANA STATE LINE ROAD, ON LAND BELONGING TO MRS. WILLFORD

LA0691'WHO LIVES ABOUT

LA0691'0.5 MILE SOUTH AND IS 125.6 FEET SOUTHEAST OF

LA0691'THE SOUTHEAST CORNER OF A

LA0691'FARMHOUSE OWNED BY H.E. BAXTER AND

LA0691'LOCATED ON THE WEST SIDE OF THE STATE LINE

LA0691'ROAD, 48 FEET SOUTHEAST

LA0691'OF THE INTERSECTION OF THE STATE LINE ROAD AND T-ROAD, 40.6











LA0691'CONCRETE MONUMENT THAT IS 6 INCHES BELOW THE GROUND SURFACE. IT IS  
LA0691'41 FEET SOUTH OF THE CENTER OF  
LA0691'WOLFCALE ROAD, 29 FEET EAST OF THE CENTER OF THE STATE  
LA0691'LINE ROAD AND 25 FEET NORTHEAST OF A METAL  
LA0691'WITNESS POST WITH SIGN. NOTE 1A7A  
LA0691'  
LA0691'REFERENCE MARK 1 IS A STANDARD DISK STAMPED BAXTER NO 1 1932, SET IN  
LA0691'THE TOP OF A 12-INCH SQUARE  
LA0691'CONCRETE MONUMENT THAT IS FLUSH WITH THE GROUND SURFACE. IT IS 29  
LA0691'FEET EAST OF A TELEPHONE POLE, 21  
LA0691'FEET SOUTH OF THE CENTER OF WOLFCALE ROAD AND 2 FEET EAST  
LA0691'OF A METAL WITNESS POST WITH SIGN. NOTE 11A.  
LA0691'  
LA0691'REFERENCE MARK 2 IS A STANDARD DISK STAMPED BAXTER NO 2 1932, SET IN  
LA0691'THE TOP OF A 12-INCH SQUARE  
LA0691'CONCRETE MONUMENT THAT PROJECTS 4 INCHES ABOVE THE GROUND SURFACE.  
LA0691'IT IS 22 FEET EAST OF THE CENTER  
LA0691'OF THE STATE LINE ROAD, 2 FEET NORTH OF A METAL WITNESS  
LA0691'POST WITH SIGN AND 1.5 FEET SOUTHEAST OF A  
LA0691'TELEPHONE POLE. NOTE 11A.  
LA0691'  
LA0691'THE AZIMUTH MARK IS A STANDARD DISK STAMPED BAXTER 1932 1970, SET IN  
LA0691'THE TOP OF A ROUND CONCRETE  
LA0691'MONUMENT THAT IS 12 INCHES IN DIAMETER AND PROJECTS 4 INCHES ABOVE  
LA0691'THE GROUND SURFACE. IT IS 22 FEET  
LA0691'WEST OF THE CENTER OF THE STATE LINE ROAD, 3 FEET SOUTH  
LA0691'OF A TELEPHONE POLE AND 1.5 FEET NORTH OF A METAL  
LA0691'WITNESS POST WITH SIGN. NOTE 16B  
LA0691'  
LA0691'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN- 6 MILES  
LA0691'WEST-SOUTHWEST OF CONVOY  
LA0691'  
LA0691'  
LA0691' STATION RECOVERY (1972)  
LA0691'  
LA0691'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1972 (LFS)  
LA0691'ALL MARKS WERE RECOVERED AND FOUND AS DESCRIBED AND IN GOOD  
LA0691'CONDITION. A HOUSE  
LA0691'IS BEING BUILT AT THE STATION SITE BUT NONE OF THE MARKS WILL  
LA0691'BE DISTURBED. MR. JOHN  
LA0691'BURGER WHO NOW OWNS THE PROPERTY SAID THAT THE  
LA0691'STATION MARK WILL HAVE AN ADDITIONAL FOOT  
LA0691'OF FILL DIRT OVER IT WHEN  
LA0691'THE HOUSE IS COMPLETED AND THE YARD GRADED, BUT CARE WOULD  
LA0691'BE TAKEN TO  
LA0691'PROTECT THE MARKS IN THEIR ORIGINAL POSITION. THE 1970 RECOVERY  
LA0691'NOTE IS GOOD.  
LA0691'  
LA0691'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN- 6 MILES  
LA0691'WEST-SOUTHWEST OF CONVOY  
LA0691'  
LA0691' STATION RECOVERY (1995)  
LA0691'  
LA0691'RECOVERY NOTE BY ABW MAPPING AND CONSULTING 1995 (DAA)  
LA0691'STATION RECOVERED AS DESCRIBED, HOWEVER 8 INCHES OF DIRT HAS BEEN  
LA0691'FILLED IN AROUND THE MARK, AND A 10 INCH PVC PIPE HAS BEEN INSTALLED



LA0691'OVER THE STATION TO ELIMINATE THE NEED TO EXCAVATE.

LA0691

LA0691

STATION RECOVERY (1995)

LA0691

LA0691'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

LA0691'THE STATION AND RM 2 WERE FOUND IN GOOD CONDITION. RM 1 HAS BEEN  
LA0691'DESTROYED, AZ MK 2 WAS NOT SEARCHED FOR. THE MARK IS IN THE LAWN OF A  
LA0691'PRIVATE RESIDENCE, HOME OF MRS. BURGER, 8015 STATE LINE ROAD, CONVOY,  
LA0691'OHIO 45832, TELEPHONE 419-749-2642. THE STATION IS LOCATED ABOUT 19.3  
LA0691'KM (12.00 MI) WEST OF VAN WERT, AND 8.0 KM (4.95 MI) WEST-SOUTHWEST OF  
LA0691'CONVOY. TO REACH FROM THE HARRISON TOWNSHIP OFFICE IN MIDDLEBURY, GO  
LA0691'WEST ON US HIGHWAY 224 FOR 4.8 KM (3.00 MI) TO A CROSSROAD AT THE  
LA0691'OHIO-INDIANA STATE LINE. TURN RIGHT, NORTH, ON STATE LINE ROAD FOR  
LA0691'5.0 KM (3.10 MI) TO WOLFCAL ROAD ON THE RIGHT AND THE STATION IN THE  
LA0691'SOUTHEAST ANGLE OF THE INTERSECTION. THE STATION MARK IS SET IN TOP  
LA0691'OF A CONCRETE POST 22.86 CM BELOW GROUND AND INSIDE A 10 INCH DIAMETER  
LA0691'PLASTIC PIPE WITH CAST IRON LID. IT IS 13.3 M (43.6 FT) SOUTH OF THE  
LA0691'CENTERLINE OF WOLFCAL ROAD, 8.9 M (29.2 FT) EAST OF THE CENTER OF  
LA0691'STATE LINE ROAD, 4.3 M (14.1 FT) EAST OF THE CENTER OF A ROUND SEWER  
LA0691'DRAIN, 6.8 M (22.3 FT) SOUTH OF A TELEPHONE JUNCTION BOX, AND 20.5 M  
LA0691'(67.3 FT) NORTHWEST OF THE NORTHWEST CORNER OF A PORCH.

LA0691

LA0691

STATION RECOVERY (1997)

LA0691

LA0691'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)

LA0691'RECOVERED AS DESCRIBED.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DL1914 *****
DL1914 HT_MOD      - This is a Height Modernization Survey Station.
DL1914 DESIGNATION - BERLIN M5
DL1914 PID        - DL1914
DL1914 STATE/COUNTY- OH/PORTAGE
DL1914 COUNTRY    - US
DL1914 USGS QUAD   - DEERFIELD (1994)
DL1914
DL1914                                *CURRENT SURVEY CONTROL
DL1914
DL1914* NAD 83(2011) POSITION- 41 02 35.39933(N) 081 00 32.70381(W) ADJUSTED
DL1914* NAD 83(2011) ELLIP HT- 285.861 (meters) (06/27/12) ADJUSTED
DL1914* NAD 83(2011) EPOCH - 2010.00
DL1914* NAVD 88 ORTHO HEIGHT - 319.56 (meters) 1048.4 (feet) GPS OBS
DL1914
DL1914 NAVD 88 orthometric height was determined with geoid model GEOID03
DL1914 GEOID HEIGHT - -33.685 (meters) GEOID03
DL1914 GEOID HEIGHT - -33.696 (meters) GEOID18
DL1914 NAD 83(2011) X - 752,893.642 (meters) COMP
DL1914 NAD 83(2011) Y - -4,758,466.263 (meters) COMP
DL1914 NAD 83(2011) Z - 4,166,227.665 (meters) COMP
DL1914 LAPLACE CORR - -1.98 (seconds) DEFLEC18
DL1914
DL1914 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DL1914 Standards:
DL1914      FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
DL1914      Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
DL1914 -----
DL1914 NETWORK      0.44   1.02              0.19   0.17   0.52      0.06856722
DL1914 -----
DL1914 Click here for local accuracies and other accuracy information.
DL1914
DL1914
DL1914.The horizontal coordinates were established by GPS observations
DL1914.and adjusted by the National Geodetic Survey in June 2012.
DL1914
DL1914.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DL1914.been affixed to the stable North American tectonic plate. See
DL1914.NA2011 for more information.
DL1914
DL1914.The horizontal coordinates are valid at the epoch date displayed above
DL1914.which is a decimal equivalence of Year/Month/Day.
DL1914
DL1914.The orthometric height was determined by GPS observations and a
DL1914.high-resolution geoid model using precise GPS observation and
DL1914.processing techniques.
DL1914
DL1914.Significant digits in the geoid height do not necessarily reflect accuracy.
DL1914.GEOID18 height accuracy estimate available here.

```



DL1914  
DL1914.Click [here](#) to see if photographs exist for this station.  
DL1914  
DL1914.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
DL1914  
DL1914.The Laplace correction was computed from DEFLEC18 derived deflections.  
DL1914  
DL1914.The ellipsoidal height was determined by GPS observations  
DL1914.and is referenced to NAD 83.  
DL1914  
DL1914. The following values were computed from the NAD 83(2011) position.  
DL1914  
DL1914;  

	North	East	Units	Scale	Factor	Converg.
DL1914;SPC OH N	- 153,926.002	725,342.864	MT	0.99993923		+0 58 46.0
DL1914;SPC OH N	- 505,005.56	2,379,729.05	sFT	0.99993923		+0 58 46.0
DL1914;UTM 17	- 4,543,549.008	499,236.487	MT	0.99960001		-0 00 21.5

DL1914  
DL1914!  

DL1914!SPC OH N	- 0.99995516	x	0.99993923	=	0.99989439
DL1914!UTM 17	- 0.99995516	x	0.99960001	=	0.99955519

DL1914  
DL1914\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF9923643549(NAD 83)  
DL1914  
DL1914 SUPERSEDED SURVEY CONTROL  
DL1914  
DL1914 NAD 83(2007)- 41 02 35.39945(N) 081 00 32.70465(W) AD(2002.00) B  
DL1914 ELLIP H (03/17/09) 285.874 (m) GP(2002.00) 4 1  
DL1914  
DL1914.Superseded values are not recommended for survey control.  
DL1914  
DL1914.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
DL1914.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
DL1914  
DL1914\_MARKER: Z = SEE DESCRIPTION  
DL1914\_SETTING: 0 = UNSPECIFIED SETTING  
DL1914\_SP\_SET: CONCRETE FILLED STEEL PIPE  
DL1914\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
DL1914\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
DL1914\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
DL1914+SATELLITE: SATELLITE OBSERVATIONS - 2005  
DL1914  
DL1914 HISTORY - Date Condition Report By  
DL1914 HISTORY - UNK MONUMENTED USACE  
DL1914 HISTORY - 2005 GOOD TERRSV  
DL1914  
DL1914 STATION DESCRIPTION  
DL1914  
DL1914'DESCRIBED BY TERRA SURV 2005 (JVH)  
DL1914'THE STATION IS LOCATED ABOUT 8.2 MI (13.2 KM) EAST OF ATWATER, 4.4 MI  
DL1914'(7.1 KM) SOUTH-SOUTHWEST OF LAKE MILTON AND 2.5 MI (4.0 KM)  
DL1914'EAST-NORTHEAST OF DEERFIELD. OWNERSHIP--UNITED STATES ARMY CORPS OF  
DL1914'ENGINEERS.  
DL1914'  
DL1914'TO REACH FROM THE INTERSECTION OF UNITED STATES ROUTE 62 AND UNITED  
DL1914'STATES ROUTE 224 IN CANFIELD, OH, GO WEST ON UNITED STATES ROUTE 224



DL1914'FOR 13.1 MI (21.1 KM) TO CR 75 (BONNER ROAD). TURN RIGHT ONTO BONNER  
DL1914'ROAD AND GO NORTH FOR 1.1 MI (1.8 KM) TO THE ENTRANCE DRIVE FOR THE  
DL1914'BERLIN LAKE DAM. TURN RIGHT ONTO THE ENTRANCE DRIVE AND GO 0.12 MI  
DL1914'(0.2 KM) AND THE STATION AHEAD.

DL1914'

DL1914'THE STATION IS A CONCRETE FILLED STEEL PIPE PEDESTAL WITH A 5/8 INCH  
DL1914'(2 CM) STEEL ALL THREAD ROD IN THE TOP CENTER. IT IS ON THE SOUTH  
DL1914'SIDE OF THE DRIVE TO ACCESS THE DAM. THE STATION IS ON UNITED STATES  
DL1914'GOVERNMENT PROPERTY. PERMISSION SHOULD BE OBTAINED FROM THE PROJECT  
DL1914'OFFICE.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DH3473 *****
DH3473 CORS          - This is a GPS Continuously Operating Reference Station.
DH3473 DESIGNATION  - BOWLINGGREEN COOP CORS ARP
DH3473 CORS_ID      - BGOH
DH3473 PID          - DH3473
DH3473 STATE/COUNTY- OH/WOOD
DH3473 COUNTRY      - US
DH3473 USGS QUAD    - BOWLING GREEN NORTH (1994)
DH3473
DH3473                      *CURRENT SURVEY CONTROL
DH3473
DH3473* NAD 83(2011) POSITION- 41 22 48.59519(N) 083 38 33.45644(W) ADJUSTED
DH3473* NAD 83(2011) ELLIP HT- 211.808 (meters) (06/??/19) ADJUSTED
DH3473* NAD 83(2011) EPOCH   - 2010.00
DH3473
DH3473 GEOID HEIGHT   - -35.338 (meters) GEOID18
DH3473 NAD 83(2011) X   - 530,720.743 (meters) COMP
DH3473 NAD 83(2011) Y   - -4,763,471.603 (meters) COMP
DH3473 NAD 83(2011) Z   - 4,194,335.111 (meters) COMP
DH3473
DH3473 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DH3473 Standards:
DH3473      FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
DH3473      Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
DH3473 -----
DH3473 NETWORK      0.19   0.36              0.05   0.09   0.18      -0.14584800
DH3473 -----
DH3473
DH3473.The coordinates were established by GPS observations
DH3473.and adjusted by the National Geodetic Survey in June 2019.
DH3473
DH3473.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DH3473.been affixed to the stable North American Tectonic Plate.
DH3473
DH3473.The coordinates are valid at the epoch date displayed above
DH3473.which is a decimal equivalence of Year/Month/Day.
DH3473
DH3473.Due to the release of the International GNSS Service (IGS) 2014
DH3473.realization of the International Terrestrial Reference Frame of 2014
DH3473.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DH3473.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DH3473.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DH3473.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DH3473.currently published epoch of 2010.00.
DH3473
DH3473.Additional information on MYCS2 is available at
DH3473.https://geodesy.noaa.gov/CORS/coords.shtml
DH3473

```



DH3473.Significant digits in the geoid height do not necessarily reflect accuracy.  
DH3473.GEOID18 height accuracy estimate available [here](#).

DH3473

DH3473.The PID for the CORS L1 Phase Center is DQ6451.

DH3473

DH3473.Click [here](#) to see if photographs exist for this station.

DH3473

DH3473.The XYZ, and position/ellipsoidal ht. are equivalent.

DH3473

DH3473.The ellipsoidal height was determined by GPS observations

DH3473.and is referenced to NAD 83.

DH3473

DH3473. The following values were computed from the NAD 83(2011) position.

DH3473

DH3473;		North	East	Units	Scale	Factor	Converg.
DH3473;SPC OH N	-	190,905.013	504,426.510	MT	0.99995398	-0 45	02.3
DH3473;SPC OH N	-	626,327.53	1,654,939.31	sFT	0.99995398	-0 45	02.3
DH3473;UTM 17	-	4,584,330.426	279,022.924	MT	1.00020099	-1 44	51.4
DH3473!	-	Elev Factor x Scale Factor = Combined Factor					
DH3473!SPC OH N	-	0.99996678	x	0.99995398	=	0.99992076	
DH3473!UTM 17	-	0.99996678	x	1.00020099	=	1.00016776	

DH3473

DH3473\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF7902284330 (NAD 83)

DH3473

SUPERSEDED SURVEY CONTROL

DH3473

DH3473	NAD 83(2011)-	41 22 48.59518(N)	083 38 33.45642(W)	AD(2010.00)	c
DH3473	ELLIP H (08/??/11)	211.804 (m)		GP(2010.00)	c c
DH3473	NAD 83(CORS)-	41 22 48.59527(N)	083 38 33.45714(W)	AD(2002.00)	c
DH3473	ELLIP H (05/??/05)	211.783 (m)		GP(2002.00)	c c

DH3473

DH3473.Superseded values are not recommended for survey control.

DH3473

DH3473.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DH3473.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DH3473

DH3473\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DH3473

STATION DESCRIPTION

DH3473

DH3473'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DH3473'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DH3473'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DH3473'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DH3473' ftp://cors.ngs.noaa.gov/cors/README.txt

DH3473' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DH3473' ftp://cors.ngs.noaa.gov/cors/station\_log

DH3473' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
AB5587 *****
AB5587 FBN - This is a Federal Base Network Control Station.
AB5587 DESIGNATION - CAUSEWAY
AB5587 PID - AB5587
AB5587 STATE/COUNTY- OH/KNOX
AB5587 COUNTRY - US
AB5587 USGS QUAD - BUTLER (1961)
AB5587
AB5587 *CURRENT SURVEY CONTROL
AB5587
AB5587* NAD 83(2011) POSITION- 40 31 06.95465(N) 082 29 00.84357(W) ADJUSTED
AB5587* NAD 83(2011) ELLIP HT- 302.490 (meters) (06/27/12) ADJUSTED
AB5587* NAD 83(2011) EPOCH - 2010.00
AB5587* NAVD 88 ORTHO HEIGHT - 336.172 (meters) 1102.92 (feet) ADJUSTED
AB5587
AB5587 GEOID HEIGHT - -33.661 (meters) GEOID18
AB5587 NAD 83(2011) X - 635,179.774 (meters) COMP
AB5587 NAD 83(2011) Y - -4,814,000.146 (meters) COMP
AB5587 NAD 83(2011) Z - 4,122,126.635 (meters) COMP
AB5587 LAPLACE CORR - 2.61 (seconds) DEFLEC18
AB5587 DYNAMIC HEIGHT - 336.001 (meters) 1102.36 (feet) COMP
AB5587 MODELED GRAVITY - 980,108.8 (mgal) NAVD 88
AB5587
AB5587 VERT ORDER - SECOND CLASS II
AB5587
AB5587 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AB5587 Standards:
AB5587 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
AB5587 Horiz Ellip SD_N SD_E SD_h (unitless)
AB5587 -----
AB5587 NETWORK 0.39 0.98 0.18 0.13 0.50 0.10199609
AB5587 -----
AB5587 Click here for local accuracies and other accuracy information.
AB5587
AB5587
AB5587.The horizontal coordinates were established by GPS observations
AB5587.and adjusted by the National Geodetic Survey in June 2012.
AB5587
AB5587.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AB5587.been affixed to the stable North American tectonic plate. See
AB5587.NA2011 for more information.
AB5587
AB5587.The horizontal coordinates are valid at the epoch date displayed above
AB5587.which is a decimal equivalence of Year/Month/Day.
AB5587
AB5587.The orthometric height was determined by differential leveling and
AB5587.adjusted by the NATIONAL GEODETIC SURVEY
AB5587.in August 1996.
AB5587

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AB5587.Significant digits in the geoid height do not necessarily reflect accuracy.  
AB5587.GEOID18 height accuracy estimate available [here](#).

AB5587

AB5587.Click [here](#) to see if photographs exist for this station.

AB5587

AB5587.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AB5587

AB5587.The Laplace correction was computed from DEFLEC18 derived deflections.

AB5587

AB5587.The ellipsoidal height was determined by GPS observations

AB5587.and is referenced to NAD 83.

AB5587

AB5587.The dynamic height is computed by dividing the NAVD 88

AB5587.geopotential number by the normal gravity value computed on the

AB5587.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AB5587.degrees latitude (g = 980.6199 gals.).

AB5587

AB5587.The modeled gravity was interpolated from observed gravity values.

AB5587

AB5587. The following values were computed from the NAD 83(2011) position.

AB5587

AB5587;		North	East	Units	Scale Factor	Converg.
AB5587;SPC OH N	-	94,604.269	601,392.527	MT	0.99998476	+0 00 38.9
AB5587;SPC OH N	-	310,380.84	1,973,068.65	sFT	0.99998476	+0 00 38.9
AB5587;UTM 17	-	4,486,376.396	374,324.096	MT	0.99979442	-0 57 50.4

AB5587

AB5587! - Elev Factor x Scale Factor = Combined Factor

AB5587!SPC OH N - 0.99995255 x 0.99998476 = 0.99993731

AB5587!UTM 17 - 0.99995255 x 0.99979442 = 0.99974698

AB5587

AB5587\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLE7432486376 (NAD 83)

AB5587

AB5587 SUPERSEDED SURVEY CONTROL

AB5587

AB5587	NAD 83(2007)-	40 31 06.95477(N)	082 29 00.84432(W)	AD(2002.00)	0
AB5587	ELLIP H (02/10/07)	302.503 (m)		GP(2002.00)	
AB5587	ELLIP H (09/23/04)	302.512 (m)		GP( )	4 1
AB5587	NAD 83(1995)-	40 31 06.95506(N)	082 29 00.84459(W)	AD( )	B
AB5587	ELLIP H (08/20/96)	302.510 (m)		GP( )	4 2
AB5587	NAVD 88	336.17 (m)	1102.9 (f)	LEVELING	3

AB5587

AB5587.Superseded values are not recommended for survey control.

AB5587

AB5587.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AB5587.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AB5587

AB5587\_MARKER: DH = HORIZONTAL CONTROL DISK

AB5587\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

AB5587\_STAMPING: CAUSEWAY 1987

AB5587\_MARK LOGO: NGS

AB5587\_PROJECTION: FLUSH

AB5587\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT

AB5587\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

AB5587+STABILITY: SURFACE MOTION

AB5587\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR



AB5587+SATELLITE: SATELLITE OBSERVATIONS - March 13, 2017

AB5587

AB5587	HISTORY	- Date	Condition	Report By
AB5587	HISTORY	- 1987	MONUMENTED	OHDNR
AB5587	HISTORY	- 19950914	GOOD	NGS
AB5587	HISTORY	- 20030710	GOOD	OHDT
AB5587	HISTORY	- 20170313	GOOD	OHDNR

AB5587

AB5587

STATION DESCRIPTION

AB5587

AB5587'DESCRIBED BY OHIO DEPARTMENT OF NATURAL RESOURCES 1987 (RLS)  
AB5587'STATION DESCRIBED 1995. THIS STATION WAS SET IN 1987 BY THE OHIO  
AB5587'DEPARTMENT OF NATURAL RESOURCES. THE STATION IS LOCATED ABOUT 6.4 KM  
AB5587'(3.95 MI) NORTHEAST OF FREDERICKTOWN ON THE CAUSEWAY AT THE NORTHEAST  
AB5587'END OF KNOX LAKE. TO REACH THE STATION FROM THE FREDERICKTOWN  
AB5587'MUNICIPAL BUILDING AT THE JUNCTION OF STATE ROUTE 13 AND 95, GO NORTH  
AB5587'0.24 KM (0.15 MI) ON ROUTE 13 AND 95 TO A JUNCTION, TURN RIGHT  
AB5587'(CROSSING NEW BRIDGE OVER THE NORTH BRANCH KOKOSING RIVER) AND GO 5.5  
AB5587'KM (3.40 MI) EAST-NORTHEAST ON COUNTY ROAD 14 TO THE JUNCTION WITH  
AB5587'KNOX LAKE ROAD, TURN LEFT AND GO 2.4 KM (1.50 MI) ON KNOX LAKE ROAD TO  
AB5587'THE CAUSEWAY AND THE STATION ON THE RIGHT, 6.1 M (20.0 FT) WEST OF THE  
AB5587'WATERS EDGE. THE STATION MARKS ARE STANDARD NGS DISKS STAMPED  
AB5587'--CAUSEWAY 1987--. THE SURFACE DISK IS SET IN TOP OF A 0.3 M (1.0 FT)  
AB5587'DIAMETER, FLUSH CONCRETE MONUMENT WITH A STEEL ROD EMBEDDED IN IT. IT  
AB5587'IS 85.6 M (280.8 FT) SOUTH OF THE EAST END OF A 1.8 M (5.9 FT)  
AB5587'DIAMETER STEEL CULVERT PIPE UNDER THE ROAD, 10.3 M (33.8 FT) NORTH OF  
AB5587'A UTILITY POLE, 5.6 M (18.4 FT) EAST OF THE ROAD CENTER, 0.3 M (1.0  
AB5587'FT) BELOW SAME, AND 3.0 M (9.8 FT) WEST OF A FIBERGLASS WITNESS POST.  
AB5587'THE UNDERGROUND MARK IS SET IN AN IRREGULAR MASS OF CONCRETE RECESSED  
AB5587'1 M (3.3 FT) . STATIONS RAMP 1987 AND MAPLE 1987 ARE BOTH VISIBLE AT  
AB5587'EYE LEVEL FROM THIS STATION.

AB5587

AB5587

STATION RECOVERY (1995)

AB5587

AB5587'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
AB5587'STATION IS ABOUT 6.4 KM (3.95 MI) NORTHEAST OF FREDERICKTOWN ON THE  
AB5587'CAUSEWAY AT THE NORTHEAST END OF KNOX LAKE. TO REACH THE STATION FROM  
AB5587'THE FREDERICKTOWN MUNICIPAL BUILDING AT THE JUNCTION OF STATE ROUTE 13  
AB5587'AND 95, GO NORTH 0.24 KM (0.15 MI) ON ROUTE 13 AND 95 TO A JUNCTION,  
AB5587'TURN RIGHT (CROSSING NEWBRIDGE OVER THE NORTH BRANCH KOKOSING RIVER)  
AB5587'AND GO 5.5 KM (3.40 MI) EAST-NORTHEAST ON COUNTY ROAD 14 TO THE  
AB5587'JUNCTION WITH KNOX LAKE ROAD, TURN LEFT AND GO 2.4 KM (1.50 MI) ON  
AB5587'KNOX LAKE ROAD TO THE CAUSEWAY AND THE STATION ON THE RIGHT, 6.1 M  
AB5587'(20.0 FT) WEST OF THE WATERS EDGE. THE STATION MARKS ARE STANDARD NGS  
AB5587'DISKS STAMPED --CAUSEWAY 1987--. THE SURFACE DISK IS SET IN TOP OF A  
AB5587'0.3 M (1.0 FT) DIAMETER, FLUSH CONCRETE MONUMENT WITH A STEEL ROD  
AB5587'EMBEDDED IN IT. IT IS 85.6 M (280.8 FT) SOUTH OF THE EAST END OF A  
AB5587'1.8 M (5.9 FT) DIAMETER STEEL CULVERT PIPE UNDER THE ROAD, 10.3 M  
AB5587'(33.8 FT) NORTH OF A UTILITY POLE, 5.6 M (18.4 FT) EAST OF THE ROAD  
AB5587'CENTER, 0.3 M (1.0 FT) BELOW SAME, AND 3.0 M (9.8 FT) WEST OF A  
AB5587'FIBERGLASS WITNESS POST. THE UNDERGROUND MARK IS SET IN AN IRREGULAR  
AB5587'MASS OF CONCRETE RECESSED 1 M (3.3 FT) . STATIONS RAMP 1987 AND MAPLE  
AB5587'1987 ARE BOTH VISIBLE AT EYE LEVEL FROM THIS STATION.

AB5587

AB5587

STATION RECOVERY (2003)



AB5587  
AB5587'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2003 (JAS)  
AB5587'RECOVERED AS DESCRIBED.  
AB5587  
AB5587 STATION RECOVERY (2017)  
AB5587  
AB5587'RECOVERY NOTE BY OHIO DEPARTMENT OF NATURAL RESOURCES 2017 (WAM)  
AB5587'FOR MORE INFORMATION CONTACT  
AB5587'OHIO DEPARTMENT OF NATURAL RESOURCES  
AB5587'OFFICE OF REAL ESTATE  
AB5587'SURVEY SECTION  
AB5587'2045 MORSE RD. BLDG. E2  
AB5587'COLUMBUS, OH 43229

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = DECEMBER 4, 2019

LA0562 \*\*\*\*\*

LA0562 DESIGNATION - **CELINA**

LA0562 PID - LA0562

LA0562 STATE/COUNTY- OH/MERCER

LA0562 COUNTRY - US

LA0562 USGS QUAD - CELINA (1982)

LA0562

LA0562 \*CURRENT SURVEY CONTROL

LA0562

LA0562\* NAD 83(2011) POSITION- 40 33 10.19542(N) 084 37 03.87193(W) ADJUSTED

LA0562\* NAD 83(2011) ELLIP HT- 241.699 (meters) (06/27/12) ADJUSTED

LA0562\* NAD 83(2011) EPOCH - 2010.00

LA0562\* [NAVD 88](#) ORTHO HEIGHT - 275.172 (meters) 902.79 (feet) ADJUSTED

LA0562

LA0562 GEOID HEIGHT - -33.463 (meters) GEOID18

LA0562 NAD 83(2011) X - 455,230.887 (meters) COMP

LA0562 NAD 83(2011) Y - -4,831,809.040 (meters) COMP

LA0562 NAD 83(2011) Z - 4,124,976.364 (meters) COMP

LA0562 LAPLACE CORR - -1.32 (seconds) DEFLEC18

LA0562 DYNAMIC HEIGHT - 275.041 (meters) 902.36 (feet) COMP

LA0562 MODELED GRAVITY - 980,141.0 (mgal) NAVD 88

LA0562

LA0562 VERT ORDER - SECOND CLASS 0

LA0562

LA0562 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

LA0562 Standards:

LA0562	FGDC (95% conf, cm)	Standard deviation (cm)			CorrNE
LA0562	Horiz Ellip	SD_N	SD_E	SD_h	(unitless)

LA0562	-----	-----	-----	-----	-----		
LA0562	NETWORK	1.24	2.04	0.58	0.40	1.04	0.03130183
LA0562	-----	-----	-----	-----	-----	-----	-----

LA0562

LA0562 Click [here](#) for local accuracies and other accuracy information.

LA0562

LA0562

LA0562.The horizontal coordinates were established by GPS observations

LA0562.and adjusted by the National Geodetic Survey in June 2012.

LA0562

LA0562.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

LA0562.been affixed to the stable North American tectonic plate. See

LA0562.[NA2011](#) for more information.

LA0562

LA0562.The horizontal coordinates are valid at the epoch date displayed above

LA0562.which is a decimal equivalence of Year/Month/Day.

LA0562

LA0562.The orthometric height was determined by differential leveling and

LA0562.adjusted by the NATIONAL GEODETIC SURVEY

LA0562.in June 1991.

LA0562

LA0562.Significant digits in the geoid height do not necessarily reflect accuracy.



LA0562.GEOID18 height accuracy estimate available [here](#).  
 LA0562  
 LA0562.Click [here](#) to see if photographs exist for this station.  
 LA0562  
 LA0562.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 LA0562  
 LA0562.The Laplace correction was computed from DEFLEC18 derived deflections.  
 LA0562  
 LA0562.The ellipsoidal height was determined by GPS observations  
 LA0562.and is referenced to NAD 83.  
 LA0562  
 LA0562.The dynamic height is computed by dividing the NAVD 88  
 LA0562.geopotential number by the normal gravity value computed on the  
 LA0562.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 LA0562.degrees latitude (g = 980.6199 gals.).

LA0562  
 LA0562.The modeled gravity was interpolated from observed gravity values.  
 LA0562  
 LA0562. The following values were computed from the NAD 83(2011) position.  
 LA0562

LA0562;		North	East	Units	Scale	Factor	Converg.
LA0562;SPC OH N	-	100,583.168	420,645.982	MT	0.99997925	-1 23 28.5	
LA0562;SPC OH N	-	329,996.61	1,380,069.36	sFT	0.99997925	-1 23 28.5	
LA0562;UTM 16	-	4,491,846.259	701,708.552	MT	1.00010084	+1 32 57.6	
LA0562!	-	Elev Factor	x Scale Factor	=	Combined Factor		
LA0562!SPC OH N	-	0.99996209	x 0.99997925	=	0.99994134		
LA0562!UTM 16	-	0.99996209	x 1.00010084	=	1.00006292		

LA0562:		Primary Azimuth Mark	Grid Az
LA0562:SPC OH N	-	CRANBERRY	170 16 28.8
LA0562:UTM 16	-	CRANBERRY	167 20 02.7

LA0562 U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGK0170891846(NAD 83)  
 LA0562

LA0562	PID	Reference Object	Distance	Geod. Az
LA0562				dddmss.s
LA0562	LA2364	OHIO CITY MUNICIPAL TANK	APPROX.24.4 KM	0003804.4
LA0562	LA2370	CELINA MUNICIPAL TANK	APPROX. 3.6 KM	0813306.8
LA0562	LA0560	CELINA AZ MK		0891955.3
LA0562	LA2373	CELINA MERSMAN TABLE WATER TK	APPROX. 3.4 KM	0905153.9
LA0562	LA2371	CELINA IMM CON CATH CH DOME	APPROX. 3.8 KM	0910451.6
LA0562	LA2372	CELINA MERSMAN TABLE COMPANY TALL S	APPROX. 3.4 KM	0920943.8
LA0562	LA0561	CELINA RM 1	108.549 METERS	11222
LA0562	LA2302	MARIA STEIN ST JOHNS CATH CH	APPROX.20.2 KM	1424231.2
LA0562	LA2306	CARTHAGENA ST CHARLES SEM DOME	APPROX.14.1 KM	1611207.6
LA0562	LA2307	CRANBERRY	APPROX.18.2 KM	1685300.3
LA0562	LA2305	CRANBERRY PRAIRIE CATH CH	APPROX.18.0 KM	1701309.7
LA0562	LA0563	CELINA RM 2	130.348 METERS	22338
LA0562	LA2312	MACEDON CATHOLIC CH STEEPLE	APPROX.15.7 KM	2235757.6
LA0562	LA2379	DICK CATHOLIC CHURCH STEEPLE	APPROX.19.1 KM	2662833.3
LA0562	LA2386	GENEVA MUNICIPAL TANK	APPROX.29.2 KM	2783502.2
LA0562	LA2374	ROCKFORD MUNICIPAL TANK	APPROX.15.8 KM	3503044.5



LA0562  
 LA0562 SUPERSEDED SURVEY CONTROL  
 LA0562  
 LA0562 NAD 83(2007)- 40 33 10.19552(N) 084 37 03.87272(W) AD(2002.00) 0  
 LA0562 ELLIP H (02/10/07) 241.717 (m) GP(2002.00)  
 LA0562 ELLIP H (10/07/05) 241.715 (m) GP( ) 4 1  
 LA0562 NAD 83(1995)- 40 33 10.19556(N) 084 37 03.87259(W) AD( ) 1  
 LA0562 ELLIP H (09/04/97) 241.726 (m) GP( ) 4 1  
 LA0562 NAD 83(1986)- 40 33 10.19755(N) 084 37 03.88562(W) AD( ) 1  
 LA0562 NAD 27 - 40 33 10.03200(N) 084 37 04.04600(W) AD( ) 1  
 LA0562 NAVD 88 275.17 (m) 902.8 (f) LEVELING 3  
 LA0562 NGVD 29 (??/??/92) 275.327 (m) 903.30 (f) ADJ UNCH 2 0  
 LA0562 NGVD 29 275.33 (m) 903.3 (f) LEVELING 3

LA0562.Superseded values are not recommended for survey control.

LA0562

LA0562.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

LA0562.See file [dsdata.pdf](#) to determine how the superseded data were derived.

LA0562

LA0562\_MARKER: DS = TRIANGULATION STATION DISK

LA0562\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

LA0562\_STAMPING: CELINA 1932

LA0562\_MAGNETIC: N = NO MAGNETIC MATERIAL

LA0562\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

LA0562+STABILITY: SURFACE MOTION

LA0562\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

LA0562+SATELLITE: SATELLITE OBSERVATIONS - April 05, 1995

LA0562

HISTORY	- Date	Condition	Report By
HISTORY	- 1932	MONUMENTED	CGS
HISTORY	- 1947	GOOD	CGS
HISTORY	- 19950405	SEE DESCRIPTION	ABW

LA0562

LA0562 STATION DESCRIPTION

LA0562

LA0562'DESCRIBED BY COAST AND GEODETIC SURVEY 1932 (HCW)

LA0562'THE STATION CELINA

LA0562'IS ABOUT 2-1/4

LA0562'MILES WEST OF THE TOWN OF CELINA, ON THE NORTH

LA0562'SIDE OF THE NORTHEAST 1/4 SEC. 3,

LA0562'T. 6 S., R. 2 E., ON PROPERTY

LA0562'BELONGING TO THE MERCER COUNTY INFIRMARY. THE

LA0562'STATION IS 200

LA0562'FEET WEST OF THE CENTER LINE OF A DRIVEWAY TO LARGE HOUSE ON THE

LA0562'NORTH SIDE OF

LA0562'THE ROAD, 24 FEET SOUTH OF THE EAST AND WEST PROPERTY

LA0562'LINE FENCE, AND 49 FEET SOUTH OF

LA0562'THE CENTER LINE OF A COUNTY

LA0562'ROAD. THE SURFACE MARK IS 8 INCHES BELOW THE

LA0562'SURFACE OF THE GROUND.

LA0562'

LA0562'REFERENCE MARK NO. 1 IS 356.13 FEET SOUTHEAST OF THE STATION

LA0562'0.5 FOOT EAST OF A

LA0562'NORTH-SOUTH FENCE LINE, 160 FEET SOUTH OF THE

LA0562'EAST-WEST PROPERTY FENCE LINE AND 185







LA0562'NORTH ON FLEETFOOT ROAD FOR 0.5 MILES (0.8 KM) TO ITS INTERSECTION  
LA0562'WITH MUD PIKE, PROCEED WEST ON MUD PIKE FOR 0.4 MILES. (0.6 KM) MARK  
LA0562'IS ON A HIGH POINT 40 FEET (12.2 M) SOUTH OF THE SOUTH EDGE OF  
LA0562'PAVEMENT OF MUD PIKE, 250 FEET (76.2 M) EAST OF RESIDENCE NUMBER 4750,  
LA0562'APPROXIMATLY 800 FEET (243.8 M) WEST OF THE DRIVE GOING TO THE COUNTY  
LA0562'HOME. MARK IS SURROUNDED BY 4 STEEL POSTS. MARK IS 10 INCHES BELOW  
LA0562'THE SURFACE AND MAY HAVE BEEN HIT BY FARM EQUIPMENT.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

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PROGRAM = datasheet95, VERSION = 8.12.5.4
1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
KZ1209 *****
KZ1209 DESIGNATION -   D 248
KZ1209 PID           -   KZ1209
KZ1209 STATE/COUNTY-  OH/RICHLAND
KZ1209 COUNTRY       -   US
KZ1209 USGS QUAD     -   MANSFIELD NORTH (1982)
KZ1209
KZ1209                                *CURRENT SURVEY CONTROL
KZ1209
KZ1209* NAD 83(2011) POSITION- 40 48 44.51874(N) 082 30 01.96702(W) ADJUSTED
KZ1209* NAD 83(2011) ELLIP HT- 356.139 (meters) (06/27/12) ADJUSTED
KZ1209* NAD 83(2011) EPOCH - 2010.00
KZ1209* NAVD 88 ORTHO HEIGHT - 389.953 (meters) 1279.37 (feet) ADJUSTED
KZ1209
KZ1209 GEOID HEIGHT - -33.805 (meters) GEOID18
KZ1209 NAD 83(2011) X - 630,983.841 (meters) COMP
KZ1209 NAD 83(2011) Y - -4,793,151.319 (meters) COMP
KZ1209 NAD 83(2011) Z - 4,146,907.642 (meters) COMP
KZ1209 LAPLACE CORR - 3.61 (seconds) DEFLEC18
KZ1209 DYNAMIC HEIGHT - 389.766 (meters) 1278.76 (feet) COMP
KZ1209 MODELED GRAVITY - 980,133.9 (mgal) NAVD 88
KZ1209
KZ1209 VERT ORDER - SECOND CLASS 0
KZ1209
KZ1209 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KZ1209 Standards:
KZ1209          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
KZ1209          Horiz Ellip                    SD_N   SD_E   SD_h          (unitless)
KZ1209 -----
KZ1209 NETWORK      1.55    3.27                0.71   0.53   1.67          -0.00660743
KZ1209 -----
KZ1209 Click here for local accuracies and other accuracy information.
KZ1209
KZ1209
KZ1209.This mark is at Mansfield Lahm Municipal Airport (MFD)
KZ1209
KZ1209.The horizontal coordinates were established by GPS observations
KZ1209.and adjusted by the National Geodetic Survey in June 2012.
KZ1209
KZ1209.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KZ1209.been affixed to the stable North American tectonic plate. See
KZ1209.NA2011 for more information.
KZ1209
KZ1209.The horizontal coordinates are valid at the epoch date displayed above
KZ1209.which is a decimal equivalence of Year/Month/Day.
KZ1209
KZ1209.The orthometric height was determined by differential leveling and
KZ1209.adjusted by the NATIONAL GEODETIC SURVEY
KZ1209.in June 1991.

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KZ1209  
 KZ1209.Significant digits in the geoid height do not necessarily reflect accuracy.  
 KZ1209.GEOID18 height accuracy estimate available [here](#).  
 KZ1209  
 KZ1209.Click [here](#) to see if photographs exist for this station.  
 KZ1209  
 KZ1209.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 KZ1209  
 KZ1209.The Laplace correction was computed from DEFLEC18 derived deflections.  
 KZ1209  
 KZ1209.The ellipsoidal height was determined by GPS observations  
 KZ1209.and is referenced to NAD 83.  
 KZ1209  
 KZ1209.The dynamic height is computed by dividing the NAVD 88  
 KZ1209.geopotential number by the normal gravity value computed on the  
 KZ1209.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 KZ1209.degrees latitude (g = 980.6199 gals.).  
 KZ1209  
 KZ1209.The modeled gravity was interpolated from observed gravity values.  
 KZ1209  
 KZ1209. The following values were computed from the NAD 83(2011) position.  
 KZ1209  
 KZ1209;  

	North	East	Units	Scale	Factor	Converg.
KZ1209;SPC OH N	- 127,225.151	599,953.901	MT	0.99994902	-0 00	01.3
KZ1209;SPC OH N	- 417,404.52	1,968,348.76	sFT	0.99994902	-0 00	01.3
KZ1209;UTM 17	- 4,519,011.561	373,442.411	MT	0.99979714	-0 58	51.1

	Elev Factor	x	Scale Factor	=	Combined Factor
KZ1209!SPC OH N	- 0.99994414	x	0.99994902	=	0.99989316
KZ1209!UTM 17	- 0.99994414	x	0.99979714	=	0.99974129

  
 KZ1209\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF7344219011 (NAD 83)  
 KZ1209  
 KZ1209 SUPERSEDED SURVEY CONTROL  
 KZ1209  

KZ1209	NAD 83(2007)-	40 48 44.51899(N)	082 30 01.96752(W)	AD(2002.00)	0
KZ1209	ELLIP H (02/10/07)	356.156 (m)		GP(2002.00)	
KZ1209	ELLIP H (10/07/05)	356.149 (m)		GP( )	4 2
KZ1209	NAD 83(1995)-	40 48 44.51892(N)	082 30 01.96772(W)	AD( )	3
KZ1209	ELLIP H (05/28/98)	356.164 (m)		GP( )	4 2
KZ1209	NAVD 88	389.95 (m)	1279.4 (f)	LEVELING	3
KZ1209	NGVD 29 (??/??/92)	390.110 (m)	1279.89 (f)	ADJ UNCH	2 0

  
 KZ1209.Superseded values are not recommended for survey control.  
 KZ1209  
 KZ1209.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 KZ1209.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 KZ1209  
 KZ1209\_MARKER: DB = BENCH MARK DISK  
 KZ1209\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 KZ1209\_STAMPING: D 248 1959  
 KZ1209\_MARK LOGO: CGS  
 KZ1209\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 KZ1209\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 KZ1209+STABILITY: SURFACE MOTION



KZ1209\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
KZ1209+SATELLITE: SATELLITE OBSERVATIONS - October 07, 1997

KZ1209

KZ1209	HISTORY	- Date	Condition	Report By
KZ1209	HISTORY	- 1959	MONUMENTED	CGS
KZ1209	HISTORY	- 1970	GOOD	NGS
KZ1209	HISTORY	- 19870322	GOOD	USPSQD
KZ1209	HISTORY	- 19971007	GOOD	NGS

KZ1209

KZ1209

STATION DESCRIPTION

KZ1209

KZ1209'DESCRIBED BY COAST AND GEODETIC SURVEY 1959

KZ1209'2.6 MI N FROM MANSFIELD.

KZ1209'ABOUT 2.6 MILES NORTH ALONG STATE HIGHWAY 13 FROM THE OVERPASS  
KZ1209'OF U.S. HIGHWAY 30 AT MANSFIELD, 0.15 MILE NORTH OF CROSSING OF  
KZ1209'RUNWAY APPROACH LIGHTS TO MANSFIELD AIRPORT, 254 YARDS SOUTH OF  
KZ1209'CENTER OF JUNCTION OF CRALL ROAD LEADING EAST, 36 1/2 FEET WEST  
KZ1209'OF CENTER LINE OF HIGHWAY, 165 FEET SOUTH OF SOUTH END OF WEST  
KZ1209'CONCRETE HEAD WALL OF A 15-INCH PIPE CULVERT, 38 FEET SOUTH OF  
KZ1209'EXTENDED CENTER LINE OF A TAXI WAY EXTENDING WEST TO AIRPORT  
KZ1209'BUILDING, 1 1/2 FEET NORTH OF A STEEL WITNESS POST, ABOUT LEVEL  
KZ1209'WITH HIGHWAY AND SET IN THE TOP OF A CONCRETE POST PROJECTING 3 INCHES

KZ1209

KZ1209

STATION RECOVERY (1970)

KZ1209

KZ1209'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1970

KZ1209'RECOVERED IN GOOD CONDITION.

KZ1209

KZ1209

STATION RECOVERY (1987)

KZ1209

KZ1209'RECOVERY NOTE BY US POWER SQUADRON 1987 (WN)

KZ1209'RECOVERED IN GOOD CONDITION.

KZ1209

KZ1209

STATION RECOVERY (1997)

KZ1209

KZ1209

KZ1209'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (WCW)

KZ1209'RECOVERED IN AS DESCRIBED WITH NOTES. THE STATION IS IN THE RIGHT OF

KZ1209'WAY FOR STATE HIGHWAY 13. THE STATION IS LOCATED 0.40 KM (0.25 MI)

KZ1209'NORTHERLY ALONG STATE HIGHWAY 13 FROM THE JUNCTION WITH SOUTH AIRPORT

KZ1209'ROAD. THE STATION IS LOCATED NORTHEAST FROM THE SOUTHEASTERLY

KZ1209'EXTENDED CENTERLINE OF RUNWAY 14-32 AT MANSFIELD LAHM MUNICIPAL

KZ1209'AIRPORT.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = DECEMBER 9, 2019  
 AB6017 \*\*\*\*\*  
 AB6017 CBN - This is a Cooperative Base Network Control Station.  
 AB6017 DESIGNATION - **DEF 66**  
 AB6017 PID - AB6017  
 AB6017 STATE/COUNTY- OH/DEFIANCE  
 AB6017 COUNTRY - US  
 AB6017 USGS QUAD - DEFIANCE EAST (1979)

AB6017 \*CURRENT SURVEY CONTROL

AB6017\* NAD 83(2011) POSITION- 41 15 40.12355(N) 084 21 40.40108(W) ADJUSTED  
 AB6017\* NAD 83(2011) ELLIP HT- 182.415 (meters) (06/27/12) ADJUSTED  
 AB6017\* NAD 83(2011) EPOCH - 2010.00  
 AB6017\* [NAVD 88](#) ORTHO HEIGHT - 217.0 (meters) 712. (feet) GPS OBS  
 AB6017 NAVD 88 orthometric height was determined with geoid model GEOID93  
 AB6017 GEOID HEIGHT - -34.531 (meters) GEOID93  
 AB6017 GEOID HEIGHT - -34.571 (meters) GEOID18  
 AB6017 NAD 83(2011) X - 471,793.180 (meters) COMP  
 AB6017 NAD 83(2011) Y - -4,778,416.804 (meters) COMP  
 AB6017 NAD 83(2011) Z - 4,184,388.061 (meters) COMP  
 AB6017 LAPLACE CORR - -5.97 (seconds) DEFLEC18

AB6017 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	0.28	0.61	0.13	0.09	0.31	0.01441998

AB6017 Click [here](#) for local accuracies and other accuracy information.

AB6017.The horizontal coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2012.

AB6017.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American tectonic plate. See [NA2011](#) for more information.

AB6017.The horizontal coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

AB6017.The orthometric height was determined by GPS observations and a high-resolution geoid model.

AB6017.Significant digits in the geoid height do not necessarily reflect accuracy. GEOID18 height accuracy estimate available [here](#).



AB6017.Click [here](#) to see if photographs exist for this station.

AB6017

AB6017.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AB6017

AB6017.The Laplace correction was computed from DEFLEC18 derived deflections.

AB6017

AB6017.The ellipsoidal height was determined by GPS observations

AB6017.and is referenced to NAD 83.

AB6017

AB6017. The following values were computed from the NAD 83(2011) position.

AB6017

AB6017;		North	East	Units	Scale	Factor	Converg.
AB6017;SPC OH N	-	178,725.393	444,045.841	MT	0.99994482	-1 13	21.8
AB6017;SPC OH N	-	586,368.23	1,456,840.40	sFT	0.99994482	-1 13	21.8
AB6017;UTM 16	-	4,571,105.717	721,057.306	MT	1.00020144	+1 44	27.4
AB6017!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
AB6017!SPC OH N	-	0.99997139	x	0.99994482	=	0.99991621	
AB6017!UTM 16	-	0.99997139	x	1.00020144	=	1.00017282	

AB6017

AB6017\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL2105771105 (NAD 83)

AB6017

SUPERSEDED SURVEY CONTROL

AB6017

AB6017	NAD 83(2007)-	41 15 40.12363(N)	084 21 40.40191(W)	AD(2002.00)	0
AB6017	ELLIP H (02/10/07)	182.428 (m)		GP(2002.00)	
AB6017	ELLIP H (09/23/04)	182.420 (m)		GP( )	4 1
AB6017	NAD 83(1995)-	41 15 40.12350(N)	084 21 40.40144(W)	AD( )	B
AB6017	ELLIP H (08/20/96)	182.464 (m)		GP( )	4 2

AB6017

AB6017.Superseded values are not recommended for survey control.

AB6017

AB6017.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AB6017.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AB6017

AB6017\_MARKER: DD = SURVEY DISK

AB6017\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.+)

AB6017\_STAMPING: DEF 66 1995

AB6017\_MARK LOGO: OHDT

AB6017\_PROJECTION: FLUSH

AB6017\_MAGNETIC: O = OTHER; SEE DESCRIPTION

AB6017\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AB6017\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AB6017+SATELLITE: SATELLITE OBSERVATIONS - May 15, 2003

AB6017\_ROD/PIPE-DEPTH: 8.2 meters

AB6017\_SLEEVE-DEPTH : 1.1 meters

AB6017

AB6017	HISTORY	- Date	Condition	Report By
AB6017	HISTORY	- 1995	MONUMENTED	OHDT
AB6017	HISTORY	- 19980403	GOOD	JCAND
AB6017	HISTORY	- 20030515	GOOD	NGS

AB6017

STATION DESCRIPTION

AB6017

AB6017'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1995 (EAA)





AB6017'STATION IS LOCATED AT THE INTERSECTION OF STATE ROUTE 66 AND PALMER  
AB6017'DRIVE, DEFIANCE, OHIO. TO REACH THE STATION FROM DEFIANCE SENIOR HIGH  
AB6017'SCHOOL GO SOUTH 0.2 KM (0.10 MI) ON PALMER DRIVE TO ISLAND AT THE  
AB6017'INTERSECTION OF PALMER DRIVE AND STATE ROUTE 66. STATION LIES 12.2 M  
AB6017'(40.0 FT) WEST OF CENTERLINE OF OLD PALMER DRIVE (NOW CLOSED) , 33.2 M  
AB6017'(108.9 FT) NORTHWEST OF FIRE HYDRANT, 29.9 M (98.1 FT) SOUTHWEST OF A  
AB6017'MANHOLE COVER, 25.6 M (84.0 FT) EAST OF CENTERLINE OF STATE ROUTE 66  
AB6017'AND 0.3 M (1.0 FT) EAST OF AN ORANGE FIBERGLASS NOAA WITNESS POST.  
AB6017'MARK IS UNDER A PROTECTIVE ALUMINUM COVER ALSO STAMPED --DEF 66  
AB6017'1995--. THE MARK IS ON PUBLIC RIGHT-OF-WAY AND IS ACCESSIBLE AT ALL  
AB6017'TIMES. NOTE--SLEEVE DEPTH DOES NOT MEET CLASS A REQUIREMENTS.

AB6017

AB6017 STATION RECOVERY (1998)

AB6017

AB6017'RECOVERY NOTE BY JC ANDRUS ASSOC 1998 (DAA)

AB6017'FOUND AS DESCRIBED IN 1995

AB6017

AB6017 STATION RECOVERY (2003)

AB6017

AB6017'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2003 (JMW)

AB6017'STATION IS LOCATED AT THE SOUTH EDGE OF DEFIANCE, 0.1 MILE SOUTH OF  
AB6017'THE DEFIANCE SENIOR HIGH SCHOOL, IN A GRASS ISLAND FORMED BY STATE  
AB6017'HIGHWAY 66, PALMER DRIVE, AND OLD PALMER DRIVE (NOW CLOSED) AND NEAR  
AB6017'A ---WELCOME TO DEFIANCE--- SIGN AND A SIGN DISPLAYING EMBLEMS OF THE  
AB6017'TOWN'S CIVIC ORGANIZATIONS.

AB6017'

AB6017'TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAYS 66, 15 EAST  
AB6017'AND 18 EAST AT THE INTERSECTION OF JEFFERSON AVENUE AND SECOND STREET  
AB6017'IN DOWNTOWN DEFIANCE, GO SOUTH ON HIGHWAY 66 FOR 2.05 MILES TO THE  
AB6017'JUNCTION OF PALMER DRIVE ON THE LEFT. TURN LEFT AND GO NORTHEAST ON  
AB6017'PALMER DRIVE FOR 0.05 MILE TO WHERE PALMER DRIVE CURVES NORTH AND A  
AB6017'PAVED CLOSED ROAD GOES SOUTH. TURN RIGHT AND GO SOUTH ON OLD PALMER  
AB6017'DRIVE FOR 0.05 MILE TO THE STATION ON THE RIGHT.

AB6017'

AB6017'STATION IS 111.5 FEET NORTH OF THE WEST LEG OF THE WELCOME SIGN, 108.9  
AB6017'FEET NORTHWEST OF A FIRE HYDRANT, 80.5 FEET SOUTHEAST OF THE EAST LEG  
AB6017'OF THE CIVIC ORGANIZATION SIGN AND 40.0 FEET WEST OF THE CENTER OF  
AB6017'OLD PALMER DRIVE.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019  
 MC0734 \*\*\*\*\*  
 MC0734 DESIGNATION - **E 182**  
 MC0734 PID - MC0734  
 MC0734 STATE/COUNTY- OH/LUCAS  
 MC0734 COUNTRY - US  
 MC0734 USGS QUAD - TOLEDO (1980)

MC0734  
 MC0734 \*CURRENT SURVEY CONTROL

MC0734*	NAD 83(2011) POSITION-	41 41 37.56935(N)	083 31 36.97676(W)	ADJUSTED
MC0734*	NAD 83(2011) ELLIP HT-	145.716 (meters)	(06/27/12)	ADJUSTED
MC0734*	NAD 83(2011) EPOCH	- 2010.00		
MC0734*	<a href="#">NAVD 88</a> ORTHO HEIGHT -	181.073 (meters)	594.07 (feet)	ADJUSTED
MC0734	GEOID HEIGHT	- -35.358 (meters)		GEOID18
MC0734	NAD 83(2011) X	- 537,728.419 (meters)		COMP
MC0734	NAD 83(2011) Y	- -4,739,391.737 (meters)		COMP
MC0734	NAD 83(2011) Z	- 4,220,363.367 (meters)		COMP
MC0734	LAPLACE CORR	- -1.23 (seconds)		DEFLEC18
MC0734	DYNAMIC HEIGHT	- 181.003 (meters)	593.84 (feet)	COMP
MC0734	MODELED GRAVITY	- 980,236.3 (mgal)		NAVD 88

MC0734 VERT ORDER - FIRST CLASS I

MC0734 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

MC0734	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
MC0734	-----	-----	-----	-----	-----	-----
MC0734	NETWORK	0.79 1.61	0.36	0.27	0.82	0.10103996
MC0734	-----	-----	-----	-----	-----	-----

MC0734 Click [here](#) for local accuracies and other accuracy information.

MC0734.The horizontal coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2012.

MC0734.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American tectonic plate. See [NA2011](#) for more information.

MC0734.The horizontal coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

MC0734.The orthometric height was determined by differential leveling and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

MC0734.Significant digits in the geoid height do not necessarily reflect accuracy.



MC0734.GEOID18 height accuracy estimate available [here](#).

MC0734

MC0734.Click [here](#) to see if photographs exist for this station.

MC0734

MC0734.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC0734

MC0734.The Laplace correction was computed from DEFLEC18 derived deflections.

MC0734

MC0734.The ellipsoidal height was determined by GPS observations

MC0734.and is referenced to NAD 83.

MC0734

MC0734.The dynamic height is computed by dividing the NAVD 88

MC0734.geopotential number by the normal gravity value computed on the

MC0734.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC0734.degrees latitude (g = 980.6199 gals.).

MC0734

MC0734.The modeled gravity was interpolated from observed gravity values.

MC0734

MC0734. The following values were computed from the NAD 83(2011) position.

MC0734

MC0734;		North	East	Units	Scale	Factor	Converg.
MC0734;SPC OH N	-	225,611.532	514,512.772	MT	0.99999880	-0 40	28.7
MC0734;SPC OH N	-	740,193.83	1,688,030.65	sFT	0.99999880	-0 40	28.7
MC0734;UTM 17	-	4,618,862.118	289,716.657	MT	1.00014418	-1 40	53.1

MC0734

MC0734! - Elev Factor x Scale Factor = Combined Factor

MC0734!SPC OH N - 0.99997715 x 0.99999880 = 0.99997595

MC0734!UTM 17 - 0.99997715 x 1.00014418 = 1.00012132

MC0734

MC0734\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKG8971618862 (NAD 83)

MC0734

MC0734 SUPERSEDED SURVEY CONTROL

MC0734

MC0734	NAD 83(2007)-	41 41 37.56951(N)	083 31 36.97755(W)	AD(2002.00)	0
MC0734	ELLIP H (02/10/07)	145.733 (m)		GP(2002.00)	
MC0734	ELLIP H (10/07/05)	145.753 (m)		GP( )	4 1
MC0734	NAD 83(1995)-	41 41 37.56925(N)	083 31 36.97695(W)	AD( )	1
MC0734	ELLIP H (04/01/98)	145.787 (m)		GP( )	4 1
MC0734	NAD 83(1994)-	41 41 37.56924(N)	083 31 36.97694(W)	AD( )	1
MC0734	NAD 83(1986)-	41 41 37.58272(N)	083 31 36.99425(W)	AD( )	1
MC0734	NAVD 88	181.07 (m)	594.1 (f)	LEVELING	3
MC0734	NGVD 29 (??/??/92)	181.257 (m)	594.67 (f)	ADJ UNCH	1 1

MC0734

MC0734.Superseded values are not recommended for survey control.

MC0734

MC0734.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC0734.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC0734

MC0734\_MARKER: DB = BENCH MARK DISK

MC0734\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MC0734\_STAMPING: E 182 1954

MC0734\_MARK LOGO: CGS

MC0734\_MAGNETIC: O = OTHER; SEE DESCRIPTION

MC0734\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MC0734+STABILITY: SURFACE MOTION



MC0734\_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR  
MC0734+SATELLITE: SATELLITE OBSERVATIONS - May 01, 2001

MC0734

MC0734	HISTORY	- Date	Condition	Report By
MC0734	HISTORY	- 1954	MONUMENTED	CGS
MC0734	HISTORY	- 1968	GOOD	CGS
MC0734	HISTORY	- 1983	MARK NOT FOUND	LOCSUR
MC0734	HISTORY	- 19921204	GOOD	PLSO
MC0734	HISTORY	- 19930715	GOOD	NGS
MC0734	HISTORY	- 19930924	GOOD	GEOMET
MC0734	HISTORY	- 20010501	GOOD	JCLS

MC0734

MC0734 STATION DESCRIPTION

MC0734

MC0734'DESCRIBED BY COAST AND GEODETIC SURVEY 1968

MC0734'AT TOLEDO.

MC0734'AT TOLEDO, ABOUT 0.5 MILE NORTH ALONG STICKNEY AVENUE FROM THE  
MC0734'INTERSECTION OF MANHATTAN BLVD, ABOUT 80 YARDS NORTH OF THE  
MC0734'JUNCTION OF ELBON STREET, NEAR THE CROSSING OF A DOUBLE RAILROAD  
MC0734'TRACK, 47.9 FEET NORTH OF THE NORTH RAIL OF THE NORTH TRACK,  
MC0734'20.7 FEET EAST OF THE EAST CURB OF THE AVENUE, 24.8 FEET NORTH  
MC0734'OF THE SOUTHWEST CORNER OF THE CHAIN LINK FENCE AROUND THE  
MC0734'KAISER JEEP CORP. PLANT, 20.4 FEET NORTHEAST OF THE CENTER OF  
MC0734'A ROUND MANHOLE COVER MARKED WATER, 1.2 FEET NORTH OF A METAL  
MC0734'WITNESS POST, 1 FOOT BELOW THE LEVEL OF THE AVENUE AND SET IN  
MC0734'THE TOP OF A CONCRETE POST PROJECTING 3 INCHES ABOVE THE LEVEL  
MC0734'OF THE GROUND.

MC0734

MC0734 STATION RECOVERY (1983)

MC0734

MC0734'RECOVERY NOTE BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1983

MC0734'MARK NOT FOUND.

MC0734

MC0734 STATION RECOVERY (1992)

MC0734

MC0734'RECOVERY NOTE BY LAND SURV OF OH 1992

MC0734'THE STATION IS LOCATED IN TOLEDO, ABOUT 4 KM (2.50 MI) NORTH OF THE  
MC0734'CITY CENTER, 0.4 KM (0.25 MI) NORTH ALONG STICKNEY AVENUE FROM THE  
MC0734'JUNCTION OF INTERSTATE 75, JUST NORTHEAST OF A RAILROAD CROSSING, AND  
MC0734'NEAR THE SOUTHWEST CORNER OF A JEEP FACTORY. IT IS 18.9 M  
MC0734'(62.0 FT) NORTH OF THE NORTH RAIL, 6.3 M (20.7 FT) EAST OF THE EAST  
MC0734'CURB, 7.6 M (24.9 FT) NORTH OF THE SOUTHWEST CORNER OF THE CHAIN LINK  
MC0734'FENCE AROUND THE FACTORY, 6.28 M (20.60 FT) NORTHEAST OF A MANHOLE  
MC0734'COVER MARKED--WATER--, 5.39 M (17.68 FT) SOUTHEAST OF ANOTHER MANHOLE,  
MC0734'0.4 M (1.3 FT) WEST OF THE CHAIN LINK FENCE AND A FIBERGLASS WITNESS  
MC0734'POST, 0.3 M (1.0 FT) BELOW THE STREET LEVEL, AND SET IN A ROUND  
MC0734'CONCRETE MONUMENT PROJECTING 0.1 M (0.3 FT) .

MC0734

MC0734 STATION RECOVERY (1993)

MC0734

MC0734'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1993

MC0734'0.5 KM (0.30 MI) NORTHERLY ALONG STICKNEY AVENUE FROM THE JUNCTION OF  
MC0734'INTERSTATE HIGHWAY 75 IN TOLEDO, 115.9 M (380.2 FT) NORTH OF THE  
MC0734'CENTER OF ELBON STREET, 18.7 M (61.4 FT) NORTH OF THE NEAR RAIL OF  
MC0734'THE CONRAIL RAILROAD, 12.1 M (39.7 FT) EAST OF THE CENTERLINE OF THE



MC0734'AVENUE, 7.0 M (23.0 FT) NORTH OF THE SOUTHWEST CORNER OF A FENCE, 0.4  
MC0734'M (1.3 FT) WEST OF A FENCE, 0.3 M (1.0 FT) BELOW THE LEVEL OF THE  
MC0734'AVENUE, 0.2 M (0.7 FT) WEST OF A WITNESS POST, AND THE MONUMENT IS  
MC0734'FLUSH WITH THE GROUND SURFACE.

MC0734

MC0734 STATION RECOVERY (1993)

MC0734

MC0734'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1993

MC0734'RECOVERED IN GOOD CONDITION.

MC0734

MC0734 STATION RECOVERY (2001)

MC0734

MC0734'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2001 (CLG)

MC0734'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

KY1826 \*\*\*\*\*

KY1826 DESIGNATION - **E 281**

KY1826 PID - KY1826

KY1826 STATE/COUNTY- OH/WAYNE

KY1826 COUNTRY - US

KY1826 USGS QUAD - RITTMAN (1994)

KY1826

KY1826 \*CURRENT SURVEY CONTROL

KY1826

KY1826\* NAD 83(2011) POSITION- 40 57 30.01126(N) 081 46 49.27577(W) ADJUSTED

KY1826\* NAD 83(2011) ELLIP HT- 260.413 (meters) (06/27/12) ADJUSTED

KY1826\* NAD 83(2011) EPOCH - 2010.00

KY1826\* [NAVD 88](#) ORTHO HEIGHT - 293.613 (meters) 963.30 (feet) ADJUSTED

KY1826

KY1826 GEOID HEIGHT - -33.196 (meters) GEOID18

KY1826 NAD 83(2011) X - 689,653.621 (meters) COMP

KY1826 NAD 83(2011) Y - -4,774,268.084 (meters) COMP

KY1826 NAD 83(2011) Z - 4,159,100.848 (meters) COMP

KY1826 LAPLACE CORR - 0.29 (seconds) DEFLEC18

KY1826 DYNAMIC HEIGHT - 293.485 (meters) 962.88 (feet) COMP

KY1826 MODELED GRAVITY - 980,179.5 (mgal) NAVD 88

KY1826

KY1826 VERT ORDER - SECOND CLASS 0

KY1826

KY1826 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

KY1826 Standards:

KY1826 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

KY1826 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

KY1826 -----

KY1826 NETWORK 1.43 2.08 0.70 0.34 1.06 0.14510857

KY1826 -----

KY1826 Click [here](#) for local accuracies and other accuracy information.

KY1826

KY1826

KY1826.The horizontal coordinates were established by GPS observations

KY1826.and adjusted by the National Geodetic Survey in June 2012.

KY1826

KY1826.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

KY1826.been affixed to the stable North American tectonic plate. See

KY1826.[NA2011](#) for more information.

KY1826

KY1826.The horizontal coordinates are valid at the epoch date displayed above

KY1826.which is a decimal equivalence of Year/Month/Day.

KY1826

KY1826.The orthometric height was determined by differential leveling and

KY1826.adjusted by the NATIONAL GEODETIC SURVEY

KY1826.in June 1991.

KY1826

KY1826.Significant digits in the geoid height do not necessarily reflect accuracy.



KY1826.GEOID18 height accuracy estimate available [here](#).  
 KY1826  
 KY1826.Click [here](#) to see if photographs exist for this station.  
 KY1826  
 KY1826.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 KY1826  
 KY1826.The Laplace correction was computed from DEFLEC18 derived deflections.  
 KY1826  
 KY1826.The ellipsoidal height was determined by GPS observations  
 KY1826.and is referenced to NAD 83.  
 KY1826  
 KY1826.The dynamic height is computed by dividing the NAVD 88  
 KY1826.geopotential number by the normal gravity value computed on the  
 KY1826.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 KY1826.degrees latitude (g = 980.6199 gals.).

KY1826  
 KY1826.The modeled gravity was interpolated from observed gravity values.  
 KY1826  
 KY1826. The following values were computed from the NAD 83(2011) position.  
 KY1826  

KY1826;		North	East	Units	Scale	Factor	Converg.
KY1826;SPC OH N	-	143,684.425	660,581.363	MT	0.99994095	+0 28	22.0
KY1826;SPC OH N	-	471,404.65	2,167,257.36	sFT	0.99994095	+0 28	22.0
KY1826;UTM 17	-	4,534,425.190	434,329.403	MT	0.99965308	-0 30	41.6

KY1826  
 KY1826!  
 KY1826!SPC OH N  
 KY1826!UTM 17

KY1826  
 KY1826\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF3432934425 (NAD 83)  
 KY1826

KY1826  
 KY1826 SUPERSEDED SURVEY CONTROL  
 KY1826  

KY1826	NAD 83(2007)-	40 57 30.01127(N)	081 46 49.27661(W)	AD(2002.00)	0
KY1826	ELLIP H (02/10/07)	260.426 (m)		GP(2002.00)	
KY1826	ELLIP H (10/07/05)	260.446 (m)		GP( )	4 1
KY1826	NAD 83(1995)-	40 57 30.01123(N)	081 46 49.27642(W)	AD( )	1
KY1826	ELLIP H (10/25/00)	260.441 (m)		GP( )	4 1
KY1826	NAVD 88	293.61 (m)	963.3 (f)	LEVELING	3
KY1826	NGVD 29 (??/??/92)	293.874 (m)	964.15 (f)	ADJ UNCH	2 0

KY1826  
 KY1826.Superseded values are not recommended for survey control.  
 KY1826  
 KY1826.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 KY1826.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 KY1826

KY1826\_MARKER: DB = BENCH MARK DISK  
 KY1826\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 KY1826\_STAMPING: E 281 1959  
 KY1826\_MARK LOGO: CGS  
 KY1826\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 KY1826\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 KY1826+STABILITY: SURFACE MOTION  
 KY1826\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 KY1826+SATELLITE: SATELLITE OBSERVATIONS - April 21, 2017



KY1826				
KY1826	HISTORY	- Date	Condition	Report By
KY1826	HISTORY	- 1959	MONUMENTED	CGS
KY1826	HISTORY	- 1971	GOOD	OHDT
KY1826	HISTORY	- 1987	GOOD	OHDT
KY1826	HISTORY	- 19980323	GOOD	GCS
KY1826	HISTORY	- 20111028	GOOD	GEOCAC
KY1826	HISTORY	- 20140517	GOOD	FAMM
KY1826	HISTORY	- 20170421	GOOD	WOOLPT

KY1826

KY1826

STATION DESCRIPTION

KY1826

KY1826'DESCRIBED BY COAST AND GEODETIC SURVEY 1959

KY1826'0.6 MI S FROM RITTMAN.

KY1826'ABOUT 0.65 MILE SOUTH ALONG STATE HIGHWAY 94 FROM THE BALTIMORE  
 KY1826'AND OHIO RAILROAD STATION AT RITTMAN, 0.25 MILE SOUTH OF THE  
 KY1826'SOUTH ONE OF TWO CONCRETE BRIDGES, 31 FEET EAST OF THE CENTER  
 KY1826'LINE OF THE HIGHWAY AND AT THE OUTSIDE OF A CURVE WITH TANGENTS  
 KY1826'EXTENDING NORTHEAST AND SOUTH, 94 FEET NORTH OF THE NORTH END OF  
 KY1826'EAST CONCRETE HEAD WALL OF A 24-INCH PIPE CULVERT, 20 1/2 FEET  
 KY1826'SOUTH OF A FENCE CORNER, 2 FEET WEST OF A WIRE FENCE, 23 FEET  
 KY1826'SOUTH OF A TELEPHONE POLE, ABOUT 1 1/2 FEET ABOVE THE LEVEL OF  
 KY1826'THE HIGHWAY, AND SET IN TOP OF A CONCRETE POST PROJECTING 3 INCHES.

KY1826

KY1826

STATION RECOVERY (1971)

KY1826

KY1826'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1971

KY1826'RECOVERED IN GOOD CONDITION.

KY1826

KY1826

STATION RECOVERY (1987)

KY1826

KY1826'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1987 (ROS)

KY1826'RECOVERED IN GOOD CONDITION.

KY1826

KY1826

STATION RECOVERY (1998)

KY1826

KY1826'RECOVERY NOTE BY GEODETIC CONSULTING SERVICES 1998 (KDZ)

KY1826'RECOVERED AS DESCRIBED.

KY1826

KY1826

STATION RECOVERY (2011)

KY1826

KY1826'RECOVERY NOTE BY GEOCACHING 2011 (RLM)

KY1826'RECOVERED IN GOOD CONDITION. REPLACE REFERENCE TO STATE HIGHWAY 94

KY1826'WITH SOUTH MAIN STREET.

KY1826'

KY1826

KY1826

STATION RECOVERY (2014)

KY1826

KY1826'RECOVERY NOTE BY FUGRO AERIAL AND MOBILE MAPPING INC 2014 (MRY)

KY1826'RECOVERED IN GOOD CONDITION.

KY1826

KY1826

STATION RECOVERY (2017)

KY1826

KY1826'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2017

KY1826'RECOVERED IN GOOD CONDITION





\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

LA2517 \*\*\*\*\*

LA2517 DESIGNATION - **E 348**

LA2517 PID - LA2517

LA2517 STATE/COUNTY- OH/SHELBY

LA2517 COUNTRY - US

LA2517 USGS QUAD - BOTKINS (1984)

LA2517

LA2517 \*CURRENT SURVEY CONTROL

LA2517

LA2517\* NAD 83(1986) POSITION- 40 26 10. (N) 084 10 07. (W) SCALED

LA2517\* [NAVD 88](#) ORTHO HEIGHT - 310.371 (meters) 1018.28 (feet) ADJUSTED

LA2517

LA2517 GEOID HEIGHT - -33.490 (meters) GEOID18

LA2517 DYNAMIC HEIGHT - 310.219 (meters) 1017.78 (feet) COMP

LA2517 MODELED GRAVITY - 980,123.9 (mgal) NAVD 88

LA2517

LA2517 VERT ORDER - FIRST CLASS II

LA2517

LA2517.The horizontal coordinates were scaled from a map and have

LA2517.an estimated accuracy of +/- 6 seconds.

LA2517.

LA2517.The orthometric height was determined by differential leveling and

LA2517.adjusted by the NATIONAL GEODETIC SURVEY

LA2517.in January 1994.

LA2517

LA2517.Significant digits in the geoid height do not necessarily reflect accuracy.

LA2517.GEOID18 height accuracy estimate available [here](#).

LA2517

LA2517.Click [here](#) to see if photographs exist for this station.

LA2517

LA2517.The dynamic height is computed by dividing the NAVD 88

LA2517.geopotential number by the normal gravity value computed on the

LA2517.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

LA2517.degrees latitude (g = 980.6199 gals.).

LA2517

LA2517.The modeled gravity was interpolated from observed gravity values.

LA2517

LA2517; North East Units Estimated Accuracy

LA2517;SPC OH N - 86,800. 458,430. MT (+/- 180 meters Scaled)

LA2517

LA2517\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGK401800(NAD 83)

LA2517

LA2517 SUPERSEDED SURVEY CONTROL

LA2517

LA2517.No superseded survey control is available for this station.

LA2517

LA2517\_MARKER: I = METAL ROD

LA2517\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

LA2517\_STAMPING: E 348 1993



LA2517\_MARK LOGO: NGS  
LA2517\_PROJECTION: FLUSH  
LA2517\_MAGNETIC: I = MARKER IS A STEEL ROD  
LA2517\_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD  
LA2517+STABILITY: POSITION/ELEVATION WELL  
LA2517\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
LA2517+SATELLITE: SATELLITE OBSERVATIONS - 1993  
LA2517\_ROD/PIPE-DEPTH: 12.2 meters  
LA2517\_SLEEVE-DEPTH : 3.1 meters  
LA2517  
LA2517 HISTORY - Date Condition Report By  
LA2517 HISTORY - 1993 MONUMENTED NGS  
LA2517  
LA2517 STATION DESCRIPTION  
LA2517  
LA2517'DESCRIBED BY NATIONAL GEODETIC SURVEY 1993  
LA2517'14.2 KM (8.80 MI) NORTHERLY ALONG INTERSTATE HIGHWAY 75 FROM THE  
LA2517'JUNCTION OF STATE HIGHWAY 29 IN SIDNEY (EXIT 93), 308.0 M (1010.5 FT)  
LA2517'SOUTH OF THE CENTER OF STATE HIGHWAY 274 (EXIT 102), 39.8 M (130.6  
LA2517'FT) EAST OF THE CENTERLINE OF THE NORTHBOUND LANES OF THE HIGHWAY,  
LA2517'17.2 M (56.4 FT) SOUTHWEST OF A UTILITY POLE WITH A TRANSFORMER  
LA2517'ATTACHED, 2.0 M (6.6 FT) ABOVE THE LEVEL OF THE HIGHWAY, AND 1.4 M  
LA2517'(4.6 FT) WEST OF A WITNESS POST AND FENCE. NOTE--ACCESS TO THE DATUM  
LA2517'POINT IS THROUGH A 5-INCH LOGO CAP.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MB2974 *****
MB2974 CBN          - This is a Cooperative Base Network Control Station.
MB2974 PACS        - This is a Primary Airport Control Station.
MB2974 DESIGNATION - EXECPORT
MB2974 PID         - MB2974
MB2974 STATE/COUNTY- OH/MAHONING
MB2974 COUNTRY     - US
MB2974 USGS QUAD   - CANFIELD (1979)
MB2974
MB2974                                *CURRENT SURVEY CONTROL
MB2974
MB2974* NAD 83(2011) POSITION- 41 03 34.89880(N) 080 49 49.49557(W) ADJUSTED
MB2974* NAD 83(2011) ELLIP HT- 265.559 (meters) (06/27/12) ADJUSTED
MB2974* NAD 83(2011) EPOCH - 2010.00
MB2974* NAVD 88 ORTHO HEIGHT - 299.43 (meters) 982.4 (feet) GPS OBS
MB2974
MB2974 NAVD 88 orthometric height was determined with geoid model GEOID93
MB2974 GEOID HEIGHT - -33.933 (meters) GEOID93
MB2974 GEOID HEIGHT - -33.841 (meters) GEOID18
MB2974 NAD 83(2011) X - 767,534.035 (meters) COMP
MB2974 NAD 83(2011) Y - -4,754,890.152 (meters) COMP
MB2974 NAD 83(2011) Z - 4,167,598.560 (meters) COMP
MB2974 LAPLACE CORR - -1.82 (seconds) DEFLEC18
MB2974
MB2974 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB2974 Standards:
MB2974          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
MB2974          Horiz Ellip                SD_N   SD_E   SD_h          (unitless)
MB2974 -----
MB2974 NETWORK      1.14    2.33                0.53   0.37   1.19          0.00228953
MB2974 -----
MB2974 Click here for local accuracies and other accuracy information.
MB2974
MB2974
MB2974.This mark is at Youngstown Executive Airport (06G)
MB2974
MB2974.The horizontal coordinates were established by GPS observations
MB2974.and adjusted by the National Geodetic Survey in June 2012.
MB2974
MB2974.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB2974.been affixed to the stable North American tectonic plate. See
MB2974.NA2011 for more information.
MB2974
MB2974.The horizontal coordinates are valid at the epoch date displayed above
MB2974.which is a decimal equivalence of Year/Month/Day.
MB2974
MB2974.The orthometric height was determined by GPS observations and a
MB2974.high-resolution geoid model.
MB2974

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MB2974.GPS derived orthometric heights for airport stations designated as MB2974.PACS or SACS are published to 2 decimal places. This maintains MB2974.centimeter relative accuracy between the PACS and SACS. It does MB2974.not indicate centimeter accuracy relative to other marks which are MB2974.part of the NAVD 88 network.

MB2974

MB2974.Significant digits in the geoid height do not necessarily reflect accuracy.

MB2974.GEOID18 height accuracy estimate available [here](#).

MB2974

MB2974.Click [here](#) to see if photographs exist for this station.

MB2974

MB2974.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MB2974

MB2974.The Laplace correction was computed from DEFLEC18 derived deflections.

MB2974

MB2974.The ellipsoidal height was determined by GPS observations

MB2974.and is referenced to NAD 83.

MB2974

MB2974. The following values were computed from the NAD 83(2011) position.

MB2974

MB2974;		North	East	Units	Scale	Factor	Converg.
MB2974;SPC OH N	-	156,033.191	740,326.884	MT	0.99993915	+1 05	48.6
MB2974;SPC OH N	-	511,918.89	2,428,889.12	sFT	0.99993915	+1 05	48.6
MB2974;UTM 17	-	4,545,397.560	514,249.449	MT	0.99960250	+0 06	41.0

MB2974

MB2974! - Elev Factor x Scale Factor = Combined Factor

MB2974!SPC OH N - 0.99995835 x 0.99993915 = 0.99989750

MB2974!UTM 17 - 0.99995835 x 0.99960250 = 0.99956086

MB2974

MB2974:		Primary Azimuth Mark	Grid Az
MB2974:SPC OH N	-	EXECPORT AZ MK	109 05 44.0
MB2974:UTM 17	-	EXECPORT AZ MK	110 04 51.6

MB2974

MB2974\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF1424945397 (NAD 83)

MB2974

MB2974	PID	Reference Object	Distance	Geod. Az
MB2974				dddmmss.s
MB2974	MB2977	EXECPORT AZ MK	426.969 METERS	1101132.6

MB2974

MB2974

SUPERSEDED SURVEY CONTROL

MB2974

MB2974	NAD 83(2007)-	41 03 34.89896(N)	080 49 49.49631(W)	AD(2002.00)	0
MB2974	ELLIP H (02/10/07)	265.573 (m)		GP(2002.00)	
MB2974	ELLIP H (03/08/05)	265.582 (m)		GP( )	4 2
MB2974	NAD 83(1995)-	41 03 34.89866(N)	080 49 49.49627(W)	AD( )	B
MB2974	ELLIP H (08/20/96)	265.576 (m)		GP( )	4 2
MB2974	NAD 83(1986)-	41 03 34.90654(N)	080 49 49.50473(W)	AD( )	3
MB2974	NAD 27	- 41 03 34.68735(N)	080 49 50.18072(W)	AD( )	3
MB2974	NGVD 29 (02/23/89)	299.66 (m)	RAPSU86 model used	GPS OBS	

MB2974

MB2974.Superseded values are not recommended for survey control.

MB2974

MB2974.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.



MB2974. See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB2974

MB2974\_MARKER: DH = HORIZONTAL CONTROL DISK

MB2974\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MB2974\_STAMPING: EXECPORT 1986

MB2974\_MARK LOGO: NGS

MB2974\_MAGNETIC: N = NO MAGNETIC MATERIAL

MB2974\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MB2974+STABILITY: SURFACE MOTION

MB2974\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB2974+SATELLITE: SATELLITE OBSERVATIONS - June 12, 2006

MB2974

MB2974	HISTORY	- Date	Condition	Report By
MB2974	HISTORY	- 1986	MONUMENTED	NGS
MB2974	HISTORY	- 19871027	GOOD	
MB2974	HISTORY	- 19880913	GOOD	NGS
MB2974	HISTORY	- 19901027	GOOD	NGS
MB2974	HISTORY	- 19950726	GOOD	NGS
MB2974	HISTORY	- 20060612	GOOD	GEOCAC

MB2974

STATION DESCRIPTION

MB2974

MB2974'DESCRIBED BY NATIONAL GEODETIC SURVEY 1986

MB2974'STATION IS ABOUT 10 MILES WEST OF YOUNGSTOWN, 3 MILES SOUTHEAST OF

MB2974'NORTH JACKSON, AT THE YOUNGSTOWN EXECUTIVE AIRPORT, AT THE JUNCTION

MB2974'OF THE MAIN RAM AND THE RUNWAY. OWNERSHIP CITY OF YOUNGSTOWN, C/O

MB2974'AIRPORT MANAGER JOHN IRWIN, 9579 GIBSON ROAD, NORTH JACKSON OH 44451

MB2974'PHONE 216-538-2528

MB2974'TO REACH FROM THE JUNCTION OF THE MAIN STREET AND STATE HIGHWAY 45 IN

MB2974'NORTH JACKSON (JUST NORTH OF THE POST OFFICE), GO SOUTH ON HIGHWAY 45

MB2974'FOR 2.1 MILES TO A PAVED ROAD LEFT. TURN LEFT, EAST, ON KIRK ROAD

MB2974'FOR 0.7 MILES TO AN OFFSET CROSSROAD. TURN RIGHT, SOUTH FOR 0.5 MILES

MB2974'TO A PAVED ROAD RIGHT. TURN RIGHT, SOUTH ON ROAD, THEN RAMP FOR 0.2

MB2974'MILES TO THE RUNWAY AND STATION ON LEFT. TO REACH THE AZIMUTH MARK

MB2974'FROM STATION, GO SOUTHEAST ON NARROW PAVED LANE FOR 0.3 MILES TO A

MB2974'CURVE JUST BEFORE RUNWAY AND MARK ON THE RIGHT.

MB2974'STATION MARKS ARE STANDARD NGS STATION DISKS STAMPED --EXECPORT

MB2974'1986--. THE SURFACE DISK IS SET IN TOP OF A 25 CM ROUND CONCRETE

MB2974'POST PROJECTION 1 CM. IT IS 24.3 METERS NORTHEAST OF THE RUNWAY

MB2974'CENTER, 17.7 METERS SOUTHEAST OF THE RAMP CENTER, 5.7 METERS EAST

MB2974'NORTHEAST OF A FIBERGLASS WITNESS POST, 14.9 METERS SOUTHWEST OF THE

MB2974'TARMAC EDGE, AND 5.8 METERS WEST OF SOUTHWEST CORNER OF A MACADAM

MB2974'AIRCRAFT PARKING APRON. THE SUBSURFACE DISK IS SET IN THE TOP OF AN

MB2974'IRREGULAR CONCRETE MASS ABOUT 1.2 METERS BELOW GROUND.

MB2974'DESCRIBED BY B.L. LAMBERT. TYPED BY JAMES MALONEY 9/05/87.

MB2974

STATION RECOVERY (1987)

MB2974

MB2974'RECOVERED 1987

MB2974'RECOVERED IN GOOD CONDITION.

MB2974

STATION RECOVERY (1988)

MB2974

MB2974'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1988

MB2974'RECOVERED IN GOOD CONDITION.



MB2974

MB2974

STATION RECOVERY (1990)

MB2974

MB2974'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1990

MB2974'THE STATION IS LOCATED ABOUT 4.82 KM (3.00 MI) SOUTHEAST OF NORTH  
MB2974'JACKSON, AT THE YOUNGSTOWN EXECUTIVE AIRPORT AND AT THE JUNCTION OF  
MB2974'THE TAXIWAY AND RUNWAY. OWNERSHIP--CITY OF YOUNGSTOWN, C/O LEON  
MB2974'SYREK, AIRPORT MANAGER, 9579 GIBSON ROAD, NORTH JACKSON, OH 44451,  
MB2974'PHONE (216)538-3456.

MB2974'TO REACH THE STATION FROM THE WESTBOUND LANE OF INTERSTATE HIGHWAY 76  
MB2974'AND BAILEY ROAD (EXIT 57), LOCATED ABOUT 3.54 KM (2.20 MI) WEST OF  
MB2974'NORTH JACKSON, GO SOUTH ON BAILEY ROAD FOR 1.05 KM (0.65 MI) TO THE  
MB2974'JUNCTION OF MAHONING ROAD, TURN LEFT, EAST, ON MAHONING ROAD FOR 2.57  
MB2974'KM (1.60 MI) TO THE JUNCTION OF STATE HIGHWAY 45, TURN RIGHT, SOUTH,  
MB2974'ON STATE HIGHWAY 45 FOR 3.38 KM (2.10 MI) TO THE JUNCTION OF KIRK  
MB2974'ROAD ON THE LEFT, TURN LEFT, EAST, ON KIRK ROAD FOR 1.13 KM  
MB2974'(0.70 MI) TO THE JUNCTION OF GAULT ROAD ON THE RIGHT, TURN RIGHT,  
MB2974'SOUTH, ON GAULT ROAD FOR 0.88 KM (0.55 MI) TO THE JUNCTION OF GIBSON  
MB2974'ROAD ON THE LEFT, TURN LEFT, EAST, ON GIBSON ROAD FOR 1.20 KM  
MB2974'(0.75 MI) TO THE AIRPORT ENTRANCE ROAD ON THE RIGHT, TURN RIGHT,  
MB2974'SOUTH, ON THE ENTRANCE ROAD FOR 0.16 KM (0.10 MI) TO THE APRON AND  
MB2974'THE AIRPORT OFFICE ON THE LEFT, CONTINUE AHEAD TO THE JUNCTION OF THE  
MB2974'RUNWAY AND THE STATION ON THE LEFT.

MB2974'THE STATION IS ABOUT FLUSH WITH THE GROUND LOCATED 24.3 M (79.7 FT)  
MB2974'NORTHEAST OF THE CENTER OF THE RUNWAY, 17.7 M (58.1 FT) SOUTHEAST OF  
MB2974'THE CENTER OF THE TAXIWAY, 14.0 M (45.9 FT) NORTH OF THE NORTH EDGE  
MB2974'OF THE APRON AND 5.7 M (18.7 FT) EAST OF A FIBERGLASS WITNESS POST.

MB2974

MB2974

STATION RECOVERY (1995)

MB2974

MB2974'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

MB2974'NOTE--THIS IS THE PAC STATION. THE STATION IS LOCATED ABOUT 16 KM  
MB2974'(9.95 MI) WEST OF YOUNGSTOWN, 6 KM (3.70 MI) SOUTH OF INTERSTATE  
MB2974'HIGHWAY 76, 5 KM (3.10 MI) SOUTHEAST OF NORTH JACKSON AT THE  
MB2974'YOUNGSTOWN EXECUTIVE AIRPORT, ADJACENT TO THE APRON, IN THE NORTHEAST  
MB2974'QUADRANT OF THE JUNCTION OF THE RUNWAY AND A CONNECTOR TAXI AT  
MB2974'MIDFIELD. OWNERSHIP--CITY OF YOUNGSTOWN. AIRPORT MANAGER IS LEON  
MB2974'SYREK, 9579 GIBSON ROAD, NORTH JACKSON, OH. 44451. PHONE  
MB2974'330-538-3456. TO REACH FROM THE JUNCTION OF INTERSTATE HIGHWAY 76 AND  
MB2974'BAILEY ROAD (EXIT 57) , ABOUT 4 KM (2.50 MI) WEST OF NORTH JACKSON, GO  
MB2974'SOUTH ON BAILEY ROAD FOR 1.05 KM (0.65 MI) TO A PAVED CROSSROAD  
MB2974'(MAHONING ROAD) . TURN LEFT, EAST, ON MAHONING ROAD FOR 2.57 KM (1.60  
MB2974'MI) TO THE JUNCTION OF STATE HIGHWAY 45. TURN RIGHT, SOUTH, ON  
MB2974'HIGHWAY 45 FOR 3.38 KM (2.10 MI) TO THE JUNCTION OF KIRK ROAD ON THE  
MB2974'LEFT. TURN LEFT, EAST, ON KIRK ROAD FOR 1.13 KM (0.70 MI) TO THE  
MB2974'JUNCTION OF GAULT ROAD ON THE RIGHT. TURN RIGHT, SOUTH, ON GAULT ROAD  
MB2974'FOR 0.88 KM (0.55 MI) TO THE JUNCTION OF GIBSON ROAD ON THE LEFT.  
MB2974'TURN LEFT, EAST, ON GIBSON ROAD FOR 1.2 KM (0.75 MI) TO THE AIRPORT  
MB2974'ENTRANCE ROAD ON THE RIGHT. TURN RIGHT, SOUTH, ON THE ENTRANCE ROAD  
MB2974'FOR 0.16 KM (0.10 MI) TO THE APRON AND AIRPORT OFFICE ON THE LEFT.  
MB2974'CONTINUE AHEAD, SOUTHWEST, ACROSS THE APRON AND ALONG TAXI FOR 0.16 KM  
MB2974'(0.10 MI) TO THE JUNCTION OF THE RUNWAY AND THE STATION ON THE LEFT.  
MB2974'THE STATION IS SET IN THE TOP OF A 30 CM CONCRETE POST SET FLUSH WITH  
MB2974'THE GROUND. IT IS 24.3 M (79.7 FT) NORTHEAST OF THE CENTER OF THE  
MB2974'RUNWAY, 17.7 M (58.1 FT) SOUTHEAST OF THE CENTER OF THE TAXI, 14.0 M



MB2974' (45.9 FT) SOUTHWEST OF THE SOUTHWEST EDGE OF THE APRON, AND 5.7 M  
MB2974' (18.7 FT) EAST OF A FIBERGLASS WITNESS POST.

MB2974

MB2974

STATION RECOVERY (2006)

MB2974

MB2974'RECOVERY NOTE BY GEOCACHING 2006 (RLM)

MB2974'THE AIRPORT IS NOT IN USE AND THE LAND IS FOR SALE.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB0924 \*\*\*\*\*

MB0924 DESIGNATION - **F 152**

MB0924 PID - MB0924

MB0924 STATE/COUNTY- OH/TRUMBULL

MB0924 COUNTRY - US

MB0924 USGS QUAD - SHARON WEST (1994)

MB0924

MB0924 \*CURRENT SURVEY CONTROL

MB0924

MB0924\* NAD 83(1986) POSITION- 41 14 01.38 (N) 080 31 20.84 (W) HD\_HELD1

MB0924\* [NAVD 88](#) ORTHO HEIGHT - 331.500 (meters) 1087.60 (feet) ADJUSTED

MB0924

MB0924 GEOID HEIGHT - -33.883 (meters) GEOID18

MB0924 DYNAMIC HEIGHT - 331.354 (meters) 1087.12 (feet) COMP

MB0924 MODELED GRAVITY - 980,171.9 (mgal) NAVD 88

MB0924

MB0924 VERT ORDER - SECOND CLASS 0

MB0924

MB0924.The horizontal coordinates were determined by differentially corrected  
 MB0924.hand held GPS observations or other comparable positioning techniques  
 MB0924.and have an estimated accuracy of +/- 3 meters.

MB0924.

MB0924.The orthometric height was determined by differential leveling and  
 MB0924.adjusted by the NATIONAL GEODETIC SURVEY

MB0924.in June 1991.

MB0924

MB0924.Significant digits in the geoid height do not necessarily reflect accuracy.

MB0924.GEOID18 height accuracy estimate available [here](#).

MB0924

MB0924.Click [here](#) to see if photographs exist for this station.

MB0924

MB0924.The dynamic height is computed by dividing the NAVD 88

MB0924.geopotential number by the normal gravity value computed on the

MB0924.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB0924.degrees latitude (g = 980.6199 gals.).

MB0924

MB0924.The modeled gravity was interpolated from observed gravity values.

MB0924

MB0924;	North	East	Units	Estimated Accuracy
MB0924;SPC OH N	- 175,894.6	765,768.4	MT	(+/- 3 meters HH1 GPS)

MB0924

MB0924\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF4002064812 (NAD 83)

MB0924

MB0924 SUPERSEDED SURVEY CONTROL

MB0924

MB0924 NGVD 29 (??/??/92) 331.665 (m) 1088.14 (f) ADJ UNCH 2 0

MB0924

MB0924.Superseded values are not recommended for survey control.

MB0924



MB0924.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB0924.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB0924

MB0924\_MARKER: DB = BENCH MARK DISK

MB0924\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MB0924\_STAMPING: F 152 1950

MB0924\_MARK LOGO: CGS

MB0924\_MAGNETIC: O = OTHER; SEE DESCRIPTION

MB0924\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MB0924+STABILITY: SURFACE MOTION

MB0924\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB0924+SATELLITE: SATELLITE OBSERVATIONS - March 14, 2006

MB0924

MB0924	HISTORY	- Date	Condition	Report By
MB0924	HISTORY	- 1950	MONUMENTED	CGS
MB0924	HISTORY	- 19910925	GOOD	OHDT
MB0924	HISTORY	- 20060314	GOOD	GEOCAC

MB0924

MB0924 STATION DESCRIPTION

MB0924

MB0924'DESCRIBED BY COAST AND GEODETIC SURVEY 1950

MB0924'0.4 MI NW FROM SHARON.

MB0924'ABOUT 0.35 MILE NORTHWEST ALONG STATE STREET FROM THE NEW YORK

MB0924'CENTRAL RAILROAD STATION AT SHARON, THENCE ABOUT 0.2 MILE

MB0924'NORTHWEST ALONG STATE HIGHWAY 82, ABOUT 70 YARDS NORTHWEST OF THE

MB0924'TOP OF GRADE, 81.5 FEET NORTHEAST OF AND ACROSS THE NORTHWEST

MB0924'CORNER OF THE CONTI AND LOMBARDO GROCERY STORE, 19.5 FEET

MB0924'NORTHWEST OF THE NORTHWEST END OF A DRAIN, 22 FEET NORTHEAST OF

MB0924'THE CENTERLINE OF THE HIGHWAY. IT IS 2 FEET SOUTHEAST OF A

MB0924'WHITE WITNESS POST AND ABOUT 1 FOOT ABOVE THE LEVEL OF THE

MB0924'HIGHWAY. A STANDARD DISK SET IN THE TOP OF A CONCRETE POST AND

MB0924'ABOUT FLUSH WITH THE LEVEL OF THE GROUND.

MB0924

MB0924 STATION RECOVERY (1991)

MB0924

MB0924'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1991 (PM)

MB0924'RECOVERED IN GOOD CONDITION.

MB0924

MB0924 STATION RECOVERY (2006)

MB0924

MB0924'RECOVERY NOTE BY GEOCACHING 2006 (RLM)

MB0924'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB0924 \*\*\*\*\*

MB0924 DESIGNATION - **F 152**

MB0924 PID - MB0924

MB0924 STATE/COUNTY- OH/TRUMBULL

MB0924 COUNTRY - US

MB0924 USGS QUAD - SHARON WEST (1994)

MB0924

MB0924 \*CURRENT SURVEY CONTROL

MB0924

MB0924\* NAD 83(1986) POSITION- 41 14 01.38 (N) 080 31 20.84 (W) HD\_HELD1

MB0924\* [NAVD 88](#) ORTHO HEIGHT - 331.500 (meters) 1087.60 (feet) ADJUSTED

MB0924

MB0924 GEOID HEIGHT - -33.883 (meters) GEOID18

MB0924 DYNAMIC HEIGHT - 331.354 (meters) 1087.12 (feet) COMP

MB0924 MODELED GRAVITY - 980,171.9 (mgal) NAVD 88

MB0924

MB0924 VERT ORDER - SECOND CLASS 0

MB0924

MB0924.The horizontal coordinates were determined by differentially corrected  
MB0924.hand held GPS observations or other comparable positioning techniques  
MB0924.and have an estimated accuracy of +/- 3 meters.

MB0924.

MB0924.The orthometric height was determined by differential leveling and  
MB0924.adjusted by the NATIONAL GEODETIC SURVEY

MB0924.in June 1991.

MB0924

MB0924.Significant digits in the geoid height do not necessarily reflect accuracy.  
MB0924.GEOID18 height accuracy estimate available [here](#).

MB0924

MB0924.Click [here](#) to see if photographs exist for this station.

MB0924

MB0924.The dynamic height is computed by dividing the NAVD 88  
MB0924.geopotential number by the normal gravity value computed on the  
MB0924.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
MB0924.degrees latitude (g = 980.6199 gals.).

MB0924

MB0924.The modeled gravity was interpolated from observed gravity values.

MB0924

MB0924;	North	East	Units	Estimated Accuracy
MB0924;SPC OH N -	175,894.6	765,768.4	MT	(+/- 3 meters HH1 GPS)

MB0924

MB0924\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF4002064812 (NAD 83)

MB0924

MB0924 SUPERSEDED SURVEY CONTROL

MB0924

MB0924 NGVD 29 (??/??/92) 331.665 (m) 1088.14 (f) ADJ UNCH 2 0

MB0924

MB0924.Superseded values are not recommended for survey control.

MB0924



MB0924.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB0924.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB0924

MB0924\_MARKER: DB = BENCH MARK DISK

MB0924\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MB0924\_STAMPING: F 152 1950

MB0924\_MARK LOGO: CGS

MB0924\_MAGNETIC: O = OTHER; SEE DESCRIPTION

MB0924\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MB0924+STABILITY: SURFACE MOTION

MB0924\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB0924+SATELLITE: SATELLITE OBSERVATIONS - March 14, 2006

MB0924

MB0924	HISTORY	- Date	Condition	Report By
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MB0924	HISTORY	- 1950	MONUMENTED	CGS
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MB0924	HISTORY	- 19910925	GOOD	OHDT
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MB0924	HISTORY	- 20060314	GOOD	GEOCAC
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MB0924

MB0924 STATION DESCRIPTION

MB0924

MB0924'DESCRIBED BY COAST AND GEODETIC SURVEY 1950

MB0924'0.4 MI NW FROM SHARON.

MB0924'ABOUT 0.35 MILE NORTHWEST ALONG STATE STREET FROM THE NEW YORK

MB0924'CENTRAL RAILROAD STATION AT SHARON, THENCE ABOUT 0.2 MILE

MB0924'NORTHWEST ALONG STATE HIGHWAY 82, ABOUT 70 YARDS NORTHWEST OF THE

MB0924'TOP OF GRADE, 81.5 FEET NORTHEAST OF AND ACROSS THE NORTHWEST

MB0924'CORNER OF THE CONTI AND LOMBARDO GROCERY STORE, 19.5 FEET

MB0924'NORTHWEST OF THE NORTHWEST END OF A DRAIN, 22 FEET NORTHEAST OF

MB0924'THE CENTERLINE OF THE HIGHWAY. IT IS 2 FEET SOUTHEAST OF A

MB0924'WHITE WITNESS POST AND ABOUT 1 FOOT ABOVE THE LEVEL OF THE

MB0924'HIGHWAY. A STANDARD DISK SET IN THE TOP OF A CONCRETE POST AND

MB0924'ABOUT FLUSH WITH THE LEVEL OF THE GROUND.

MB0924

MB0924 STATION RECOVERY (1991)

MB0924

MB0924'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1991 (PM)

MB0924'RECOVERED IN GOOD CONDITION.

MB0924

MB0924 STATION RECOVERY (2006)

MB0924

MB0924'RECOVERY NOTE BY GEOCACHING 2006 (RLM)

MB0924'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

AB5533 \*\*\*\*\*

AB5533 DESIGNATION - **FULTON NO 04**

AB5533 PID - AB5533

AB5533 STATE/COUNTY- OH/FULTON

AB5533 COUNTRY - US

AB5533 USGS QUAD - NAPOLEON WEST (1971)

AB5533

AB5533 \*CURRENT SURVEY CONTROL

AB5533

AB5533\* NAD 83(2011) POSITION- 41 29 10.06781(N) 084 10 22.70961(W) ADJUSTED

AB5533\* NAD 83(2011) ELLIP HT- 186.434 (meters) (06/27/12) ADJUSTED

AB5533\* NAD 83(2011) EPOCH - 2010.00

AB5533\* [NAVD 88](#) ORTHO HEIGHT - 221.4 (meters) 726. (feet) GPS OBS

AB5533

AB5533 NAVD 88 orthometric height was determined with geoid model GEOID93

AB5533 GEOID HEIGHT - -34.933 (meters) GEOID93

AB5533 GEOID HEIGHT - -34.996 (meters) GEOID18

AB5533 NAD 83(2011) X - 485,813.793 (meters) COMP

AB5533 NAD 83(2011) Y - -4,760,413.194 (meters) COMP

AB5533 NAD 83(2011) Z - 4,203,141.903 (meters) COMP

AB5533 LAPLACE CORR - -5.41 (seconds) DEFLEC18

AB5533

AB5533 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	1.00	1.27	0.45	0.36	0.65	0.08364531

AB5533

AB5533 -----

AB5533

AB5533 Click [here](#) for local accuracies and other accuracy information.

AB5533

AB5533

AB5533.The horizontal coordinates were established by GPS observations

AB5533.and adjusted by the National Geodetic Survey in June 2012.

AB5533

AB5533.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

AB5533.been affixed to the stable North American tectonic plate. See

AB5533.[NA2011](#) for more information.

AB5533

AB5533.The horizontal coordinates are valid at the epoch date displayed above

AB5533.which is a decimal equivalence of Year/Month/Day.

AB5533

AB5533.The orthometric height was determined by GPS observations and a

AB5533.high-resolution geoid model.

AB5533

AB5533.Significant digits in the geoid height do not necessarily reflect accuracy.

AB5533.GEOID18 height accuracy estimate available [here](#).

AB5533

AB5533.Click [here](#) to see if photographs exist for this station.



AB5533  
 AB5533.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 AB5533  
 AB5533.The Laplace correction was computed from DEFLEC18 derived deflections.  
 AB5533  
 AB5533.The ellipsoidal height was determined by GPS observations  
 AB5533.and is referenced to NAD 83.

AB5533  
 AB5533. The following values were computed from the NAD 83(2011) position.  
 AB5533

AB5533;		North	East	Units	Scale	Factor	Converg.
AB5533;SPC OH N	-	203,387.086	460,296.557	MT	0.99996576	-1 05	56.6
AB5533;SPC OH N	-	667,279.13	1,510,156.29	sFT	0.99996576	-1 05	56.6
AB5533;UTM 16	-	4,596,583.145	736,013.572	MT	1.00028555	+1 52	24.9

AB5533  
 AB5533!  
 AB5533!SPC OH N  
 AB5533!UTM 16

-	Elev Factor	x	Scale Factor	=	Combined Factor
-	0.99997076	x	0.99996576	=	0.99993652
-	0.99997076	x	1.00028555	=	1.00025630

AB5533\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL3601396583 (NAD 83)

AB5533  
 AB5533 SUPERSEDED SURVEY CONTROL

AB5533	NAD 83(2007)-	41 29 10.06790(N)	084 10 22.71021(W)	AD(2002.00)	0
AB5533	ELLIP H (02/10/07)	186.458 (m)		GP(2002.00)	
AB5533	ELLIP H (10/07/05)	186.460 (m)		GP( )	4 1
AB5533	NAD 83(1995)-	41 29 10.06769(N)	084 10 22.70984(W)	AD( )	1
AB5533	ELLIP H (04/01/98)	186.512 (m)		GP( )	4 1
AB5533	NAD 83(1994)-	41 29 10.06762(N)	084 10 22.70970(W)	AD( )	1
AB5533	NAD 83(1986)-	41 29 10.07593(N)	084 10 22.72264(W)	AD( )	1

AB5533  
 AB5533.Superseded values are not recommended for survey control.  
 AB5533  
 AB5533.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 AB5533.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 AB5533

AB5533\_MARKER: A = ALUMINUM MARKER  
 AB5533\_SETTING: 9 = SET IN PREFABRICATED CONCRETE POST IMBEDDED IN GROUND  
 AB5533\_STAMPING: FULTON NO. 4 1994  
 AB5533\_MARK LOGO: FULCOE  
 AB5533\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT  
 AB5533\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 AB5533+STABILITY: SURFACE MOTION  
 AB5533\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 AB5533+SATELLITE: SATELLITE OBSERVATIONS - 1994

AB5533	HISTORY	- Date	Condition	Report By
AB5533	HISTORY	- 1994	MONUMENTED	FULCOE

AB5533  
 AB5533 STATION DESCRIPTION  
 AB5533  
 AB5533'DESCRIBED BY FULTON COUNTY ENGINEERS 1994 (CS)  
 AB5533'STATION IS A COMMON SECTION CORNER OF SECTIONS 9 AND 10 OF T 6 N, R 6  
 AB5533'E IN CLINTON TWP., FULTON COUNTY, OHIO LOCATED AT THE INTERSECTION OF  
 AB5533'CENTERLINES OF COUNTY ROADS A AND 16. STATION IS AN ALUMINUM BERNTSEN



AB5533'TUBE WITH LABELED CAP ENCASED IN A 15 IN. DIA. CONCRETE, COLUMN 48 IN.  
AB5533'LONG EXTENDING TO A DEPTH OF 60 IN. BELOW THE ROAD SURFACE, CAP AND  
AB5533'COLUMN ARE TOPPED BY A 12 IN. DEEP CAST IRON NEENAH ADJUSTABLE  
AB5533'MONUMENT BOX, WITH REMOVABLE LID.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 20, 2019

MC0747 \*\*\*\*\*

MC0747 DESIGNATION - **G 18**

MC0747 PID - MC0747

MC0747 STATE/COUNTY- OH/LUCAS

MC0747 COUNTRY - US

MC0747 USGS QUAD - WHITEHOUSE (1980)

MC0747

MC0747 \*CURRENT SURVEY CONTROL

MC0747

MC0747\* NAD 83(2011) POSITION- 41 35 45.16620(N) 083 50 40.66383(W) ADJUSTED

MC0747\* NAD 83(2011) ELLIP HT- 169.188 (meters) (06/27/12) ADJUSTED

MC0747\* NAD 83(2011) EPOCH - 2010.00

MC0747\* [NAVD 88](#) ORTHO HEIGHT - 204.520 (meters) 671.00 (feet) ADJUSTED

MC0747

MC0747 GEOID HEIGHT - -35.317 (meters) GEOID18

MC0747 NAD 83(2011) X - 512,218.111 (meters) COMP

MC0747 NAD 83(2011) Y - -4,749,501.140 (meters) COMP

MC0747 NAD 83(2011) Z - 4,212,254.157 (meters) COMP

MC0747 LAPLACE CORR - -0.02 (seconds) DEFLEC18

MC0747 DYNAMIC HEIGHT - 204.437 (meters) 670.72 (feet) COMP

MC0747 MODELED GRAVITY - 980,214.2 (mgal) NAVD 88

MC0747

MC0747 VERT ORDER - SECOND CLASS 0

MC0747

MC0747 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MC0747 Standards:

MC0747 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

MC0747 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

MC0747 -----

MC0747 NETWORK 1.91 2.29 0.80 0.76 1.17 -0.11122290

MC0747 -----

MC0747 Click [here](#) for local accuracies and other accuracy information.

MC0747

MC0747

MC0747.The horizontal coordinates were established by GPS observations

MC0747.and adjusted by the National Geodetic Survey in June 2012.

MC0747

MC0747.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MC0747.been affixed to the stable North American tectonic plate. See

MC0747.[NA2011](#) for more information.

MC0747

MC0747.The horizontal coordinates are valid at the epoch date displayed above

MC0747.which is a decimal equivalence of Year/Month/Day.

MC0747

MC0747.The orthometric height was determined by differential leveling and

MC0747.adjusted by the NATIONAL GEODETIC SURVEY

MC0747.in June 1991.

MC0747

MC0747.WARNING-Repeat measurements at this control monument indicate possible





MC0747.vertical movement.

MC0747

MC0747.Significant digits in the geoid height do not necessarily reflect accuracy.

MC0747.GEOID18 height accuracy estimate available [here](#).

MC0747

MC0747.Click [here](#) to see if photographs exist for this station.

MC0747

MC0747.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC0747

MC0747.The Laplace correction was computed from DEFLEC18 derived deflections.

MC0747

MC0747.The ellipsoidal height was determined by GPS observations

MC0747.and is referenced to NAD 83.

MC0747

MC0747.The dynamic height is computed by dividing the NAVD 88

MC0747.geopotential number by the normal gravity value computed on the

MC0747.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC0747.degrees latitude (g = 980.6199 gals.).

MC0747

MC0747.The modeled gravity was interpolated from observed gravity values.

MC0747

MC0747. The following values were computed from the NAD 83(2011) position.

MC0747

MC0747;		North	East	Units	Scale Factor	Converg.
MC0747;SPC OH N	-	215,100.232	487,900.900	MT	0.99998158	-0 53 00.1
MC0747;SPC OH N	-	705,708.01	1,600,721.54	sFT	0.99998158	-0 53 00.1
MC0747;UTM 17	-	4,608,817.598	262,918.192	MT	1.00029175	-1 53 21.7
MC0747!	-	Elev Factor	x Scale Factor	=	Combined Factor	
MC0747!SPC OH N	-	0.99997346	x 0.99998158	=	0.99995504	
MC0747!UTM 17	-	0.99997346	x 1.00029175	=	1.00026521	

MC0747

MC0747\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKG6291808817(NAD 83)

MC0747

MC0747 SUPERSEDED SURVEY CONTROL

MC0747

MC0747	NAD 83(2007)-	41 35 45.16643(N)	083 50 40.66474(W)	AD(2002.00)	0
MC0747	ELLIP H (02/10/07)	169.208 (m)		GP(2002.00)	
MC0747	ELLIP H (10/07/05)	169.222 (m)		GP( )	4 1
MC0747	NAD 83(1995)-	41 35 45.16617(N)	083 50 40.66434(W)	AD( )	1
MC0747	ELLIP H (04/01/98)	169.271 (m)		GP( )	4 1
MC0747	NAD 83(1994)-	41 35 45.16609(N)	083 50 40.66421(W)	AD( )	1
MC0747	NAD 83(1986)-	41 35 45.17609(N)	083 50 40.67734(W)	AD( )	1
MC0747	NAVD 88	204.52 (m)	671.0 (f)	LEVELING	3
MC0747	NAVD 88 (09/14/94)	204.4 (m)	GEOID93 model used	GPS OBS	
MC0747	NGVD 29 (??/??/92)	204.710 (m)	671.62 (f)	ADJ UNCH	2 0

MC0747

MC0747.Superseded values are not recommended for survey control.

MC0747

MC0747.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC0747.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC0747

MC0747\_MARKER: DB = BENCH MARK DISK

MC0747\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MC0747\_STAMPING: G 18 1934



MC0747\_MARK LOGO: CGS  
 MC0747\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 MC0747\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 MC0747+STABILITY: SURFACE MOTION  
 MC0747\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 MC0747+SATELLITE: SATELLITE OBSERVATIONS - March 19, 2014

MC0747	HISTORY	- Date	Condition	Report By
MC0747	HISTORY	- 1934	MONUMENTED	CGS
MC0747	HISTORY	- 1955	GOOD	CGS
MC0747	HISTORY	- 19921204	GOOD	PLSO
MC0747	HISTORY	- 19930115	GOOD	
MC0747	HISTORY	- 19960130	GOOD	WOOLPT
MC0747	HISTORY	- 20140319	GOOD	INDIV

MC0747

MC0747 STATION DESCRIPTION

MC0747

MC0747'DESCRIBED BY COAST AND GEODETIC SURVEY 1955  
 MC0747'2.4 MI E FROM SWANTON.  
 MC0747'IN LUCAS COUNTY, 2.4 MILES EAST ALONG THE NEW YORK CENTRAL  
 MC0747'RAILROAD FROM THE STATION AT SWANTON, FULTON COUNTY, AT A  
 MC0747'ROAD CROSSING, 40 FEET WEST OF THE CENTERLINE OF WILKINS ROAD,  
 MC0747'34.7 FEET SOUTH OF THE SOUTH RAIL, 5.4 FEET NORTH OF A WIRE  
 MC0747'FENCE, AND ABOUT 3 FEET LOWER THAN THE TOP OF THE RAIL. A STANDARD  
 MC0747'DISK, STAMPED G 18 1934 AND SET IN THE TOP OF A CONCRETE POST.

MC0747

MC0747 STATION RECOVERY (1992)

MC0747

MC0747'RECOVERY NOTE BY LAND SURV OF OH 1992  
 MC0747'THE STATION IS LOCATED IN LUCAS COUNTY ABOUT 10 KM (6.20 MI)  
 MC0747'NORTH-NORTHWEST OF WHITEHOUSE, 4 KM (2.50 MI) EAST-NORTHEAST OF  
 MC0747'SWANTON, 0.5 KM (0.30 MI) SOUTH OF THE OHIO TURNPIKE, AND IN THE  
 MC0747'SOUTHWEST ANGLE OF THE JUNCTION OF WILKINS ROAD AND THE RAILROAD  
 MC0747'(CONRAIL).  
 MC0747'TO REACH FROM THE JUNCTION OF US HIGHWAY ALTERNATE 20 AND STATE ROUTE  
 MC0747'64, 1.5 KM (0.95 MI) EAST OF SWANTON, GO EAST ON HIGHWAY 20 FOR 2.5  
 MC0747'KM (1.55 MI) TO A ROAD LEFT, TURN LEFT AND GO NORTH FOR 1.3 KM  
 MC0747'(0.80 MI) ON WILKINS ROAD TO A RAILROAD CROSSING AND THE STATION ON  
 MC0747'THE LEFT.  
 MC0747'THE DISK IS SET IN A 0.10 M (0.33 FT) SQUARE CONCRETE POST RECESSED  
 MC0747'0.15 M (0.49 FT) , 12.2 M (40.0 FT) WEST OF THE CENTER OF WILKINS  
 MC0747'ROAD, 5.2 M (17.1 FT) WEST NORTHWEST OF A UTILITY POLE WITH ONE  
 MC0747'CROSSBAR, 4.6 M (15.1 FT) SOUTH OF THE SOUTH SIDE OF A METAL UTILITY  
 MC0747'BUILDING 1.8 M (5.9 FT) TALL, 1.3 M (4.3 FT) SOUTH OF THE BASE OF A  
 MC0747'1.0 M (3.3 FT) HIGH RETAINING WALL, 1.6 M (5.2 FT) NORTH OF A WIRE  
 MC0747'FENCE, 1.4 M (4.6 FT) SOUTHWEST OF A UTILITY POLE WITH THREE  
 MC0747'CROSSBARS, 0.15 M (0.49 FT) EAST OF A FIBERGLASS WITNESS POST, AND  
 MC0747'1.0 M (3.3 FT) BELOW THE TRACKS.

MC0747

MC0747 STATION RECOVERY (1993)

MC0747

MC0747'RECOVERED 1993  
 MC0747'RECOVERED IN GOOD CONDITION.

MC0747

MC0747 STATION RECOVERY (1996)



MC0747  
MC0747'RECOVERY NOTE BY WOOLPERT CONSULTANTS 1996 (BS)  
MC0747'RECOVERED AS DESCRIBED.  
MC0747  
MC0747 STATION RECOVERY (2014)  
MC0747  
MC0747'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2014 (DJP)  
MC0747'RECOVERED AS DESCRIBED. SHARED ON OPUS.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = JANUARY 27, 2020
KZ1049 *****
KZ1049 DESIGNATION - G 249
KZ1049 PID - KZ1049
KZ1049 STATE/COUNTY- OH/RICHLAND
KZ1049 COUNTRY - US
KZ1049 USGS QUAD - SHELBY (2016)
KZ1049
KZ1049 *CURRENT SURVEY CONTROL
KZ1049
KZ1049* NAD 83(2011) POSITION- 40 52 38.94952(N) 082 41 45.67663(W) ADJUSTED
KZ1049* NAD 83(2011) ELLIP HT- 307.348 (meters) (06/27/12) ADJUSTED
KZ1049* NAD 83(2011) EPOCH - 2010.00
KZ1049* NAVD 88 ORTHO HEIGHT - 341.611 (meters) 1120.77 (feet) ADJUSTED
KZ1049
KZ1049 GEOID HEIGHT - -34.283 (meters) GEOID18
KZ1049 NAD 83(2011) X - 614,021.490 (meters) COMP
KZ1049 NAD 83(2011) Y - -4,790,548.092 (meters) COMP
KZ1049 NAD 83(2011) Z - 4,152,346.594 (meters) COMP
KZ1049 LAPLACE CORR - 3.67 (seconds) DEFLEC18
KZ1049 DYNAMIC HEIGHT - 341.446 (meters) 1120.23 (feet) COMP
KZ1049 MODELED GRAVITY - 980,132.3 (mgal) NAVD 88
KZ1049
KZ1049 VERT ORDER - FIRST CLASS I
KZ1049
KZ1049 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KZ1049 Standards:
KZ1049 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
KZ1049 Horiz Ellip SD_N SD_E SD_h (unitless)
KZ1049 -----
KZ1049 NETWORK 1.55 3.02 0.70 0.55 1.54 -0.06035825
KZ1049 -----
KZ1049 Click here for local accuracies and other accuracy information.
KZ1049
KZ1049
KZ1049.This mark is at Shelby Community Airport (12G)
KZ1049
KZ1049.The horizontal coordinates were established by GPS observations
KZ1049.and adjusted by the National Geodetic Survey in June 2012.
KZ1049
KZ1049.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KZ1049.been affixed to the stable North American tectonic plate. See
KZ1049.NA2011 for more information.
KZ1049
KZ1049.The horizontal coordinates are valid at the epoch date displayed above
KZ1049.which is a decimal equivalence of Year/Month/Day.
KZ1049
KZ1049.The orthometric height was determined by differential leveling and
KZ1049.adjusted by the NATIONAL GEODETIC SURVEY

```



KZ1049.in June 1991.

KZ1049

KZ1049.WARNING-Repeat measurements at this control monument indicate possible KZ1049.vertical movement.

KZ1049

KZ1049.Significant digits in the geoid height do not necessarily reflect accuracy.

KZ1049.GEOID18 height accuracy estimate available [here](#).

KZ1049

KZ1049.Click [photographs](#) - Photos may exist for this station.

KZ1049

KZ1049.The X, Y, and Z were computed from the position and the ellipsoidal ht.

KZ1049

KZ1049.The Laplace correction was computed from DEFLEC18 derived deflections.

KZ1049

KZ1049.The ellipsoidal height was determined by GPS observations

KZ1049.and is referenced to NAD 83.

KZ1049

KZ1049.The dynamic height is computed by dividing the NAVD 88

KZ1049.geopotential number by the normal gravity value computed on the

KZ1049.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

KZ1049.degrees latitude (g = 980.6199 gals.).

KZ1049

KZ1049.The modeled gravity was interpolated from observed gravity values.

KZ1049

KZ1049. The following values were computed from the NAD 83(2011) position.

KZ1049

KZ1049;		North	East	Units	Scale Factor	Converg.
KZ1049;SPC OH N	-	134,474.931	583,478.141	MT	0.99994462	-0 07 43.6
KZ1049;SPC OH N	-	441,189.84	1,914,294.53	sFT	0.99994462	-0 07 43.6
KZ1049;UTM 17	-	4,526,541.403	357,095.187	MT	0.99985136	-1 06 36.5

KZ1049

KZ1049! - Elev Factor x Scale Factor = Combined Factor

KZ1049!SPC OH N - 0.99995179 x 0.99994462 = 0.99989641

KZ1049!UTM 17 - 0.99995179 x 0.99985136 = 0.99980316

KZ1049

KZ1049:		Primary Azimuth Mark	Grid Az
KZ1049:SPC OH N	-	12G A	224 08 27.2
KZ1049:UTM 17	-	12G A	225 07 20.1

KZ1049

KZ1049\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF5709526541 (NAD 83)

KZ1049

KZ1049	PID	Reference Object	Distance	Geod. Az
KZ1049				ddmmss.s
KZ1049	AB6036	12G A	APPROX. 0.5 KM	2240043.6

KZ1049

KZ1049

SUPERSEDED SURVEY CONTROL

KZ1049

KZ1049 NAD 83(2007)- 40 52 38.94974(N) 082 41 45.67721(W) AD(2002.00) 0

KZ1049 ELLIP H (02/10/07) 307.364 (m) GP(2002.00)

KZ1049 ELLIP H (10/07/05) 307.360 (m) GP( ) 4 2

KZ1049 NAD 83(1995)- 40 52 38.94963(N) 082 41 45.67727(W) AD( ) 3

KZ1049 ELLIP H (05/15/97) 307.374 (m) GP( ) 4 2

KZ1049 NAD 83(1986)- 40 52 38.95665(N) 082 41 45.68991(W) AD( ) 2



KZ1049 NAD 27 - 40 52 38.75401(N) 082 41 46.05046(W) AD( ) 2  
 KZ1049 NAVD 88 341.61 (m) 1120.8 (f) LEVELING 3  
 KZ1049 NGVD 29 (??/??/92) 341.756 (m) 1121.24 (f) ADJ UNCH 1 1  
 KZ1049 NGVD 29 341.75 (m) 1121.2 (f) LEVELING 3

KZ1049.No superseded survey control is available for this station.

KZ1049

KZ1049\_MARKER: DB = BENCH MARK DISK

KZ1049\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

KZ1049\_STAMPING: G 249 1959

KZ1049\_MARK LOGO: CGS

KZ1049\_PROJECTION: PROJECTING 25 CENTIMETERS

KZ1049\_MAGNETIC: N = NO MAGNETIC MATERIAL

KZ1049\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

KZ1049+STABILITY: SURFACE MOTION

KZ1049\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

KZ1049+SATELLITE: SATELLITE OBSERVATIONS - November 21, 2019

KZ1049

KZ1049	HISTORY	- Date	Condition	Report By
KZ1049	HISTORY	- 1959	MONUMENTED	CGS
KZ1049	HISTORY	- 1967	GOOD	CGS
KZ1049	HISTORY	- 1973	GOOD	OHDT
KZ1049	HISTORY	- 1987	GOOD	OHDT
KZ1049	HISTORY	- 1991	GOOD	USPSQD
KZ1049	HISTORY	- 19950928	GOOD	NGS
KZ1049	HISTORY	- 20191121	GOOD	USPSQD

KZ1049

KZ1049

STATION DESCRIPTION

KZ1049

KZ1049'DESCRIBED BY COAST AND GEODETIC SURVEY 1959 (WER)

KZ1049'THE STATION IS ABOUT 2.0 MILES WEST OF SHELBY, NEAR THE NORTHEAST

KZ1049'CORNER OF THE

KZ1049'SHELBY SKY HAVEN AIRPORT.

KZ1049'THE MARK IS A STANDARD U.S. COAST AND GEODETIC SURVEY BENCH MARK DISK

KZ1049'STAMPED G 249, SET IN A ROUND

KZ1049'CONCRETE POST WHICH PROJECTS 2 INCHES. IT IS 79 FEET WEST OF THE

KZ1049'CENTERLINE OF FUNK ROAD, 23 FEET SOUTH

KZ1049'OF THE CENTERLINE OF HIGHWAY 39, 3 FEET SOUTHEAST OF A POWER

KZ1049'POLE AND 71 FEET SOUTH OF THE SOUTHEAST CORNER

KZ1049'OF THE MORTON COMMUNITY CENTER BRICK

KZ1049'BUILDING.

KZ1049'A TRAVERSE CONNECTION WAS MADE FROM TRIANGULATION STATION AMERITE,

KZ1049'DISTANCE BEING 119.679 METERS

KZ1049'(392.65 FEET) EAST OF STATION AMERITE.

KZ1049

KZ1049

STATION RECOVERY (1967)

KZ1049

KZ1049'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1967

KZ1049'1.6 MI W FROM SHELBY.

KZ1049'ABOUT 1.6 MILES WEST ALONG STATE HIGHWAYS 96 AND 39 FROM THE

KZ1049'CROSSING OF THE NEW YORK CENTRAL RAILROAD AT SHELBY, NEAR THE

KZ1049'NORTHEAST CORNER OF THE AMERICAN TOWER LANDING FIELD, 91 FEET

KZ1049'SOUTHWEST OF THE CENTER OF THE INTERSECTION OF THE HIGHWAYS AND

KZ1049'FUNK ROAD, 80 FEET WEST OF THE CENTER LINE OF FUNK ROAD, 23 FEET

KZ1049'SOUTH OF THE CENTER LINE OF THE HIGHWAY, 3 FEET SOUTHEAST OF A

KZ1049'COMBINATION POWER AND CABLE LINE POLE, ABOUT LEVEL WITH THE



KZ1049'HIGHWAY AND SET IN THE TOP OF A CONCRETE POST PROJECTING 4 INCHES  
KZ1049'ABOVE THE LEVEL OF THE GROUND. NOTE-- HAS WITNESS POST.  
KZ1049  
KZ1049 STATION RECOVERY (1973)  
KZ1049  
KZ1049'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1973  
KZ1049'RECOVERED IN GOOD CONDITION.  
KZ1049  
KZ1049 STATION RECOVERY (1987)  
KZ1049  
KZ1049'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1987 (JY)  
KZ1049'RECOVERED IN GOOD CONDITION.  
KZ1049  
KZ1049 STATION RECOVERY (1991)  
KZ1049  
KZ1049'RECOVERY NOTE BY US POWER SQUADRON 1991 (BN)  
KZ1049'RECOVERED IN GOOD CONDITION.  
KZ1049  
KZ1049 STATION RECOVERY (1995)  
KZ1049  
KZ1049'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
KZ1049'THE STATION IS LOCATED ABOUT 19 KM (11.80 MI) NORTHWEST OF MANSFIELD,  
KZ1049'3 KM (1.85 MI) WEST OF SHELBY AT THE SHELBY COMMUNITY AIRPORT, IN  
KZ1049'GRASS IN THE SOUTHWEST QUADRANT OF THE JUNCTION OF FUNK ROAD AND STATE  
KZ1049'HIGHWAY 96 AND 39, AND AT THE NORTHEAST CORNER OF THE AIRFIELD.  
KZ1049'OWNERSHIP--SHELBY COMMUNITY AIRPORT,P.O. BOX 29, SHELBY, OH. 44875.  
KZ1049'AIRPORT MANAGER IS CLELAND WINGART. PHONE 419-347-1185. TO REACH  
KZ1049'FROM THE JUNCTION OF STATE HIGHWAYS 61, 39, AND 96 IN SHELBY, GO WEST  
KZ1049'ON COMBINED HIGHWAYS 39 AND 96 FOR 2.95 KM (1.85 MI) TO A CROSSROAD  
KZ1049'(FUNK ROAD) AND THE STATION ON THE LEFT. THE STATION IS SET IN THE TOP  
KZ1049'OF A ROUND CONCRETE POST PROJECTING 10 CM ABOVE THE GROUND. IT IS  
KZ1049'27.7 M (90.9 FT) SOUTHWEST OF THE CENTER OF THE INTERSECTION OF THE  
KZ1049'HIGHWAYS AND FUNK ROAD, 24.4 M (80.1 FT) WEST OF THE CENTER OF FUNK  
KZ1049'ROAD, 7.0 M (23.0 FT) SOUTH OF THE CENTER OF THE HIGHWAY, AND 0.9 M  
KZ1049'(3.0 FT) SOUTHEAST OF A COMBINATION POWER AND CABLE LINE POLE.  
KZ1049  
KZ1049 STATION RECOVERY (2019)  
KZ1049  
KZ1049'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)  
KZ1049'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

```

PROGRAM = datasheet95, VERSION = 8.12.5.4
1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MB1563 *****
MB1563 CBN - This is a Cooperative Base Network Control Station.
MB1563 TIDAL BM - This is a Tidal Bench Mark.
MB1563 DESIGNATION - G 321
MB1563 PID - MB1563
MB1563 STATE/COUNTY- OH/CUYAHOGA
MB1563 COUNTRY - US
MB1563 USGS QUAD - CLEVELAND NORTH (1994)
MB1563
MB1563 *CURRENT SURVEY CONTROL
MB1563
MB1563* NAD 83(2011) POSITION- 41 32 23.93378(N) 081 38 02.94336(W) ADJUSTED
MB1563* NAD 83(2011) ELLIP HT- 143.437 (meters) (06/27/12) ADJUSTED
MB1563* NAD 83(2011) EPOCH - 2010.00
MB1563* NAVD 88 ORTHO HEIGHT - 177.801 (meters) 583.34 (feet) ADJUSTED
MB1563
MB1563 GEOID HEIGHT - -34.372 (meters) GEOID18
MB1563 NAD 83(2011) X - 695,624.354 (meters) COMP
MB1563 NAD 83(2011) Y - -4,730,266.863 (meters) COMP
MB1563 NAD 83(2011) Z - 4,207,592.100 (meters) COMP
MB1563 LAPLACE CORR - 1.83 (seconds) DEFLEC18
MB1563 DYNAMIC HEIGHT - 177.731 (meters) 583.11 (feet) COMP
MB1563 MODELED GRAVITY - 980,228.1 (mgal) NAVD 88
MB1563
MB1563 VERT ORDER - FIRST CLASS II
MB1563
MB1563 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB1563 Standards:
MB1563 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MB1563 Horiz Ellip SD_N SD_E SD_h (unitless)
MB1563 -----
MB1563 NETWORK 0.26 0.61 0.11 0.10 0.31 -0.03705795
MB1563 -----
MB1563 Click here for local accuracies and other accuracy information.
MB1563
MB1563
MB1563.The horizontal coordinates were established by GPS observations
MB1563.and adjusted by the National Geodetic Survey in June 2012.
MB1563
MB1563.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB1563.been affixed to the stable North American tectonic plate. See
MB1563.NA2011 for more information.
MB1563
MB1563.The horizontal coordinates are valid at the epoch date displayed above
MB1563.which is a decimal equivalence of Year/Month/Day.
MB1563
MB1563.The orthometric height was determined by differential leveling and
MB1563.adjusted by the NATIONAL GEODETIC SURVEY
MB1563.in June 1991.

```





MB1563

MB1563.WARNING-Repeat measurements at this control monument indicate possible MB1563.vertical movement.

MB1563

MB1563.Significant digits in the geoid height do not necessarily reflect accuracy. MB1563.GEOID18 height accuracy estimate available [here](#).

MB1563

MB1563.This Tidal Bench Mark is designated as VM 12817

MB1563.by the [CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS AND SERVICES](#).

MB1563

MB1563.Click [here](#) to see if photographs exist for this station.

MB1563

MB1563.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MB1563

MB1563.The Laplace correction was computed from DEFLEC18 derived deflections.

MB1563

MB1563.The ellipsoidal height was determined by GPS observations

MB1563.and is referenced to NAD 83.

MB1563

MB1563.The dynamic height is computed by dividing the NAVD 88

MB1563.geopotential number by the normal gravity value computed on the

MB1563.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB1563.degrees latitude (g = 980.6199 gals.).

MB1563

MB1563.The modeled gravity was interpolated from observed gravity values.

MB1563

MB1563. The following values were computed from the NAD 83(2011) position.

MB1563

MB1563;	North	East	Units	Scale	Factor	Converg.
MB1563;SPC OH N	- 208,386.553	672,247.464	MT	0.99997306	+0 34 07.8	
MB1563;SPC OH N	- 683,681.55	2,205,531.89	sFT	0.99997306	+0 34 07.8	
MB1563;UTM 17	- 4,598,897.084	447,104.440	MT	0.99963443	-0 25 14.0	
MB1563!	- Elev Factor	x Scale Factor	=	Combined Factor		
MB1563!SPC OH N	- 0.99997750	x 0.99997306	=	0.99995056		
MB1563!UTM 17	- 0.99997750	x 0.99963443	=	0.99961194		

MB1563

MB1563\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF4710498897(NAD 83)

MB1563

MB1563	PID	Reference Object	Distance	Geod. Az
MB1563			ddmmss.s	
MB1563	DH8999	CLEVELAND CORS ARP	117.683 METERS	31526

MB1563

MB1563

SUPERSEDED SURVEY CONTROL

MB1563

MB1563	NAD 83(2007)-	41 32 23.93388(N)	081 38 02.94410(W)	AD(2002.00)	0
MB1563	ELLIP H (02/10/07)	143.454 (m)		GP(2002.00)	
MB1563	ELLIP H (09/23/04)	143.463 (m)		GP( )	4 1
MB1563	NAD 83(1995)-	41 32 23.93345(N)	081 38 02.94417(W)	AD( )	B
MB1563	ELLIP H (08/20/96)	143.451 (m)		GP( )	4 2
MB1563	ELLIP H (06/30/95)	143.545 (m)		GP( )	1 1
MB1563	NAD 83(1986)-	41 32 23.94224(N)	081 38 02.94631(W)	AD( )	1
MB1563	NAVD 88	177.80 (m)	583.3 (f)	LEVELING	3



MB1563 NGVD 29 (06/03/92) 178.030 (m) 584.09 (f) ADJUSTED 1 2  
 MB1563 NGVD 29 178.04 (m) 584.1 (f) LEVELING 3

MB1563

MB1563.Superseded values are not recommended for survey control.

MB1563

MB1563.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MB1563.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB1563

MB1563\_MARKER: F = FLANGE-ENCASED ROD

MB1563\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

MB1563\_STAMPING: G 321 1981

MB1563\_MARK LOGO: NGS

MB1563\_PROJECTION: PROJECTING 15 CENTIMETERS

MB1563\_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD

MB1563+STABILITY: POSITION/ELEVATION WELL

MB1563\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB1563+SATELLITE: SATELLITE OBSERVATIONS - September 25, 2017

MB1563\_ROD/PIPE-DEPTH: 17.1 meters

MB1563\_SLEEVE-DEPTH : 6.1 meters

MB1563

MB1563	HISTORY	- Date	Condition	Report By
MB1563	HISTORY	- 1981	MONUMENTED	NGS
MB1563	HISTORY	- 19891005	GOOD	NGS
MB1563	HISTORY	- 19900326	GOOD	AEROS
MB1563	HISTORY	- 19940731	GOOD	NOS
MB1563	HISTORY	- 19950718	GOOD	NGS
MB1563	HISTORY	- 19970605	GOOD	NOS
MB1563	HISTORY	- 20030521	GOOD	NGS
MB1563	HISTORY	- 20040920	GOOD	OHDT
MB1563	HISTORY	- 2005	GOOD	NGS
MB1563	HISTORY	- 20090524	GOOD	GEOCAC
MB1563	HISTORY	- 20100607	GOOD	NGS
MB1563	HISTORY	- 20120612	GOOD	NGS
MB1563	HISTORY	- 20140110	GOOD	TERRSV
MB1563	HISTORY	- 20150514	GOOD	NOS
MB1563	HISTORY	- 20170925	GOOD	USPSQD

MB1563

STATION DESCRIPTION

MB1563

MB1563'DESCRIBED BY NATIONAL GEODETIC SURVEY 1981

MB1563'IN CLEVELAND.

MB1563'THE MARK IS ABOVE LEVEL WITH SIDEWALK.

MB1563'IN CLEVELAND, IN THE LAKEFRONT STATE PARK BETWEEN THE NORTH END OF MB1563'72ND STREET AND LIBERTY BOULEVARD, THE MARK IS DIRECTLY BEHIND THE MB1563'WOODEN SIGN FOR THE PARK, 117.34 METERS (385.0 FEET) SOUTH-SOUTHEAST MB1563'OF THE NOAA GAGE HOUSE A 7 BY 7-FOOT BRICK BUILDING, 41.14 METERS MB1563'(135.0 FEET) SOUTH OF AN ALUMINUM LAMP POST, 28.04 METERS (92.0 FEET) MB1563'SOUTHEAST OF THE SOUTHEAST EDGE OF THE SIDEWALK LEADING INTO THE PARK, MB1563'13.87 METERS (45.5 FEET) SOUTH OF THE NORTHWEST END OF THE NORTHWEST MB1563'ONE OF 10 CONCRETE STOPS OF A SMALL PARKING AREA, 2.43 METERS (8.0 MB1563'FEET) NORTH OF THE SOUTHEAST LEG OF THE SIGN.

MB1563

STATION RECOVERY (1989)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989



MB1563'IN CLEVELAND, IN THE LAKEFRONT STATE PARK BETWEEN THE NORTH END OF MB1563'72ND STREET AND M. L. KING JR. BOULEVARD, THE MARK IS DIRECTLY MB1563'BEHIND THE WOODEN SIGN FOR THE PARK, 117.34 METERS (385.0 FEET) MB1563'SOUTH-SOUTHEAST OF THE NOAA GAGE HOUSE (A 7 FOOT SQUARE BRICK MB1563'BUILDING), 41.14 METERS (135.0 FEET) SOUTH OF AN ALUMINUM LAMP POST, MB1563'28.04 METERS (92.0 FEET) SOUTHEAST OF THE SOUTHEAST EDGE OF THE MB1563'SIDEWALK LEADING INTO THE PARK, 13.87 METERS (45.5 FEET) SOUTH OF THE MB1563'NORTHWEST END OF THE NORTHWEST ONE OF 10 CONCRETE STOPS OF A SMALL MB1563'PARKING AREA, 2.43 METERS (8.0 FEET) NORTH OF THE SOUTHEAST LEG OF MB1563'THE SIGN.

MB1563

MB1563 STATION RECOVERY (1990)

MB1563

MB1563'RECOVERY NOTE BY AERO SERVICE CORPORATION 1990

MB1563'RECOVERED IN GOOD CONDITION.

MB1563

MB1563 STATION RECOVERY (1994)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL OCEAN SERVICE 1994 (JDR)

MB1563'RECOVERED AS DESCRIBED.

MB1563

MB1563 STATION RECOVERY (1995)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

MB1563'IN CLEVELAND, IN A LAWN AT LAKEFRONT STATE PARK BETWEEN THE NORTH END MB1563'OF 72ND STREET AND M L KING JR BOULEVARD, 117.3 M (384.8 FT) SOUTH OF MB1563'THE NOAA GAGE HOUSE (A 2.1 M (6.9 FT) SQUARE BRICK BUILDING) , 61.9 M MB1563'(203.1 FT) NORTHWEST OF BM STEPS AT THE NORTHWEST CORNER OF CONCRETE MB1563'STAIRS LEADING UPHILL TO A PEDESTRIAN BRIDGE OVER INTERSTATE 90, 53.3 MB1563'M (174.9 FT) WEST-NORTHWEST OF THE CENTERLINE OF THE PARK ENTRANCE MB1563'ROAD, 33.4 M (109.6 FT) EAST OF THE SOUTHEAST CORNER OF A FENCE AROUND MB1563'A MARINA, 41.1 M (134.8 FT) SOUTH-SOUTHEAST OF AN ALUMINUM LAMP POST, MB1563'AND 28.0 M (91.9 FT) SOUTHEAST OF THE SOUTHEAST EDGE OF THE SIDEWALK MB1563'LEADING INTO THE PARK.

MB1563

MB1563 STATION RECOVERY (1997)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL OCEAN SERVICE 1997 (CAP)

MB1563'IN CLEVELAND, IN THE LAKEFRONT STATE PARK BETWEEN THE NORTH END OF MB1563'72ND STREET AND M. L. KING JR. BOULEVARD, THE MARK IS DIRECTLY MB1563'BEHIND THE WOODEN SIGN FOR THE PARK, 117.34 METERS (384.97 FT) MB1563'SOUTH-SOUTHEAST OF THE NOAA GAUGE HOUSE (A 7 FOOT (2.1 M) SQUARE BRICK MB1563'BUILDING), 41.14 METERS (134.97 FT) SOUTH OF AN ALUMINUM LAMP POST, MB1563'28.04 METERS (91.99 FT) SOUTHEAST OF THE SOUTHEAST EDGE OF THE MB1563'SIDEWALK LEADING INTO THE PARK, 13.87 METERS (45.51 FT) SOUTH OF THE MB1563'NORTHWEST END OF THE NORTHWEST ONE OF 10 CONCRETE PARKING STOPS OF A MB1563'SMALL PARKING AREA, WITH 5-INCH PVC PIPE AND ALUMINUM ACCESS COVER MB1563'WHICH IS STAMPED G 321 SURROUND BY A MASS OF CONCRETE FLUSH WITH THE MB1563'GROUND.

MB1563

MB1563 STATION RECOVERY (2003)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2003 (JMW)

MB1563'THE STATION IS LOCATED IN THE NORTHEAST PART OF CLEVELAND, IN THE MB1563'LAKEFRONT STATE PARK, IN THE GRASS AT THE GORDON BOAT RAMP AREA OF



MB1563'THE PARK WHICH LIES BETWEEN EXITS 176 AND 177 OF INTERSTATE HIGHWAY  
MB1563'90.

MB1563'

MB1563'TO REACH THE STATION FROM THE BOTTOM OF THE EXIT RAMP FOR THE  
MB1563'INTERSTATE HIGHWAY 90 EASTBOUND LANES AT EXIT 177 (MARTIN L. KING JR.  
MB1563'DRIVE) IN THE NORTHEAST PART OF CLEVELAND, GO NORTH FOR 0.05 MI,  
MB1563'PASSING UNDER THE INTERSTATE HIGHWAY, TO A ROAD ON THE LEFT WHICH  
MB1563'PARALLELS THE INTERSTATE HIGHWAY WESTBOUND LANES. TURN LEFT AND GO  
MB1563'WEST ON THE ROAD FOR 0.1 MI TO THE ENTRANCE DRIVE FOR THE GORDON BOAT  
MB1563'RAMP ON THE RIGHT. TURN RIGHT AND GO NORTH, THEN NORTHWEST FOR 0.05  
MB1563'MI ON THE DRIVE TO A STRIP OF TEN PARKING SPACES ON THE LEFT AND THE  
MB1563'STATION NEAR THE NORTHWESTERNMOST PARKING SPACE.

MB1563'

MB1563'LOCATED 385.0 FT SOUTH-SOUTHEAST OF THE NOAA GAGE HOUSE, 154.0 FT  
MB1563'NORTHWEST OF THE NORTH LEG OF THE WOODEN GORDON BOAT RAMP SIGN AT  
MB1563'ENTRANCE TO BOAT RAMP AREA, 135.0 FT SOUTH OF AN ALUMINUM LAMP POST,  
MB1563'92.0 FT SOUTHEAST OF THE SOUTHEAST EDGE OF THE SIDEWALK LEADING INTO  
MB1563'THE PARK, 45.5 FT SOUTH OF THE NORTHWEST END OF THE CONCRETE STOP FOR  
MB1563'THE NORTHWESTERNMOST PARKING SPACE AND 2.0 FT NORTH OF A FIBERGLASS  
MB1563'WITNESS POST.

MB1563

MB1563 STATION RECOVERY (2004)

MB1563

MB1563'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)

MB1563'RECOVERED IN GOOD CONDITION.

MB1563

MB1563 STATION RECOVERY (2005)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2005 (DAC)

MB1563'RECOVERED AS DESCRIBED.

MB1563

MB1563 STATION RECOVERY (2009)

MB1563

MB1563'RECOVERY NOTE BY GEOCACHING 2009 (RLM)

MB1563'RECOVERED IN GOOD CONDITION. ADD TO DESCRIPTION, THE WOODEN SIGN FOR  
MB1563'THE PARK HAS BEEN REMOVED.

MB1563

MB1563 STATION RECOVERY (2010)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2010 (JDR)

MB1563'RECOVERED AS DESCRIBED.

MB1563

MB1563 STATION RECOVERY (2012)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2012 (DAC)

MB1563'LOGO COVER AND PIPE ARE PROJECTING 15 CM (0.5 FT)

MB1563

MB1563 STATION RECOVERY (2014)

MB1563

MB1563'RECOVERY NOTE BY TERRA SURV 2014 (JVH)

MB1563'RECOVERED IN GOOD CONDITION.

MB1563

MB1563 STATION RECOVERY (2015)

MB1563

MB1563'RECOVERY NOTE BY NATIONAL OCEAN SERVICE 2015 (PTR)



MB1563'RECOVERED IN GOOD CONDITION.

MB1563'

MB1563'NOTE-ADD- TO REACH IN CLEVELAND FROM THE INTERSECTION OF HIGHWAY 90/2  
MB1563'AND MARTIN LUTHER KING JR BOULEVARD, PROCEED ON M.L. KING JR  
MB1563'BOULEVARD, TO ITS INTERSECTION WITH N MARGINAL DRIVE, THEN PROCEED  
MB1563'WEST ON N MARGINAL DR FOR APPROXIMATELY 0.05 MI (0.08 KM) TO ITS  
MB1563'INTERSECTION WITH THE LAKEFRONT STATE PARK AND GORDON BOAT RAMP, ON  
MB1563'THE NORTH SIDE OF DRIVE, BETWEEN THE NORTH END OF E 72ND STREET AND  
MB1563'M.L. KING JR. BOULEVARD, THEN PROCEED NW ON PAVED ENTRANCE ROAD FOR  
MB1563'APPROXIMATELY 0.05 MI (0.08 KM) TO THE MARK ON SW SIDE OF DRIVE.

MB1563'

MB1563'IT IS 40.78 M (133.8 FT) SOUTH OF AN ALUMINUM LAMP POST, 16.10 M (52.8  
MB1563'FT) SOUTHEAST OF THE SOUTHEAST EDGE OF THE SIDEWALK LEADING INTO THE  
MB1563'PARK, 11.37 M (37.3 FT) SOUTH OF A PAVED BIKE PATH.

MB1563

MB1563

STATION RECOVERY (2017)

MB1563

MB1563'RECOVERY NOTE BY US POWER SQUADRON 2017 (TJH)

MB1563'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DF5362 *****
DF5362 CORS          - This is a GPS Continuously Operating Reference Station.
DF5362 DESIGNATION  - GARFIELD HTS CORS ARP
DF5362 CORS_ID      - GARF
DF5362 PID          - DF5362
DF5362 STATE/COUNTY- OH/CUYAHOGA
DF5362 COUNTRY      - US
DF5362 USGS QUAD    - SHAKER HEIGHTS (1979)
DF5362
DF5362                                *CURRENT SURVEY CONTROL
DF5362
DF5362-----
DF5362* NAD 83(2011) POSITION- 41 24 56.78157(N) 081 36 53.60423(W) ADJUSTED
DF5362* NAD 83(2011) ELLIP HT- 254.249 (meters) (06/??/19) ADJUSTED
DF5362* NAD 83(2011) EPOCH - 2010.00
DF5362
DF5362-----
DF5362 GEOID HEIGHT - -34.111 (meters) GEOID18
DF5362 NAD 83(2011) X - 698,559.010 (meters) COMP
DF5362 NAD 83(2011) Y - -4,739,154.373 (meters) COMP
DF5362 NAD 83(2011) Z - 4,197,329.772 (meters) COMP
DF5362
DF5362 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DF5362 Standards:
DF5362          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
DF5362          Horiz Ellip                    SD_N   SD_E   SD_h          (unitless)
DF5362-----
DF5362 NETWORK      0.14   0.31                0.04   0.07   0.16          -0.11425100
DF5362-----
DF5362
DF5362
DF5362.The coordinates were established by GPS observations
DF5362.and adjusted by the National Geodetic Survey in June 2019.
DF5362
DF5362.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DF5362.been affixed to the stable North American Tectonic Plate.
DF5362
DF5362.The coordinates are valid at the epoch date displayed above
DF5362.which is a decimal equivalence of Year/Month/Day.
DF5362
DF5362.Due to the release of the International GNSS Service (IGS) 2014
DF5362.realization of the International Terrestrial Reference Frame of 2014
DF5362.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DF5362.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DF5362.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DF5362.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DF5362.currently published epoch of 2010.00.
DF5362
DF5362.Additional information on MYCS2 is available at
DF5362.https://geodesy.noaa.gov/CORS/coords.shtml
DF5362

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DF5362.Significant digits in the geoid height do not necessarily reflect accuracy.  
DF5362.GEOID18 height accuracy estimate available [here](#).

DF5362

DF5362.The PID for the CORS L1 Phase Center is DL2025.

DF5362

DF5362.Click [here](#) to see if photographs exist for this station.

DF5362

DF5362.The XYZ, and position/ellipsoidal ht. are equivalent.

DF5362

DF5362.The ellipsoidal height was determined by GPS observations

DF5362.and is referenced to NAD 83.

DF5362

DF5362. The following values were computed from the NAD 83(2011) position.

DF5362

DF5362;		North	East	Units	Scale	Factor	Converg.
DF5362;SPC OH N	-	194,608.842	673,994.553	MT	0.99995756	+0 34	53.3
DF5362;SPC OH N	-	638,479.18	2,211,263.80	sFT	0.99995756	+0 34	53.3
DF5362;UTM 17	-	4,585,095.852	448,613.007	MT	0.99963250	-0 24	24.4
DF5362!	-	Elev Factor x Scale Factor =		Combined Factor			
DF5362!SPC OH N	-	0.99996012	x 0.99995756	=	0.99991768		
DF5362!UTM 17	-	0.99996012	x 0.99963250	=	0.99959264		

DF5362

DF5362\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF4861385095 (NAD 83)

DF5362

SUPERSEDED SURVEY CONTROL

DF5362

DF5362	ELLIP H (06/27/12)	254.276 (m)				GP(2010.00)	0 0
DF5362	NAD 83(2011)-	41 24 56.78172(N)	081 36 53.60420(W)	AD(2010.00)		c	
DF5362	NAD 83(2011)-	41 24 56.78172(N)	081 36 53.60430(W)	AD(2010.00)		c	
DF5362	ELLIP H (08/??/11)	254.243 (m)				GP(2010.00)	c c
DF5362	ELLIP H (02/10/07)	254.284 (m)				GP(2002.00)	
DF5362	NAD 83(2007)-	41 24 56.78186(N)	081 36 53.60493(W)	AD(2002.00)		c	
DF5362	NAD 83(CORS)-	41 24 56.78186(N)	081 36 53.60493(W)	AD(2002.00)		c	
DF5362	ELLIP H (05/??/03)	254.284 (m)				GP(2002.00)	c c

DF5362

DF5362.Superseded values are not recommended for survey control.

DF5362

DF5362.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DF5362.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DF5362

DF5362\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DF5362

STATION DESCRIPTION

DF5362'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019  
DF5362'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND  
DF5362'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE  
DF5362'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DF5362' ftp://cors.ngs.noaa.gov/cors/README.txt  
DF5362' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14  
DF5362' ftp://cors.ngs.noaa.gov/cors/station\_log  
DF5362' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

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AJ7190 *****
AJ7190 CORS - This is a GPS Continuously Operating Reference Station.
AJ7190 DESIGNATION - GUSTAVUS CORS ARP
AJ7190 CORS_ID - GUST
AJ7190 PID - AJ7190
AJ7190 STATE/COUNTY- OH/TRUMBULL
AJ7190 COUNTRY - US
AJ7190 USGS QUAD - GUSTAVUS (1994)

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AJ7190 \*CURRENT SURVEY CONTROL

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AJ7190* NAD 83(2011) POSITION- 41 27 45.87327(N) 080 42 58.24973(W) ADJUSTED
AJ7190* NAD 83(2011) ELLIP HT- 283.185 (meters) (06/??/19) ADJUSTED
AJ7190* NAD 83(2011) EPOCH - 2010.00

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AJ7190 GEOID HEIGHT - -33.880 (meters) GEOID18
AJ7190 NAD 83(2011) X - 772,252.262 (meters) COMP
AJ7190 NAD 83(2011) Y - -4,724,228.646 (meters) COMP
AJ7190 NAD 83(2011) Z - 4,201,259.747 (meters) COMP

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AJ7190 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

AJ7190	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
AJ7190	0.11	0.21	0.03	0.05	0.11	-0.23433000

AJ7190.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

AJ7190.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

AJ7190.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

AJ7190.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

AJ7190.Additional information on MYCS2 is available at <https://geodesy.noaa.gov/CORS/coords.shtml>





AJ7190.Significant digits in the geoid height do not necessarily reflect accuracy.  
AJ7190.GEOID18 height accuracy estimate available [here](#).

AJ7190

AJ7190.The PID for the CORS L1 Phase Center is D01743.

AJ7190

AJ7190.Click [here](#) to see if photographs exist for this station.

AJ7190

AJ7190.The XYZ, and position/ellipsoidal ht. are equivalent.

AJ7190

AJ7190.The ellipsoidal height was determined by GPS observations

AJ7190.and is referenced to NAD 83.

AJ7190

AJ7190. The following values were computed from the NAD 83(2011) position.

AJ7190

AJ7190;		North	East	Units	Scale	Factor	Converg.
AJ7190;SPC OH N	-	200,973.684	749,011.504	MT	0.99996287	+1	10 18.8
AJ7190;SPC OH N	-	659,361.16	2,457,381.91	sFT	0.99996287	+1	10 18.8
AJ7190;UTM 17	-	4,590,166.818	523,701.947	MT	0.99960691	+0	11 16.5
AJ7190!	-	Elev Factor x Scale Factor =		Combined Factor			
AJ7190!SPC OH N	-	0.99995558	x 0.99996287	=	0.99991846		
AJ7190!UTM 17	-	0.99995558	x 0.99960691	=	0.99956251		

AJ7190\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF2370190166(NAD 83)

AJ7190

SUPERSEDED SURVEY CONTROL

AJ7190

AJ7190	ELLIP H (06/27/12)	283.194	(m)			GP(2010.00)	0 0
AJ7190	NAD 83(2011)-	41 27 45.87335(N)		080 42 58.24979(W)		AD(2010.00)	c
AJ7190	NAD 83(2011)-	41 27 45.87321(N)		080 42 58.25004(W)		AD(2010.00)	c
AJ7190	ELLIP H (08/??/11)	283.189	(m)			GP(2010.00)	c c
AJ7190	ELLIP H (02/10/07)	283.207	(m)			GP(2002.00)	
AJ7190	NAD 83(2007)-	41 27 45.87349(N)		080 42 58.25056(W)		AD(2002.00)	c
AJ7190	NAD 83(CORS)-	41 27 45.87349(N)		080 42 58.25056(W)		AD(2002.00)	c
AJ7190	ELLIP H (03/??/02)	283.207	(m)			GP(2002.00)	c c
AJ7190	NAD 83(CORS)-	41 27 45.87349(N)		080 42 58.25057(W)		AD(1997.00)	c
AJ7190	ELLIP H (01/??/02)	283.207	(m)			GP(1997.00)	c c

AJ7190

AJ7190.Superseded values are not recommended for survey control.

AJ7190.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AJ7190.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AJ7190

AJ7190\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

AJ7190

STATION DESCRIPTION

AJ7190'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

AJ7190'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

AJ7190'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

AJ7190'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

AJ7190' ftp://cors.ngs.noaa.gov/cors/README.txt

AJ7190' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

AJ7190' ftp://cors.ngs.noaa.gov/cors/station\_log

AJ7190' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = JANUARY 23, 2020
KZ0652 *****
KZ0652 DESIGNATION -   H 294
KZ0652 PID           -   KZ0652
KZ0652 STATE/COUNTY- OH/HARDIN
KZ0652 COUNTRY       -   US
KZ0652 USGS QUAD     -   MOUNT VICTORY (2016)
KZ0652
KZ0652                                *CURRENT SURVEY CONTROL
KZ0652
KZ0652* NAD 83(2011) POSITION- 40 33 38.68075(N) 083 34 07.71483(W) ADJUSTED
KZ0652* NAD 83(2011) ELLIP HT- 286.647 (meters) (06/27/12) ADJUSTED
KZ0652* NAD 83(2011) EPOCH - 2010.00
KZ0652* NAVD 88 ORTHO HEIGHT - 321.334 (meters) 1054.24 (feet) ADJUSTED
KZ0652
KZ0652 GEOID HEIGHT - -34.623 (meters) GEOID18
KZ0652 NAD 83(2011) X - 543,546.996 (meters) COMP
KZ0652 NAD 83(2011) Y - -4,822,131.960 (meters) COMP
KZ0652 NAD 83(2011) Z - 4,125,673.187 (meters) COMP
KZ0652 LAPLACE CORR - 0.70 (seconds) DEFLEC18
KZ0652 DYNAMIC HEIGHT - 321.166 (meters) 1053.69 (feet) COMP
KZ0652 MODELED GRAVITY - 980,093.9 (mgal) NAVD 88
KZ0652
KZ0652 VERT ORDER - SECOND CLASS 0
KZ0652
KZ0652 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KZ0652 Standards:
KZ0652          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
KZ0652          Horiz Ellip          SD_N   SD_E   SD_h          (unitless)
KZ0652 -----
KZ0652 NETWORK    0.69    1.67          0.32   0.23   0.85          -0.17068367
KZ0652 -----
KZ0652 Click here for local accuracies and other accuracy information.
KZ0652
KZ0652
KZ0652.The horizontal coordinates were established by GPS observations
KZ0652.and adjusted by the National Geodetic Survey in June 2012.
KZ0652
KZ0652.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KZ0652.been affixed to the stable North American tectonic plate. See
KZ0652.NA2011 for more information.
KZ0652
KZ0652.The horizontal coordinates are valid at the epoch date displayed above
KZ0652.which is a decimal equivalence of Year/Month/Day.
KZ0652
KZ0652.The orthometric height was determined by differential leveling and
KZ0652.adjusted by the NATIONAL GEODETIC SURVEY
KZ0652.in June 1991.
KZ0652

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KZ0652.Significant digits in the geoid height do not necessarily reflect accuracy.  
 KZ0652.GEOID18 height accuracy estimate available [here](#).

KZ0652

KZ0652.Click [photographs](#) - Photos may exist for this station.

KZ0652

KZ0652.The X, Y, and Z were computed from the position and the ellipsoidal ht.

KZ0652

KZ0652.The Laplace correction was computed from DEFLEC18 derived deflections.

KZ0652

KZ0652.The ellipsoidal height was determined by GPS observations

KZ0652.and is referenced to NAD 83.

KZ0652

KZ0652.The dynamic height is computed by dividing the NAVD 88

KZ0652.geopotential number by the normal gravity value computed on the

KZ0652.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

KZ0652.degrees latitude (g = 980.6199 gals.).

KZ0652

KZ0652.The modeled gravity was interpolated from observed gravity values.

KZ0652

KZ0652. The following values were computed from the NAD 83(2011) position.

KZ0652

KZ0652;		North	East	Units	Scale	Factor	Converg.
KZ0652;SPC OH N	-	99,838.800	509,485.419	MT	0.99997803	-0 42 07.8	
KZ0652;SPC OH N	-	327,554.46	1,671,536.75	sFT	0.99997803	-0 42 07.8	
KZ0652;UTM 17	-	4,493,168.731	282,519.912	MT	1.00018222	-1 40 15.7	

KZ0652

KZ0652! - Elev Factor x Scale Factor = Combined Factor

KZ0652!SPC OH N - 0.99995504 x 0.99997803 = 0.99993307

KZ0652!UTM 17 - 0.99995504 x 1.00018222 = 1.00013725

KZ0652

KZ0652\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKE8251993168 (NAD 83)

KZ0652

SUPERSEDED SURVEY CONTROL

KZ0652

KZ0652	NAD 83(2007)-	40 33 38.68084(N)	083 34 07.71556(W)	AD(2002.00)	0
KZ0652	ELLIP H (02/10/07)	286.662 (m)		GP(2002.00)	
KZ0652	ELLIP H (10/07/05)	286.646 (m)		GP( )	3 1
KZ0652	NAD 83(1995)-	40 33 38.68124(N)	083 34 07.71532(W)	AD( )	1
KZ0652	ELLIP H (10/02/97)	286.677 (m)		GP( )	3 1
KZ0652	NAVD 88	321.33 (m)	1054.2 (f)	LEVELING	3
KZ0652	NGVD 29 (??/??/92)	321.516 (m)	1054.84 (f)	ADJ UNCH	2 0

KZ0652.No superseded survey control is available for this station.

KZ0652

KZ0652\_MARKER: DB = BENCH MARK DISK

KZ0652\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

KZ0652\_STAMPING: H 294

KZ0652\_MARK LOGO: CGS

KZ0652\_MAGNETIC: O = OTHER; SEE DESCRIPTION

KZ0652\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

KZ0652+STABILITY: SURFACE MOTION

KZ0652\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

KZ0652+SATELLITE: SATELLITE OBSERVATIONS - June 14, 2011

KZ0652

KZ0652 HISTORY - Date Condition Report By

KZ0652 HISTORY - 1960 MONUMENTED CGS



KZ0652 HISTORY - 19970730 GOOD WOOLPT  
KZ0652 HISTORY - 20110614 GOOD JCLS

KZ0652

KZ0652

KZ0652

STATION DESCRIPTION

KZ0652'DESCRIBED BY COAST AND GEODETIC SURVEY 1960

KZ0652'3.1 MI N FROM RIDGEWAY.

KZ0652'ABOUT 3.1 MILES NORTH ALONG THE NEW YORK CENTRAL RAILROAD FROM  
KZ0652'HAYES TOWER AT RIDGEWAY, 0.45 MILE SOUTH OF MILEPOST TOL 78, AT  
KZ0652'THE CROSSING OF BLACK TOP ROAD 200, 46 FEET EAST OF THE EAST RAIL,  
KZ0652'1 FOOT WEST OF A WIRE FENCE, 16 1/2 FEET SOUTH OF A FENCE CORNER,  
KZ0652'42 FEET SOUTH OF THE CENTER LINE OF ROAD, 17 FEET EAST OF A  
KZ0652'TELEPHONE POLE, 27 FEET SOUTHWEST OF A POWER LINE POLE, ABOUT 1  
KZ0652'FOOT ABOVE THE LEVEL OF THE TRACK, AND SET IN TOP OF A CONCRETE  
KZ0652'POST PROJECTING 3 INCHES.

KZ0652

KZ0652

KZ0652

STATION RECOVERY (1997)

KZ0652'RECOVERY NOTE BY WOOLPERT CONSULTANTS 1997 (JWK)

KZ0652'RECOVERED AS DESCRIBED.

KZ0652

KZ0652

KZ0652

STATION RECOVERY (2011)

KZ0652'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011

KZ0652'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

```

PROGRAM = datasheet95, VERSION = 8.12.5.4
1      National Geodetic Survey,      Retrieval Date = JANUARY  6, 2020
LA2545 *****
LA2545 FBN - This is a Federal Base Network Control Station.
LA2545 DESIGNATION - H 348
LA2545 PID - LA2545
LA2545 STATE/COUNTY- OH/ALLEN
LA2545 COUNTRY - US
LA2545 USGS QUAD - CAIRO (1983)
LA2545
LA2545 *CURRENT SURVEY CONTROL
LA2545
LA2545* NAD 83(2011) POSITION- 40 46 24.69934(N) 084 05 34.42459(W) ADJUSTED
LA2545* NAD 83(2011) ELLIP HT- 230.366 (meters) (06/27/12) ADJUSTED
LA2545* NAD 83(2011) EPOCH - 2010.00
LA2545* NAVD 88 ORTHO HEIGHT - 265.054 (meters) 869.60 (feet) ADJUSTED
LA2545
LA2545 GEOID HEIGHT - -34.667 (meters) GEOID18
LA2545 NAD 83(2011) X - 497,827.529 (meters) COMP
LA2545 NAD 83(2011) Y - -4,811,542.527 (meters) COMP
LA2545 NAD 83(2011) Z - 4,143,560.027 (meters) COMP
LA2545 LAPLACE CORR - -3.85 (seconds) DEFLEC18
LA2545 DYNAMIC HEIGHT - 264.925 (meters) 869.17 (feet) COMP
LA2545 MODELED GRAVITY - 980,130.2 (mgal) NAVD 88
LA2545
LA2545 VERT ORDER - FIRST CLASS II
LA2545
LA2545 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
LA2545 Standards:
LA2545 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
LA2545 Horiz Ellip SD_N SD_E SD_h (unitless)
LA2545 -----
LA2545 NETWORK 0.33 0.76 0.14 0.13 0.39 -0.03988927
LA2545 -----
LA2545 Click here for local accuracies and other accuracy information.
LA2545
LA2545
LA2545.The horizontal coordinates were established by GPS observations
LA2545.and adjusted by the National Geodetic Survey in June 2012.
LA2545
LA2545.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
LA2545.been affixed to the stable North American tectonic plate. See
LA2545.NA2011 for more information.
LA2545
LA2545.The horizontal coordinates are valid at the epoch date displayed above
LA2545.which is a decimal equivalence of Year/Month/Day.
LA2545
LA2545.The orthometric height was determined by differential leveling and
LA2545.adjusted by the NATIONAL GEODETIC SURVEY
LA2545.in January 1994.
LA2545

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LA2545.Significant digits in the geoid height do not necessarily reflect accuracy.  
LA2545.GEOID18 height accuracy estimate available [here](#).

LA2545

LA2545.Click [here](#) to see if photographs exist for this station.

LA2545

LA2545.The X, Y, and Z were computed from the position and the ellipsoidal ht.

LA2545

LA2545.The Laplace correction was computed from DEFLEC18 derived deflections.

LA2545

LA2545.The ellipsoidal height was determined by GPS observations

LA2545.and is referenced to NAD 83.

LA2545

LA2545.The dynamic height is computed by dividing the NAVD 88

LA2545.geopotential number by the normal gravity value computed on the

LA2545.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

LA2545.degrees latitude (g = 980.6199 gals.).

LA2545

LA2545.The modeled gravity was interpolated from observed gravity values.

LA2545

LA2545. The following values were computed from the NAD 83(2011) position.

LA2545

LA2545;		North	East	Units	Scale Factor	Converg.
LA2545;SPC OH N	-	124,140.276	465,537.644	MT	0.99995225	-1 02 47.2
LA2545;SPC OH N	-	407,283.56	1,527,351.42	sFT	0.99995225	-1 02 47.2
LA2545;UTM 16	-	4,517,683.676	745,342.537	MT	1.00034095	+1 53 58.2

LA2545

LA2545! - Elev Factor x Scale Factor = Combined Factor

LA2545!SPC OH N - 0.99996387 x 0.99995225 = 0.99991612

LA2545!UTM 16 - 0.99996387 x 1.00034095 = 1.00030480

LA2545

LA2545\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL4534217683(NAD 83)

LA2545

SUPERSEDED SURVEY CONTROL

LA2545

LA2545	NAD 83(2007)-	40 46 24.69942(N)	084 05 34.42541(W)	AD(2002.00)	0
LA2545	ELLIP H (02/10/07)	230.382 (m)		GP(2002.00)	
LA2545	ELLIP H (09/23/04)	230.373 (m)		GP( )	4 1
LA2545	NAD 83(1995)-	40 46 24.69935(N)	084 05 34.42573(W)	AD(1995.00)	A
LA2545	ELLIP H (12/01/95)	230.381 (m)		GP(1995.00)	2 2
LA2545	NAVD 88	265.05 (m)	869.6 (f)	LEVELING	3

LA2545

LA2545.Superseded values are not recommended for survey control.

LA2545

LA2545.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

LA2545.See file [dsdata.pdf](#) to determine how the superseded data were derived.

LA2545

LA2545\_MARKER: I = METAL ROD

LA2545\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

LA2545\_STAMPING: H 348 1993

LA2545\_MARK LOGO: NGS

LA2545\_PROJECTION: FLUSH

LA2545\_MAGNETIC: N = NO MAGNETIC MATERIAL

LA2545\_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD

LA2545+STABILITY: POSITION/ELEVATION WELL

LA2545\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR



LA2545+SATELLITE: SATELLITE OBSERVATIONS - June 14, 2011

LA2545\_ROD/PIPE-DEPTH: 14.6 meters

LA2545\_SLEEVE-DEPTH : 3.1 meters

LA2545

LA2545	HISTORY	- Date	Condition	Report By
LA2545	HISTORY	- 1993	MONUMENTED	NGS
LA2545	HISTORY	- 19950811	GOOD	NGS
LA2545	HISTORY	- 19951023	GOOD	NGS
LA2545	HISTORY	- 19951114	GOOD	NGS
LA2545	HISTORY	- 19970821	GOOD	NGS
LA2545	HISTORY	- 20030710	GOOD	OHDT
LA2545	HISTORY	- 20031022	GOOD	COMPA
LA2545	HISTORY	- 20110614	GOOD	JCLS

LA2545

LA2545

LA2545

STATION DESCRIPTION

LA2545'DESCRIBED BY NATIONAL GEODETIC SURVEY 1993

LA2545'IN LIMA, AT 1885 NORTH MCCULLOUGH ROAD, 48.0 M (157.5 FT) SOUTH OF LA2545'THE CENTERLINE OF BIBLE ROAD, 46.8 M (153.5 FT) SOUTHEAST OF THE LA2545'NORTHEAST CORNER OF THE DEPARTMENT OF TRANSPORTATION OFFICE AT 1885 LA2545'NORTH MCCULLOUGH ROAD, 12.9 M (42.3 FT) EAST OF THE ROAD CENTERLINE, LA2545'8.2 M (26.9 FT) SOUTH OF THE MOST NORTHERLY DRIVEWAY LEADING TO A LA2545'PARKING LOT, 4.8 M (15.7 FT) NORTH OF THE NORTH EDGE OF THE PARKING LA2545'LOT, AND 0.3 M (1.0 FT) ABOVE THE LEVEL OF THE ROAD. NOTE--ACCESS TO LA2545'THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP.

LA2545

LA2545

LA2545

STATION RECOVERY (1995)

LA2545'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (DAC)

LA2545'THE STATION IS LOCATED IN LIMA, AT THE OHIO DEPARTMENT OF LA2545'TRANSPORTATION DISTRICT ONE OFFICE, IN THE LAWN NEAR A PARKING LOT. LA2545'OWNERSHIP--OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT ONE, 1885 N. LA2545'MCCULLOUGH STREET, BOX 40, LIMA OH 45802-0040, JEFFREY L. WAGGAMON, LA2545'P.S., DISTRICT SURVEY OPERATIONS MANAGER, PHONE 419-222-9055, LA2545'EXTENSION 267. TO REACH THE STATION FROM THE JUNCTION OF INTERSTATE LA2545'HIGHWAY 75 (EXIT 127) AND STATE ROUTE 81 NORTHEAST OF LIMA, GO WEST LA2545'FOR 0.85 MI (1.37 KM) ON ROUTE 81, TURN RIGHT AND GO NORTH FOR 1.4 MI LA2545'(2.3 KM) ON SUGAR STREET, TURN LEFT AND GO WEST FOR 0.15 MI (0.24 KM) LA2545'ON BIBLE STREET TO THE JUNCTION WITH MCCULLOUGH STREET ON THE LEFT AND LA2545'THE TRANSPORTATION OFFICE BUILDING. LOCATED 157.5 FT (48.0 M) SOUTH LA2545'OF THE CENTER OF BIBLE STREET, 153.5 FT (46.8 M) SOUTHEAST OF THE LA2545'NORTHEAST CORNER OF THE OFFICE BUILDING, 42.3 FT (12.9 M) EAST OF THE LA2545'CENTERLINE OF N. MCCULLOUGH STREET, 26.9 FT (8.2 M) SOUTH OF THE MOST LA2545'NORTHERLY DRIVEWAY LEADING TO THE PARKING LOT, 15.7 FT (4.8 M) NORTH LA2545'OF THE NORTH EDGE OF THE PARKING LOT AND 0.3 FT (9.1 CM) ABOVE THE LA2545'LEVEL OF THE STREET.

LA2545

LA2545

LA2545

STATION RECOVERY (1995)

LA2545'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

LA2545'LOCATED IN LIMA AT THE ODOT DISTRICT ONE OFFICE, AT 1885 NORTH LA2545'MCCULLOUGH STREET, IN THE LAWN NEAR A PARKING LOT. TO REACH FROM THE LA2545'JUNCTION OF INTERSTATE 75 (EXIT 127) AND STATE ROUTE 81 NORTHEAST OF LA2545'LIMA, GO WEST 1.37 KM (0.85 MI) ON ROUTE 81, TURN RIGHT AND GO NORTH LA2545'2.3 KM (1.40 MI) ON SUGAR STREET, TURN LEFT AND GO WEST 0.24 KM (0.15



LA2545' MI) ON BIBLE STREET TO THE JUNCTION WITH MCCULLOUGH STREET ON THE LEFT  
LA2545' AND THE ODOT OFFICE. THE STATION IS LOCATED, 48.0 M (157.5 FT) SOUTH  
LA2545' OF THE CENTER OF BIBLE ROAD, 46.8 M (153.5 FT) SOUTHEAST OF THE  
LA2545' NORTHEAST CORNER OF THE ODOT BUILDING, 12.9 M (42.3 FT) EAST OF THE  
LA2545' CENTERLINE OF NORTH MCCULLOUGH STREET, 8.2 M (26.9 FT) SOUTH OF THE  
LA2545' MOST NORTHERLY DRIVEWAY LEADING TO THE PARKING LOT, 4.8 M (15.7 FT)  
LA2545' NORTH OF THE NORTH EDGE OF THE PARKING LOT, AND 9.1 CM ABOVE THE LEVEL  
LA2545' OF THE STREET. OWNERSHIP--STATE OF OHIO, DEPARTMENT OF  
LA2545' TRANSPORTATION, DISTRICT 1 DEPUTY DIRECTOR, 1885 MCCULLOUGH STREET,  
LA2545' LIMA, OHIO 45801. THE MARK IS ACCESSIBLE AT ALL TIMES.

LA2545

LA2545 STATION RECOVERY (1995)

LA2545

LA2545' RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

LA2545' RECOVERED AS DESCRIBED.

LA2545

LA2545 STATION RECOVERY (1997)

LA2545

LA2545' RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)

LA2545' RECOVERED AS DESCRIBED.

LA2545

LA2545 STATION RECOVERY (2003)

LA2545

LA2545' RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2003 (JAS)

LA2545' RECOVERED AS DESCRIBED.

LA2545

LA2545 STATION RECOVERY (2003)

LA2545

LA2545' RECOVERY NOTE BY COMPASSCOM INC 2003 (JA)

LA2545' RECOVERED IN GOOD CONDITION.

LA2545

LA2545 STATION RECOVERY (2011)

LA2545

LA2545' RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011

LA2545' RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

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PROGRAM = datasheet95, VERSION = 8.12.5.4
1      National Geodetic Survey,  Retrieval Date = JANUARY  6, 2020
MC0215 *****
MC0215 SACS - This is a Secondary Airport Control Station.
MC0215 DESIGNATION - HEISLER
MC0215 PID - MC0215
MC0215 STATE/COUNTY- OH/HURON
MC0215 COUNTRY - US
MC0215 USGS QUAD - WILLARD (1972)
MC0215
MC0215 *CURRENT SURVEY CONTROL
MC0215
MC0215* NAD 83(2011) POSITION- 41 02 20.88180(N) 082 43 54.20823(W) ADJUSTED
MC0215* NAD 83(2011) ELLIP HT- 259.028 (meters) (06/27/12) ADJUSTED
MC0215* NAD 83(2011) EPOCH - 2010.00
MC0215* NAVD 88 ORTHO HEIGHT - 293.679 (meters) 963.51 (feet) ADJUSTED
MC0215
MC0215 GEOID HEIGHT - -34.650 (meters) GEOID18
MC0215 NAD 83(2011) X - 609,542.758 (meters) COMP
MC0215 NAD 83(2011) Y - -4,779,220.245 (meters) COMP
MC0215 NAD 83(2011) Z - 4,165,872.250 (meters) COMP
MC0215 LAPLACE CORR - 3.08 (seconds) DEFLEC18
MC0215 DYNAMIC HEIGHT - 293.543 (meters) 963.07 (feet) COMP
MC0215 MODELED GRAVITY - 980,153.7 (mgal) NAVD 88
MC0215
MC0215 VERT ORDER - FIRST CLASS II
MC0215
MC0215 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MC0215 Standards:
MC0215 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MC0215 Horiz Ellip SD_N SD_E SD_h (unitless)
MC0215 -----
MC0215 NETWORK 1.30 2.82 0.59 0.46 1.44 -0.03364874
MC0215 -----
MC0215 Click here for local accuracies and other accuracy information.
MC0215
MC0215
MC0215.This mark is at Willard Airport (8G1)
MC0215
MC0215.The horizontal coordinates were established by GPS observations
MC0215.and adjusted by the National Geodetic Survey in June 2012.
MC0215
MC0215.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MC0215.been affixed to the stable North American tectonic plate. See
MC0215.NA2011 for more information.
MC0215
MC0215.The horizontal coordinates are valid at the epoch date displayed above
MC0215.which is a decimal equivalence of Year/Month/Day.
MC0215
MC0215.The orthometric height was determined by differential leveling and
MC0215.adjusted by the NATIONAL GEODETIC SURVEY

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MC0215.in April 1995.

MC0215

MC0215.Significant digits in the geoid height do not necessarily reflect accuracy.

MC0215.GEOID18 height accuracy estimate available [here](#).

MC0215

MC0215.Click [here](#) to see if photographs exist for this station.

MC0215

MC0215.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC0215

MC0215.The Laplace correction was computed from DEFLEC18 derived deflections.

MC0215

MC0215.The ellipsoidal height was determined by GPS observations

MC0215.and is referenced to NAD 83.

MC0215

MC0215.The dynamic height is computed by dividing the NAVD 88

MC0215.geopotential number by the normal gravity value computed on the

MC0215.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC0215.degrees latitude (g = 980.6199 gals.).

MC0215

MC0215.The modeled gravity was interpolated from observed gravity values.

MC0215

MC0215. The following values were computed from the NAD 83(2011) position.

MC0215

MC0215;		North	East	Units	Scale Factor	Converg.
MC0215;SPC OH N	-	152,432.689	580,516.558	MT	0.99993926	-0 09 08.0
MC0215;SPC OH N	-	500,106.25	1,904,578.07	sFT	0.99993926	-0 09 08.0
MC0215;UTM 17	-	4,544,545.799	354,442.393	MT	0.99986077	-1 08 13.9

MC0215

MC0215! - Elev Factor x Scale Factor = Combined Factor

MC0215!SPC OH N - 0.99995937 x 0.99993926 = 0.99989863

MC0215!UTM 17 - 0.99995937 x 0.99986077 = 0.99982015

MC0215

MC0215:		Primary Azimuth Mark	Grid Az
MC0215:SPC OH N	-	HEISLER AZ MK	077 34 12.9
MC0215:UTM 17	-	HEISLER AZ MK	078 33 18.8

MC0215

MC0215\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF5444244545 (NAD 83)

MC0215

MC0215	PID	Reference Object	Distance	Geod. Az
MC0215				dddmss.s
MC0215	MC1182	WILLARD MUNICIPAL TANK	APPROX. 0.7 KM	0503122.8
MC0215	MC1183	WILLARD RR DONNELLEY SONS TANK	APPROX. 1.5 KM	0742459.0
MC0215	MC1561	HEISLER AZ MK	451.502 METERS	0772504.9
MC0215	CE6715	HEISLER RM 1	25.471 METERS	09734
MC0215	KZ1950	PLYMOUTH MUNICIPAL TANK	APPROX. 7.7 KM	1340904.2
MC0215	KZ1943	PLYMOUTH FATE ROOT HEATH CO TK	APPROX. 7.4 KM	1345906.6
MC0215	MC0216	HEISLER RM 2	15.987 METERS	15003
MC0215	MC0217	HEISLER RM 3	17.049 METERS	21205
MC0215	KZ1970	NEW WASHINGTON ST JOHNS SPIRE	APPROX.13.2 KM	2295040.9

MC0215

MC0215

SUPERSEDED SURVEY CONTROL

MC0215

MC0215 NAD 83(2007)- 41 02 20.88202(N) 082 43 54.20882(W) AD(2002.00) 0



MC0215	ELLIP H (02/10/07)	259.044	(m)				GP (2002.00)	
MC0215	ELLIP H (10/07/05)	259.042	(m)				GP ( )	4 2
MC0215	NAD 83(1995)-	41 02 20.88190	(N)	082	43	54.20891	(W) AD ( )	1
MC0215	ELLIP H (07/29/97)	259.058	(m)				GP ( )	4 2
MC0215	NAD 83(1986)-	41 02 20.88585	(N)	082	43	54.22537	(W) AD ( )	3
MC0215	NAD 27	- 41 02 20.68568	(N)	082	43	54.58193	(W) AD ( )	3
MC0215	NAVD 88	293.68	(m)			963.5	(f) LEVELING	3
MC0215	NGVD 29 (??/??/??)	293.82	(m)			964.0	(f) RESET	3
MC0215	NGVD 29 (01/19/93)	293.841	(m)			964.04	(f) ADJUSTED	1 2
MC0215	NGVD 29	293.82	(m)			964.0	(f) LEVELING	3

MC0215  
 MC0215.Superseded values are not recommended for survey control.  
 MC0215

MC0215.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MC0215.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MC0215

MC0215\_MARKER: DS = TRIANGULATION STATION DISK  
 MC0215\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 MC0215\_STAMPING: HEISLER 1959  
 MC0215\_MARK LOGO: CGS  
 MC0215\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 MC0215\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 MC0215+STABILITY: SURFACE MOTION  
 MC0215\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 MC0215+SATELLITE: SATELLITE OBSERVATIONS - October 31, 1995  
 MC0215

MC0215	HISTORY	- Date	Condition	Report By
MC0215	HISTORY	- 1959	MONUMENTED	CGS
MC0215	HISTORY	- 1971	SEE DESCRIPTION	OHHD
MC0215	HISTORY	- 1971	SEE DESCRIPTION	NGS
MC0215	HISTORY	- 1971	GOOD	NGS
MC0215	HISTORY	- 1986	GOOD	NGS
MC0215	HISTORY	- 1987	GOOD	OHDT
MC0215	HISTORY	- 19921023	GOOD	NGS
MC0215	HISTORY	- 19951031	GOOD	NGS

MC0215  
 MC0215 STATION DESCRIPTION  
 MC0215  
 MC0215'DESCRIBED BY COAST AND GEODETIC SURVEY 1959 (WER)  
 MC0215'THE STATION IS ABOUT 1-1/4 MILES SOUTH OF WILLARD, 1/4 MILE SOUTH OF  
 MC0215'U.S. HIGHWAY 224, ALONG THE  
 MC0215'EAST SIDE OF STATE HIGHWAY 298, ON THE WEST SIDE OF THE WILLARD  
 MC0215'AIRPORT, NEAR THE WEST CENTER OF NEW  
 MC0215'HAVEN TOWNSHIP, ON PROPERTY OWNED BY MR. KENNETH HEISLER.  
 MC0215'  
 MC0215'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 224 AND STATE  
 MC0215'HIGHWAY 298 ABOUT 1.0 MILE  
 MC0215'SOUTH OF WILLARD, GO SOUTH ON HIGHWAY 298 FOR 0.25 MILE TO THE MAIN  
 MC0215'BUILDING ON THE AIRPORT AND THE STATION  
 MC0215'ON THE LEFT.  
 MC0215'  
 MC0215'STATION MARKS ARE STANDARD DISKS STAMPED HEISLER 1959. THE SURFACE  
 MC0215'DISK IS SET IN A SQUARE  
 MC0215'CONCRETE POST 3 INCHES BELOW THE SURFACE OF THE GROUND. IT IS 54.5  
 MC0215'FEET NORTHWEST OF THE NORTHEAST



MC0215'CORNER OF THE MAIN BUILDING, 59.5 FEET NORTHEAST OF THE NORTHWEST  
MC0215'CORNER OF THE MAIN BUILDING AND 120 FEET EAST  
MC0215'OF THE CENTERLINE OF STATE HIGHWAY  
MC0215'298. THE UNDERGROUND DISK IS SET IN AN IRREGULAR MASS OF  
MC0215'CONCRETE 32 INCHES BELOW THE  
MC0215'SURFACE OF THE GROUND.  
MC0215'  
MC0215'REFERENCE MARK NO. 1, A STANDARD DISK STAMPED HEISLER NO 1 1959, IS  
MC0215'SET IN A SQUARE CONCRETE  
MC0215'POST FLUSH WITH THE SURFACE OF THE GROUND. IT IS 67 FEET NORTHEAST  
MC0215'OF THE NORTHEAST CORNER OF THE MAIN  
MC0215'BUILDING, 86 FEET WEST OF THE CENTER OF A GRAVEL NORTH-SOUTH  
MC0215'RUNWAY AND 203 FEET EAST OF THE CENTERLINE OF  
MC0215'HIGHWAY 298.  
MC0215'  
MC0215'REFERENCE MARK NO. 2, A STANDARD 1.S. COAST AND GEODETIC SURVEY BENCH  
MC0215'MARK DISK STAMPED U 173  
MC0215'1954, IS SET IN A ROUND CONCRETE POST FLUSH WITH THE SURFACE OF THE  
MC0215'GROUND. IT IS 67 FEET EAST OF THE  
MC0215'CENTERLINE OF HIGHWAY 298 AND 1.7 FEET WEST OF THE SOUTHWEST  
MC0215'CORNER OF THE MOST NORTHERLY HANGER ON THE  
MC0215'AIRPORT. A WOODEN WITNESS POST WAS SET 1.5  
MC0215'FEET SOUTHEAST OF THE MARK.  
MC0215'  
MC0215'AZIMUTH MARK, A STANDARD DISK STAMPED HEISLER 1959, IS SET IN A  
MC0215'SQUARE CONCRETE POST WHICH  
MC0215'PROJECTS 4 INCHES. IT IS 80 FEET NORTH OF THE CENTER OF A GRAVEL  
MC0215'EAST-WEST RUNWAY AND 6 FEET WEST OF  
MC0215'THE SOUTHWEST CORNER OF A FENCELINE. A STANDARD METAL WITNESS  
MC0215'POST WAS SET 1.5 FEET SOUTHEAST OF THE MARK.  
MC0215'  
MC0215'TO REACH THE AZIMUTH MARK FROM THE STATION, GO NORTH 0.1 MILE TO THE  
MC0215'NORTH SIDE OF THE AIRPORT. TURN RIGHT AND GO EAST ON A GRAVEL  
MC0215'RUNWAY FOR 0.25 MILE TO THE AZIMUTH MARK ON THE LEFT AT THE MOUTH  
MC0215'EDGE OF THE RUNWAY.  
MC0215'  
MC0215'HEIGHT OF LIGHT ABOVE STATION MARK 26 METERS.  
MC0215'  
MC0215'A TRAVERSE CONNECTION WAS MADE BETWEEN STA AND BM U 173 1954.  
MC0215'  
MC0215'  
MC0215'  
MC0215'  
MC0215' STATION RECOVERY (1971)  
MC0215'  
MC0215'RECOVERY NOTE BY OHIO HIGHWAY DEPARTMENT (NOW OHDT) 1971 (RS)  
MC0215'HEISLER 1959  
MC0215'GOOD - NO WITNESS POST  
MC0215'HEISLER NO 1-1959 DISC HAS BEEN  
MC0215'DESTROYED  
MC0215'U 173 1954 GOOD - NO WITNESS POST  
MC0215'AZI. HEISLER 1959 GOOD - HAS WITNESS  
MC0215'  
MC0215'TWO NEW REFERENCES SHOULD BE SET. STATION CANNOT BE SEEN FROM REF.  
MC0215'NO 2.  
MC0215'  
MC0215' AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN- 1.25 MILES S OF  
MC0215'WILLARD.



MC0215  
MC0215 STATION RECOVERY (1971)  
MC0215  
MC0215'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1971 (LFS)  
MC0215'THE STATION MARK AND AZIMUTH MARK WERE FOUND IN GOOD CONDITION.  
MC0215'U 173 WAS FOUND IN  
MC0215'GOOD CONDITION BUT OBSTRUCTED TO THE STATION BY THE  
MC0215'CORNER OF A BUILDING. REFERENCE MARK  
MC0215'1 WAS FOUND TO HAVE BEEN HIT AND  
MC0215'THE DISK GONE. REFERENCE MARKS 2 AND 3 WERE SET. THE  
MC0215'DIRECTION TO THE  
MC0215'AZIMUTH MARK CHECKED. A NEW DESCRIPTION FOLLOWS-  
MC0215'  
MC0215'THE STATION IS LOCATED AT THE SOUTHWEST CORNER OF THE WILLARD  
MC0215'AIRPORT, ON THE  
MC0215'PROPERTY OF MR. KENNETH HEISLER, ABOUT 1/4 MILE SOUTH  
MC0215'OF THE JUNCTION OF U.S. HIGHWAY  
MC0215'224 AND 103, 120 FEET  
MC0215'EAST OF THE CENTERLINE OF HIGHWAY 103, 54 FEET  
MC0215'NORTHWEST OF THE NORTHEAST  
MC0215'CORNER OF A LARGE CONCRETE BLOCK BUILDING (HEISTER TRUCK SALES),  
MC0215'AND 59 FEET  
MC0215'NORTHEAST OF THE NORTHWEST CORNER OF THE BUILDING. THE  
MC0215'MONUMENT IS 2 INCHES  
MC0215'UNDERGROUND AND THE DISK IS STAMPED HEISTER 1959.  
MC0215'(NOTE 1A 7A)  
MC0215'  
MC0215'REFERENCE MARK 2 IS 2 FEET NORTH OF THE NORTHEAST CORNER OF  
MC0215'THE BUILDING AND  
MC0215'144 FEET EAST OF THE CENTERLINE OF THE HIGHWAY. THE  
MC0215'MONUMENT IS FLUSH AND THE DISK IS  
MC0215'STAMPED HEISLER 1959 NO 2 1971.  
MC0215'  
MC0215'REFERENCE MARK 3 IS A STANDARD DISK STAMPED HEISLER 1959 NO 3  
MC0215'1971 SET IN A  
MC0215'DRILL HOLE IN THE NORTHWEST CORNER OF CONCRETE STEP, 3  
MC0215'FEET NORTHEAST OF THE NORTHWEST  
MC0215'CORNER OF THE BUILDING, 2 FEET NORTH  
MC0215'OF THE NORTH WALL OF THE BUILDING AND 88 FEET EAST  
MC0215'OF THE CENTERLINE OF  
MC0215'THE HIGHWAY.  
MC0215'  
MC0215'THE AZIMUTH MARK IS 140 FEET NORTH OF THE LIVE RUNWAY, 7 FEET  
MC0215'WEST OF A  
MC0215'NORTH-SOUTH FENCE CORNER AND 2 FEET WEST OF A METAL WITNESS  
MC0215'POST. THE MONUMENT PROJECTS  
MC0215'4 INCHES AND THE DISK IS STAMPED HEISLER  
MC0215'1959.  
MC0215'  
MC0215'TO REACH THE AZIMUTH MARK FROM THE STATION, GO NORTH ON THE  
MC0215'HIGHWAY FOR 0.1  
MC0215'MILE TO THE NORTH SIDE OF THE AIRPORT. TURN RIGHT AND  
MC0215'GO EAST ON RUNWAY FOR 0.25 MILE TO  
MC0215'THE AZIMUTH MARK ON THE LEFT AT  
MC0215'THE NORTH EDGE OF RUNWAY.



MC0215'  
MC0215' AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN- AT SOUTHWEST EDGE  
MC0215' OF WILLARD  
MC0215'  
MC0215' HEIGHT OF LIGHT ABOVE STATION MARK 5 FEET.  
MC0215  
MC0215 STATION RECOVERY (1971)  
MC0215  
MC0215' RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1971  
MC0215' AT WILLARD.  
MC0215' AT THE SOUTH EDGE OF WILLARD, 0.25 MILE SOUTH OF THE JUNCTION OF  
MC0215' U.S. HIGHWAY 224 AND STATE HIGHWAY 103, AT THE SOUTHWEST EDGE  
MC0215' OF THE WILLARD AIRPORT, 120 FEET EAST OF THE CENTERLINE OF  
MC0215' HIGHWAY 103, 54 FEET NORTHWEST OF THE NORTHEAST CORNER OF A  
MC0215' LARGE CONCRETE BLOCK BUILDING (HEISLER TRUCK SALES), AND 59  
MC0215' FEET NORTHEAST OF THE NORTHWEST CORNER OF THE BUILDING, SET IN  
MC0215' THE TOP OF A ROUND CONCRETE POST 2 INCHES UNDERGROUND.  
MC0215  
MC0215 STATION RECOVERY (1986)  
MC0215  
MC0215' RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1986  
MC0215' THE STATION IS LOCATED ABOUT 4 MILES NORTHWEST OF PLYMOUTH AND 1.0  
MC0215' MILE SOUTH OF WILLARD, 26 METERS SOUTH OF EAST/WEST RUNWAY AT THE  
MC0215' WILLARD AIRPORT AT THE NORTH END OF THE PARKING AREA FOR HEISLER INC.  
MC0215' TRUCK SALES. OWNERSHIP KENNETH HEISLER, 3810 STATE ROUTE 103  
MC0215' WILLARD OHIO PHONE 419 522 9811  
MC0215' TO REACH FROM THE JUNCTION OF U.S. HIGHWAY 224 AND STATE HIGHWAY 103  
MC0215' ON THE SOUTHWEST EDGE OF WILLARD. GO SOUTH ON STATE HIGHWAY 103 FOR  
MC0215' 0.25 MILES TO THE STATION ON THE LEFT.  
MC0215' THE STATION IS A STANDARD CGS STATION DISKS STAMPED --HEISLER 1959---.  
MC0215' THE STATION IS SET IN THE TOP OF A 25 CM SQUARE CONCRETE POST 25 CM  
MC0215' BELOW GROUND. IT IS 36.6 METERS EAST OF THE HIGHWAY CENTER LINE, 18.0  
MC0215' METERS NORTHEAST FROM THE NORTHWEST CORNER OF BLOCK BUILDING, 14.6  
MC0215' METERS NORTH FROM THE CENTER OF BUILDING AT METAL WITNESS POST, 16.5  
MC0215' METERS NORTHWEST OF THE NORTHEAST CORNER OF BUILDING.  
MC0215' TYPED BY JAMES MALONEY 9/06/87 DESCRIBED BY BL LAMBERT.  
MC0215  
MC0215 STATION RECOVERY (1987)  
MC0215  
MC0215' RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1987 (JY)  
MC0215' RECOVERED IN GOOD CONDITION.  
MC0215  
MC0215 STATION RECOVERY (1992)  
MC0215  
MC0215' RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1992  
MC0215' 0.4 KM (0.25 MI) SOUTHERLY ALONG STATE HIGHWAY 103 FROM THE JUNCTION  
MC0215' OF U.S. HIGHWAY 224 IN WILLARD, 36.6 M (120.1 FT) EAST OF AND LEVEL  
MC0215' WITH THE HIGHWAY CENTERLINE, 17.0 M (55.8 FT) NORTHEAST OF REFERENCE  
MC0215' MARK 3, 16.0 M (52.5 FT) NORTHWEST OF REFERENCE MARK 2, 14.6 M  
MC0215' (47.9 FT) NORTH OF A WITNESS POST AND THE NORTH FACE OF A BUILDING,  
MC0215' AND THE MONUMENT IS RECESSED 0.1 M (0.3 FT) BELOW THE GROUND  
MC0215' SURFACE.  
MC0215  
MC0215 STATION RECOVERY (1995)  
MC0215



MC0215'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
MC0215'THE STATION IS LOCATED ABOUT 6.0 KM (3.70 MI) NORTHWEST OF PLYMOUTH,  
MC0215'OH., AND 1.5 KM (0.95 MI) SOUTH OF WILLARD, OH., JUST SOUTH OF THE  
MC0215'AIRPORT ENTRANCE, SOUTH OF THE WEST END OF THE RUNWAY, IN THE NORTH  
MC0215'EDGE OF THE GRAVEL DRIVE OF HEISLER INC. TRUCK SALES.  
MC0215'OWNERSHIP--KENNETH HIESLER, 3810 STATE ROUTE 103, WILLARD, OH. PHONE  
MC0215'419-522-9811. NOTE--THIS STATION WAS SELECTED AS A (SACS) .  
MC0215'NOTE--PROBABLY COVERED WITH GRAVEL. TO REACH THE STATION FROM THE  
MC0215'JUNCTION OF U.S. HIGHWAY 224 AND STATE HIGHWAY 103 NEAR THE SOUTHWEST  
MC0215'EDGE OF WILLARD, GO SOUTH, 0.40 KM (0.25 MI) ALONG HIGHWAY 103 PAST  
MC0215'THE WEST END OF THE RUNWAY TO THE GRAVEL DRIVE AND THE STATION ON THE  
MC0215'LEFT. STATION IS 36.6 M (120.1 FT) EAST OF THE HIGHWAY CENTERLINE,  
MC0215'18.0 M (59.1 FT) NORTHEAST OF THE NORTHWEST CORNER OF THE BLOCK  
MC0215'BUILDING, 16.5 M (54.1 FT) NORTHWEST OF THE NORTHEAST CORNER OF THE  
MC0215'BUILDING, 14.7 M (48.2 FT) NORTH OF THE BUILDINGS NORTH FACE AND METAL  
MC0215'WITNESS POST, AND THE MONUMENT IS 0.1 M (0.3 FT) BELOW THE ROAD LEVEL  
MC0215'AND 0.1 M (0.3 FT) BELOW THE GROUND SURFACE. BY R.G. HAYES

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DF7205 \*\*\*\*\*

DF7205 DESIGNATION - **HI 14**

DF7205 PID - DF7205

DF7205 STATE/COUNTY- OH/MEDINA

DF7205 COUNTRY - US

DF7205 USGS QUAD - MEDINA (1994)

DF7205

DF7205 \*CURRENT SURVEY CONTROL

DF7205

DF7205\* NAD 83(2011) POSITION- 41 14 20.42697(N) 081 47 05.23060(W) ADJUSTED

DF7205\* NAD 83(2011) ELLIP HT- 330.741 (meters) (06/27/12) ADJUSTED

DF7205\* NAD 83(2011) EPOCH - 2010.00

DF7205\* [NAVD 88](#) ORTHO HEIGHT - 364.5 (meters) 1196. (feet) GPS OBS

DF7205

DF7205 NAVD 88 orthometric height was determined with geoid model GEOID99

DF7205 GEOID HEIGHT - -33.743 (meters) GEOID99

DF7205 GEOID HEIGHT - -33.784 (meters) GEOID18

DF7205 NAD 83(2011) X - 686,363.920 (meters) COMP

DF7205 NAD 83(2011) Y - -4,754,093.267 (meters) COMP

DF7205 NAD 83(2011) Z - 4,182,637.305 (meters) COMP

DF7205 LAPLACE CORR - 1.30 (seconds) DEFLEC18

DF7205

DF7205 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DF7205 Standards:

DF7205 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

DF7205 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

DF7205 -----

DF7205 NETWORK 1.38 2.12 0.62 0.50 1.08 0.03738138

DF7205 -----

DF7205 Click [here](#) for local accuracies and other accuracy information.

DF7205

DF7205

DF7205.The horizontal coordinates were established by GPS observations

DF7205.and adjusted by the National Geodetic Survey in June 2012.

DF7205

DF7205.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

DF7205.been affixed to the stable North American tectonic plate. See

DF7205.[NA2011](#) for more information.

DF7205

DF7205.The horizontal coordinates are valid at the epoch date displayed above

DF7205.which is a decimal equivalence of Year/Month/Day.

DF7205

DF7205.The orthometric height was determined by GPS observations and a

DF7205.high-resolution geoid model.

DF7205

DF7205.Significant digits in the geoid height do not necessarily reflect accuracy.

DF7205.GEOID18 height accuracy estimate available [here](#).

DF7205

DF7205.Click [here](#) to see if photographs exist for this station.





DF7205  
 DF7205.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 DF7205  
 DF7205.The Laplace correction was computed from DEFLEC18 derived deflections.  
 DF7205  
 DF7205.The ellipsoidal height was determined by GPS observations  
 DF7205.and is referenced to NAD 83.

DF7205  
 DF7205. The following values were computed from the NAD 83(2011) position.

DF7205

DF7205;		North	East	Units	Scale	Factor	Converg.
DF7205;SPC OH N	-	174,848.597	659,952.689	MT	0.99994360	+0 28	11.5
DF7205;SPC OH N	-	573,649.11	2,165,194.78	sFT	0.99994360	+0 28	11.5
DF7205;UTM 17	-	4,565,586.615	434,236.996	MT	0.99965322	-0 31	02.5

DF7205  
 DF7205!  
 DF7205!SPC OH N  
 DF7205!UTM 17

	-	Elev Factor	x	Scale Factor	=	Combined Factor
DF7205!SPC OH N	-	0.99994812	x	0.99994360	=	0.99989173
DF7205!UTM 17	-	0.99994812	x	0.99965322	=	0.99960136

DF7205  
 DF7205\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF3423665586 (NAD 83)

DF7205  
 DF7205 SUPERSEDED SURVEY CONTROL

DF7205

DF7205	NAD 83(2007)-	41 14 20.42695(N)	081 47 05.23115(W)	AD(2002.00)	0
DF7205	ELLIP H (02/10/07)	330.761 (m)		GP(2002.00)	
DF7205	ELLIP H (10/07/05)	330.770 (m)		GP( )	4 2
DF7205	NAD 83(1995)-	41 14 20.42656(N)	081 47 05.23095(W)	AD( )	1
DF7205	ELLIP H (08/20/03)	330.798 (m)		GP( )	4 2

DF7205  
 DF7205.Superseded values are not recommended for survey control.  
 DF7205  
 DF7205.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 DF7205.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DF7205  
 DF7205\_MARKER: DD = SURVEY DISK  
 DF7205\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 DF7205\_STAMPING: HI 14 2000  
 DF7205\_MARK LOGO: OH-103  
 DF7205\_PROJECTION: FLUSH  
 DF7205\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT  
 DF7205\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 DF7205+STABILITY: SURFACE MOTION  
 DF7205\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 DF7205+SATELLITE: SATELLITE OBSERVATIONS - June 22, 2008

DF7205

DF7205	HISTORY	-	Date	Condition	Report By
DF7205	HISTORY	-	20000115	MONUMENTED	OH-103
DF7205	HISTORY	-	20080622	GOOD	GEOCAC

DF7205  
 DF7205 STATION DESCRIPTION  
 DF7205  
 DF7205'DESCRIBED BY MEDINA COUNTY OHIO 2000 (MAJ)  
 DF7205'DESCRIBED BY MEDINA COUNTY SANITARY ENGINEER 2000  
 DF7205'STATION IS LOCATED ON THE EAST EDGE OF BRUNSWICK CITY, IN MEDINA  
 DF7205'COUNTY, OHIO, HINCKLEY TOWNSHIP, LOT 41. OWNERSHIP--ROAD



DF7205'RIGHT-OF-WAY.

DF7205'

DF7205'TO REACH FROM THE INTERSECTION OF INTERSTATE 71 AND S.R. 303 IN  
DF7205'BRUNSWICK, GO EAST ON S.R. 303 0.7 MI TO ITS INTERSECTION WITH  
DF7205'COUNTY ROAD 17 (WEST 130TH ST) AND THE STATION ON THE NORTHEAST  
DF7205'CORNER.

DF7205'

DF7205'THE STATION MARK IS A STANDARD MEDINA COUNTY SANITARY ENGINEER  
DF7205'GPS SURVEY 3.5 INCH DIA BRONZE DISK STAMPED --HI14 2000-- SET IN A 12  
DF7205'INCH DIA 48 INCH DEEP CONCRETE MONUMENT WITH A 12 INCH PVC SLEEVE,  
DF7205'SET FLUSH WITH THE GROUND SURFACE. STATION IS 39.4 FT EAST OF WEST  
DF7205'130TH ST, 217.0 FT NORTH OF S.R. 303, 14.3 FT SOUTH OF A POLE MARKED  
DF7205'--90200-1385--, AND 1.0 FT WEST OF AN ORANGE CARSONITE WITNESS POST.

DF7205'

DF7205'NO REFERENCE MARKS OR AZIMUTH MARKS WERE SET FOR THIS STATION.

DF7205

DF7205

STATION RECOVERY (2008)

DF7205

DF7205'RECOVERY NOTE BY GEOCACHING 2008 (RLM)

DF7205'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019  
 MC0069 \*\*\*\*\*  
 MC0069 DESIGNATION - **HOMER AZ MK**  
 MC0069 PID - MC0069  
 MC0069 STATE/COUNTY- OH/MEDINA  
 MC0069 COUNTRY - US  
 MC0069 USGS QUAD - SULLIVAN (1973)

MC0069 \*CURRENT SURVEY CONTROL

MC0069\* NAD 83(2011) POSITION- 41 03 13.73362(N) 082 07 31.63880(W) ADJUSTED  
 MC0069\* NAD 83(2011) ELLIP HT- 285.509 (meters) (06/27/12) ADJUSTED  
 MC0069\* NAD 83(2011) EPOCH - 2010.00  
 MC0069\* [NAVD 88](#) ORTHO HEIGHT - 319.092 (meters) 1046.89 (feet) ADJUSTED  
 MC0069  
 MC0069 GEOID HEIGHT - -33.612 (meters) GEOID18  
 MC0069 NAD 83(2011) X - 659,934.556 (meters) COMP  
 MC0069 NAD 83(2011) Y - -4,771,462.195 (meters) COMP  
 MC0069 NAD 83(2011) Z - 4,167,119.305 (meters) COMP  
 MC0069 LAPLACE CORR - 2.29 (seconds) DEFLEC18  
 MC0069 DYNAMIC HEIGHT - 318.952 (meters) 1046.43 (feet) COMP  
 MC0069 MODELED GRAVITY - 980,179.2 (mgal) NAVD 88

MC0069 VERT ORDER - FIRST CLASS I

MC0069 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	1.80	2.43	0.82	0.63	1.24	-0.01031903

MC0069 Click [here](#) for local accuracies and other accuracy information.

MC0069.The horizontal coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2012.

MC0069.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American tectonic plate. See [NA2011](#) for more information.

MC0069.The horizontal coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

MC0069.The orthometric height was determined by differential leveling and adjusted by the NATIONAL GEODETIC SURVEY in June 1991.

MC0069.Significant digits in the geoid height do not necessarily reflect accuracy.



MC0069.GEOID18 height accuracy estimate available [here](#).

MC0069

MC0069.Click [here](#) to see if photographs exist for this station.

MC0069

MC0069.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC0069

MC0069.The Laplace correction was computed from DEFLEC18 derived deflections.

MC0069

MC0069.The ellipsoidal height was determined by GPS observations

MC0069.and is referenced to NAD 83.

MC0069

MC0069.The dynamic height is computed by dividing the NAVD 88

MC0069.geopotential number by the normal gravity value computed on the

MC0069.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC0069.degrees latitude (g = 980.6199 gals.).

MC0069

MC0069.The modeled gravity was interpolated from observed gravity values.

MC0069

MC0069. The following values were computed from the NAD 83(2011) position.

MC0069

MC0069;		North	East	Units	Scale Factor	Converg.
MC0069;SPC OH N	-	154,104.715	631,484.737	MT	0.99993917	+0 14 45.8
MC0069;SPC OH N	-	505,591.89	2,071,796.17	sFT	0.99993917	+0 14 45.8
MC0069;UTM 17	-	4,545,341.152	405,423.672	MT	0.99971009	-0 44 21.2

MC0069

MC0069!  
MC0069!SPC OH N

MC0069!  
MC0069!UTM 17

MC0069!  
MC0069!UTM 17

MC0069

MC0069\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF0542345341 (NAD 83)

MC0069

MC0069 SUPERSEDED SURVEY CONTROL

MC0069

MC0069	NAD 83(2007)-	41 03 13.73362(N)	082 07 31.63953(W)	AD(2002.00)	0
MC0069	ELLIP H (02/10/07)	285.526 (m)		GP(2002.00)	
MC0069	ELLIP H (10/07/05)	285.538 (m)		GP( )	4 2
MC0069	NAD 83(1995)-	41 03 13.73364(N)	082 07 31.63950(W)	AD( )	1
MC0069	ELLIP H (08/20/03)	285.544 (m)		GP( )	4 2
MC0069	NAVD 88 (08/20/03)	319.1 (m)	GEOID99 model used	GPS OBS	
MC0069	NGVD 29 (??/??/92)	319.292 (m)	1047.54 (f)	ADJ UNCH	1 1

MC0069

MC0069.Superseded values are not recommended for survey control.

MC0069

MC0069.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC0069.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC0069

MC0069\_MARKER: DZ = AZIMUTH MARK DISK

MC0069\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MC0069\_STAMPING: HOMER 1959

MC0069\_MARK LOGO: CGS

MC0069\_PROJECTION: PROJECTING 5 CENTIMETERS

MC0069\_MAGNETIC: N = NO MAGNETIC MATERIAL

MC0069\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MC0069+STABILITY: SURFACE MOTION

MC0069\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR



MC0069+SATELLITE: SATELLITE OBSERVATIONS - July 04, 2016

MC0069

MC0069	HISTORY	- Date	Condition	Report By
MC0069	HISTORY	- 1959	MONUMENTED	CGS
MC0069	HISTORY	- 1967	GOOD	CGS
MC0069	HISTORY	- 2000	GOOD	OH-103
MC0069	HISTORY	- 20160704	GOOD	GEOCAC

MC0069

MC0069

STATION DESCRIPTION

MC0069

MC0069'DESCRIBED BY COAST AND GEODETIC SURVEY 1967

MC0069'6.4 MI NE FROM SULLIVAN.

MC0069'ABOUT 5.3 MILES EAST ALONG THE BALTIMORE AND OHIO RAILROAD FROM  
MC0069'THE CROSSING OF STATE HIGHWAY 58 AT SULLIVAN, THENCE 1.05 MILES  
MC0069'NORTH ALONG STATE HIGHWAY 301, ABOUT 0.15 MILE SOUTH OF THE  
MC0069'INTERSECTION OF COUNTY ROAD NO. 83, 134 FEET SOUTHEAST OF THE  
MC0069'APPROXIMATE CENTER OF THE JUNCTION OF THE HIGHWAY AND A DRIVEWAY  
MC0069'LEADING EAST, 40 FEET EAST OF THE CENTER LINE OF THE HIGHWAY,  
MC0069'1 1/2 FEET SOUTH OF POWER LINE POLE 65 DA-1, 1.8 FEET SOUTHEAST  
MC0069'OF A METAL WITNESS POST, 1 1/2 FEET ABOVE THE LEVEL OF THE  
MC0069'HIGHWAY AND SET IN THE TOP OF A CONCRETE POST PROJECTING 2 INCHES  
MC0069'ABOVE THE LEVEL OF THE GROUND.

MC0069

MC0069

STATION RECOVERY (2000)

MC0069

MC0069'RECOVERY NOTE BY MEDINA COUNTY OHIO 2000

MC0069'RECOVERY NOTE BY MEDINA COUNTY SANITARY ENGINEER 2000

MC0069'FOUND AS DESCRIBED IN GOOD CONDITION.

MC0069'

MC0069

MC0069

STATION RECOVERY (2016)

MC0069

MC0069'RECOVERY NOTE BY GEOCACHING 2016 (RLM)

MC0069'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MB1083 *****
MB1083 DESIGNATION - HUDSON
MB1083 PID - MB1083
MB1083 STATE/COUNTY- OH/SUMMIT
MB1083 COUNTRY - US
MB1083 USGS QUAD - HUDSON (1984)
MB1083
MB1083 *CURRENT SURVEY CONTROL
MB1083
MB1083* NAD 83(2011) POSITION- 41 14 24.10542(N) 081 26 40.96959(W) ADJUSTED
MB1083* NAD 83(2011) ELLIP HT- 289.887 (meters) (06/27/12) ADJUSTED
MB1083* NAD 83(2011) EPOCH - 2010.00
MB1083* NAVD 88 ORTHO HEIGHT - 323.593 (meters) 1061.65 (feet) ADJUSTED
MB1083
MB1083 GEOID HEIGHT - -33.718 (meters) GEOID18
MB1083 NAD 83(2011) X - 714,553.339 (meters) COMP
MB1083 NAD 83(2011) Y - -4,749,831.361 (meters) COMP
MB1083 NAD 83(2011) Z - 4,182,695.710 (meters) COMP
MB1083 LAPLACE CORR - 1.22 (seconds) DEFLEC18
MB1083 DYNAMIC HEIGHT - 323.453 (meters) 1061.20 (feet) COMP
MB1083 MODELED GRAVITY - 980,182.1 (mgal) NAVD 88
MB1083
MB1083 VERT ORDER - FIRST CLASS II
MB1083
MB1083 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB1083 Standards:
MB1083 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MB1083 Horiz Ellip SD_N SD_E SD_h (unitless)
MB1083 -----
MB1083 NETWORK 2.79 5.23 1.28 0.95 2.67 0.04808443
MB1083 -----
MB1083 Click here for local accuracies and other accuracy information.
MB1083
MB1083
MB1083.The horizontal coordinates were established by GPS observations
MB1083.and adjusted by the National Geodetic Survey in June 2012.
MB1083
MB1083.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB1083.been affixed to the stable North American tectonic plate. See
MB1083.NA2011 for more information.
MB1083
MB1083.The horizontal coordinates are valid at the epoch date displayed above
MB1083.which is a decimal equivalence of Year/Month/Day.
MB1083
MB1083.The orthometric height was determined by differential leveling and
MB1083.adjusted by the NATIONAL GEODETIC SURVEY
MB1083.in June 1991.
MB1083
MB1083.WARNING-Repeat measurements at this control monument indicate possible

```



MB1083.vertical movement.

MB1083

MB1083.Significant digits in the geoid height do not necessarily reflect accuracy.

MB1083.GEOID18 height accuracy estimate available [here](#).

MB1083

MB1083.Click [here](#) to see if photographs exist for this station.

MB1083

MB1083.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MB1083

MB1083.The Laplace correction was computed from DEFLEC18 derived deflections.

MB1083

MB1083.The ellipsoidal height was determined by GPS observations

MB1083.and is referenced to NAD 83.

MB1083

MB1083.The dynamic height is computed by dividing the NAVD 88

MB1083.geopotential number by the normal gravity value computed on the

MB1083.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB1083.degrees latitude (g = 980.6199 gals.).

MB1083

MB1083.The modeled gravity was interpolated from observed gravity values.

MB1083

MB1083. The following values were computed from the NAD 83(2011) position.

MB1083

MB1083;		North	East	Units	Scale	Factor	Converg.
MB1083;SPC OH N	-	175,251.407	688,456.678	MT	0.99994365	+0 41	35.8
MB1083;SPC OH N	-	574,970.66	2,258,711.62	sFT	0.99994365	+0 41	35.8
MB1083;UTM 17	-	4,565,498.483	462,734.853	MT	0.99961709	-0 17	35.4
MB1083!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
MB1083!SPC OH N	-	0.99995453	x	0.99994365	=	0.99989818	
MB1083!UTM 17	-	0.99995453	x	0.99961709	=	0.99957164	

MB1083

MB1083\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF6273465498 (NAD 83)

MB1083

MB1083 SUPERSEDED SURVEY CONTROL

MB1083

MB1083	NAD 83(2007)-	41 14 24.10549(N)	081 26 40.97030(W)	AD(2002.00)	0
MB1083	ELLIP H (02/10/07)	289.903 (m)		GP(2002.00)	
MB1083	ELLIP H (10/07/05)	289.888 (m)		GP( )	4 1
MB1083	NAD 83(1995)-	41 14 24.10530(N)	081 26 40.96782(W)	AD( )	3
MB1083	ELLIP H (04/01/98)	289.941 (m)		GP( )	4 1
MB1083	NAD 83(1986)-	41 14 24.11497(N)	081 26 40.96804(W)	AD( )	3
MB1083	NGVD 29 (??/??/92)	323.756 (m)	1062.19 (f)	SUPERSEDED	1 2
MB1083	NGVD 29 (06/03/92)	323.801 (m)	1062.34 (f)	ADJUSTED	1 2
MB1083	NGVD 29	323.76 (m)	1062.2 (f)	LEVELING	3

MB1083

MB1083.Superseded values are not recommended for survey control.

MB1083

MB1083.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MB1083.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB1083

MB1083\_MARKER: DB = BENCH MARK DISK

MB1083\_SETTING: 38 = SET IN THE ABUTMENT OR PIER OF A LARGE BRIDGE

MB1083\_SP\_SET: BRIDGE ABUTMENT

MB1083\_STAMPING: HUDSON 1934



MB1083\_MARK LOGO: CGS  
MB1083\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MB1083\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
MB1083\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MB1083+SATELLITE: SATELLITE OBSERVATIONS - December 16, 2006

MB1083

MB1083	HISTORY	- Date	Condition	Report By
MB1083	HISTORY	- 1934	MONUMENTED	CGS
MB1083	HISTORY	- 1938	GOOD	CGS
MB1083	HISTORY	- 1983	GOOD	NGS
MB1083	HISTORY	- 1989	GOOD	OHDT
MB1083	HISTORY	- 19900915	GOOD	RDA
MB1083	HISTORY	- 20061216	GOOD	GEOCAC

MB1083

MB1083 STATION DESCRIPTION

MB1083

MB1083'DESCRIBED BY COAST AND GEODETIC SURVEY 1938

MB1083'AT HUDSON.

MB1083'AT HUDSON, SUMMIT COUNTY, IN LINE WITH THE SOUTH SIDE OF THE  
MB1083'PENNSYLVANIA RAILROAD STATION, 21 YARDS WEST OF THE SOUTHWEST  
MB1083'CORNER, IN THE TOP OF THE NORTH ABUTMENT OF THE WEST BRIDGE OVER  
MB1083'STATE HIGHWAY 303, 2.8 FEET EAST OF THE SOUTHWEST CORNER OF THE  
MB1083'ABUTMENT, 5.8 FEET WEST OF THE WEST SIDE OF THE WEST GIRDER, AND  
MB1083'7.5 FEET WEST OF THE WEST RAIL OF THE WEST TRACK. A STANDARD  
MB1083'DISK, STAMPED HUDSON 1934.

MB1083

MB1083 STATION RECOVERY (1983)

MB1083

MB1083'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1983

MB1083'RECOVERED IN GOOD CONDITION.

MB1083

MB1083 STATION RECOVERY (1989)

MB1083

MB1083'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1989 (KM)

MB1083'RECOVERED IN GOOD CONDITION.

MB1083

MB1083 STATION RECOVERY (1990)

MB1083

MB1083'RECOVERY NOTE BY RINKER DETWILER AND ASSOCIATES 1990

MB1083'RECOVERED IN GOOD CONDITION.

MB1083

MB1083 STATION RECOVERY (2006)

MB1083

MB1083'RECOVERY NOTE BY GEOCACHING 2006 (RLM)

MB1083'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = JANUARY 6, 2020

KZ0966 \*\*\*\*\*

KZ0966 DESIGNATION - **J 272**

KZ0966 PID - KZ0966

KZ0966 STATE/COUNTY- OH/KNOX

KZ0966 COUNTRY - US

KZ0966 USGS QUAD - CENTERBURG (1984)

KZ0966

KZ0966 \*CURRENT SURVEY CONTROL

KZ0966

KZ0966\* NAD 83(2011) POSITION- 40 19 12.07756(N) 082 41 30.81104(W) ADJUSTED

KZ0966\* NAD 83(2011) ELLIP HT- 344.456 (meters) (06/27/12) ADJUSTED

KZ0966\* NAD 83(2011) EPOCH - 2010.00

KZ0966\* [NAVD 88](#) ORTHO HEIGHT - 378.456 (meters) 1241.65 (feet) ADJUSTED

KZ0966

KZ0966 GEOID HEIGHT - -33.963 (meters) GEOID18

KZ0966 NAD 83(2011) X - 619,494.985 (meters) COMP

KZ0966 NAD 83(2011) Y - -4,830,491.102 (meters) COMP

KZ0966 NAD 83(2011) Z - 4,105,365.499 (meters) COMP

KZ0966 LAPLACE CORR - 1.32 (seconds) DEFLEC18

KZ0966 DYNAMIC HEIGHT - 378.252 (meters) 1240.98 (feet) COMP

KZ0966 MODELED GRAVITY - 980,077.0 (mgal) NAVD 88

KZ0966

KZ0966 VERT ORDER - SECOND CLASS 0

KZ0966

KZ0966 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

KZ0966 Standards:

KZ0966 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

KZ0966 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

KZ0966 -----

KZ0966 NETWORK 2.69 6.39 1.25 0.88 3.26 0.00389974

KZ0966 -----

KZ0966 Click [here](#) for local accuracies and other accuracy information.

KZ0966

KZ0966

KZ0966.The horizontal coordinates were established by GPS observations

KZ0966.and adjusted by the National Geodetic Survey in June 2012.

KZ0966

KZ0966.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

KZ0966.been affixed to the stable North American tectonic plate. See

KZ0966.[NA2011](#) for more information.

KZ0966

KZ0966.The horizontal coordinates are valid at the epoch date displayed above

KZ0966.which is a decimal equivalence of Year/Month/Day.

KZ0966

KZ0966.The orthometric height was determined by differential leveling and

KZ0966.adjusted by the NATIONAL GEODETIC SURVEY

KZ0966.in June 1991.

KZ0966

KZ0966.Significant digits in the geoid height do not necessarily reflect accuracy.



KZ0966.GEOID18 height accuracy estimate available [here](#).

KZ0966

KZ0966.Click [here](#) to see if photographs exist for this station.

KZ0966

KZ0966.The X, Y, and Z were computed from the position and the ellipsoidal ht.

KZ0966

KZ0966.The Laplace correction was computed from DEFLEC18 derived deflections.

KZ0966

KZ0966.The ellipsoidal height was determined by GPS observations

KZ0966.and is referenced to NAD 83.

KZ0966

KZ0966.The dynamic height is computed by dividing the NAVD 88

KZ0966.geopotential number by the normal gravity value computed on the

KZ0966.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

KZ0966.degrees latitude (g = 980.6199 gals.).

KZ0966

KZ0966.The modeled gravity was interpolated from observed gravity values.

KZ0966

KZ0966. The following values were computed from the NAD 83(2011) position.

KZ0966

KZ0966;		North	East	Units	Scale	Factor	Converg.
KZ0966;SPC OH N	-	72,571.486	583,689.986	MT	1.00002364	-0 07	33.8
KZ0966;SPC OH N	-	238,094.95	1,914,989.56	sFT	1.00002364	-0 07	33.8
KZ0966;UTM 17	-	4,464,650.961	356,253.616	MT	0.99985436	-1 05	41.8

KZ0966

KZ0966! - Elev Factor x Scale Factor = Combined Factor

KZ0966!SPC OH N - 0.99994597 x 1.00002364 = 0.99996961

KZ0966!UTM 17 - 0.99994597 x 0.99985436 = 0.99980034

KZ0966

KZ0966\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLE5625364650 (NAD 83)

KZ0966

SUPERSEDED SURVEY CONTROL

KZ0966

KZ0966	NAD 83(2007)-	40 19 12.07861(N)	082 41 30.81419(W)	AD(2002.00)	0
KZ0966	ELLIP H (02/10/07)	344.525 (m)		GP(2002.00)	
KZ0966	ELLIP H (10/07/05)	344.489 (m)		GP( )	4 1
KZ0966	NAD 83(1995)-	40 19 12.07956(N)	082 41 30.81514(W)	AD( )	1
KZ0966	ELLIP H (04/01/98)	344.562 (m)		GP( )	4 1
KZ0966	NAD 83(1986)-	40 19 12.08575(N)	082 41 30.81849(W)	AD( )	1
KZ0966	NAVD 88	378.46 (m)	1241.7 (f)	LEVELING	3
KZ0966	NGVD 29 (??/??/92)	378.591 (m)	1242.09 (f)	ADJ UNCH	2 0

KZ0966

KZ0966.Superseded values are not recommended for survey control.

KZ0966

KZ0966.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

KZ0966.See file [dsdata.pdf](#) to determine how the superseded data were derived.

KZ0966

KZ0966\_MARKER: DB = BENCH MARK DISK

KZ0966\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

KZ0966\_STAMPING: J 272 1959

KZ0966\_MARK LOGO: CGS

KZ0966\_PROJECTION: PROJECTING 3 CENTIMETERS

KZ0966\_MAGNETIC: O = OTHER; SEE DESCRIPTION

KZ0966\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

KZ0966+STABILITY: SURFACE MOTION



KZ0966\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
KZ0966+SATELLITE: SATELLITE OBSERVATIONS - April 07, 2012

KZ0966  
KZ0966 HISTORY - Date Condition Report By  
KZ0966 HISTORY - 1959 MONUMENTED CGS  
KZ0966 HISTORY - 19931013 GOOD GEOONE  
KZ0966 HISTORY - 19980916 GOOD GEOMET  
KZ0966 HISTORY - 20120407 GOOD GEOCAC

KZ0966  
KZ0966 STATION DESCRIPTION

KZ0966  
KZ0966'DESCRIBED BY COAST AND GEODETIC SURVEY 1959  
KZ0966'0.8 MI N FROM CENTERBURG.  
KZ0966'ABOUT 0.8 MILE NORTH ALONG STATE HIGHWAY 314 FROM THE JUNCTION  
KZ0966'OF U.S. HIGHWAY 36 AT CENTERBURG, 0.65 MILE NORTH OF THE  
KZ0966'CROSSING OF THE PENNSYLVANIA RAILROAD, AT THE INTERSECTION OF  
KZ0966'A GRAVEL ROAD (DELAWARE ROAD) LEADING EAST AND WEST, 47 FEET  
KZ0966'EAST OF THE CENTER LINE OF HIGHWAY, 25 FEET NORTH OF THE CENTER  
KZ0966'LINE OF GRAVEL ROAD, 1 FOOT SOUTH OF A WIRE FENCE, 21 1/2 FEET  
KZ0966'EAST OF A FENCE CORNER, 2 FEET WEST OF A STEEL WITNESS POST,  
KZ0966'ABOUT LEVEL WITH THE ROADS, AND SET IN TOP OF A CONCRETE  
KZ0966'POST PROJECTING 2 INCHES. NOTE-- THIS MARK CAN BE REACHED BY  
KZ0966'GOING ABOUT 0.4 MILE NORTHEAST ALONG THE PENNSYLVANIA RAILROAD  
KZ0966'FROM THE STATION AT CENTERBURG, THENCE ABOUT 0.65 MILE NORTH  
KZ0966'ALONG STATE HIGHWAY 314.

KZ0966  
KZ0966 STATION RECOVERY (1993)

KZ0966  
KZ0966'RECOVERY NOTE BY GEOONE INCORPORATED 1993 (SBE)  
KZ0966'RECOVERED AS DESCRIBED.

KZ0966  
KZ0966 STATION RECOVERY (1998)

KZ0966  
KZ0966'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1998 (DAR)  
KZ0966'THE STATION IS IN LOCATED IN HILLIAR TOWNSHIP IN KNOX COUNTY, OHIO IN  
KZ0966'THE NORTHEAST CORNER OF THE INTERSECTION OF JOHNSVILLE ROAD (SR 314)  
KZ0966'AND UPDIKE ROAD (T-109) .

KZ0966  
KZ0966 STATION RECOVERY (2012)

KZ0966  
KZ0966'RECOVERY NOTE BY GEOCACHING 2012 (RLM)  
KZ0966'RECOVERED IN GOOD CONDITION. THE WIRE FENCE AND FENCE CORNER HAVE  
KZ0966'BEEN REMOVED.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.6

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = MARCH 30, 2020

MC0957 \*\*\*\*\*

MC0957 DESIGNATION - **J 318**

MC0957 PID - MC0957

MC0957 STATE/COUNTY- OH/ERIE

MC0957 COUNTRY - US

MC0957 USGS QUAD - SANDUSKY (2016)

MC0957

MC0957 \*CURRENT SURVEY CONTROL

MC0957

MC0957\* NAD 83(1986) POSITION- 41 25 59. (N) 082 41 55. (W) SCALED

MC0957\* [NAVD 88](#) ORTHO HEIGHT - 182.801 (meters) 599.74 (feet) ADJUSTED

MC0957

MC0957 GEOID HEIGHT - -35.315 (meters) GEOID18

MC0957 DYNAMIC HEIGHT - 182.726 (meters) 599.49 (feet) COMP

MC0957 MODELED GRAVITY - 980,206.6 (mgal) NAVD 88

MC0957

MC0957 VERT ORDER - FIRST CLASS II

MC0957

MC0957.The horizontal coordinates were scaled from a map and have

MC0957.an estimated accuracy of +/- 6 seconds.

MC0957.

MC0957.The orthometric height was determined by differential leveling and

MC0957.adjusted by the NATIONAL GEODETIC SURVEY

MC0957.in June 1991.

MC0957

MC0957.Significant digits in the geoid height do not necessarily reflect accuracy.

MC0957.GEOID18 height accuracy estimate available [here](#).

MC0957

MC0957.Click [photographs](#) - Photos may exist for this station.

MC0957

MC0957.The dynamic height is computed by dividing the NAVD 88

MC0957.geopotential number by the normal gravity value computed on the

MC0957.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC0957.degrees latitude (g = 980.6199 gals.).

MC0957

MC0957.The modeled gravity was interpolated from observed gravity values.

MC0957

MC0957; North East Units Estimated Accuracy

MC0957;SPC OH N - 196,170. 583,400. MT (+/- 180 meters Scaled)

MC0957

MC0957\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF580882 (NAD 83)

MC0957

MC0957 SUPERSEDED SURVEY CONTROL

MC0957

MC0957 NGVD 29 (06/03/92) 183.021 (m) 600.46 (f) ADJUSTED 1 2

MC0957

MC0957.Superseded values are not recommended for survey control.

MC0957



MC0957.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MC0957.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
MC0957

MC0957\_MARKER: I = METAL ROD  
MC0957\_SETTING: 15 = METAL ROD DRIVEN INTO GROUND. SEE TEXT FOR ADDITIONAL  
MC0957+WITH SETTING: INFORMATION.  
MC0957\_STAMPING: J 318 1980  
MC0957\_MARK LOGO: NGS  
MC0957\_PROJECTION: FLUSH  
MC0957\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
MC0957+STABILITY: SURFACE MOTION  
MC0957\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MC0957+SATELLITE: SATELLITE OBSERVATIONS - August 31, 2019  
MC0957\_ROD/PIPE-DEPTH: 2.2 meters

MC0957

HISTORY	- Date	Condition	Report By
HISTORY	- 1980	MONUMENTED	NGS
HISTORY	- 20030929	GOOD	USPSQD
HISTORY	- 20040818	GOOD	OHDT
HISTORY	- 20160611	GOOD	USPSQD
HISTORY	- 20180708	GOOD	USPSQD
HISTORY	- 20190831	GOOD	USPSQD

MC0957

STATION DESCRIPTION

MC0957

MC0957'DESCRIBED BY NATIONAL GEODETIC SURVEY 1980  
MC0957'IN SANDUSKY.  
MC0957'IN SANDUSKY, AT THE NORTHWEST CORNER OF THE JUNCTION OF COLUMBUS AND  
MC0957'PERKINS AVENUE, SET IN THE LAWN ON THE WEST SIDE OF THE 3 RD NATIONAL  
MC0957'BANK, 6.7 METERS (22.0 FEET) WEST-SOUTHWEST OF THE SOUTHWEST CORNER  
MC0957'OF THE BANK, 4.05 METERS (13.3 FEET) SOUTHEAST OF THE SOUTHEAST EDGE  
MC0957'OF A SIDEWALK RUNNING NORTHEAST-SOUTHWEST TO THE MAIN ENTRANCE TO THE  
MC0957'BANK, 3.05 METERS (10.0 FEET) NORTH OF THE NORTH CURB OF PERKINS  
MC0957'AVENUE, 1.4 METERS (4.6 FEET) EAST OF THE CENTER OF A METAL FLAG POLE.  
MC0957'NOTE-THE DRILL RIG WAS USED TO DRILL A HOLE DOWN TO ROCK, THE ROD WAS  
MC0957'CEMENTED INTO THE ROCK.

MC0957'THE MARK IS ABOVE LEVEL WITH SIDEWALK.

MC0957

STATION RECOVERY (2003)

MC0957

MC0957'RECOVERY NOTE BY US POWER SQUADRON 2003 (RTK)  
MC0957'RECOVERED IN GOOD CONDITION.

MC0957

STATION RECOVERY (2004)

MC0957

MC0957'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)  
MC0957'BANK IS NOW NATIONAL CITY BANK

MC0957

STATION RECOVERY (2016)

MC0957

MC0957'RECOVERY NOTE BY US POWER SQUADRON 2016 (JTH)  
MC0957'BANK IS NOW PNC BANK. DESIGNATION IS WORN.

MC0957

STATION RECOVERY (2018)

MC0957



MC0957'RECOVERY NOTE BY US POWER SQUADRON 2018 (TJH)  
MC0957'RECOVERED IN GOOD CONDITION.

MC0957

MC0957 STATION RECOVERY (2019)

MC0957

MC0957'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)  
MC0957'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MB1815 *****
MB1815 DESIGNATION - J 337
MB1815 PID - MB1815
MB1815 STATE/COUNTY- OH/SUMMIT
MB1815 COUNTRY - US
MB1815 USGS QUAD - NORTHFIELD (1994)
MB1815
MB1815 *CURRENT SURVEY CONTROL
MB1815
MB1815* NAD 83(2011) POSITION- 41 19 16.82749(N) 081 30 31.78573(W) ADJUSTED
MB1815* NAD 83(2011) ELLIP HT- 275.966 (meters) (06/27/12) ADJUSTED
MB1815* NAD 83(2011) EPOCH - 2010.00
MB1815* NAVD 88 ORTHO HEIGHT - 309.903 (meters) 1016.74 (feet) ADJUSTED
MB1815
MB1815 GEOID HEIGHT - -33.884 (meters) GEOID18
MB1815 NAD 83(2011) X - 708,356.401 (meters) COMP
MB1815 NAD 83(2011) Y - -4,744,724.883 (meters) COMP
MB1815 NAD 83(2011) Z - 4,189,473.067 (meters) COMP
MB1815 LAPLACE CORR - 1.52 (seconds) DEFLEC18
MB1815 DYNAMIC HEIGHT - 309.771 (meters) 1016.31 (feet) COMP
MB1815 MODELED GRAVITY - 980,189.2 (mgal) NAVD 88
MB1815
MB1815 VERT ORDER - FIRST CLASS II
MB1815
MB1815 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB1815 Standards:
MB1815 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MB1815 Horiz Ellip SD_N SD_E SD_h (unitless)
MB1815 -----
MB1815 NETWORK 8.34 5.53 4.11 1.91 2.82 -0.18698317
MB1815 -----
MB1815 Click here for local accuracies and other accuracy information.
MB1815
MB1815
MB1815.The horizontal coordinates were established by GPS observations
MB1815.and adjusted by the National Geodetic Survey in June 2012.
MB1815
MB1815.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB1815.been affixed to the stable North American tectonic plate. See
MB1815.NA2011 for more information.
MB1815
MB1815.The horizontal coordinates are valid at the epoch date displayed above
MB1815.which is a decimal equivalence of Year/Month/Day.
MB1815
MB1815.The orthometric height was determined by differential leveling and
MB1815.adjusted by the NATIONAL GEODETIC SURVEY
MB1815.in June 1991.
MB1815
MB1815.Significant digits in the geoid height do not necessarily reflect accuracy.

```



MB1815.GEOID18 height accuracy estimate available [here](#).  
 MB1815  
 MB1815.Click [here](#) to see if photographs exist for this station.  
 MB1815  
 MB1815.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MB1815  
 MB1815.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MB1815  
 MB1815.The ellipsoidal height was determined by GPS observations  
 MB1815.and is referenced to NAD 83.  
 MB1815  
 MB1815.The dynamic height is computed by dividing the NAVD 88  
 MB1815.geopotential number by the normal gravity value computed on the  
 MB1815.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 MB1815.degrees latitude (g = 980.6199 gals.).

MB1815  
 MB1815.The modeled gravity was interpolated from observed gravity values.  
 MB1815  
 MB1815. The following values were computed from the NAD 83(2011) position.  
 MB1815  

MB1815;		North	East	Units	Scale Factor	Converg.
MB1815;SPC OH N	-	184,217.706	682,979.970	MT	0.99994891	+0 39 04.1
MB1815;SPC OH N	-	604,387.59	2,240,743.45	sFT	0.99994891	+0 39 04.1
MB1815;UTM 17	-	4,574,554.812	457,415.108	MT	0.99962232	-0 20 09.5

MB1815  
 MB1815!  
 MB1815!SPC OH N  
 MB1815!UTM 17

MB1815  
 MB1815\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF5741574554 (NAD 83)  
 MB1815

MB1815 SUPERSEDED SURVEY CONTROL

MB1815	NAD 83(2007)-	41 19 16.82718(N)	081 30 31.78600(W)	AD(2002.00)	0
MB1815	ELLIP H (02/10/07)	275.978 (m)		GP(2002.00)	
MB1815	ELLIP H (10/07/05)	276.013 (m)		GP( )	4 1
MB1815	NAD 83(1995)-	41 19 16.82506(N)	081 30 31.78682(W)	AD( )	1
MB1815	ELLIP H (04/01/98)	276.040 (m)		GP( )	4 1
MB1815	NAD 83(1994)-	41 19 16.83488(N)	081 30 31.78652(W)	AD( )	1
MB1815	NAD 83(1986)-	41 19 16.83534(N)	081 30 31.78645(W)	AD( )	1
MB1815	NGVD 29 (06/03/92)	310.116 (m)	1017.44	(f) ADJUSTED	1 2
MB1815	NGVD 29	310.08 (m)	1017.3	(f) LEVELING	3

MB1815  
 MB1815.Superseded values are not recommended for survey control.  
 MB1815  
 MB1815.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MB1815.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MB1815  
 MB1815\_MARKER: F = FLANGE-ENCASED ROD  
 MB1815\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)  
 MB1815\_STAMPING: J 337 1983  
 MB1815\_MARK LOGO: NGS  
 MB1815\_PROJECTION: RECESSED 15 CENTIMETERS  
 MB1815\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 MB1815\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR





MB1815+SATELLITE: SATELLITE OBSERVATIONS - April 14, 2019

MB1815\_ROD/PIPE-DEPTH: 8.4 meters

MB1815

MB1815	HISTORY	- Date	Condition	Report By
MB1815	HISTORY	- 1983	MONUMENTED	NGS
MB1815	HISTORY	- 19900320	GOOD	AEROS
MB1815	HISTORY	- 20021004	GOOD	OH-153
MB1815	HISTORY	- 20160717	GOOD	GEOCAC
MB1815	HISTORY	- 20190414	GOOD	USPSQD

MB1815

MB1815 STATION DESCRIPTION

MB1815

MB1815'DESCRIBED BY NATIONAL GEODETIC SURVEY 1983

MB1815'IN MACEDONIA.

MB1815'IN MACEDONIA, ALONG BEDFORD ROAD, 74.68 METERS (245.0 FT) SOUTH OF THE

MB1815'INTERSECTION OF BERKSHIRE DRIVE, AT THE SOUTH END OF A SIDEWALK,

MB1815'10.97 METERS (30.6 FT) EAST OF THE CENTERLINE OF THE ROAD,

MB1815'23.93 METERS (78.5 FT) NORTHWEST OF THE NORTHWEST LEG OF A HIGH

MB1815'POWERED TRANSMISSION LINE, 21.34 METERS (70.0 FT) EAST AND ACROSS

MB1815'BEDFORD ROAD FROM A UTILITY POLE WITH A GUY WIRE.

MB1815'THE MARK IS 0.30 M ABOVE ROAD.

MB1815

MB1815 STATION RECOVERY (1990)

MB1815

MB1815'RECOVERY NOTE BY AERO SERVICE CORPORATION 1990

MB1815'RECOVERED IN GOOD CONDITION.

MB1815

MB1815 STATION RECOVERY (2002)

MB1815

MB1815'RECOVERY NOTE BY SUMMIT COUNTY OHIO 2002 (WJS)

MB1815'RECOVERED IN GOOD CONDITION.

MB1815

MB1815 STATION RECOVERY (2016)

MB1815

MB1815'RECOVERY NOTE BY GEOCACHING 2016 (RLM)

MB1815'RECOVERED IN GOOD CONDITION.

MB1815

MB1815 STATION RECOVERY (2019)

MB1815

MB1815'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)

MB1815'THE LID IS MISSING.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

```

1      National Geodetic Survey,      Retrieval Date = JANUARY 23, 2020
AB6140 *****
AB6140 CBN          - This is a Cooperative Base Network Control Station.
AB6140 DESIGNATION - KILLDEER
AB6140 PID          - AB6140
AB6140 STATE/COUNTY- OH/WYANDOT
AB6140 COUNTRY      - US
AB6140 USGS QUAD    - MARSEILLES (2016)
AB6140
AB6140                                *CURRENT SURVEY CONTROL
AB6140
AB6140* NAD 83(2011) POSITION- 40 42 32.19298(N) 083 22 52.28774(W) ADJUSTED
AB6140* NAD 83(2011) ELLIP HT- 233.105 (meters) (06/27/12) ADJUSTED
AB6140* NAD 83(2011) EPOCH - 2010.00
AB6140* NAVD 88 ORTHO HEIGHT - 267.9 (meters) 879. (feet) GPS OBS
AB6140
AB6140 NAVD 88 orthometric height was determined with geoid model GEOID93
AB6140 GEOID HEIGHT - -34.854 (meters) GEOID93
AB6140 GEOID HEIGHT - -34.850 (meters) GEOID18
AB6140 NAD 83(2011) X - 558,094.381 (meters) COMP
AB6140 NAD 83(2011) Y - -4,809,639.544 (meters) COMP
AB6140 NAD 83(2011) Z - 4,138,127.565 (meters) COMP
AB6140 LAPLACE CORR - 1.05 (seconds) DEFLEC18
AB6140
AB6140 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AB6140 Standards:
AB6140          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
AB6140          Horiz Ellip                    SD_N   SD_E   SD_h          (unitless)
AB6140 -----
AB6140 NETWORK      1.20    2.49                    0.57   0.37   1.27          -0.01208642
AB6140 -----
AB6140 Click here for local accuracies and other accuracy information.
AB6140
AB6140
AB6140.The horizontal coordinates were established by GPS observations
AB6140.and adjusted by the National Geodetic Survey in June 2012.
AB6140
AB6140.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AB6140.been affixed to the stable North American tectonic plate. See
AB6140.NA2011 for more information.
AB6140
AB6140.The horizontal coordinates are valid at the epoch date displayed above
AB6140.which is a decimal equivalence of Year/Month/Day.
AB6140
AB6140.The orthometric height was determined by GPS observations and a
AB6140.high-resolution geoid model.
AB6140
AB6140.Significant digits in the geoid height do not necessarily reflect accuracy.
AB6140.GEOID18 height accuracy estimate available here.

```



AB6140

AB6140.Click [photographs](#) - Photos may exist for this station.

AB6140

AB6140.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AB6140

AB6140.The Laplace correction was computed from DEFLEC18 derived deflections.

AB6140

AB6140.The ellipsoidal height was determined by GPS observations

AB6140.and is referenced to NAD 83.

AB6140

AB6140. The following values were computed from the NAD 83(2011) position.

AB6140

AB6140;		North	East	Units	Scale	Factor	Converg.
AB6140;SPC OH N	-	116,116.707	525,540.000	MT	0.99995863	-0 34	44.0
AB6140;SPC OH N	-	380,959.56	1,724,209.15	sFT	0.99995863	-0 34	44.0
AB6140;UTM 17	-	4,509,174.745	298,851.077	MT	1.00009804	-1 33	12.9
AB6140!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
AB6140!SPC OH N	-	0.99996344	x	0.99995863	=	0.99992207	
AB6140!UTM 17	-	0.99996344	x	1.00009804	=	1.00006147	

AB6140

AB6140\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF9885109174 (NAD 83)

AB6140

SUPERSEDED SURVEY CONTROL

AB6140

AB6140	NAD 83(2007)-	40 42 32.19306(N)	083 22 52.28851(W)	AD(2002.00)	0
AB6140	ELLIP H (02/10/07)	233.122 (m)		GP(2002.00)	
AB6140	ELLIP H (03/08/05)	233.113 (m)		GP( )	4 2
AB6140	NAD 83(1995)-	40 42 32.19322(N)	083 22 52.28833(W)	AD( )	B
AB6140	ELLIP H (08/20/96)	233.135 (m)		GP( )	4 2

AB6140.No superseded survey control is available for this station.

AB6140

AB6140\_MARKER: DD = SURVEY DISK

AB6140\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.+)

AB6140\_STAMPING: KILLDEER 1995

AB6140\_MARK LOGO: OHDT

AB6140\_PROJECTION: FLUSH

AB6140\_MAGNETIC: T = STEEL SPIKE ADJACENT TO MONUMENT

AB6140\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AB6140\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AB6140+SATELLITE: SATELLITE OBSERVATIONS - 1995

AB6140\_ROD/PIPE-DEPTH: 4.6 meters

AB6140\_SLEEVE-DEPTH : 1.1 meters

AB6140

AB6140 HISTORY - Date Condition Report By

AB6140 HISTORY - 1995 MONUMENTED OHDT

AB6140

STATION DESCRIPTION

AB6140

AB6140'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1995 (EAA)  
AB6140'STATION IS LOCATED AT KILLDEER PLAINS RESERVOIR, MARSEILLES, OHIO. TO  
AB6140'REACH THE STATION FROM THE JUNCTION OF STATE ROUTES 67 AND 37 IN  
AB6140'MARSEILLES, GO NORTHEAST 1.1 KM (0.70 MI) ON STATE ROUTE 67 TO COUNTY  
AB6140'HIGHWAY 75, TURN RIGHT (EAST) ON COUNTY HIGHWAY 75 AND GO 0.3 KM (0.20  
AB6140'MI) TO KILLDEER PLAINS RESERVOIR AND STATION ON RIGHT (SOUTH) .



AB6140'STATION LIES 12.5 M (41.0 FT) SOUTH OF CENTERLINE OF COUNTY HIGHWAY  
AB6140'75, 2.4 M (7.9 FT) WEST OF RESERVOIR PARKING LOT AND 1.4 M (4.6 FT)  
AB6140'SOUTHWEST OF ORANGE FIBERGLASS NOAA WITNESS POST. MARK IS UNDER A  
AB6140'PROTECTIVE ALUMINUM COVER ALSO STAMPED --KILLDEER 1995--.  
AB6140'OWNERSHIP--STATE OF OHIO. NO RESTRICTIONS AND MARK IS ACCESSIBLE AT  
AB6140'ALL TIMES. NOTE--SLEEVE DEPTH DOES NOT MEET CLASS A REQUIREMENTS.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DF4052 \*\*\*\*\*

DF4052 CORS - This is a GPS Continuously Operating Reference Station.

DF4052 DESIGNATION - KENTON CORS ARP

DF4052 CORS\_ID - **KNTN**

DF4052 PID - DF4052

DF4052 STATE/COUNTY- OH/HARDIN

DF4052 COUNTRY - US

DF4052 USGS QUAD - KENTON (1980)

DF4052

DF4052 \*CURRENT SURVEY CONTROL

DF4052

DF4052\* NAD 83(2011) POSITION- 40 37 49.64006(N) 083 36 53.28058(W) ADJUSTED

DF4052\* NAD 83(2011) ELLIP HT- 265.945 (meters) (06/??/19) ADJUSTED

DF4052\* NAD 83(2011) EPOCH - 2010.00

DF4052

DF4052 GEOID HEIGHT - -34.853 (meters) GEOID18

DF4052 NAD 83(2011) X - 539,114.187 (meters) COMP

DF4052 NAD 83(2011) Y - -4,817,544.839 (meters) COMP

DF4052 NAD 83(2011) Z - 4,131,537.972 (meters) COMP

DF4052

DF4052 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

DF4052	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
DF4052	-----	-----	-----	-----	-----	-----
DF4052	NETWORK	0.09 0.22	0.03	0.04	0.11	-0.18923400
DF4052	-----	-----	-----	-----	-----	-----

DF4052

DF4052

DF4052.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

DF4052

DF4052.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

DF4052

DF4052.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

DF4052

DF4052.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

DF4052

DF4052.Additional information on MYCS2 is available at

DF4052.<https://geodesy.noaa.gov/CORS/coords.shtml>

DF4052



DF4052.Significant digits in the geoid height do not necessarily reflect accuracy.  
DF4052.GEOID18 height accuracy estimate available [here](#).

DF4052

DF4052.The PID for the CORS L1 Phase Center is DQ2077.

DF4052

DF4052.Click [here](#) to see if photographs exist for this station.

DF4052

DF4052.The XYZ, and position/ellipsoidal ht. are equivalent.

DF4052

DF4052.The ellipsoidal height was determined by GPS observations

DF4052.and is referenced to NAD 83.

DF4052

DF4052. The following values were computed from the NAD 83(2011) position.

DF4052

DF4052;		North	East	Units	Scale	Factor	Converg.
DF4052;SPC OH N	-	107,627.841	505,689.761	MT	0.99996808	-0 43	56.5
DF4052;SPC OH N	-	353,109.01	1,659,083.82	sFT	0.99996808	-0 43	56.5
DF4052;UTM 17	-	4,501,022.629	278,855.848	MT	1.00020200	-1 42	12.2
DF4052!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DF4052!SPC OH N	-	0.99995828	x	0.99996808	=	0.99992637	
DF4052!UTM 17	-	0.99995828	x	1.00020200	=	1.00016028	

DF4052

DF4052\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF7885501022 (NAD 83)

DF4052

DF4052

SUPERSEDED SURVEY CONTROL

DF4052

DF4052	ELLIP H (06/27/12)	265.965	(m)			GP(2010.00)	0 0
DF4052	NAD 83(2011)- 40 37 49.64016(N)			083 36 53.28011(W)		AD(2010.00)	c
DF4052	NAD 83(2011)- 40 37 49.64018(N)			083 36 53.28034(W)		AD(2010.00)	c
DF4052	ELLIP H (08/??/11)	265.945	(m)			GP(2010.00)	c c
DF4052	ELLIP H (02/10/07)	265.975	(m)			GP(2002.00)	
DF4052	NAD 83(2007)- 40 37 49.64024(N)			083 36 53.28079(W)		AD(2002.00)	c
DF4052	NAD 83(CORS)- 40 37 49.64024(N)			083 36 53.28079(W)		AD(2002.00)	c
DF4052	ELLIP H (02/??/03)	265.975	(m)			GP(2002.00)	c c

DF4052

DF4052.Superseded values are not recommended for survey control.

DF4052

DF4052.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DF4052.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DF4052

DF4052\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DF4052

DF4052

STATION DESCRIPTION

DF4052'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DF4052'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DF4052'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DF4052'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DF4052' ftp://cors.ngs.noaa.gov/cors/README.txt

DF4052' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DF4052' ftp://cors.ngs.noaa.gov/cors/station\_log

DF4052' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = DECEMBER 13, 2019
LA0533 *****
LA0533 CBN - This is a Cooperative Base Network Control Station.
LA0533 DESIGNATION - L 227 RESET
LA0533 PID - LA0533
LA0533 STATE/COUNTY- IN/JAY
LA0533 COUNTRY - US
LA0533 USGS QUAD - GENEVA (1994)
LA0533
LA0533 *CURRENT SURVEY CONTROL
LA0533
LA0533* NAD 83(2011) POSITION- 40 32 29.00171(N) 084 55 48.50179(W) ADJUSTED
LA0533* NAD 83(2011) ELLIP HT- 226.945 (meters) (06/27/12) ADJUSTED
LA0533* NAD 83(2011) EPOCH - 2010.00
LA0533* NAVD 88 ORTHO HEIGHT - 260.53 (meters) 854.8 (feet) RESET
LA0533
LA0533 GEOID HEIGHT - -33.567 (meters) GEOID18
LA0533 NAD 83(2011) X - 428,951.499 (meters) COMP
LA0533 NAD 83(2011) Y - -4,835,030.941 (meters) COMP
LA0533 NAD 83(2011) Z - 4,124,001.202 (meters) COMP
LA0533 LAPLACE CORR - 2.02 (seconds) DEFLEC18
LA0533 VERT ORDER - THIRD
LA0533
LA0533 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
LA0533 Standards:
LA0533 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
LA0533 Horiz Ellip SD_N SD_E SD_h (unitless)
LA0533 -----
LA0533 NETWORK 0.76 1.88 0.35 0.25 0.96 -0.08564342
LA0533 -----
LA0533 Click here for local accuracies and other accuracy information.
LA0533
LA0533
LA0533.The horizontal coordinates were established by GPS observations
LA0533.and adjusted by the National Geodetic Survey in June 2012.
LA0533
LA0533.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
LA0533.been affixed to the stable North American tectonic plate. See
LA0533.NA2011 for more information.
LA0533
LA0533.The horizontal coordinates are valid at the epoch date displayed above
LA0533.which is a decimal equivalence of Year/Month/Day.
LA0533
LA0533.The orthometric height was computed from unverified reset data.
LA0533
LA0533.Significant digits in the geoid height do not necessarily reflect accuracy.
LA0533.GEOID18 height accuracy estimate available here.
LA0533
LA0533.Click here to see if photographs exist for this station.
LA0533

```



LA0533.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
LA0533

LA0533.The Laplace correction was computed from DEFLEC18 derived deflections.  
LA0533

LA0533.The ellipsoidal height was determined by GPS observations  
LA0533.and is referenced to NAD 83.

LA0533

LA0533. The following values were computed from the NAD 83(2011) position.

LA0533

LA0533;		North	East	Units	Scale	Factor	Converg.
LA0533;SPC IN E	-	587,892.097	162,393.574	MT	1.00001457	+0 28	43.5
LA0533;SPC IN E	-	1,928,775.99	532,786.25	sFT	1.00001457	+0 28	43.5
LA0533;UTM 16	-	4,489,907.449	675,285.426	MT	0.99997821	+1 20	44.7
LA0533!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
LA0533!SPC IN E	-	0.99996440	x	1.00001457	=	0.99997897	
LA0533!UTM 16	-	0.99996440	x	0.99997821	=	0.99994261	

LA0533

LA0533\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TFK7528589907 (NAD 83)

LA0533

SUPERSEDED SURVEY CONTROL

LA0533

LA0533	NAD 83(2007)-	40 32 29.00193(N)	084 55 48.50240(W)	AD(2002.00)	0
LA0533	ELLIP H (02/10/07)	226.962 (m)		GP(2002.00)	
LA0533	NAD 83(1997)-	40 32 29.00188(N)	084 55 48.50214(W)	AD( )	B
LA0533	ELLIP H (04/10/98)	226.982 (m)		GP( )	4 1
LA0533	NAD 83(1995)-	40 32 29.00120(N)	084 55 48.50498(W)	AD( )	3
LA0533	NAD 83(1986)-	40 32 29.00289(N)	084 55 48.51862(W)	AD( )	3
LA0533	NAD 27	- 40 32 28.84200(N)	084 55 48.63670(W)	AD( )	3
LA0533	NAVD 88 (10/27/10)	260.5 (m)	GEOID09 model used	GPS OBS	
LA0533	NAVD 88 (04/10/98)	260.5 (m)	UNKNOWN model used	GPS OBS	
LA0533	NGVD 29 (??/??/??)	260.68 (m)	855.2 (f)	RESET	3
LA0533	NGVD 29	260.68 (m)	855.2 (f)	LEVELING	3

LA0533

LA0533.Superseded values are not recommended for survey control.

LA0533

LA0533.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

LA0533.See file [dsdata.pdf](#) to determine how the superseded data were derived.

LA0533

LA0533\_MARKER: DB = BENCH MARK DISK

LA0533\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

LA0533\_STAMPING: L 227 1947 RESET 1962

LA0533\_MARK LOGO: CGS

LA0533\_PROJECTION: PROJECTING 8 CENTIMETERS

LA0533\_MAGNETIC: N = NO MAGNETIC MATERIAL

LA0533\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

LA0533+STABILITY: SURFACE MOTION

LA0533\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

LA0533+SATELLITE: SATELLITE OBSERVATIONS - November 20, 2009

LA0533

LA0533	HISTORY	-	Date	Condition	Report By
LA0533	HISTORY	-	1962	MONUMENTED	CGS
LA0533	HISTORY	-	19970812	GOOD	SEC
LA0533	HISTORY	-	20091120	GOOD	WOOLPT

LA0533





LA0533 STATION DESCRIPTION  
LA0533  
LA0533'DESCRIBED BY COAST AND GEODETIC SURVEY 1962  
LA0533'2.3 MI NE FROM BRYANT.  
LA0533'ABOUT 0.55 MILE NORTH ALONG U.S. HIGHWAY 27 FROM THE METHODIST  
LA0533'CHURCH AT BRYANT, THENCE ABOUT 1.75 MILES EAST ALONG STATE  
LA0533'HIGHWAY 67, ABOUT 0.6 MILE WEST OF THE BRIDGE OVER LIMBERLOST  
LA0533'CREEK, ABOUT 0.2 MILE EAST OF THE JUNCTION OF A ROAD LEADING  
LA0533'NORTH, 84 FEET NORTHWEST OF THE NORTHWEST CORNER OF A BARN, 47  
LA0533'FEET SOUTH OF THE CENTERLINE OF HIGHWAY 67, 1 FOOT SOUTHEAST OF  
LA0533'A POWER POLE AND SET IN THE TOP OF A CONCRETE POST PROJECTING  
LA0533'3 INCHES.

LA0533 STATION RECOVERY (1997)  
LA0533  
LA0533'RECOVERY NOTE BY SCHNEIDER ENGINEERING CORPORATION 1997 (RGR)  
LA0533'THE STATION IS LOCATED 2.3 MILES (3.7 KM) NORTHEAST OF BRYANT, 1.7  
LA0533'MILES (2.7 KM) EAST OF THE INTERSECTION OF U.S. HIGHWAY 27 AND STATE  
LA0533'HIGHWAY 67 AND 0.6 MILES (1.0 KM) WEST OF LIMBERLOST BRIDGE. TO REACH  
LA0533'THE STATION FROM THE INTERSECTION OF U.S. HIGHWAY 27 AND STATE HIGHWAY  
LA0533'67, GO EAST FOR 1.7 MILES (2.7 KM) TO THE STATION ON RIGHT.  
LA0533'OWNERSHIP--HARLEY CAMPBELL, CARBONDALE CO 81623, PHONE 970-963-1880.  
LA0533'THE STATION IS SET IN A ROUND CONCRETE MONUMENT FLUSH WITH GROUND. IT  
LA0533'IS 74.68 METERS (245.01 FT) WEST OF THE CENTERLINE OF GRAVEL DRIVE,  
LA0533'25.60 METERS (83.99 FT) NORTHWEST OF THE NORTHWEST CORNER OF BARN,  
LA0533'14.32 METERS (46.98 FT) SOUTH OF THE CENTERLINE OF STATE HIGHWAY 67  
LA0533'AND 0.3 METERS (1.0 FT) EAST OF A POWER POLE.

LA0533 STATION RECOVERY (2009)  
LA0533  
LA0533'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2009 (BJM)  
LA0533'THIS STATION WAS RECOVERED AS DESCRIBED AND FOUND IN GOOD CONDITION.  
LA0533'  
LA0533'NOTE--THE DESCRIBED BARN IS NO LONGER STANDING.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019  
 MB1618 \*\*\*\*\*  
 MB1618 DESIGNATION - **L 321**  
 MB1618 PID - MB1618  
 MB1618 STATE/COUNTY- OH/LAKE  
 MB1618 COUNTRY - US  
 MB1618 USGS QUAD - MENTOR (1992)

MB1618  
 MB1618 \*CURRENT SURVEY CONTROL  
 MB1618

MB1618\* NAD 83(2011) POSITION- 41 44 17.01428(N) 081 16 45.38201(W) ADJUSTED  
 MB1618\* NAD 83(2011) ELLIP HT- 151.606 (meters) (09/20/18) ADJUSTED  
 MB1618\* NAD 83(2011) EPOCH - 2010.00

MB1618\* [NAVD 88](#) ORTHO HEIGHT - 186.028 (meters) 610.33 (feet) ADJUSTED  
 MB1618

MB1618 GEOID HEIGHT - -34.442 (meters) GEOID18  
 MB1618 NAD 83(2011) X - 722,693.718 (meters) COMP  
 MB1618 NAD 83(2011) Y - -4,711,424.872 (meters) COMP  
 MB1618 NAD 83(2011) Z - 4,224,039.341 (meters) COMP  
 MB1618 LAPLACE CORR - 1.28 (seconds) DEFLEC18  
 MB1618 DYNAMIC HEIGHT - 185.961 (meters) 610.11 (feet) COMP  
 MB1618 MODELED GRAVITY - 980,259.1 (mgal) NAVD 88

MB1618  
 MB1618 VERT ORDER - FIRST CLASS II  
 MB1618

MB1618 Network accuracy estimates per FGDC Geospatial Positioning Accuracy  
 MB1618 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	0.43	1.29	0.20	0.14	0.66	-0.03721730

MB1618 Click [here](#) for local accuracies and other accuracy information.  
 MB1618  
 MB1618

MB1618.The horizontal coordinates were established by GPS observations  
 MB1618.and adjusted by the National Geodetic Survey in September 2018.  
 MB1618

MB1618.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has  
 MB1618.been affixed to the stable North American tectonic plate. See  
 MB1618.[NA2011](#) for more information.  
 MB1618

MB1618.The horizontal coordinates are valid at the epoch date displayed above  
 MB1618.which is a decimal equivalence of Year/Month/Day.  
 MB1618

MB1618.The orthometric height was determined by differential leveling and  
 MB1618.adjusted by the NATIONAL GEODETIC SURVEY  
 MB1618.in June 1991.  
 MB1618

MB1618.Significant digits in the geoid height do not necessarily reflect accuracy.



MB1618.GEOID18 height accuracy estimate available [here](#).  
MB1618  
MB1618.Click [here](#) to see if photographs exist for this station.  
MB1618  
MB1618.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
MB1618  
MB1618.The Laplace correction was computed from DEFLEC18 derived deflections.  
MB1618  
MB1618.The ellipsoidal height was determined by GPS observations  
MB1618.and is referenced to NAD 83.  
MB1618  
MB1618.The dynamic height is computed by dividing the NAVD 88  
MB1618.geopotential number by the normal gravity value computed on the  
MB1618.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
MB1618.degrees latitude (g = 980.6199 gals.).  
MB1618  
MB1618.The modeled gravity was interpolated from observed gravity values.  
MB1618  
MB1618. The following values were computed from the NAD 83(2011) position.  
MB1618  
MB1618;  
MB1618;SPC OH N - North 230,738.157 East 701,549.349 Units MT Scale Factor 1.00000756 Converg. +0 48 07.0  
MB1618;SPC OH N - 757,013.44 2,301,666.49 sFT 1.00000756 +0 48 07.0  
MB1618;UTM 17 - 4,620,731.618 476,776.671 MT 0.99960664 -0 11 09.3  
MB1618  
MB1618!  
MB1618!SPC OH N - Elev Factor x Scale Factor = Combined Factor  
MB1618!UTM 17 - 0.99997622 x 0.99960664 = 0.99958287  
MB1618  
MB1618\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMG7677620731 (NAD 83)  
MB1618  
MB1618 SUPERSEDED SURVEY CONTROL  
MB1618  
MB1618 NGVD 29 (06/03/92) 186.255 (m) 611.07 (f) ADJUSTED 1 2  
MB1618  
MB1618.Superseded values are not recommended for survey control.  
MB1618  
MB1618.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB1618.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
MB1618  
MB1618\_MARKER: F = FLANGE-ENCASED ROD  
MB1618\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)  
MB1618\_STAMPING: L 321 1981  
MB1618\_MARK LOGO: NGS  
MB1618\_PROJECTION: FLUSH  
MB1618\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MB1618\_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD  
MB1618+STABILITY: POSITION/ELEVATION WELL  
MB1618\_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR  
MB1618+SATELLITE: SATELLITE OBSERVATIONS - October 21, 2018  
MB1618\_ROD/PIPE-DEPTH: 10.1 meters  
MB1618\_SLEEVE-DEPTH : 6.1 meters  
MB1618  
MB1618 HISTORY - Date Condition Report By  
MB1618 HISTORY - 1981 MONUMENTED NGS



MB1618	HISTORY	- 19891005	GOOD	NGS
MB1618	HISTORY	- 19980923	GOOD	USPSQD
MB1618	HISTORY	- 20040921	GOOD	OHDT
MB1618	HISTORY	- 20060921	GOOD	NGS
MB1618	HISTORY	- 20110612	GOOD	GEOCAC
MB1618	HISTORY	- 20130220	GOOD	TERRSV
MB1618	HISTORY	- 20150812	GOOD	NGS
MB1618	HISTORY	- 20160129	GOOD	USPSQD
MB1618	HISTORY	- 20181021	GOOD	USPSQD

MB1618

MB1618 STATION DESCRIPTION

MB1618

MB1618'DESCRIBED BY NATIONAL GEODETIC SURVEY 1981

MB1618'IN GRAND RIVER.

MB1618'THE MARK IS ABOVE LEVEL WITH SIDEWALK.

MB1618'IN GRAND RIVER, AT THE JUNCTION OF SINGER STREET (STATE HIGHWAY 283)

MB1618'AND RIVER STREET, THE MARK IS AT THE NORTH CORNER OF THE EAST SHORE

MB1618'CENTER ACADEMY BUILDING, 10.05 METERS (33.0 FEET) EAST OF THE EAST

MB1618'CORNER OF THE ASPHALT BASKETBALL COURT, 4.2 METERS (13.8 FEET)

MB1618'SOUTHWEST OF THE SOUTHWEST EDGE OF THE SIDEWALK, 2.01 METERS (6.6

MB1618'FEET) NORTHEAST OF THE NORTH CORNER OF THE BUILDING AND IN LINE WITH

MB1618'THE NORTHWEST FACE OF THE BUILDING.

MB1618

MB1618 STATION RECOVERY (1989)

MB1618

MB1618'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989

MB1618'IN GRAND RIVER, AT THE JUNCTION OF SINGER STREET (STATE HIGHWAY 283)

MB1618'AND RIVER ROAD, AT THE NORTH CORNER OF THE MERRICK HUTCHINSON SCHOOL

MB1618'BUILDING, NOW OCCUPIED BY THE LAKE COUNTY MENTAL HEALTH CENTER, 34.1

MB1618'M (111.9 FT) SOUTHEAST OF THE CENTER OF MURPHY STREET, 4.2 METERS

MB1618'(13.8 FEET) SOUTHWEST OF THE SOUTHWEST EDGE OF A SIDEWALK, 2.01

MB1618'METERS (6.6 FEET) NORTHEAST OF THE NORTH CORNER OF THE BUILDING AND

MB1618'IN LINE WITH THE NORTHWEST FACE OF THE BUILDING.

MB1618

MB1618 STATION RECOVERY (1998)

MB1618

MB1618'RECOVERY NOTE BY US POWER SQUADRON 1998

MB1618'RECOVERED IN GOOD CONDITION.

MB1618

MB1618 STATION RECOVERY (2004)

MB1618

MB1618'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)

MB1618'MARK POORLY SUITED FOR GPS OBSERVATION

MB1618

MB1618 STATION RECOVERY (2006)

MB1618

MB1618'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2006 (SFH)

MB1618'RECOVERED AS DESCRIBED.

MB1618

MB1618 STATION RECOVERY (2011)

MB1618

MB1618'RECOVERY NOTE BY GEOCACHING 2011 (RLM)

MB1618'RECOVERED IN GOOD CONDITION.

MB1618

MB1618 STATION RECOVERY (2013)



MB1618  
MB1618'RECOVERY NOTE BY TERRA SURV 2013 (JVH)  
MB1618'RECOVERED AS DESCRIBED.  
MB1618  
MB1618 STATION RECOVERY (2015)  
MB1618  
MB1618'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2015 (JDR)  
MB1618'RECOVERED AS DESCRIBED WITH THE FOLLOW CHANGES, THE EAST SHORE CENTER  
MB1618'ACADEMY BUILDING HAS BEEN RAZED. ADDITIONAL REFERENCE OBJECTS, 58 FT  
MB1618'(17.7 M) NORTHWEST OF A FLAGPOLE AND 36 FT (11.0 M) SOUTH OF A TWIN  
MB1618'TRUNK MAPLE TREE.  
MB1618  
MB1618 STATION RECOVERY (2016)  
MB1618  
MB1618'RECOVERY NOTE BY US POWER SQUADRON 2016 (MLG)  
MB1618'NO ACCESS COVER AND NO BUILDING. MARK IS 72 FT (21.9 M)  
MB1618'WEST-NORTHWEST OF FLAGPOLE, 93 FT (28.3 M) SOUTHEAST OF WATERLINE  
MB1618'ACCESS COVER, 120 FT (36.6 M) SOUTHEAST OF MURPHY ST AND 33 FT (10.1  
MB1618'M) EAST OF THE EAST CORNER OF ASPHALT BASKETBALL COURT.  
MB1618  
MB1618 STATION RECOVERY (2018)  
MB1618  
MB1618'RECOVERY NOTE BY US POWER SQUADRON 2018 (TJH)  
MB1618'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = JANUARY 19, 2020

AE2615 \*\*\*\*\*

AE2615 DESIGNATION - LAKE

AE2615 PID - AE2615

AE2615 STATE/COUNTY- OH/AUGLAIZE

AE2615 COUNTRY - US

AE2615 USGS QUAD - SAINT MARYS (2016)

AE2615

AE2615 \*CURRENT SURVEY CONTROL

AE2615

AE2615\* NAD 83(2011) POSITION- 40 33 24.64125(N) 084 27 20.53311(W) ADJUSTED

AE2615\* NAD 83(2011) ELLIP HT- 239.783 (meters) (06/27/12) ADJUSTED

AE2615\* NAD 83(2011) EPOCH - 2010.00

AE2615\* [NAVD 88](#) ORTHO HEIGHT - 273.4 (meters) 897. (feet) GPS OBS

AE2615

AE2615 NAVD 88 orthometric height was determined with geoid model GEOID96

AE2615 GEOID HEIGHT - -33.540 (meters) GEOID96

AE2615 GEOID HEIGHT - -33.593 (meters) GEOID18

AE2615 NAD 83(2011) X - 468,865.785 (meters) COMP

AE2615 NAD 83(2011) Y - -4,830,212.458 (meters) COMP

AE2615 NAD 83(2011) Z - 4,125,313.687 (meters) COMP

AE2615 LAPLACE CORR - -2.01 (seconds) DEFLEC18

AE2615

AE2615 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

AE2615 Standards:

AE2615 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

AE2615 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

AE2615 -----

AE2615 NETWORK 1.67 2.61 0.77 0.56 1.33 0.04177822

AE2615 -----

AE2615 Click [here](#) for local accuracies and other accuracy information.

AE2615

AE2615

AE2615.The horizontal coordinates were established by GPS observations

AE2615.and adjusted by the National Geodetic Survey in June 2012.

AE2615

AE2615.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

AE2615.been affixed to the stable North American tectonic plate. See

AE2615.[NA2011](#) for more information.

AE2615

AE2615.The horizontal coordinates are valid at the epoch date displayed above

AE2615.which is a decimal equivalence of Year/Month/Day.

AE2615

AE2615.The orthometric height was determined by GPS observations and a

AE2615.high-resolution geoid model.

AE2615

AE2615.Significant digits in the geoid height do not necessarily reflect accuracy.

AE2615.GEOID18 height accuracy estimate available [here](#).

AE2615



AE2615.Click [photographs](#) - Photos may exist for this station.

AE2615

AE2615.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AE2615

AE2615.The Laplace correction was computed from DEFLEC18 derived deflections.

AE2615

AE2615.The ellipsoidal height was determined by GPS observations

AE2615.and is referenced to NAD 83.

AE2615

AE2615. The following values were computed from the NAD 83(2011) position.

AE2615

AE2615;		North	East	Units	Scale	Factor	Converg.
AE2615;SPC OH N	-	100,708.161	434,376.809	MT	0.99997863	-1 17	05.3
AE2615;SPC OH N	-	330,406.69	1,425,117.91	sFT	0.99997863	-1 17	05.3
AE2615;UTM 16	-	4,492,675.514	715,417.041	MT	1.00017123	+1 39	17.8
AE2615!	-	Elev Factor x Scale Factor = Combined Factor					
AE2615!SPC OH N	-	0.99996239	x	0.99997863	=	0.99994102	
AE2615!UTM 16	-	0.99996239	x	1.00017123	=	1.00013361	

AE2615

AE2615\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGK1541792675 (NAD 83)

AE2615

SUPERSEDED SURVEY CONTROL

AE2615

AE2615	NAD 83(2007)-	40 33 24.64135(N)	084 27 20.53391(W)	AD(2002.00)	0
AE2615	ELLIP H (02/10/07)	239.800 (m)		GP(2002.00)	
AE2615	ELLIP H (10/07/05)	239.800 (m)		GP( )	4 1
AE2615	NAD 83(1995)-	40 33 24.64143(N)	084 27 20.53383(W)	AD( )	1
AE2615	ELLIP H (09/04/97)	239.806 (m)		GP( )	4 1

AE2615.No superseded survey control is available for this station.

AE2615

AE2615\_MARKER: DD = SURVEY DISK

AE2615\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

AE2615\_STAMPING: LAKE

AE2615\_MARK LOGO: OHDT

AE2615\_MAGNETIC: O = OTHER; SEE DESCRIPTION

AE2615\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

AE2615+STABILITY: SURFACE MOTION

AE2615\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AE2615+SATELLITE: SATELLITE OBSERVATIONS - 1994

AE2615

AE2615 HISTORY - Date Condition Report By

AE2615 HISTORY - 1994 MONUMENTED OHDT

AE2615

STATION DESCRIPTION

AE2615

AE2615'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1994 (DR)  
AE2615'IN THE SOUTHEAST QUARTER OF SECTION 36, TOWN 5 SOUTH, RANGE 3 EAST,  
AE2615'CENTER TOWNSHIP, MERCER COUNTY, OHIO. TO REACH FROM THE MERCER COUNTY  
AE2615'COURT HOUSE IN CELINA, TRAVEL EAST ON STATE ROUTE 29 FOR 6 MILES (9.7  
AE2615'KM) TO ITS INTERSECTION WITH HARRIS ROAD, PROCEED SOUTH ON HARRIS ROAD  
AE2615'FOR 0.4 MILES (0.6 KM) TO ITS INTERSECTION WITH STATE ROUTE 703,  
AE2615'PROCEED EAST ON STATE ROUTE 703 FOR 0.5 MILES (0.8 KM) TO ITS  
AE2615'INTERSECTION WITH MERCER-AUGLAIZE COUNTY LINE ROAD, PROCEED NORTH ON  
AE2615'MERCER-AUGLAIZE COUNTY LINE ROAD FOR 0.4 MILES. (0.6 KM) THE MARK IS



AE2615'IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF STATE ROUTE 29 AND  
AE2615'MERCER-AUGLIAZE COUNTY LINE ROAD, 14 FEET (4.3 M) SOUTH OF THE SOUTH  
AE2615'RIGHT OF WAY FENCE OF STATE ROUTE 29, 10.5 FEET (3.2 M) SOUTH OF A  
AE2615'GUARD RAIL, 15 FEET (4.6 M) WEST OF THE CENTERLINE OF MERCER-AUGLAIZE  
AE2615'COUNTY LINE ROAD.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = DECEMBER 13, 2019

AE2641 \*\*\*\*\*

AE2641 DESIGNATION - LANDO

AE2641 PID - AE2641

AE2641 STATE/COUNTY- OH/MERCER

AE2641 COUNTRY - US

AE2641 USGS QUAD - NORTH STAR (1984)

AE2641

AE2641 \*CURRENT SURVEY CONTROL

AE2641

AE2641\* NAD 83(2011) POSITION- 40 21 12.81538(N) 084 34 18.08991(W) ADJUSTED

AE2641\* NAD 83(2011) ELLIP HT- 259.858 (meters) (06/27/12) ADJUSTED

AE2641\* NAD 83(2011) EPOCH - 2010.00

AE2641\* [NAVD 88](#) ORTHO HEIGHT - 293.1 (meters) 962. (feet) GPS OBS

AE2641

AE2641 NAVD 88 orthometric height was determined with geoid model GEOID96

AE2641 GEOID HEIGHT - -33.212 (meters) GEOID96

AE2641 GEOID HEIGHT - -33.256 (meters) GEOID18

AE2641 NAD 83(2011) X - 460,473.776 (meters) COMP

AE2641 NAD 83(2011) Y - -4,845,748.664 (meters) COMP

AE2641 NAD 83(2011) Z - 4,108,149.603 (meters) COMP

AE2641 LAPLACE CORR - 1.44 (seconds) DEFLEC18

AE2641

AE2641 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE
	Horiz	Ellip	SD_N	SD_E	SD_h	(unitless)

AE2641 NETWORK	1.73	2.70	0.80	0.58	1.38	0.04043666
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AE2641

AE2641 Click [here](#) for local accuracies and other accuracy information.

AE2641

AE2641

AE2641.The horizontal coordinates were established by GPS observations

AE2641.and adjusted by the National Geodetic Survey in June 2012.

AE2641

AE2641.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

AE2641.been affixed to the stable North American tectonic plate. See

AE2641.[NA2011](#) for more information.

AE2641

AE2641.The horizontal coordinates are valid at the epoch date displayed above

AE2641.which is a decimal equivalence of Year/Month/Day.

AE2641

AE2641.The orthometric height was determined by GPS observations and a

AE2641.high-resolution geoid model.

AE2641

AE2641.Significant digits in the geoid height do not necessarily reflect accuracy.

AE2641.GEOID18 height accuracy estimate available [here](#).

AE2641

AE2641.Click [here](#) to see if photographs exist for this station.



AE2641  
 AE2641.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 AE2641  
 AE2641.The Laplace correction was computed from DEFLEC18 derived deflections.  
 AE2641  
 AE2641.The ellipsoidal height was determined by GPS observations  
 AE2641.and is referenced to NAD 83.

AE2641  
 AE2641. The following values were computed from the NAD 83(2011) position.

AE2641

AE2641;		North	East	Units	Scale	Factor	Converg.
AE2641;SPC OH N	-	78,367.953	424,019.743	MT	1.00001624	-1 21	39.6
AE2641;SPC OH N	-	257,112.19	1,391,138.11	sFT	1.00001624	-1 21	39.6
AE2641;UTM 16	-	4,469,830.570	706,216.763	MT	1.00012350	+1 34	22.4

AE2641  
 AE2641!  
 AE2641!SPC OH N  
 AE2641!UTM 16

	-	Elev Factor	x	Scale Factor	=	Combined Factor
AE2641!SPC OH N	-	0.99995924	x	1.00001624	=	0.99997548
AE2641!UTM 16	-	0.99995924	x	1.00012350	=	1.00008273

AE2641  
 AE2641\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGK0621669830 (NAD 83)

AE2641  
 AE2641 SUPERSEDED SURVEY CONTROL

AE2641

AE2641	NAD 83(2007)-	40 21 12.81548(N)	084 34 18.09070(W)	AD(2002.00)	0
AE2641	ELLIP H (02/10/07)	259.875 (m)		GP(2002.00)	
AE2641	ELLIP H (10/07/05)	259.873 (m)		GP( )	4 1
AE2641	NAD 83(1995)-	40 21 12.81553(N)	084 34 18.09053(W)	AD( )	1
AE2641	ELLIP H (09/04/97)	259.884 (m)		GP( )	4 1

AE2641  
 AE2641.Superseded values are not recommended for survey control.  
 AE2641  
 AE2641.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 AE2641.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AE2641  
 AE2641\_MARKER: F = FLANGE-ENCASED ROD  
 AE2641\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)  
 AE2641\_STAMPING: LANDO  
 AE2641\_MARK LOGO: OH-107  
 AE2641\_PROJECTION: RECESSED 8 CENTIMETERS  
 AE2641\_MAGNETIC: I = MARKER IS A STEEL ROD  
 AE2641\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 AE2641\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 AE2641+SATELLITE: SATELLITE OBSERVATIONS - October 03, 2010  
 AE2641\_ROD/PIPE-DEPTH: 6.1 meters  
 AE2641\_SLEEVE-DEPTH : 1.1 meters

AE2641

AE2641	HISTORY	-	Date	Condition	Report By
AE2641	HISTORY	-	1995	MONUMENTED	OHDT
AE2641	HISTORY	-	20101003	GOOD	GEOCAC

AE2641  
 AE2641 STATION DESCRIPTION  
 AE2641  
 AE2641'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1995 (KM)  
 AE2641'IN THE SOUTHEAST QUARTER OF SECTION 32, TOWN 15 NORTH, RANGE 2 EAST,  
 AE2641'GRANVILLE TOWNSHIP, MERCER COUNTY, OHIO. TO REACH FROM THE MERCER



AE2641'COUNTY COURT HOUSE IN CELINE, TRAVEL SOUTH ON US 127 13.75 MILES  
AE2641'(22.13 KM) TO ITS INTERESECTION WITH MERCER-DARKE COUNTY LINE ROAD.  
AE2641'THE MARK IS IN THE NORTHWEST QUADRANT OF THE INTERSECTIONS OF US 127  
AE2641'AND MERCER-DARKE COUNTY LINE ROAD, 74 FEET (22.6 M) WEST OF THE  
AE2641'CENTERLINE OF USE 127, 35 FEET (10.7 M) NORTH OF THE CENTERLINE OF  
AE2641'MERCER-DARKE COUNTY LINE ROAD, 41 FEET (12.5 M) IN THE NORTHWESTERLY  
AE2641'DIRECTION FROM CONC CALV, 20.8 FEET (6.3 M) WEST OF AN OHIO DEPARTMENT  
AE2641'OF TRANSPORTATION SURVEY CAP. THE MARK IS A STEEL ROD IN AN ALUMINUM  
AE2641'MONUMENT BOX STAMPED LANDO ADJACENT TO A METAL POST PLACED BY THE  
AE2641'MERCER COUNTY ENGINEER.

AE2641

AE2641

STATION RECOVERY (2010)

AE2641

AE2641'RECOVERY NOTE BY GEOCACHING 2010 (RLM)

AE2641'RECOVERED IN GOOD CONDITION.

AE2641'

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MC1778 *****
MC1778 DESIGNATION - LCB 528
MC1778 PID - MC1778
MC1778 STATE/COUNTY- OH/LUCAS
MC1778 COUNTRY - US
MC1778 USGS QUAD - RENO BEACH (1967)
MC1778
MC1778 *CURRENT SURVEY CONTROL
MC1778
MC1778* NAD 83(2011) POSITION- 41 39 38.01970(N) 083 18 45.16663(W) ADJUSTED
MC1778* NAD 83(2011) ELLIP HT- 139.957 (meters) (06/27/12) ADJUSTED
MC1778* NAD 83(2011) EPOCH - 2010.00
MC1778* NAVD 88 ORTHO HEIGHT - 175.5 (meters) 576. (feet) GPS OBS
MC1778
MC1778 NAVD 88 orthometric height was determined with geoid model GEOID93
MC1778 GEOID HEIGHT - -35.460 (meters) GEOID93
MC1778 GEOID HEIGHT - -35.516 (meters) GEOID18
MC1778 NAD 83(2011) X - 555,743.771 (meters) COMP
MC1778 NAD 83(2011) Y - -4,739,778.062 (meters) COMP
MC1778 NAD 83(2011) Z - 4,217,604.643 (meters) COMP
MC1778 LAPLACE CORR - -1.48 (seconds) DEFLEC18
MC1778
MC1778 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MC1778 Standards:
MC1778 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MC1778 Horiz Ellip SD_N SD_E SD_h (unitless)
MC1778 -----
MC1778 NETWORK 0.84 1.72 0.38 0.29 0.88 0.07325350
MC1778 -----
MC1778 Click here for local accuracies and other accuracy information.
MC1778
MC1778
MC1778.The horizontal coordinates were established by GPS observations
MC1778.and adjusted by the National Geodetic Survey in June 2012.
MC1778
MC1778.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MC1778.been affixed to the stable North American tectonic plate. See
MC1778.NA2011 for more information.
MC1778
MC1778.The horizontal coordinates are valid at the epoch date displayed above
MC1778.which is a decimal equivalence of Year/Month/Day.
MC1778
MC1778.The orthometric height was determined by GPS observations and a
MC1778.high-resolution geoid model.
MC1778
MC1778.Significant digits in the geoid height do not necessarily reflect accuracy.
MC1778.GEOID18 height accuracy estimate available here.
MC1778
MC1778.Click here to see if photographs exist for this station.

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MC1778  
 MC1778.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MC1778  
 MC1778.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MC1778  
 MC1778.The ellipsoidal height was determined by GPS observations  
 MC1778.and is referenced to NAD 83.

MC1778  
 MC1778. The following values were computed from the NAD 83(2011) position.  
 MC1778

MC1778;		North	East	Units	Scale	Factor	Converg.
MC1778;SPC OH N	-	221,735.158	532,324.816	MT	0.99999263	-0 32	01.7
MC1778;SPC OH N	-	727,476.10	1,746,469.00	sFT	0.99999263	-0 32	01.7
MC1778;UTM 17	-	4,614,673.398	307,459.792	MT	1.00005622	-1 32	15.6

MC1778  
 MC1778!  
 - Elev Factor x Scale Factor = Combined Factor  
 MC1778!SPC OH N - 0.99997805 x 0.99999263 = 0.99997068  
 MC1778!UTM 17 - 0.99997805 x 1.00005622 = 1.00003427  
 MC1778

MC1778\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLG0745914673 (NAD 83)

MC1778  
 MC1778 SUPERSEDED SURVEY CONTROL

MC1778	NAD 83(2007)-	41 39 38.01984(N)	083 18 45.16742(W)	AD(2002.00)	0
MC1778	ELLIP H (02/10/07)	139.973 (m)		GP(2002.00)	
MC1778	ELLIP H (10/07/05)	139.992 (m)		GP( )	4 1
MC1778	NAD 83(1995)-	41 39 38.01962(N)	083 18 45.16692(W)	AD( )	1
MC1778	ELLIP H (04/01/98)	140.032 (m)		GP( )	4 1
MC1778	NAD 83(1994)-	41 39 38.01962(N)	083 18 45.16691(W)	AD( )	1
MC1778	NAD 83(1986)-	41 39 38.03533(N)	083 18 45.18695(W)	AD( )	1

MC1778  
 MC1778.Superseded values are not recommended for survey control.  
 MC1778

MC1778.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MC1778.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MC1778

MC1778\_MARKER: DB = BENCH MARK DISK  
 MC1778\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 MC1778\_STAMPING: 528  
 MC1778\_MARK LOGO: OH-095  
 MC1778\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 MC1778+STABILITY: SURFACE MOTION  
 MC1778\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 MC1778+SATELLITE: SATELLITE OBSERVATIONS - July 19, 2016

MC1778	HISTORY	-	Date	Condition	Report By
MC1778	HISTORY	-	UNK	MONUMENTED	OH-095
MC1778	HISTORY	-	19930923	GOOD	OH-095
MC1778	HISTORY	-	20160719	GOOD	USPSQD

MC1778  
 MC1778 STATION DESCRIPTION

MC1778'DESCRIBED BY LUCAS COUNTY OHIO 1993  
 MC1778'THE STATION IS LOCATED IN LUCAS COUNTY, OHIO ABOUT 3.0 MILES NORTHWEST  
 MC1778'OF THE VILLAGE OF BONO.



MC1778'TO REACH THE STATION FROM THE INTERSECTION OF MAIN STREET AND  
MC1778'JERUSALEM ROAD (STATE ROUTE 2) PROCEED WEST ALONG STATE ROUTE 2 2.3  
MC1778'MILES TO ITS INTERSECTION WITH YONDOTA ROAD. TURN RIGHT AND PROCEED  
MC1778'NORTH ALONG YONDOTA ROAD 1.5 MILES TO ITS INTERSECTION WITH CORDUROY  
MC1778'ROAD AND THE STATION ON THE LEFT IN THE NORTHWEST CORNER OF THE  
MC1778'INTERSECTION.  
MC1778'THE STATION IS A 3.25 INCH BRASS LUCAS COUNTY BENCHMARK DISK SET IN  
MC1778'CONCRETE 0.3 FEET BELOW THE GROUND SURFACE AND IS STAMPED --528--.  
MC1778'THE STATION IS AN EXISTING LUCAS COUNTY MARK, DATE OF INSTALLATION AND  
MC1778'PARTY CHIEF ARE UNKNOWN.  
MC1778'THE STATION IS 4.3 FEET EAST FROM A NAIL AND SHINER IN THE EAST FACE  
MC1778'OF A POLE NORTHWEST OF THE INTERSECTION, 64.6 FEET NORTHEAST FROM A  
MC1778'NAIL AND SHINER IN THE NORTHEAST FACE OF A POLE LOCATED SOUTHWEST OF  
MC1778'THE INTERSECTION, AND 43.4 FEET NORTHWEST FROM A SMALL RAIL ROAD  
MC1778'SPIKE IN THE INTERSECTION.  
MC1778  
MC1778 STATION RECOVERY (2016)  
MC1778  
MC1778'RECOVERY NOTE BY US POWER SQUADRON 2016 (JTH)  
MC1778'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = JANUARY 6, 2020

LA0048 \*\*\*\*\*  
 LA0048 DESIGNATION - **LIMA**  
 LA0048 PID - LA0048  
 LA0048 STATE/COUNTY- OH/ALLEN  
 LA0048 COUNTRY - US  
 LA0048 USGS QUAD - LIMA (1983)

LA0048  
 LA0048 \*CURRENT SURVEY CONTROL

LA0048\* NAD 83(2011) POSITION- 40 44 02.35570(N) 084 04 48.06696(W) ADJUSTED  
 LA0048\* NAD 83(2011) ELLIP HT- 236.148 (meters) (06/27/12) ADJUSTED  
 LA0048\* NAD 83(2011) EPOCH - 2010.00  
 LA0048\* [NAVD 88](#) ORTHO HEIGHT - 270.743 (meters) 888.26 (feet) ADJUSTED

LA0048  
 LA0048 GEOID HEIGHT - -34.581 (meters) GEOID18  
 LA0048 NAD 83(2011) X - 499,205.003 (meters) COMP  
 LA0048 NAD 83(2011) Y - -4,814,286.097 (meters) COMP  
 LA0048 NAD 83(2011) Z - 4,140,237.496 (meters) COMP  
 LA0048 LAPLACE CORR - -3.75 (seconds) DEFLEC18  
 LA0048 DYNAMIC HEIGHT - 270.610 (meters) 887.83 (feet) COMP  
 LA0048 MODELED GRAVITY - 980,124.6 (mgal) NAVD 88

LA0048  
 LA0048 VERT ORDER - FIRST CLASS II

LA0048 Network accuracy estimates per FGDC Geospatial Positioning Accuracy  
 LA0048 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	4.84	5.64	1.94	2.00	2.88	-0.21087916

LA0048 -----  
 LA0048 Click [here](#) for local accuracies and other accuracy information.

LA0048  
 LA0048

LA0048.The horizontal coordinates were established by GPS observations  
 LA0048.and adjusted by the National Geodetic Survey in June 2012.

LA0048  
 LA0048.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has  
 LA0048.been affixed to the stable North American tectonic plate. See  
 LA0048.[NA2011](#) for more information.

LA0048  
 LA0048.The horizontal coordinates are valid at the epoch date displayed above  
 LA0048.which is a decimal equivalence of Year/Month/Day.

LA0048  
 LA0048.The orthometric height was determined by differential leveling and  
 LA0048.adjusted by the NATIONAL GEODETIC SURVEY  
 LA0048.in January 1994.

LA0048  
 LA0048.Significant digits in the geoid height do not necessarily reflect accuracy.



LA0048.GEOID18 height accuracy estimate available [here](#).  
 LA0048  
 LA0048.Click [here](#) to see if photographs exist for this station.  
 LA0048  
 LA0048.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 LA0048  
 LA0048.The Laplace correction was computed from DEFLEC18 derived deflections.  
 LA0048  
 LA0048.The ellipsoidal height was determined by GPS observations  
 LA0048.and is referenced to NAD 83.  
 LA0048  
 LA0048.The dynamic height is computed by dividing the NAVD 88  
 LA0048.geopotential number by the normal gravity value computed on the  
 LA0048.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 LA0048.degrees latitude (g = 980.6199 gals.).

LA0048  
 LA0048.The modeled gravity was interpolated from observed gravity values.  
 LA0048  
 LA0048. The following values were computed from the NAD 83(2011) position.  
 LA0048

LA0048;		North	East	Units	Scale Factor	Converg.
LA0048;SPC OH N	-	119,730.553	466,544.993	MT	0.99995601	-1 02 16.8
LA0048;SPC OH N	-	392,815.99	1,530,656.36	sFT	0.99995601	-1 02 16.8
LA0048;UTM 16	-	4,513,329.835	746,575.609	MT	1.00034842	+1 54 23.0
LA0048;UTM 17	-	4,513,792.071	239,908.272	MT	1.00043273	-2 00 39.5
LA0048!	-	Elev Factor	x Scale Factor	=	Combined Factor	
LA0048!SPC OH N	-	0.99996296	x 0.99995601	=	0.99991897	
LA0048!UTM 16	-	0.99996296	x 1.00034842	=	1.00031137	
LA0048!UTM 17	-	0.99996296	x 1.00043273	=	1.00039567	

LA0048:		Primary Azimuth Mark	Grid Az
LA0048:SPC OH N	-	LIMA AZ MK	107 08 47.8
LA0048:UTM 16	-	LIMA AZ MK	104 12 08.0
LA0048:UTM 17	-	LIMA AZ MK	108 07 10.5

LA0048\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL4657513329(NAD 83)

LA0048	PID	Reference Object	Distance	Geod. Az
LA0048				dddmss.s
LA0048	LA0049	LIMA RM 1	34.308 METERS	02550
LA0048	LA0051	LIMA AZ MK		1060631.0
LA0048	LA0050	LIMA RM 2	36.561 METERS	15627
LA0048	LA2239	LIMA ALLEN CO BLDG CLOCK TOWER	APPROX. 2.4 KM	2951558.5

SUPERSEDED SURVEY CONTROL

LA0048	NAD 83(2007)-	40 44 02.35584(N)	084 04 48.06769(W)	AD(2002.00)	0
LA0048	ELLIP H (02/10/07)	236.156 (m)		GP(2002.00)	
LA0048	ELLIP H (10/07/05)	236.142 (m)		GP( )	4 1
LA0048	NAD 83(1995)-	40 44 02.35551(N)	084 04 48.06813(W)	AD( )	1
LA0048	ELLIP H (04/01/98)	236.138 (m)		GP( )	4 1
LA0048	NAD 83(1986)-	40 44 02.36540(N)	084 04 48.08720(W)	AD( )	1





LA0048 NAD 27 - 40 44 02.18000(N) 084 04 48.27200(W) AD( ) 1  
 LA0048 NAVD 88 (06/15/91) 270.722 (m) 888.19 (f) SUPERSEDED 1 2  
 LA0048 NGVD 29 (??/??/92) 270.891 (m) 888.75 (f) ADJ UNCH 1 2  
 LA0048 NGVD 29 270.89 (m) 888.7 (f) LEVELING 3

LA0048.Superseded values are not recommended for survey control.

LA0048.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

LA0048.See file [dsdata.pdf](#) to determine how the superseded data were derived.

LA0048\_MARKER: DS = TRIANGULATION STATION DISK

LA0048\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

LA0048\_STAMPING: LIMA 1943

LA0048\_MARK LOGO: CGS

LA0048\_MAGNETIC: N = NO MAGNETIC MATERIAL

LA0048\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

LA0048+STABILITY: SURFACE MOTION

LA0048\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

LA0048+SATELLITE: SATELLITE OBSERVATIONS - July 06, 1993

LA0048	HISTORY	- Date	Condition	Report By
LA0048	HISTORY	- 1943	MONUMENTED	CGS
LA0048	HISTORY	- 1954	GOOD	CGS
LA0048	HISTORY	- 1954	GOOD	CGS
LA0048	HISTORY	- 1961	GOOD	THOMAS
LA0048	HISTORY	- 1961	GOOD	LOCENG
LA0048	HISTORY	- 1964	GOOD	CGS
LA0048	HISTORY	- 1976	GOOD	NGS
LA0048	HISTORY	- 19891212	GOOD	OHDT
LA0048	HISTORY	- 19900307	GOOD	
LA0048	HISTORY	- 19910903	GOOD	AIRLAN
LA0048	HISTORY	- 19930706	GOOD	NGS

LA0048 STATION DESCRIPTION

LA0048'DESCRIBED BY COAST AND GEODETIC SURVEY 1943 (APR)  
 LA0048'STATION IS LOCATED  
 LA0048'ABOUT 1.5 MILES  
 LA0048'(AIRLINE) SE OF THE CENTER OF THE CITY OF LIMA.  
 LA0048'IT IS IN THE CITY CORPORATION  
 LA0048'LIMITS ABOUT 0.2 MILE N OF THE JUNCTION  
 LA0048'OF U.S. HIGHWAY 30S AND STATE HIGHWAY 117. THE  
 LA0048'MARK IS SET  
 LA0048'NEAR THE CENTER OF AN OPEN PLOT OF GROUND, WHICH IS LAID OUT IN  
 LA0048'TOWN LOTS, BUT  
 LA0048'NEVER DEVELOPED. IT IS 44 FEET W OF AN IRON-COVERED  
 LA0048'SEWER DRAIN AND 20 FEET W OF THE  
 LA0048'CENTER LINE OF THE DIM N-S  
 LA0048'ROAD. THE DISK IS STAMPED LIMA 1943 AND IS FLUSH  
 LA0048'WITH THE SURFACE  
 LA0048'OF THE GROUND.  
 LA0048'  
 LA0048'SURFACE, UNDERGROUND, REFERENCE AND AZIMUTH MARKS ARE BRONZE  
 LA0048'DISKS SET IN  
 LA0048'CONCRETE.



LA0048'  
LA0048'REFERENCE MARK 1 IS 112.56 FEET NE OF THE STATION AND 26 FEET  
LA0048'E OF THE CENTER  
LA0048'LINE OF THE DIM N-S ROAD. THE DISK IS STAMPED  
LA0048'LIMA NO 1 1943.  
LA0048'  
LA0048'REFERENCE MARK 2 IS 119.95 FEET SSE OF THE STATION AND 26.5  
LA0048'FEET E OF THE  
LA0048'CENTER LINE OF THE DIM N-S ROAD. THE DISK IS  
LA0048'STAMPED LIMA NO 2 1943.  
LA0048'  
LA0048'THE AZIMUTH MARK IS APPROXIMATELY 0.25 MILE SSE OF THE STATION.  
LA0048'THE MARK IS SET IN  
LA0048'A TRIANGLE FORMED BY A ROAD FORK AND IT IS ABOUT  
LA0048'50 YARDS W OF HOUSE 300. IT IS 69  
LA0048'FEET NE OF THE ROAD INTERSECTION  
LA0048'AT THE FORK AND 61.5 FEET NW OF OHIO POWER COMPANY  
LA0048'LINE POLE 875 B  
LA0048'2-40. THE DISK IS STAMPED LIMA 1943. THE MARK IS FLUSH WITH THE  
LA0048'SURFACE OF THE  
LA0048'GROUND.  
LA0048'  
LA0048'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAY 30S AND  
LA0048'STATE HIGHWAY 117  
LA0048'IN SE LIMA, GO N ON A DIM ROAD, AT A LIMA CITY-  
LA0048'LIMITS SIGN, FOR 0.2 MILE TO THE  
LA0048'STATION ON THE LEFT AS DESCRIBED.  
LA0048'  
LA0048'TO REACH THE AZIMUTH MARK FROM THE JUNCTION OF HIGHWAY 30S AND  
LA0048'HIGHWAY 117, GO E  
LA0048'ON HIGHWAY 308 FOR 0.15 MILE, TURN LEFT ON A GRAVELED  
LA0048'ROAD, JUST AFTER CROSSING A CONCRETE  
LA0048'CULVERT AND GO 0.2 MILE  
LA0048'TO A ROAD FORKS AND THE MARK AS DESCRIBED.  
LA0048'  
LA0048'HEIGHT OF LIGHT ABOVE  
LA0048'STATION MARK -34 METERS.  
LA0048  
LA0048 STATION RECOVERY (1954)  
LA0048  
LA0048'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1954 (CS)  
LA0048'STATION IS LOCATED IN THE SE PART OF  
LA0048'LIMA, ABOUT 0.2  
LA0048'MI. N ALONG SOUTH ROBERTS AVENUE FROM ITS JUNCTION  
LA0048'WITH U.S. HIGHWAY 30 S AT A POINT  
LA0048'JUST W OF THE JUNCTION OF U.S.  
LA0048'HIGHWAY 30 S AND STATE HIGHWAY 117, 28-1/2 FT. W OF  
LA0048'THE CENTERLINE  
LA0048'OF SOUTH ROBERTS AVENUE, 34.8 FT. N-NW OF POWER POLE NO. 875  
LA0048'B 2-137, 44 FT.  
LA0048'W-SW ACROSS THE AVENUE FROM THE CENTER OF AN IRON  
LA0048'MANHOLE COVER, 2 FT. SW OF A WHITE  
LA0048'WOODEN WITNESS POST, ABOUT 1  
LA0048'FT. ABOVE THE LEVEL OF THE AVENUE, FLUSH WITH THE  
LA0048'GROUND, AND





LA0048'CENTER LINE OF SOUTH ROBERTS AVENUE, 34.8 FEET NORTH-NORTHWEST OF  
LA0048'POWER POLE NO. 875 B2-137, 119 1/2 FEET NORTHWEST AND ACROSS  
LA0048'AVENUE FROM RM NO. 2, 112 1/2 FEET SOUTHWEST AND ACROSS AVENUE  
LA0048'FROM RM NO. 1, 44 FEET WEST-SOUTHWEST AND ACROSS AVENUE FROM  
LA0048'CENTER OF AN IRON SEWER LID, 2 FEET SOUTHWEST OF A WHITE WOODEN  
LA0048'WITNESS POST, ABOUT 1 FOOT ABOVE LEVEL OF AVENUE AND SET IN THE  
LA0048'TOP OF A CONCRETE POST FLUSH WITH GROUND.  
LA0048  
LA0048 STATION RECOVERY (1961)  
LA0048  
LA0048'RECOVERY NOTE BY THOMAS ENG AND SURV 1961 (MA)  
LA0048'STATION MARK LIMA - UNDISTURBED.  
LA0048'  
LA0048'RM-1 - UNDISTURBED.  
LA0048'  
LA0048'RM-2 - UNDISTURBED.  
LA0048'  
LA0048'AZ. MK. - UNDISTURBED.  
LA0048'  
LA0048'NOTE--AZ. MK IS NO LONGER VISABLE FROM GROUND AT TRIANGULATION  
LA0048'STATION DUE TO MAN MADE OBJECTS AND TREES.  
LA0048  
LA0048 STATION RECOVERY (1961)  
LA0048  
LA0048'RECOVERY NOTE BY LOCAL ENGINEER (INDIVIDUAL OR FIRM) 1961 (JDS)  
LA0048'STATION WAS FOUND IN EXCELLENT CONDITION.  
LA0048'  
LA0048'REFERENCE MARK NO. 1 WAS NOT FOUND. IT APPARENTLY LIES UNDER A  
LA0048'GRAVEL DRIVEWAY. CONVERSATION WITH THE OWNER REVEALED THAT IT WAS  
LA0048'NOT REMOVED DURING CONSTRUCTION OF THE DRIVE. NO EFFORT WAS MADE  
LA0048'TO UNCOVER THE MARKER.  
LA0048'  
LA0048'LIMA AZIMUTH IS NOT VISABLE FROM THE STATION--A TRAILER PARK HAS  
LA0048'BEEN DEVELOPED BETWEEN THEM, HOWEVER, IT WAS FOUND IN GOOD  
LA0048'CONDITION.  
LA0048'  
LA0048'REFERENCE MARK NO. 2 WAS FOUND IN EXCELLENT CONDITION.  
LA0048  
LA0048 STATION RECOVERY (1964)  
LA0048  
LA0048'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1964 (VES)  
LA0048'THE STATION, REFERENCE, AND AZIMUTH MARKS WERE RECOVERED IN GOOD  
LA0048'CONDITION AS DESCRIBED. THE STATION AND AZIMUTH MARKS ARE NO LONGER  
LA0048'INTERVISABLE FROM THE GROUND.  
LA0048  
LA0048 STATION RECOVERY (1976)  
LA0048  
LA0048'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1976 (JVT)  
LA0048'THE STATION MARK AND REFERENCE MARKS 1 AND 2 WERE RECOVERED AS  
LA0048'DESCRIBED EXCEPT THAT REFERENCE MARK 1 IS NOW ABOUT 2 INCHES BELOW  
LA0048'THE GROUND SURFACE AND AT THE EDGE OF A PAVED DRIVEWAY. THE  
LA0048'AZIMUTH MARK WAS NOT SEARCHED FOR.  
LA0048'  
LA0048'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN--SOUTHEAST PART  
LA0048'OF LIMA.



LA0048  
LA0048 STATION RECOVERY (1989)  
LA0048  
LA0048'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1989  
LA0048'RECOVERED IN GOOD CONDITION.  
LA0048  
LA0048 STATION RECOVERY (1990)  
LA0048  
LA0048'RECOVERED 1990  
LA0048'RECOVERED IN GOOD CONDITION.  
LA0048  
LA0048 STATION RECOVERY (1991)  
LA0048  
LA0048'RECOVERY NOTE BY AIR LAND SURVEYS INCORPORATED 1991 (JEK)  
LA0048'THE STATION IS NOW IN THE FRONT YARD OF THE HOUSE AT 512 S. ROBERTS  
LA0048'STREET AND IS APPROXIMATELY 19 FEET SOUTH OF THE PROJECTED SOUTH FACE  
LA0048'OF THE HOUSE. THE CENTERLINE/PAVEMENT OF S. ROBERTS IS APPROXIMATELY  
LA0048'28.5 FEET EAST OF THE STATION WHICH IS SET FLUSH WITH THE GROUND.  
LA0048'REFERENCE MARKS NO. 1 AND NO. 2 WERE FOUND IN GOOD CONDITION AND AS  
LA0048'DESCRIBED. THE AZIMUTH MARK WAS NOT RECOVERED.  
LA0048  
LA0048 STATION RECOVERY (1993)  
LA0048  
LA0048'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1993  
LA0048'IN LIMA, AT THE INTERSECTION OF FEDERAL STREET AND SOUTH ROBERTS  
LA0048'AVENUE, 54.2 M (177.8 FT) NORTH OF THE STREET CENTER, 36.3 M (119.1  
LA0048'FT) NORTHWEST OF REFERENCE MARK 2, 34.3 M (112.5 FT) SOUTHWEST OF  
LA0048'REFERENCE MARK 1, 12.0 M (39.4 FT) SOUTHEAST OF THE SOUTHEAST CORNER  
LA0048'OF HOUSE NUMBER 512, 8.8 M (28.9 FT) WEST OF THE AVENUE CENTER, 8.5 M  
LA0048'(27.9 FT) NORTHWEST OF A WITNESS POST AND UTILITY POLE NUMBER 875 B  
LA0048'2-137, 0.3 M (1.0 FT) ABOVE THE LEVEL OF THE AVENUE, AND THE MONUMENT  
LA0048'IS FLUSH WITH THE GROUND SURFACE.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB0664 \*\*\*\*\*

MB0664 DESIGNATION - **M 163**

MB0664 PID - MB0664

MB0664 STATE/COUNTY- OH/TRUMBULL

MB0664 COUNTRY - US

MB0664 USGS QUAD - SOUTHLINGTON (1994)

MB0664

MB0664 \*CURRENT SURVEY CONTROL

MB0664

MB0664\* NAD 83(1986) POSITION- 41 17 10.7 (N) 080 55 31.7 (W) HD\_HELD2

MB0664\* [NAVD 88](#) ORTHO HEIGHT - 287.057 (meters) 941.79 (feet) ADJUSTED

MB0664

MB0664 GEOID HEIGHT - -33.839 (meters) GEOID18

MB0664 DYNAMIC HEIGHT - 286.936 (meters) 941.39 (feet) COMP

MB0664 MODELED GRAVITY - 980,193.9 (mgal) NAVD 88

MB0664

MB0664 VERT ORDER - SECOND CLASS 0

MB0664

MB0664.The horizontal coordinates were established by autonomous hand held GPS observations and have an estimated accuracy of +/- 10 meters.

MB0664.

MB0664.The orthometric height was determined by differential leveling and adjusted by the NATIONAL GEODETIC SURVEY

MB0664.in June 1991.

MB0664

MB0664.Significant digits in the geoid height do not necessarily reflect accuracy. GEOID18 height accuracy estimate available [here](#).

MB0664

MB0664.Click [here](#) to see if photographs exist for this station.

MB0664

MB0664.The dynamic height is computed by dividing the NAVD 88 geopotential number by the normal gravity value computed on the Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45 degrees latitude (g = 980.6199 gals.).

MB0664

MB0664.The modeled gravity was interpolated from observed gravity values.

MB0664

MB0664;	North	East	Units	Estimated Accuracy
MB0664;SPC OH N -	181,046.	731,884.	MT	(+/- 10 meters HH2 GPS)

MB0664

MB0664\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF0624070543(NAD 83)

MB0664

MB0664 SUPERSEDED SURVEY CONTROL

MB0664

MB0664 NGVD 29 (??/??/92) 287.230 (m) 942.35 (f) ADJ UNCH 2 0

MB0664

MB0664.Superseded values are not recommended for survey control.

MB0664

MB0664.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.



MB0664. See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB0664

MB0664\_MARKER: DB = BENCH MARK DISK

MB0664\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MB0664\_STAMPING: M 163 1950

MB0664\_MARK LOGO: CGS

MB0664\_MAGNETIC: O = OTHER; SEE DESCRIPTION

MB0664\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MB0664+STABILITY: SURFACE MOTION

MB0664\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB0664+SATELLITE: SATELLITE OBSERVATIONS - June 13, 2007

MB0664

MB0664	HISTORY	- Date	Condition	Report By
MB0664	HISTORY	- 1950	MONUMENTED	CGS
MB0664	HISTORY	- 19890101	GOOD	OHDT
MB0664	HISTORY	- 20070613	GOOD	GEOCAC

MB0664

STATION DESCRIPTION

MB0664

MB0664'DESCRIBED BY COAST AND GEODETIC SURVEY 1950

MB0664'2.2 MI SE FROM SOUTHLINGTON.

MB0664'ABOUT 2.2 MILES SOUTHEAST ALONG A SURFACED ROAD FROM ITS

MB0664'INTERSECTION WITH STATE HIGHWAY 534 AT SOUTHLINGTON, AT A

MB0664'NORTH-SOUTH ROAD CROSSING AT A PLACE CALLED DELIGHTFUL. IT IS

MB0664'29 FEET NORTHEAST OF THE CENTERLINE OF THE MAIN ROAD, 40 FEET

MB0664'WEST OF THE CENTERLINE OF THE NORTH-SOUTH ROAD, 12.5 FEET NORTH

MB0664'OF A POWER LINE POLE, 3 FEET WEST OF A WHITE WITNESS POST AND

MB0664'ABOUT LEVEL WITH THE ROADS. A STANDARD DISK SET IN THE TOP OF A

MB0664'CONCRETE POST PROJECTING 3 INCHES.

MB0664

STATION RECOVERY (1989)

MB0664

MB0664'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1989

MB0664'RECOVERED IN GOOD CONDITION.

MB0664

STATION RECOVERY (2007)

MB0664

MB0664'RECOVERY NOTE BY GEOCACHING 2007 (RLM)

MB0664'ADD TO DESCRIPTION, THE MAIN ROAD IS WARREN-BURTON ROAD AND THE

MB0664'NORTH-SOUTH ROAD IS BARCLAY-MESSERLY ROAD. THE POST IS PROJECTING 0.7

MB0664'FOOT AND IS LEANING SLIGHTLY TO THE SOUTH.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
MB1317 *****
MB1317 CBN - This is a Cooperative Base Network Control Station.
MB1317 DESIGNATION - M 176
MB1317 PID - MB1317
MB1317 STATE/COUNTY- OH/MEDINA
MB1317 COUNTRY - US
MB1317 USGS QUAD - WESTFIELD CENTER (1994)
MB1317
MB1317 *CURRENT SURVEY CONTROL
MB1317
MB1317* NAD 83(2011) POSITION- 41 03 13.21066(N) 081 59 11.33477(W) ADJUSTED
MB1317* NAD 83(2011) ELLIP HT- 311.442 (meters) (06/27/12) ADJUSTED
MB1317* NAD 83(2011) EPOCH - 2010.00
MB1317* NAVD 88 ORTHO HEIGHT - 344.920 (meters) 1131.63 (feet) ADJUSTED
MB1317
MB1317 GEOID HEIGHT - -33.461 (meters) GEOID18
MB1317 NAD 83(2011) X - 671,510.191 (meters) COMP
MB1317 NAD 83(2011) Y - -4,769,877.319 (meters) COMP
MB1317 NAD 83(2011) Z - 4,167,124.171 (meters) COMP
MB1317 LAPLACE CORR - 1.82 (seconds) DEFLEC18
MB1317 DYNAMIC HEIGHT - 344.770 (meters) 1131.13 (feet) COMP
MB1317 MODELED GRAVITY - 980,176.9 (mgal) NAVD 88
MB1317
MB1317 VERT ORDER - FIRST CLASS I
MB1317
MB1317 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB1317 Standards:
MB1317 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MB1317 Horiz Ellip SD_N SD_E SD_h (unitless)
MB1317 -----
MB1317 NETWORK 0.88 1.43 0.41 0.28 0.73 0.02029262
MB1317 -----
MB1317 Click here for local accuracies and other accuracy information.
MB1317
MB1317
MB1317.The horizontal coordinates were established by GPS observations
MB1317.and adjusted by the National Geodetic Survey in June 2012.
MB1317
MB1317.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB1317.been affixed to the stable North American tectonic plate. See
MB1317.NA2011 for more information.
MB1317
MB1317.The horizontal coordinates are valid at the epoch date displayed above
MB1317.which is a decimal equivalence of Year/Month/Day.
MB1317
MB1317.The orthometric height was determined by differential leveling and
MB1317.adjusted by the NATIONAL GEODETIC SURVEY
MB1317.in June 1991.
MB1317

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MB1317.Significant digits in the geoid height do not necessarily reflect accuracy.  
MB1317.GEOID18 height accuracy estimate available [here](#).

MB1317

MB1317.Click [here](#) to see if photographs exist for this station.

MB1317

MB1317.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MB1317

MB1317.The Laplace correction was computed from DEFLEC18 derived deflections.

MB1317

MB1317.The ellipsoidal height was determined by GPS observations

MB1317.and is referenced to NAD 83.

MB1317

MB1317.The dynamic height is computed by dividing the NAVD 88

MB1317.geopotential number by the normal gravity value computed on the

MB1317.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB1317.degrees latitude (g = 980.6199 gals.).

MB1317

MB1317.The modeled gravity was interpolated from observed gravity values.

MB1317

MB1317. The following values were computed from the NAD 83(2011) position.

MB1317

MB1317;		North	East	Units	Scale Factor	Converg.
MB1317;SPC OH N	-	154,148.060	643,167.002	MT	0.99993917	+0 20 14.5
MB1317;SPC OH N	-	505,734.09	2,110,123.74	sFT	0.99993917	+0 20 14.5
MB1317;UTM 17	-	4,545,183.647	417,102.126	MT	0.99968458	-0 38 52.5

MB1317

MB1317!  
MB1317!SPC OH N

MB1317!UTM 17

MB1317

MB1317

MB1317\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF1710245183(NAD 83)

MB1317

MB1317

SUPERSEDED SURVEY CONTROL

MB1317

MB1317	NAD 83(2007)-	41 03 13.21058(N)	081 59 11.33556(W)	AD(2002.00)	0
MB1317	ELLIP H (02/10/07)	311.458 (m)		GP(2002.00)	
MB1317	ELLIP H (03/08/05)	311.477 (m)		GP( )	4 2
MB1317	NAD 83(1995)-	41 03 13.21094(N)	081 59 11.33577(W)	AD( )	B
MB1317	ELLIP H (08/20/96)	311.471 (m)		GP( )	4 2
MB1317	NAD 83(1986)-	41 03 13.21405(N)	081 59 11.33673(W)	AD( )	3
MB1317	NAD 27	- 41 03 13.01910(N)	081 59 11.83876(W)	AD( )	3
MB1317	NAVD 88 (08/20/96)	344.9 (m)	GEOID93 model used	GPS OBS	
MB1317	NGVD 29 (??/??/92)	345.138 (m)	1132.34 (f)	ADJ UNCH	1 1
MB1317	NGVD 29 (02/23/89)	345. (m)	RAPSU86 model used	GPS OBS	

MB1317

MB1317.Superseded values are not recommended for survey control.

MB1317

MB1317.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MB1317.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB1317

MB1317\_MARKER: DB = BENCH MARK DISK

MB1317\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MB1317\_STAMPING: M 176 1954

MB1317\_MARK LOGO: CGS

MB1317\_PROJECTION: RECESSED 18 CENTIMETERS



MB1317\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 MB1317\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 MB1317+STABILITY: SURFACE MOTION  
 MB1317\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 MB1317+SATELLITE: SATELLITE OBSERVATIONS - April 20, 2017

MB1317

MB1317	HISTORY	- Date	Condition	Report By
MB1317	HISTORY	- 1954	MONUMENTED	CGS
MB1317	HISTORY	- 1967	GOOD	CGS
MB1317	HISTORY	- 1986	GOOD	NGS
MB1317	HISTORY	- 1987	GOOD	USPSQD
MB1317	HISTORY	- 19950724	GOOD	NGS
MB1317	HISTORY	- 19980323	GOOD	GCS
MB1317	HISTORY	- 2000	GOOD	OH-103
MB1317	HISTORY	- 20160625	GOOD	GEOCAC
MB1317	HISTORY	- 20170420	GOOD	WOOLPT

MB1317  
 MB1317 STATION DESCRIPTION  
 MB1317

MB1317'DESCRIBED BY COAST AND GEODETIC SURVEY 1967  
 MB1317'1.9 MI NE FROM LODI.  
 MB1317'ABOUT 1.9 MILES NORTHEAST ALONG STATE HIGHWAY 421 AND U.S.  
 MB1317'HIGHWAY 42 FROM THE INTERSECTION OF STATE HIGHWAY 76 AT LODI,  
 MB1317'ABOUT 0.6 MILE NORTHEAST ALONG U.S. HIGHWAY 42 FROM THE NORTHEAST  
 MB1317'END OF THE U.S. HIGHWAY 224 OVERPASS, NEAR THE NORTHWEST CORNER  
 MB1317'OF THE LODI AIRPORT, 72 FEET EAST OF THE INTERSECTION OF U.S.  
 MB1317'HIGHWAY 42 AND TOWNSHIP ROAD NO. 78, 30 FEET SOUTHEAST OF THE  
 MB1317'CENTER LINE OF THE HIGHWAY, 30 1/2 FEET NORTH OF THE CENTER LINE  
 MB1317'OF TOWNSHIP ROAD NO. 78, 9 FEET NORTHEAST OF A GAS LINE MARKER  
 MB1317'NO. RDI 989S, 1.1 FEET NORTHEAST OF A METAL WITNESS POST, 2 FEET  
 MB1317'BELOW THE LEVEL OF THE HIGHWAY, SET IN THE TOP OF A CONCRETE POST  
 MB1317'0.2 FOOT UNDERGROUND.

MB1317  
 MB1317 STATION RECOVERY (1986)  
 MB1317

MB1317'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1986  
 MB1317'STATION IS LOCATED ABOUT 2 MILES NORTHEAST OF LODI, 5 MILES WEST  
 MB1317'NORTHWEST OF THE JUNCTION OF INTERSTATE HIGHWAYS 76 AND 71, AT A ROAD  
 MB1317'JUNCTION, ON HIGHWAY RIGHT-OF-WAY. OWNERSHIP OHIO DEPARTMENT OF  
 MB1317'TRANSPORTATION.  
 MB1317'TO REACH FROM THE JUNCTION OF US HIGHWAYS 42 AND 224 AT THE NORTHWEST  
 MB1317'EDGE OF LODI, GO NORTHEAST ON HIGHWAY 42 FOR 0.7 MILES TO A SLANTED  
 MB1317'CROSSROAD AND STATION ON THE RIGHT.  
 MB1317'STATION MARK IS A STANDARD CGS BENCH MARK DISK STAMPED --M 176 1954--  
 MB1317'SET IN THE TOP OF A 25 CM SQUARE CONCRETE POST 0.4 METER BELOW GROUND  
 MB1317'(AREA IS VERY UNEVEN TO DITCHING AND PIPELINE). IT IS 9.2 METERS  
 MB1317'SOUTHEAST OF THE CENTER OF HIGHWAY 42, 9.8 METERS NORTH OF THE  
 MB1317'CENTER OF COUNTY ROUT 78, 5.6 METERS WEST OF UTILITY POLE 65CR/4-12,  
 MB1317'3.7 METERS EAST OF A UTILITY POLE WITH STEPS, 4.2 METERS NORTHWEST  
 MB1317'OF THE SOUTHWEST ONE OF TWO PIPELINE WARNING POLES, AND 0.3 METER  
 MB1317'NORTHEAST OF A METAL WITNESS POLE.  
 MB1317'DESCRIBED BY G R HEID.  
 MB1317'TYPED BY JAMES MALONEY 9/09/87.

MB1317  
 MB1317 STATION RECOVERY (1987)



MB1317  
MB1317'RECOVERY NOTE BY US POWER SQUADRON 1987 (ROS)  
MB1317'RECOVERED IN GOOD CONDITION.  
MB1317  
MB1317 STATION RECOVERY (1995)  
MB1317  
MB1317'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
MB1317'THE STATION IS LOCATED ABOUT 3.2 KM (2.00 MI) NORTHEAST OF LODI, 8.0  
MB1317'KM (4.95 MI) WEST NORTHWEST OF THE JUNCTION OF INTERSTATE HIGHWAYS 76  
MB1317'AND 71, ON HIGHWAY RIGHT-OF-WAY AT THE JUNCTION OF U S HIGHWAY 42 AND  
MB1317'KENNARD ROAD. TO REACH FROM THE JUNCTION OF U S HIGHWAYS 224 AND 42  
MB1317'AT THE NORTHEAST EDGE OF LODI, GO NORTHEAST ON HIGHWAY 42 FOR 1.1 KM  
MB1317'(0.70 MI) TO KENNARD ROAD AND THE STATION ON THE RIGHT. THE STATION  
MB1317'IS 9.2 M (30.2 FT) SOUTHEAST OF THE CENTER OF HIGHWAY 42, 10.1 M (33.1  
MB1317'FT) NORTH OF THE CENTER OF KENNARD ROAD, 5.2 M (17.1 FT) NORTH OF A  
MB1317'STOP SIGN, 5.6 M (18.4 FT) WEST OF UTILITY POLE NUMBER 65CR/4-12, 3.7  
MB1317'M (12.1 FT) EAST OF ANOTHER UTILITY POLE, 0.6 M (2.0 FT) SOUTHEAST OF  
MB1317'A FIBERGLASS WITNESS POST, AND RECESSED 0.3 M (1.0 FT) BELOW GROUND.  
MB1317  
MB1317 STATION RECOVERY (1998)  
MB1317  
MB1317'RECOVERY NOTE BY GEODETIC CONSULTING SERVICES 1998 (KDZ)  
MB1317'RECOVERED AS DESCRIBED.  
MB1317  
MB1317 STATION RECOVERY (2000)  
MB1317  
MB1317'RECOVERY NOTE BY MEDINA COUNTY OHIO 2000  
MB1317'RECOVERY NOTE BY MEDINA COUNTY SANITARY ENGINEER 2001  
MB1317'FOUND AS DESCRIBED IN GOOD CONDITION.  
MB1317'  
MB1317  
MB1317 STATION RECOVERY (2016)  
MB1317  
MB1317'RECOVERY NOTE BY GEOCACHING 2016 (RLM)  
MB1317'RECOVERED IN GOOD CONDITION.  
MB1317  
MB1317 STATION RECOVERY (2017)  
MB1317  
MB1317'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2017  
MB1317'RECOVERED IN GOOD CONDITION

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MB1605 \*\*\*\*\*

MB1605 DESIGNATION - **M 323**

MB1605 PID - MB1605

MB1605 STATE/COUNTY- OH/LAKE

MB1605 COUNTRY - US

MB1605 USGS QUAD - MENTOR (1992)

MB1605

MB1605 \*CURRENT SURVEY CONTROL

MB1605

MB1605\* NAD 83(2011) POSITION- 41 41 43.94912(N) 081 20 20.33629(W) ADJUSTED

MB1605\* NAD 83(2011) ELLIP HT- 156.643 (meters) (06/27/12) ADJUSTED

MB1605\* NAD 83(2011) EPOCH - 2010.00

MB1605\* [NAVD 88](#) ORTHO HEIGHT - 191.067 (meters) 626.86 (feet) ADJUSTED

MB1605

MB1605 GEOID HEIGHT - -34.376 (meters) GEOID18

MB1605 NAD 83(2011) X - 718,257.223 (meters) COMP

MB1605 NAD 83(2011) Y - -4,715,285.921 (meters) COMP

MB1605 NAD 83(2011) Z - 4,220,517.611 (meters) COMP

MB1605 LAPLACE CORR - 2.05 (seconds) DEFLEC18

MB1605 DYNAMIC HEIGHT - 190.999 (meters) 626.64 (feet) COMP

MB1605 MODELED GRAVITY - 980,259.7 (mgal) NAVD 88

MB1605

MB1605 VERT ORDER - FIRST CLASS II

MB1605

MB1605 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MB1605 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	8.08	7.10	3.95	2.04	3.62	-0.08539487

MB1605

MB1605 -----

MB1605

MB1605 Click [here](#) for local accuracies and other accuracy information.

MB1605

MB1605

MB1605.The horizontal coordinates were established by GPS observations

MB1605.and adjusted by the National Geodetic Survey in June 2012.

MB1605

MB1605.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MB1605.been affixed to the stable North American tectonic plate. See

MB1605.[NA2011](#) for more information.

MB1605

MB1605.The horizontal coordinates are valid at the epoch date displayed above

MB1605.which is a decimal equivalence of Year/Month/Day.

MB1605

MB1605.The orthometric height was determined by differential leveling and

MB1605.adjusted by the NATIONAL GEODETIC SURVEY

MB1605.in June 1991.

MB1605

MB1605.Significant digits in the geoid height do not necessarily reflect accuracy.



MB1605.GEOID18 height accuracy estimate available [here](#).

MB1605

MB1605.Click [here](#) to see if photographs exist for this station.

MB1605

MB1605.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MB1605

MB1605.The Laplace correction was computed from DEFLEC18 derived deflections.

MB1605

MB1605.The ellipsoidal height was determined by GPS observations

MB1605.and is referenced to NAD 83.

MB1605

MB1605.The dynamic height is computed by dividing the NAVD 88

MB1605.geopotential number by the normal gravity value computed on the

MB1605.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB1605.degrees latitude (g = 980.6199 gals.).

MB1605

MB1605.The modeled gravity was interpolated from observed gravity values.

MB1605

MB1605. The following values were computed from the NAD 83(2011) position.

MB1605

MB1605;		North	East	Units	Scale	Factor	Converg.
MB1605;SPC OH N	-	225,948.346	696,645.423	MT	0.99999914	+0 45	45.8
MB1605;SPC OH N	-	741,298.87	2,285,577.53	sFT	0.99999914	+0 45	45.8
MB1605;UTM 17	-	4,616,028.940	471,792.849	MT	0.99960979	-0 13	31.7

MB1605

MB1605! - Elev Factor x Scale Factor = Combined Factor

MB1605!SPC OH N - 0.99997543 x 0.99999914 = 0.99997457

MB1605!UTM 17 - 0.99997543 x 0.99960979 = 0.99958523

MB1605

MB1605\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMG7179216028 (NAD 83)

MB1605

SUPERSEDED SURVEY CONTROL

MB1605

MB1605	NAD 83(2007)-	41 41 43.94862(N)	081 20 20.33660(W)	AD(2002.00)	0
MB1605	ELLIP H (02/10/07)	156.651 (m)		GP(2002.00)	
MB1605	ELLIP H (10/07/05)	156.654 (m)		GP( )	4 1
MB1605	NAD 83(1995)-	41 41 43.94759(N)	081 20 20.33678(W)	AD( )	1
MB1605	ELLIP H (04/01/98)	156.694 (m)		GP( )	4 1
MB1605	NAD 83(1986)-	41 41 43.95768(N)	081 20 20.33523(W)	AD( )	1
MB1605	NAVD 88	191.07 (m)	626.9 (f)	LEVELING	3
MB1605	NGVD 29 (06/03/92)	191.297 (m)	627.61 (f)	ADJUSTED	1 2

MB1605

MB1605.Superseded values are not recommended for survey control.

MB1605

MB1605.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MB1605.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB1605

MB1605\_MARKER: F = FLANGE-ENCASED ROD

MB1605\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

MB1605\_STAMPING: M 323 1981

MB1605\_MARK LOGO: NGS

MB1605\_PROJECTION: FLUSH

MB1605\_MAGNETIC: O = OTHER; SEE DESCRIPTION

MB1605\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

MB1605\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR



MB1605+SATELLITE: SATELLITE OBSERVATIONS - October 28, 2018

MB1605\_ROD/PIPE-DEPTH: 6.1 meters

MB1605

MB1605	HISTORY	- Date	Condition	Report By
MB1605	HISTORY	- 1981	MONUMENTED	NGS
MB1605	HISTORY	- 19891012	GOOD	NGS
MB1605	HISTORY	- 19921208	GOOD	HOLDEN
MB1605	HISTORY	- 19960630	GOOD	USPSQD
MB1605	HISTORY	- 20010910	GOOD	USPSQD
MB1605	HISTORY	- 20040921	GOOD	OHDT
MB1605	HISTORY	- 20041229	GOOD	GEOCAC
MB1605	HISTORY	- 20081122	GOOD	GEOCAC
MB1605	HISTORY	- 20181028	GOOD	USPSQD

MB1605

MB1605 STATION DESCRIPTION

MB1605

MB1605'DESCRIBED BY NATIONAL GEODETIC SURVEY 1981

MB1605'IN MENTOR ON THE LAKE.

MB1605'THE MARK IS ABOVE LEVEL WITH HIGHWAY.

MB1605'IN MENTOR-ON-THE-LAKE, ALONG STATE HIGHWAY 615, ON THE PROPERTY OF THE

MB1605'MENTOR HIGH SCHOOL, 15.55 METERS (51.0 FEET) EAST OF THE CENTER LINE

MB1605'OF THE HIGHWAY, 12.81 METERS (42.0 FEET) SOUTH OF THE CENTER OF THE

MB1605'EXIT DRIVE OF THE SCHOOL, 1.0 METER (3.3 FEET) WEST OF THE METAL

MB1605'MENTOR HIGH SCHOOL SIGN.

MB1605

MB1605 STATION RECOVERY (1989)

MB1605

MB1605'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989

MB1605'IN MENTOR-ON-THE-LAKE, 1.1 KM (0.70 MI) NORTH ALONG STATE ROUTE 615

MB1605'FROM THE JUNCTION WITH STATE ROUTE 2, ON THE PROPERTY OF THE MENTOR

MB1605'HIGH SCHOOL, 15.55 METERS (51.0 FEET) EAST OF THE CENTER LINE OF THE

MB1605'HIGHWAY, 12.81 METERS (42.0 FEET) SOUTH OF THE CENTER OF THE EXIT

MB1605'DRIVE OF THE SCHOOL, 1.0 METER (3.3 FEET) WEST OF THE METAL MENTOR

MB1605'HIGH SCHOOL SIGN.

MB1605

MB1605 STATION RECOVERY (1992)

MB1605

MB1605'RECOVERY NOTE BY HOLDEN GPS 1992

MB1605'IN MENTOR-ON-THE-LAKE, 1.1 KM (0.68 MI) NORTH ALONG STATE ROUTE 615

MB1605'FROM THE JUNCTION WITH STATE ROUTE 2, ON THE PROPERTY OF THE MENTOR

MB1605'HIGH SCHOOL, 15.55 METERS (51.0 FEET) EAST OF THE CENTER LINE OF THE

MB1605'HIGHWAY, 12.81 METERS (42.0 FEET) SOUTH OF THE CENTER OF THE EXIT

MB1605'DRIVE OF THE SCHOOL, 1.0 METER (3.3 FEET) WEST OF THE METAL MENTOR

MB1605'HIGH SCHOOL SIGN.

MB1605

MB1605 STATION RECOVERY (1996)

MB1605

MB1605'RECOVERY NOTE BY US POWER SQUADRON 1996

MB1605'RECOVERED IN GOOD CONDITION.

MB1605

MB1605 STATION RECOVERY (2001)

MB1605

MB1605'RECOVERY NOTE BY US POWER SQUADRON 2001 (LAE)

MB1605'RECOVERED IN GOOD CONDITION.

MB1605



MB1605 STATION RECOVERY (2004)  
MB1605  
MB1605'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)  
MB1605'RECOVERED IN GOOD CONDITION.  
MB1605  
MB1605 STATION RECOVERY (2004)  
MB1605  
MB1605'RECOVERY NOTE BY GEOCACHING 2004  
MB1605'RECOVERED IN GOOD CONDITION.  
MB1605  
MB1605 STATION RECOVERY (2008)  
MB1605  
MB1605'RECOVERY NOTE BY GEOCACHING 2008 (RLM)  
MB1605'ADD TO DESCRIPTION, THE MARK IS NOT IN MENTOR-ON-THE-LAKE, AS  
MB1605'PREVIOUSLY LOGGED. IT IS ACTUALLY IN THE CITY OF MENTOR.  
MB1605  
MB1605 STATION RECOVERY (2018)  
MB1605  
MB1605'RECOVERY NOTE BY US POWER SQUADRON 2018 (TJH)  
MB1605'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DG7207 *****
DG7207 CBN - This is a Cooperative Base Network Control Station.
DG7207 DESIGNATION - MAR 02 01
DG7207 PID - DG7207
DG7207 STATE/COUNTY- OH/STARK
DG7207 COUNTRY - US
DG7207 USGS QUAD - LIMAVILLE (1994)
DG7207
DG7207 *CURRENT SURVEY CONTROL
DG7207
DG7207* NAD 83(2011) POSITION- 40 58 23.03490(N) 081 12 46.93883(W) ADJUSTED
DG7207* NAD 83(2011) ELLIP HT- 301.901 (meters) (06/27/12) ADJUSTED
DG7207* NAD 83(2011) EPOCH - 2010.00
DG7207* NAVD 88 ORTHO HEIGHT - 335.4 (meters) 1100. (feet) GPS OBS
DG7207
DG7207 NAVD 88 orthometric height was determined with geoid model GEOID03
DG7207 GEOID HEIGHT - -33.437 (meters) GEOID03
DG7207 GEOID HEIGHT - -33.461 (meters) GEOID18
DG7207 NAD 83(2011) X - 736,732.559 (meters) COMP
DG7207 NAD 83(2011) Y - -4,766,176.673 (meters) COMP
DG7207 NAD 83(2011) Z - 4,160,363.208 (meters) COMP
DG7207 LAPLACE CORR - -2.03 (seconds) DEFLEC18
DG7207
DG7207 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DG7207 Standards:
DG7207 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
DG7207 Horiz Ellip SD_N SD_E SD_h (unitless)
DG7207 -----
DG7207 NETWORK 0.55 1.55 0.25 0.19 0.79 0.04828231
DG7207 -----
DG7207 Click here for local accuracies and other accuracy information.
DG7207
DG7207
DG7207.The horizontal coordinates were established by GPS observations
DG7207.and adjusted by the National Geodetic Survey in June 2012.
DG7207
DG7207.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DG7207.been affixed to the stable North American tectonic plate. See
DG7207.NA2011 for more information.
DG7207
DG7207.The horizontal coordinates are valid at the epoch date displayed above
DG7207.which is a decimal equivalence of Year/Month/Day.
DG7207
DG7207.The orthometric height was determined by GPS observations and a
DG7207.high-resolution geoid model.
DG7207
DG7207.Significant digits in the geoid height do not necessarily reflect accuracy.
DG7207.GEOID18 height accuracy estimate available here.
DG7207

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DG7207.Click [here](#) to see if photographs exist for this station.  
 DG7207  
 DG7207.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 DG7207  
 DG7207.The Laplace correction was computed from DEFLEC18 derived deflections.  
 DG7207  
 DG7207.The ellipsoidal height was determined by GPS observations  
 DG7207.and is referenced to NAD 83.  
 DG7207  
 DG7207. The following values were computed from the NAD 83(2011) position.  
 DG7207

DG7207;		North	East	Units	Scale	Factor	Converg.
DG7207;SPC OH N	-	145,869.221	708,312.429	MT	0.99994050	+0 50	43.7
DG7207;SPC OH N	-	478,572.60	2,323,855.03	sFT	0.99994050	+0 50	43.7
DG7207;UTM 17	-	4,535,788.906	482,075.833	MT	0.99960395	-0 08	22.9
DG7207!	-	Elev Factor x Scale Factor = Combined Factor					
DG7207!SPC OH N	-	0.99995265	x	0.99994050	=	0.99989315	
DG7207!UTM 17	-	0.99995265	x	0.99960395	=	0.99955661	

DG7207\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF8207535788 (NAD 83)

SUPERSEDED SURVEY CONTROL

DG7207	NAD 83(2007)-	40 58 23.03505(N)	081 12 46.93957(W)	AD(2002.00)	0
DG7207	ELLIP H (02/10/07)	301.913 (m)		GP(2002.00)	
DG7207	NAD 83(1995)-	40 58 23.03505(N)	081 12 46.93961(W)	AD( )	A
DG7207	ELLIP H (09/23/04)	301.911 (m)		GP( )	4 1

DG7207.Superseded values are not recommended for survey control.  
 DG7207  
 DG7207.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 DG7207.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 DG7207

DG7207\_MARKER: DD = SURVEY DISK  
 DG7207\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 DG7207\_STAMPING: MAR.2.1  
 DG7207\_MARK LOGO: OH-151  
 DG7207\_PROJECTION: FLUSH  
 DG7207\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT  
 DG7207\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 DG7207+STABILITY: SURFACE MOTION  
 DG7207\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 DG7207+SATELLITE: SATELLITE OBSERVATIONS - 2003

DG7207	HISTORY	-	Date	Condition	Report By
DG7207	HISTORY	-	2003	MONUMENTED	OH-151
DG7207	HISTORY	-	20061202	GOOD	USPSQD
DG7207	HISTORY	-	20171111	GOOD	USPSQD
DG7207	HISTORY	-	20191005	GOOD	USPSQD

STATION DESCRIPTION

DG7207'DESCRIBED BY STARK COUNTY OHIO 2003 (BMW)  
 DG7207'THE STATION IS LOCATED ABOUT 15 MI EAST-SOUTHEAST OF AKRON, 13 MI



DG7207'NORTHEAST OF CANTON, 2 MILES NORTH OF MARLBORO, 200 FT NORTH OF  
DG7207'WALBORN RESERVOIR, AND ON COUNTY ROAD RIGHT-OF-WAY.  
DG7207'  
DG7207'TO REACH FROM THE JUNCTION OF STATE ROUTE 619 AND MARLBORO AVE IN  
DG7207'MARLBORO, GO NORTH FOR ABOUT 1.4 MI ON MARLBORO AVE TO THE STATION ON  
DG7207'THE LEFT, ABOUT 200 FT BEYOND THE RESERVOIR.  
DG7207'  
DG7207'THE STATION IS 37.3 FT SOUTH OF POWER POLE NUMBER 20/42, 52.0 FT NORTH  
DG7207'OF A GUARDRAIL POST, 20 FT WEST OF THE CENTERLINE OF MARLBORO AVE,  
DG7207'AND 1 FT EAST OF A METAL WITNESS POST. IT IS A BRONZE DISK SET IN A  
DG7207'12 INCH DIAMETER CONCRETE MONUMENT.  
DG7207  
DG7207 STATION RECOVERY (2006)  
DG7207  
DG7207'RECOVERY NOTE BY US POWER SQUADRON 2006  
DG7207'RECOVERED IN GOOD CONDITION.  
DG7207  
DG7207 STATION RECOVERY (2017)  
DG7207  
DG7207'RECOVERY NOTE BY US POWER SQUADRON 2017 (TJH)  
DG7207'RECOVERED IN GOOD CONDITION.  
DG7207  
DG7207 STATION RECOVERY (2019)  
DG7207  
DG7207'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)  
DG7207'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = DECEMBER  9, 2019
MD1780 *****
MD1780 FBN - This is a Federal Base Network Control Station.
MD1780 DESIGNATION - MILFORD 2 RM A
MD1780 PID - MD1780
MD1780 STATE/COUNTY- OH/DEFIANCE
MD1780 COUNTRY - US
MD1780 USGS QUAD - EDGERTON (1977)
MD1780
MD1780 *CURRENT SURVEY CONTROL
MD1780
MD1780* NAD 83(2011) POSITION- 41 22 56.43180(N) 084 44 54.81791(W) ADJUSTED
MD1780* NAD 83(2011) ELLIP HT- 231.545 (meters) (06/27/12) ADJUSTED
MD1780* NAD 83(2011) EPOCH - 2010.00
MD1780* NAVD 88 ORTHO HEIGHT - 265.1 (meters) 870. (feet) GPS OBS
MD1780
MD1780 NAVD 88 orthometric height was determined with an earlier geoid model
MD1780 GEOID HEIGHT - -33.604 (meters) GEOID18
MD1780 NAD 83(2011) X - 438,668.905 (meters) COMP
MD1780 NAD 83(2011) Y - -4,772,683.282 (meters) COMP
MD1780 NAD 83(2011) Z - 4,194,529.566 (meters) COMP
MD1780 LAPLACE CORR - -4.57 (seconds) DEFLEC18
MD1780
MD1780 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MD1780 Standards:
MD1780 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MD1780 Horiz Ellip SD_N SD_E SD_h (unitless)
MD1780 -----
MD1780 NETWORK 0.35 0.82 0.16 0.12 0.42 0.00179934
MD1780 -----
MD1780 Click here for local accuracies and other accuracy information.
MD1780
MD1780
MD1780.The horizontal coordinates were established by GPS observations
MD1780.and adjusted by the National Geodetic Survey in June 2012.
MD1780
MD1780.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MD1780.been affixed to the stable North American tectonic plate. See
MD1780.NA2011 for more information.
MD1780
MD1780.The horizontal coordinates are valid at the epoch date displayed above
MD1780.which is a decimal equivalence of Year/Month/Day.
MD1780
MD1780.The orthometric height was determined by GPS observations and a
MD1780.high-resolution geoid model.
MD1780
MD1780.Significant digits in the geoid height do not necessarily reflect accuracy.
MD1780.GEOID18 height accuracy estimate available here.
MD1780
MD1780.Click here to see if photographs exist for this station.

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MD1780  
 MD1780.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MD1780  
 MD1780.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MD1780  
 MD1780.The ellipsoidal height was determined by GPS observations  
 MD1780.and is referenced to NAD 83.

MD1780  
 MD1780. The following values were computed from the NAD 83(2011) position.  
 MD1780

MD1780;		North	East	Units	Scale	Factor	Converg.
MD1780;SPC OH N	-	192,945.041	411,943.849	MT	0.99995419	-1 28 37.9	
MD1780;SPC OH N	-	633,020.52	1,351,519.11	sFT	0.99995419	-1 28 37.9	
MD1780;UTM 16	-	4,583,647.953	688,257.283	MT	1.00003618	+1 29 19.7	

MD1780!	-	Elev Factor	x	Scale Factor	=	Combined Factor
MD1780!SPC OH N	-	0.99996368	x	0.99995419	=	0.99991787
MD1780!UTM 16	-	0.99996368	x	1.00003618	=	0.99999986

MD1780:		Primary Azimuth Mark	Grid Az
MD1780:SPC OH N	-	ALVARADO	345 42 47.6
MD1780:UTM 16	-	ALVARADO	342 44 50.0

MD1780  
 MD1780\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TFL8825783647(NAD 83)  
 MD1780

MD1780	PID	Reference Object	Distance	Geod. Az
MD1780				dddmss.s
MD1780	MD1779	EDGERTON MUNICIPAL TANK	APPROX. 7.4 KM	0014544.2
MD1780	MD1839	BRYAN ATT MICROWAVE	APPROX.17.1 KM	0304049.9
MD1780	MD0314	MILFORD 2	39.996 METERS	10942
MD1780	MD1822	HICKSVILLE OHIO PWR RAD MAST	APPROX. 9.4 KM	1865704.5
MD1780	MD1844	ALVARADO	APPROX.21.0 KM	3441409.7

MD1780 SUPERSEDED SURVEY CONTROL						
MD1780	NAD 83(2007)-	41 22 56.43193(N)	084 44 54.81882(W)	AD(2002.00)	0	
MD1780	ELLIP H (02/10/07)	231.562 (m)		GP(2002.00)		
MD1780	ELLIP H (09/23/04)	231.558 (m)		GP( )	4 1	
MD1780	NAD 83(1995)-	41 22 56.43166(N)	084 44 54.81816(W)	AD( )	B	
MD1780	ELLIP H (08/20/96)	231.580 (m)		GP( )	4 2	
MD1780	NAD 83(1986)-	41 22 56.43255(N)	084 44 54.83525(W)	AD( )	1	
MD1780	NAD 27	- 41 22 56.24858(N)	084 44 54.98785(W)	AD( )	1	
MD1780	NAVD 88 (04/10/98)	265.2 (m)	UNKNOWN model used	GPS OBS		
MD1780	NAVD 88 (08/20/96)	265.1 (m)	GEOID93 model used	GPS OBS		
MD1780	NGVD 29	265.23 (m)	870.2 (f)	LEVELING	3	

MD1780.Superseded values are not recommended for survey control.  
 MD1780  
 MD1780.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MD1780.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MD1780

MD1780\_MARKER: DS = TRIANGULATION STATION DISK  
 MD1780\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT



MD1780\_STAMPING: MILFORD 2 1946 RM A 1970  
MD1780\_MARK LOGO: CGS  
MD1780\_PROJECTION: PROJECTING 3 CENTIMETERS  
MD1780\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
MD1780\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
MD1780+STABILITY: SURFACE MOTION  
MD1780\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MD1780+SATELLITE: SATELLITE OBSERVATIONS - July 10, 2003

MD1780

MD1780	HISTORY	- Date	Condition	Report By
MD1780	HISTORY	- 1970	MONUMENTED	NGS
MD1780	HISTORY	- 19950807	GOOD	NGS
MD1780	HISTORY	- 19970808	GOOD	NGS
MD1780	HISTORY	- 19980726	GOOD	WOOLPT
MD1780	HISTORY	- 20030710	GOOD	OHDT

MD1780

MD1780 STATION DESCRIPTION

MD1780

MD1780'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970 (JLC)  
MD1780'THE STATION IS LOCATED ABOUT 6-1/2 MILES NORTH OF HICKSVILLE, 4-1/2  
MD1780'MILES SOUTH OF  
MD1780'EDGERTON AND ALONG STATE RIGHT-OF-WAY.

MD1780'

MD1780'STATION MARKS ARE STANDARD DISKS STAMPED MILFORD 2 1946 RM A 1970.

MD1780'THE SURFACE DISK

MD1780'IS SET IN THE TOP OF A 12-INCH CYLINDRICAL CONCRETE

MD1780'MONUMENT THAT IS FLUSH WITH THE

MD1780'GROUND SURFACE. IT IS 115 FEET SOUTH-

MD1780'SOUTHWEST OF THE CENTER OF THE INTERSECTION OF

MD1780'STATE HIGHWAYS 49 AND

MD1780'249, 51 FEET NORTH OF THE NORTHEAST CORNER OF A BUILDING AND 47

MD1780'FEET WEST OF THE

MD1780'CENTER OF STATE HIGHWAY 49. THE UNDERGROUND MARK IS SET

MD1780'IN THE TOP OF AN IRREGULAR

MD1780'MASS OF CONCRETE 42 INCHES BELOW THE GROUND

MD1780'SURFACE.

MD1780

MD1780 STATION RECOVERY (1995)

MD1780

MD1780'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

MD1780'THE STATION IS LOCATED ABOUT 10.5 KM (6.50 MI) NORTH OF HICKSVILLE,

MD1780'8.0 KM (4.95 MI) SOUTH OF EDGERTON, PROJECTING 3.0 CM IN A LAWN IN THE

MD1780'SOUTHWEST ANGLE OF STATE ROUTES 49 AND 249, ON PROPERTY OWNED BY ROGER

MD1780'AND LYNN GRANDY WHO LIVE IN THE HOUSE ABOUT 0.2 KM (0.10 MI) EAST OF

MD1780'THE STATION, TELEPHONE 419-542-8239. THE STATION IS LOCATED 32.9 M

MD1780'(107.9 FT) SOUTH OF THE CENTERLINE OF STATE ROUTE 249, 14.5 M (47.6

MD1780'FT) WEST OF THE CENTERLINE OF STATE ROUTE 49, 21.0 M (68.9 FT) EAST OF

MD1780'THE SOUTHEAST CORNER OF A CONCRETE BLOCK BUILDING, AND 15.5 M (50.9

MD1780'FT) NORTH-NORTHEAST OF THE NORTHEAST CORNER OF A SMALL WOOD FRAME

MD1780'BUILDING PAINTED WHITE (FORMERLY USED AS THE MILFORD SCHOOLHOUSE) .

MD1780

MD1780 STATION RECOVERY (1997)

MD1780

MD1780'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)

MD1780'RECOVERED AS DESCRIBED.



MD1780  
MD1780 STATION RECOVERY (1998)  
MD1780  
MD1780'RECOVERY NOTE BY WOOLPERT CONSULTANTS 1998 (JCB)  
MD1780'RECOVERED AS DESCRIBED. WOOLPERT LLP 1998 (JCB) .  
MD1780  
MD1780 STATION RECOVERY (2003)  
MD1780  
MD1780'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2003 (JAS)  
MD1780'RECOVERED AS DESCRIBED.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DF4056 \*\*\*\*\*  
 DF4056 CORS - This is a GPS Continuously Operating Reference Station.  
 DF4056 DESIGNATION - MT VERNON CORS ARP  
 DF4056 CORS\_ID - **MTVR**  
 DF4056 PID - DF4056  
 DF4056 STATE/COUNTY- OH/KNOX  
 DF4056 COUNTRY - US  
 DF4056 USGS QUAD - FREDERICKTOWN (1984)

DF4056 \*CURRENT SURVEY CONTROL

DF4056\* NAD 83(2011) POSITION- 40 22 56.57514(N) 082 30 38.38040(W) ADJUSTED  
 DF4056\* NAD 83(2011) ELLIP HT- 286.518 (meters) (06/??/19) ADJUSTED  
 DF4056\* NAD 83(2011) EPOCH - 2010.00

DF4056 GEOID HEIGHT - -33.803 (meters) GEOID18  
 DF4056 NAD 83(2011) X - 634,180.889 (meters) COMP  
 DF4056 NAD 83(2011) Y - -4,824,018.212 (meters) COMP  
 DF4056 NAD 83(2011) Z - 4,110,605.408 (meters) COMP

DF4056 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

DF4056	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)	
	Horiz	Ellip	SD_N	SD_E	SD_h		
DF4056	-----	-----	-----	-----	-----	-----	
DF4056	NETWORK	0.13	0.31	0.04	0.06	0.16	-0.04136300
DF4056	-----	-----	-----	-----	-----	-----	

DF4056.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

DF4056.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

DF4056.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

DF4056.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

DF4056.Additional information on MYCS2 is available at <https://geodesy.noaa.gov/CORS/coords.shtml>



DF4056.Significant digits in the geoid height do not necessarily reflect accuracy.  
DF4056.GEOID18 height accuracy estimate available [here](#).

DF4056

DF4056.The PID for the CORS L1 Phase Center is DQ9069.

DF4056

DF4056.Click [here](#) to see if photographs exist for this station.

DF4056

DF4056.The XYZ, and position/ellipsoidal ht. are equivalent.

DF4056

DF4056.The ellipsoidal height was determined by GPS observations

DF4056.and is referenced to NAD 83.

DF4056

DF4056. The following values were computed from the NAD 83(2011) position.

DF4056

DF4056;		North	East	Units	Scale	Factor	Converg.
DF4056;SPC OH N	-	79,478.305	599,094.686	MT	1.00001015	-0 00	25.2
DF4056;SPC OH N	-	260,755.07	1,965,529.82	sFT	1.00001015	-0 00	25.2
DF4056;UTM 17	-	4,471,294.644	371,770.148	MT	0.99980240	-0 58	43.9
DF4056!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DF4056!SPC OH N	-	0.99995506	x	1.00001015	=	0.99996521	
DF4056!UTM 17	-	0.99995506	x	0.99980240	=	0.99975746	

DF4056

DF4056\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLE7177071294 (NAD 83)

DF4056

SUPERSEDED SURVEY CONTROL

DF4056

DF4056	ELLIP H (06/27/12)	286.539	(m)			GP(2010.00)	0 0
DF4056	NAD 83(2011)- 40 22 56.57503(N)			082 30 38.38013(W)		AD(2010.00)	c
DF4056	NAD 83(2011)- 40 22 56.57516(N)			082 30 38.38036(W)		AD(2010.00)	c
DF4056	ELLIP H (08/??/11)	286.513	(m)			GP(2010.00)	c c
DF4056	NAD 83(CORS)- 40 22 56.57521(N)			082 30 38.38070(W)		AD(2002.00)	c
DF4056	ELLIP H (09/??/08)	286.515	(m)			GP(2002.00)	c c
DF4056	ELLIP H (02/10/07)	286.547	(m)			GP(2002.00)	
DF4056	NAD 83(2007)- 40 22 56.57509(N)			082 30 38.38074(W)		AD(2002.00)	c
DF4056	NAD 83(CORS)- 40 22 56.57509(N)			082 30 38.38074(W)		AD(2002.00)	c
DF4056	ELLIP H (02/??/03)	286.547	(m)			GP(2002.00)	c c

DF4056

DF4056.Superseded values are not recommended for survey control.

DF4056.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DF4056.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DF4056

DF4056\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DF4056

STATION DESCRIPTION

DF4056'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DF4056'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DF4056'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DF4056'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DF4056' ftp://cors.ngs.noaa.gov/cors/README.txt

DF4056' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DF4056' ftp://cors.ngs.noaa.gov/cors/station\_log

DF4056' <https://geodesy.noaa.gov/CORS>

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DG7215 *****
DG7215 CBN - This is a Cooperative Base Network Control Station.
DG7215 DESIGNATION - NEW LYME
DG7215 PID - DG7215
DG7215 STATE/COUNTY- OH/ASHTABULA
DG7215 COUNTRY - US
DG7215 USGS QUAD - ORWELL (1994)
DG7215
DG7215 *CURRENT SURVEY CONTROL
DG7215
DG7215* NAD 83(2011) POSITION- 41 35 09.91630(N) 080 46 12.01649(W) ADJUSTED
DG7215* NAD 83(2011) ELLIP HT- 267.729 (meters) (06/27/12) ADJUSTED
DG7215* NAD 83(2011) EPOCH - 2010.00
DG7215* NAVD 88 ORTHO HEIGHT - 301.7 (meters) 990. (feet) GPS OBS
DG7215
DG7215 NAVD 88 orthometric height was determined with geoid model GEOID03
DG7215 GEOID HEIGHT - -33.907 (meters) GEOID03
DG7215 GEOID HEIGHT - -34.015 (meters) GEOID18
DG7215 NAD 83(2011) X - 766,355.331 (meters) COMP
DG7215 NAD 83(2011) Y - -4,715,976.046 (meters) COMP
DG7215 NAD 83(2011) Z - 4,211,506.189 (meters) COMP
DG7215 LAPLACE CORR - 1.26 (seconds) DEFLEC18
DG7215
DG7215 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DG7215 Standards:
DG7215 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
DG7215 Horiz Ellip SD_N SD_E SD_h (unitless)
DG7215 -----
DG7215 NETWORK 0.55 1.53 0.25 0.19 0.78 0.02263217
DG7215 -----
DG7215 Click here for local accuracies and other accuracy information.
DG7215
DG7215
DG7215.The horizontal coordinates were established by GPS observations
DG7215.and adjusted by the National Geodetic Survey in June 2012.
DG7215
DG7215.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DG7215.been affixed to the stable North American tectonic plate. See
DG7215.NA2011 for more information.
DG7215
DG7215.The horizontal coordinates are valid at the epoch date displayed above
DG7215.which is a decimal equivalence of Year/Month/Day.
DG7215
DG7215.The orthometric height was determined by GPS observations and a
DG7215.high-resolution geoid model.
DG7215
DG7215.Significant digits in the geoid height do not necessarily reflect accuracy.
DG7215.GEOID18 height accuracy estimate available here.
DG7215

```



DG7215.Click [here](#) to see if photographs exist for this station.  
 DG7215  
 DG7215.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 DG7215  
 DG7215.The Laplace correction was computed from DEFLEC18 derived deflections.  
 DG7215  
 DG7215.The ellipsoidal height was determined by GPS observations  
 DG7215.and is referenced to NAD 83.  
 DG7215  
 DG7215. The following values were computed from the NAD 83(2011) position.  
 DG7215

DG7215;		North	East	Units	Scale	Factor	Converg.
DG7215;SPC OH N	-	214,579.246	744,244.190	MT	0.99998002	+1 08	11.5
DG7215;SPC OH N	-	703,998.74	2,441,741.15	sFT	0.99998002	+1 08	11.5
DG7215;UTM 17	-	4,603,847.235	519,170.618	MT	0.99960452	+0 09	09.6

DG7215!  
 DG7215!SPC OH N - Elev Factor x Scale Factor = Combined Factor  
 DG7215!UTM 17 - 0.99995801 x 0.99998002 = 0.99993803  
 DG7215!UTM 17 - 0.99995801 x 0.99960452 = 0.99956255

DG7215\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNG1917003847 (NAD 83)

SUPERSEDED SURVEY CONTROL

DG7215	NAD 83(2007)-	41 35 09.91646(N)	080 46 12.01727(W)	AD(2002.00)	0
DG7215	ELLIP H (02/10/07)	267.742 (m)		GP(2002.00)	
DG7215	NAD 83(1995)-	41 35 09.91652(N)	080 46 12.01738(W)	AD( )	A
DG7215	ELLIP H (09/23/04)	267.744 (m)		GP( )	4 1

DG7215.Superseded values are not recommended for survey control.  
 DG7215  
 DG7215.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 DG7215.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 DG7215

DG7215\_MARKER: DD = SURVEY DISK  
 DG7215\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)  
 DG7215\_STAMPING: NEW LYME 2002  
 DG7215\_MARK LOGO: NONE  
 DG7215\_PROJECTION: FLUSH  
 DG7215\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
 DG7215\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 DG7215\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 DG7215+SATELLITE: SATELLITE OBSERVATIONS - August 10, 2013  
 DG7215\_ROD/PIPE-DEPTH: 4.88 meters  
 DG7215\_SLEEVE-DEPTH : 0.9 meters

DG7215	HISTORY	- Date	Condition	Report By
DG7215	HISTORY	- 2002	MONUMENTED	OH-007
DG7215	HISTORY	- 20030606	GOOD	WOOLPT
DG7215	HISTORY	- 20130810	GOOD	GEOCAC

STATION DESCRIPTION

DG7215'DESCRIBED BY WOOLPERT CONSULTANTS 2003 (GTF)  
 DG7215'THE STATION IS LOCATED IN NEW LYME TOWNSHIP, 11.0 MI NORTH OF



DG7215'ANDOVER, 10.5 MI SOUTH OF JEFFERSON, 23.5 MI EAST OF CHARDON, AND  
DG7215'19.5 MI SOUTH OF ASHTABULA.

DG7215'

DG7215'TO REACH THE STATION FROM THE INTERSECTION OF INTERSTATE HIGHWAY 90  
DG7215'AND STATE ROUTE 11 IN ASHTABULA, GO SOUTH FOR 16.2 MI ON ROUTE 11 TO  
DG7215'US HIGHWAY 6 EXIT RAMP, TURN RIGHT AND GO WEST FOR 2.4 MI ON HIGHWAY  
DG7215'6 TO LENOX-NEW LYME RD., TURN LEFT AND GO SOUTH FOR 1.2 MI ON  
DG7215'LENOX-NEW LYME RD. TO DODGEVILLE RD., TURN RIGHT AND GO WEST FOR 0.35  
DG7215'MI ON DODGEVILLE RD. TO THE STATION ON THE LEFT JUST BEYOND THE  
DG7215'ENTRANCE DRIVE TO HIGHWAY DEPARTMENT OUTPOST.

DG7215'

DG7215'THE STATION IS A BRONZE DISK ON A STAINLESS STEEL ROD DRIVEN TO  
DG7215'REFUSAL, STAMPED ---NEW LYME 2002---, SET IN A CONCRETE MONUMENT BOX  
DG7215'FLUSH WITH THE GROUND. THE STATION IS 100.5 FT SOUTHEAST OF POWER  
DG7215'POLE NUMBER 588651, 127.3 FT SOUTHWEST OF POWER POLE NUMBER 588650,  
DG7215'19.0 FT WEST-NORTHWEST OF THE WESTERNMOST METAL GATE POST, 28.2 FT  
DG7215'SOUTH OF DODGEVILLE RD. CENTERLINE, AND 84.6 FT EAST OF A COUNTY RD.  
DG7215'5-MILE MARKER SIGN POST.

DG7215

STATION RECOVERY (2013)

DG7215

DG7215'RECOVERY NOTE BY GEOCACHING 2013 (RLM)

DG7215'RECOVERED IN GOOD CONDITION. THE MARK IS 3.6 FT (1.1 M) NORTH OF AN  
DG7215'EAST-WEST FENCE LINE.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
AB6039 *****
AB6039 CBN          - This is a Cooperative Base Network Control Station.
AB6039 PACS        - This is a Primary Airport Control Station.
AB6039 DESIGNATION - OH21 A
AB6039 PID         - AB6039
AB6039 STATE/COUNTY- OH/HURON
AB6039 COUNTRY     - US
AB6039 USGS QUAD   - NORWALK (1972)
AB6039
AB6039                                *CURRENT SURVEY CONTROL
AB6039
AB6039* NAD 83(2011) POSITION- 41 14 46.55036(N) 082 33 08.20342(W) ADJUSTED
AB6039* NAD 83(2011) ELLIP HT- 221.493 (meters) (06/27/12) ADJUSTED
AB6039* NAD 83(2011) EPOCH - 2010.00
AB6039* NAVD 88 ORTHO HEIGHT - 256.27 (meters) 840.8 (feet) GPS OBS
AB6039
AB6039 NAVD 88 orthometric height was determined with geoid model GEOID93
AB6039 GEOID HEIGHT - -34.767 (meters) GEOID93
AB6039 GEOID HEIGHT - -34.801 (meters) GEOID18
AB6039 NAD 83(2011) X - 622,542.366 (meters) COMP
AB6039 NAD 83(2011) Y - -4,762,252.227 (meters) COMP
AB6039 NAD 83(2011) Z - 4,183,171.283 (meters) COMP
AB6039 LAPLACE CORR - 3.55 (seconds) DEFLEC18
AB6039
AB6039 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AB6039 Standards:
AB6039          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
AB6039          Horiz Ellip                    SD_N   SD_E   SD_h          (unitless)
AB6039 -----
AB6039 NETWORK      1.10    2.33                0.50   0.38   1.19          -0.06472282
AB6039 -----
AB6039 Click here for local accuracies and other accuracy information.
AB6039
AB6039
AB6039.This mark is at Norwalk-Huron County Airport (OH21)
AB6039
AB6039.The horizontal coordinates were established by GPS observations
AB6039.and adjusted by the National Geodetic Survey in June 2012.
AB6039
AB6039.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AB6039.been affixed to the stable North American tectonic plate. See
AB6039.NA2011 for more information.
AB6039
AB6039.The horizontal coordinates are valid at the epoch date displayed above
AB6039.which is a decimal equivalence of Year/Month/Day.
AB6039
AB6039.The orthometric height was determined by GPS observations and a
AB6039.high-resolution geoid model.
AB6039

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AB6039.GPS derived orthometric heights for airport stations designated as AB6039.PACS or SACS are published to 2 decimal places. This maintains AB6039.centimeter relative accuracy between the PACS and SACS. It does AB6039.not indicate centimeter accuracy relative to other marks which are AB6039.part of the NAVD 88 network.

AB6039

AB6039.Significant digits in the geoid height do not necessarily reflect accuracy.

AB6039.GEOID18 height accuracy estimate available [here](#).

AB6039

AB6039.Click [here](#) to see if photographs exist for this station.

AB6039

AB6039.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AB6039

AB6039.The Laplace correction was computed from DEFLEC18 derived deflections.

AB6039

AB6039.The ellipsoidal height was determined by GPS observations

AB6039.and is referenced to NAD 83.

AB6039

AB6039. The following values were computed from the NAD 83(2011) position.

AB6039

AB6039;		North	East	Units	Scale	Factor	Converg.
AB6039;SPC OH N	-	175,409.936	595,618.177	MT	0.99994398	-0 02	03.6
AB6039;SPC OH N	-	575,490.77	1,954,123.97	sFT	0.99994398	-0 02	03.6
AB6039;UTM 17	-	4,567,257.036	369,935.986	MT	0.99980820	-1 01	24.8

AB6039

AB6039! - Elev Factor x Scale Factor = Combined Factor

AB6039!SPC OH N - 0.99996526 x 0.99994398 = 0.99990924

AB6039!UTM 17 - 0.99996526 x 0.99980820 = 0.99977347

AB6039

AB6039\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF6993567257 (NAD 83)

AB6039

AB6039	-----			AB6039
AB6039	PID	Reference Object	Distance	Geod. Az
AB6039				dddmss.s
AB6039	MC1566	NORPORT	317.312 METERS	24420
AB6039	-----			AB6039

AB6039

AB6039 SUPERSEDED SURVEY CONTROL

AB6039

AB6039 NAD 83(2007)- 41 14 46.55048(N) 082 33 08.20415(W) AD(2002.00) 0

AB6039 ELLIP H (02/10/07) 221.507 (m) GP(2002.00)

AB6039 ELLIP H (03/08/05) 221.515 (m) GP( ) 4 2

AB6039 NAD 83(1995)- 41 14 46.55035(N) 082 33 08.20407(W) AD( ) B

AB6039 ELLIP H (08/20/96) 221.518 (m) GP( ) 4 2

AB6039

AB6039.Superseded values are not recommended for survey control.

AB6039

AB6039.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AB6039.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AB6039

AB6039\_MARKER: DD = SURVEY DISK

AB6039\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.+)

AB6039\_STAMPING: FAA OH21 A NORPORT 1995

AB6039\_MARK LOGO: OHDT

AB6039\_PROJECTION: FLUSH



AB6039\_MAGNETIC: N = NO MAGNETIC MATERIAL  
AB6039\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
AB6039\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
AB6039+SATELLITE: SATELLITE OBSERVATIONS - October 04, 1995  
AB6039\_ROD/PIPE-DEPTH: 3.05 meters  
AB6039\_SLEEVE-DEPTH : 0.90 meters

AB6039  
AB6039 HISTORY - Date Condition Report By  
AB6039 HISTORY - 1995 MONUMENTED OHDT  
AB6039 HISTORY - 19951004 GOOD NGS

AB6039

AB6039 STATION DESCRIPTION

AB6039

AB6039'DESCRIBED BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
AB6039'NOTE--THIS IS THE PAC STATION. THE MARK IS LOCATED ABOUT 4.8 KM (3.00  
AB6039'MI) EAST OF NORWALK AND ABOUT 0.4 KM (0.25 MI) SOUTH OF U.S. ROUTE 20  
AB6039'AT THE NORTHEASTERN CORNER OF THE MOWED HURON COUNTY AIRPORT PROPERTY.  
AB6039'IN THE NORTHEASTERN CORNER OF SECTION 1, T 4 N, R 22 W, OF NORWALK  
AB6039'TOWNSHIP. OWNERSHIP--CITY OF NORWALK AND HURON COUNTY, C/O MANAGER  
AB6039'ROBERT DIEDERICH, 961 U.S. ROUTE 20 EAST, NORWALK, OH 44857. PHONE  
AB6039'419-668-0811. TO REACH FROM THE INTERSECTION OF U.S. ROUTE 20 AND  
AB6039'STATE ROUTE 18 ON THE EAST SIDE OF NORWALK, GO NORTH ON U.S. ROUTE 20  
AB6039'FOR 1.1 KM (0.70 MI) TO THE END OF THE FREEWAY. BEAR RIGHT, EAST, ON  
AB6039'U.S. ROUTE 20 FOR 1.4 KM (0.85 MI) TO A T-ROAD TO THE RIGHT. TURN  
AB6039'RIGHT, SOUTH, ON JIM ESKER ROAD FOR 0.34 KM (0.20 MI) TO A DRIVE TO  
AB6039'THE LEFT. TURN LEFT, EAST, ON ACCESS ROAD, CONTINENTAL DRIVE, THAT  
AB6039'GOES BEHIND THE U.S. CHECK OFFICE AND HANGAR FOR 0.29 KM (0.20 MI) TO  
AB6039'THE MARK, 149.4 M (490.2 FT) EAST-NORTHEAST OF THE EAST FACE OF THE  
AB6039'MAIN HANGAR OF U.S. CHECK, ON HIGH GROUND IN A GRASSY YARD-LIKE AREA.  
AB6039'THE MARK IS ABOUT 155.4 M (509.8 FT) NORTH OF THE EDGE OF RUNWAY 10-28  
AB6039'AT A ROW OF LIGHTS, 36.9 M (121.1 FT) SOUTHWEST OF THE NORTHEAST  
AB6039'CORNER OF THE GRASSY MOWED AIRPORT PROPERTY AT A WOOD POST AND  
AB6039'PROPERTY CORNER, 9.4 M (30.8 FT) SOUTH OF AN EAST-WEST DITCHLINE ON  
AB6039'THE NORTH EDGE OF THE AIRPORT PROPERTY, 30.5 M (100.1 FT) WEST OF A  
AB6039'NORTH-SOUTH DITCHLINE, 47.5 M (155.8 FT) NORTHEAST OF THE EAST EDGE OF  
AB6039'THE ASPHALT LOT OF THE U.S. CHECK COMPANY OF COLUMBUS, OH. THE MARK  
AB6039'IS AN 83 MM ALUMINUM DISK STAMPED --FAA OH21 A 1995--, SET ON A 19 MM  
AB6039'ALUMINUM ALLOY ROD AND DRIVEN TO REFUSAL AT A DEPTH OF 3.05 M (10.01  
AB6039'FT) WITH A 0.9 M (3.0 FT) GREASED SLEEVE AND ENCASED IN A 127 MM PVC  
AB6039'WITH AN ALUMINUM COVER AND REMOVABLE ALUMINUM LID, SET FLUSH WITH THE  
AB6039'GROUND. AN ORANGE CARSONITE WITNESS POST WAS SET 0.9 M (3.0 FT) NORTH  
AB6039'OF THE MARK. NOTE--SLEEVE DEPTH DOES NOT MEET CLASS A CRITERIA.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DI1846 \*\*\*\*\*  
 DI1846 CORS - This is a GPS Continuously Operating Reference Station.  
 DI1846 DESIGNATION - ALLEN COUNTY CORS ARP  
 DI1846 CORS\_ID - **OHAL**  
 DI1846 PID - DI1846  
 DI1846 STATE/COUNTY- OH/ALLEN  
 DI1846 COUNTRY - US  
 DI1846 USGS QUAD - CAIRO (1983)

DI1846 \*CURRENT SURVEY CONTROL

DI1846\* NAD 83(2011) POSITION- 40 46 09.73942(N) 084 06 25.04574(W) ADJUSTED  
 DI1846\* NAD 83(2011) ELLIP HT- 235.052 (meters) (06/??/19) ADJUSTED  
 DI1846\* NAD 83(2011) EPOCH - 2010.00  
 DI1846  
 DI1846 GEOID HEIGHT - -34.629 (meters) GEOID18  
 DI1846 NAD 83(2011) X - 496,677.980 (meters) COMP  
 DI1846 NAD 83(2011) Y - -4,811,967.866 (meters) COMP  
 DI1846 NAD 83(2011) Z - 4,143,213.593 (meters) COMP

DI1846 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

DI1846	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
DI1846	-----	-----	-----	-----	-----	-----
DI1846	NETWORK	0.15 0.27	0.04	0.07	0.14	-0.18409900
DI1846	-----	-----	-----	-----	-----	-----

DI1846.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

DI1846.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

DI1846.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

DI1846.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

DI1846.Additional information on MYCS2 is available at <https://geodesy.noaa.gov/CORS/coords.shtml>



DI1846.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI1846.GEOID18 height accuracy estimate available [here](#).

DI1846

DI1846.The PID for the CORS L1 Phase Center is DQ7755.

DI1846

DI1846.Click [here](#) to see if photographs exist for this station.

DI1846

DI1846.The XYZ, and position/ellipsoidal ht. are equivalent.

DI1846

DI1846.The ellipsoidal height was determined by GPS observations

DI1846.and is referenced to NAD 83.

DI1846

DI1846. The following values were computed from the NAD 83(2011) position.

DI1846

DI1846;		North	East	Units	Scale Factor	Converg.
DI1846;SPC OH N	-	123,700.681	464,342.298	MT	0.99995262	-1 03 20.5
DI1846;SPC OH N	-	405,841.32	1,523,429.69	sFT	0.99995262	-1 03 20.5
DI1846;UTM 16	-	4,517,183.038	744,170.911	MT	1.00033389	+1 53 24.5
DI1846!	-	Elev Factor	x Scale Factor	=	Combined Factor	
DI1846!SPC OH N	-	0.99996313	x 0.99995262	=	0.99991575	
DI1846!UTM 16	-	0.99996313	x 1.00033389	=	1.00029701	

DI1846

DI1846\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL4417017183(NAD 83)

DI1846

SUPERSEDED SURVEY CONTROL

DI1846

DI1846	NAD 83(2011)-	40 46 09.73944(N)	084 06 25.04571(W)	AD(2010.00)	c
DI1846	ELLIP H (08/??/11)	235.050 (m)		GP(2010.00)	c c
DI1846	NAD 83(CORS)-	40 46 09.73941(N)	084 06 25.04598(W)	AD(2002.00)	c
DI1846	ELLIP H (10/??/06)	235.061 (m)		GP(2002.00)	c c

DI1846

DI1846.Superseded values are not recommended for survey control.

DI1846

DI1846.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI1846.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI1846

DI1846\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI1846

STATION DESCRIPTION

DI1846

DI1846'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI1846'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND  
DI1846'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI1846'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI1846' ftp://cors.ngs.noaa.gov/cors/README.txt

DI1846' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI1846' ftp://cors.ngs.noaa.gov/cors/station\_log

DI1846' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DI1848 *****
DI1848 CORS          - This is a GPS Continuously Operating Reference Station.
DI1848 DESIGNATION  - ASHTABULA COUNTY CORS ARP
DI1848 CORS_ID     - OHAS
DI1848 PID         - DI1848
DI1848 STATE/COUNTY- OH/ASHTABULA
DI1848 COUNTRY     - US
DI1848 USGS QUAD   - CONNEAUT (1996)
DI1848
DI1848                                *CURRENT SURVEY CONTROL
DI1848
DI1848-----
DI1848* NAD 83(2011) POSITION- 41 55 30.22144(N) 080 33 03.84440(W) ADJUSTED
DI1848* NAD 83(2011) ELLIP HT- 181.595 (meters) (06/??/19) ADJUSTED
DI1848* NAD 83(2011) EPOCH - 2010.00
DI1848
DI1848-----
DI1848 GEOID HEIGHT - -34.590 (meters) GEOID18
DI1848 NAD 83(2011) X - 780,243.383 (meters) COMP
DI1848 NAD 83(2011) Y - -4,688,216.493 (meters) COMP
DI1848 NAD 83(2011) Z - 4,239,535.883 (meters) COMP
DI1848
DI1848 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DI1848 Standards:
DI1848      FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
DI1848      Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
DI1848-----
DI1848 NETWORK      0.12   0.30              0.04   0.05   0.15      -0.16237500
DI1848-----
DI1848
DI1848
DI1848.The coordinates were established by GPS observations
DI1848.and adjusted by the National Geodetic Survey in June 2019.
DI1848
DI1848.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DI1848.been affixed to the stable North American Tectonic Plate.
DI1848
DI1848.The coordinates are valid at the epoch date displayed above
DI1848.which is a decimal equivalence of Year/Month/Day.
DI1848
DI1848.Due to the release of the International GNSS Service (IGS) 2014
DI1848.realization of the International Terrestrial Reference Frame of 2014
DI1848.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DI1848.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DI1848.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DI1848.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DI1848.currently published epoch of 2010.00.
DI1848
DI1848
DI1848.Additional information on MYCS2 is available at
DI1848.https://geodesy.noaa.gov/CORS/coords.shtml
DI1848

```



DI1848.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI1848.GEOID18 height accuracy estimate available [here](#).

DI1848

DI1848.The PID for the CORS L1 Phase Center is DQ5217.

DI1848

DI1848.Click [here](#) to see if photographs exist for this station.

DI1848

DI1848.The XYZ, and position/ellipsoidal ht. are equivalent.

DI1848

DI1848.The ellipsoidal height was determined by GPS observations

DI1848.and is referenced to NAD 83.

DI1848

DI1848. The following values were computed from the NAD 83(2011) position.

DI1848

DI1848;		North	East	Units	Scale	Factor	Converg.
DI1848;SPC OH N	-	252,604.639	761,654.641	MT	1.00005117	+1 16	49.3
DI1848;SPC OH N	-	828,753.72	2,498,861.93	sFT	1.00005117	+1 16	49.3
DI1848;UTM 17	-	4,641,553.382	537,223.122	MT	0.99961705	+0 17	59.9
DI1848!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DI1848!SPC OH N	-	0.99997152	x	1.00005117	=	1.00002269	
DI1848!UTM 17	-	0.99997152	x	0.99961705	=	0.99958858	

DI1848

DI1848\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNG3722341553(NAD 83)

DI1848

SUPERSEDED SURVEY CONTROL

DI1848

DI1848	NAD 83(2011)-	41 55 30.22143(N)	080 33 03.84434(W)	AD(2010.00)	c
DI1848	ELLIP H (08/??/11)	181.594 (m)		GP(2010.00)	c c
DI1848	NAD 83(CORS)-	41 55 30.22156(N)	080 33 03.84480(W)	AD(2002.00)	c
DI1848	ELLIP H (10/??/06)	181.590 (m)		GP(2002.00)	c c

DI1848

DI1848.Superseded values are not recommended for survey control.

DI1848

DI1848.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI1848.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI1848

DI1848\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI1848

STATION DESCRIPTION

DI1848

DI1848'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI1848'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI1848'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI1848'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI1848' ftp://cors.ngs.noaa.gov/cors/README.txt

DI1848' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI1848' ftp://cors.ngs.noaa.gov/cors/station\_log

DI1848' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DI2816 \*\*\*\*\*

DI2816 CORS - This is a GPS Continuously Operating Reference Station.

DI2816 DESIGNATION - FULTON COUNTY CORS ARP

DI2816 CORS\_ID - OHFN

DI2816 PID - DI2816

DI2816 STATE/COUNTY- OH/FULTON

DI2816 COUNTRY - US

DI2816 USGS QUAD - WAUSEON (1977)

DI2816

DI2816 \*CURRENT SURVEY CONTROL

DI2816

DI2816\* NAD 83(2011) POSITION- 41 33 29.79039(N) 084 08 05.51766(W) ADJUSTED

DI2816\* NAD 83(2011) ELLIP HT- 205.155 (meters) (06/??/19) ADJUSTED

DI2816\* NAD 83(2011) EPOCH - 2010.00

DI2816

DI2816 GEOID HEIGHT - -35.005 (meters) GEOID18

DI2816 NAD 83(2011) X - 488,438.582 (meters) COMP

DI2816 NAD 83(2011) Y - -4,754,818.879 (meters) COMP

DI2816 NAD 83(2011) Z - 4,209,153.620 (meters) COMP

DI2816

DI2816 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DI2816 Standards:

DI2816	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)	
	Horiz	Ellip	SD_N	SD_E	SD_h		
DI2816	-----						
DI2816	NETWORK	0.16	0.35	0.06	0.07	0.18	-0.11402000
DI2816	-----						

DI2816

DI2816

DI2816

DI2816

DI2816

DI2816.The coordinates were established by GPS observations

DI2816.and adjusted by the National Geodetic Survey in June 2019.

DI2816

DI2816.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

DI2816.been affixed to the stable North American Tectonic Plate.

DI2816

DI2816.The coordinates are valid at the epoch date displayed above

DI2816.which is a decimal equivalence of Year/Month/Day.

DI2816

DI2816.Due to the release of the International GNSS Service (IGS) 2014

DI2816.realization of the International Terrestrial Reference Frame of 2014

DI2816.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations

DI2816.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014

DI2816.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2

DI2816.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the

DI2816.currently published epoch of 2010.00.

DI2816

DI2816.Additional information on MYCS2 is available at

DI2816.<https://geodesy.noaa.gov/CORS/coords.shtml>

DI2816



DI2816.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI2816.GEOID18 height accuracy estimate available [here](#).

DI2816

DI2816.The PID for the CORS L1 Phase Center is DM5662.

DI2816

DI2816.Click [here](#) to see if photographs exist for this station.

DI2816

DI2816.The XYZ, and position/ellipsoidal ht. are equivalent.

DI2816

DI2816.The ellipsoidal height was determined by GPS observations

DI2816.and is referenced to NAD 83.

DI2816

DI2816. The following values were computed from the NAD 83(2011) position.

DI2816

DI2816;		North	East	Units	Scale	Factor	Converg.
DI2816;SPC OH N	-	211,337.826	463,628.688	MT	0.99997575	-1 04	26.5
DI2816;SPC OH N	-	693,364.18	1,521,088.45	sFT	0.99997575	-1 04	26.5
DI2816;UTM 16	-	4,604,698.687	738,929.633	MT	1.00030258	+1 54	05.7
DI2816!	-	Elev Factor x Scale Factor = Combined Factor					
DI2816!SPC OH N	-	0.99996782	x	0.99997575	=	0.99994357	
DI2816!UTM 16	-	0.99996782	x	1.00030258	=	1.00027039	

DI2816

DI2816\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGM3892904698 (NAD 83)

DI2816

SUPERSEDED SURVEY CONTROL

DI2816

DI2816	NAD 83(2011)-	41 33 29.79042(N)	084 08 05.51758(W)	AD(2010.00)	c
DI2816	ELLIP H (08/??/11)	205.152 (m)		GP(2010.00)	c c
DI2816	NAD 83(CORS)-	41 33 29.79048(N)	084 08 05.51782(W)	AD(2002.00)	c
DI2816	ELLIP H (11/??/06)	205.160 (m)		GP(2002.00)	c c

DI2816

DI2816.Superseded values are not recommended for survey control.

DI2816

DI2816.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI2816.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI2816

DI2816\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI2816

STATION DESCRIPTION

DI2816

DI2816'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI2816'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND  
DI2816'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI2816'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI2816' ftp://cors.ngs.noaa.gov/cors/README.txt

DI2816' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI2816' ftp://cors.ngs.noaa.gov/cors/station\_log

DI2816' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DI1083 *****
DI1083  CORS          - This is a GPS Continuously Operating Reference Station.
DI1083  DESIGNATION  - HANCOCK COUNTY CORS ARP
DI1083  CORS_ID      - OHHA
DI1083  PID          - DI1083
DI1083  STATE/COUNTY- OH/HANCOCK
DI1083  COUNTRY      - US
DI1083  USGS QUAD    - FINDLAY (1979)
DI1083
DI1083                      *CURRENT SURVEY CONTROL
DI1083
DI1083* NAD 83(2011) POSITION- 41 02 27.93401(N) 083 40 33.46887(W) ADJUSTED
DI1083* NAD 83(2011) ELLIP HT- 210.016 (meters) (06/??/19) ADJUSTED
DI1083* NAD 83(2011) EPOCH - 2010.00
DI1083
DI1083  GEOID HEIGHT - -35.439 (meters) GEOID18
DI1083  NAD 83(2011) X - 530,681.809 (meters) COMP
DI1083  NAD 83(2011) Y - -4,788,437.398 (meters) COMP
DI1083  NAD 83(2011) Z - 4,166,004.163 (meters) COMP
DI1083
DI1083  Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DI1083  Standards:
DI1083      FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
DI1083      Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
DI1083  -----
DI1083  NETWORK      0.14   0.34              0.05   0.06   0.17      -0.09742300
DI1083  -----
DI1083
DI1083  The coordinates were established by GPS observations
DI1083  and adjusted by the National Geodetic Survey in June 2019.
DI1083
DI1083  NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DI1083  been affixed to the stable North American Tectonic Plate.
DI1083
DI1083  The coordinates are valid at the epoch date displayed above
DI1083  which is a decimal equivalence of Year/Month/Day.
DI1083
DI1083  Due to the release of the International GNSS Service (IGS) 2014
DI1083  realization of the International Terrestrial Reference Frame of 2014
DI1083  (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DI1083  using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DI1083  epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DI1083  (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DI1083  currently published epoch of 2010.00.
DI1083
DI1083  Additional information on MYCS2 is available at
DI1083  https://geodesy.noaa.gov/CORS/coords.shtml
DI1083

```



DI1083.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI1083.GEOID18 height accuracy estimate available [here](#).

DI1083

DI1083.The PID for the CORS L1 Phase Center is DL5323.

DI1083

DI1083.Click [here](#) to see if photographs exist for this station.

DI1083

DI1083.The XYZ, and position/ellipsoidal ht. are equivalent.

DI1083

DI1083.The ellipsoidal height was determined by GPS observations

DI1083.and is referenced to NAD 83.

DI1083

DI1083. The following values were computed from the NAD 83(2011) position.

DI1083

DI1083;		North	East	Units	Scale	Factor	Converg.
DI1083;SPC OH N	-	153,290.907	501,130.564	MT	0.99993925	-0 46	21.2
DI1083;SPC OH N	-	502,921.92	1,644,125.86	sFT	0.99993925	-0 46	21.2
DI1083;UTM 17	-	4,546,768.891	275,075.780	MT	1.00022270	-1 45	28.0
DI1083!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DI1083!SPC OH N	-	0.99996706	x	0.99993925	=	0.99990631	
DI1083!UTM 17	-	0.99996706	x	1.00022270	=	1.00018975	

DI1083

DI1083\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF7507546768 (NAD 83)

DI1083

SUPERSEDED SURVEY CONTROL

DI1083

DI1083	NAD 83(2011)-	41 02 27.93402(N)	083 40 33.46879(W)	AD(2010.00)	c
DI1083	ELLIP H (08/??/11)	210.010 (m)		GP(2010.00)	c c
DI1083	NAD 83(CORS)-	41 02 27.93407(N)	083 40 33.46922(W)	AD(2002.00)	c
DI1083	ELLIP H (08/??/06)	210.034 (m)		GP(2002.00)	c c

DI1083

DI1083.Superseded values are not recommended for survey control.

DI1083

DI1083.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI1083.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI1083

DI1083\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI1083

STATION DESCRIPTION

DI1083

DI1083'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI1083'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI1083'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI1083'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI1083' ftp://cors.ngs.noaa.gov/cors/README.txt

DI1083' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI1083' ftp://cors.ngs.noaa.gov/cors/station\_log

DI1083' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DI2818 \*\*\*\*\*

DI2818 CORS - This is a GPS Continuously Operating Reference Station.

DI2818 DESIGNATION - HURON COUNTY CORS ARP

DI2818 CORS\_ID - OHHU

DI2818 PID - DI2818

DI2818 STATE/COUNTY- OH/HURON

DI2818 COUNTRY - US

DI2818 USGS QUAD - NORWALK (1972)

DI2818

DI2818 \*CURRENT SURVEY CONTROL

DI2818

DI2818\* NAD 83(2011) POSITION- 41 10 36.35191(N) 082 33 40.91087(W) ADJUSTED

DI2818\* NAD 83(2011) ELLIP HT- 254.500 (meters) (06/??/19) ADJUSTED

DI2818\* NAD 83(2011) EPOCH - 2010.00

DI2818

DI2818 GEOID HEIGHT - -34.669 (meters) GEOID18

DI2818 NAD 83(2011) X - 622,448.804 (meters) COMP

DI2818 NAD 83(2011) Y - -4,767,418.147 (meters) COMP

DI2818 NAD 83(2011) Z - 4,177,386.333 (meters) COMP

DI2818

DI2818 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

DI2818	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
DI2818	-----	-----	-----	-----	-----	-----
DI2818	NETWORK	0.15 0.35	0.06	0.06	0.18	0.02060700
DI2818	-----	-----	-----	-----	-----	-----

DI2818

DI2818

DI2818.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

DI2818

DI2818.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

DI2818

DI2818.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

DI2818

DI2818.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

DI2818

DI2818.Additional information on MYCS2 is available at

DI2818.<https://geodesy.noaa.gov/CORS/coords.shtml>

DI2818



DI2818.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI2818.GEOID18 height accuracy estimate available [here](#).

DI2818

DI2818.The PID for the CORS L1 Phase Center is DL2028.

DI2818

DI2818.Click [here](#) to see if photographs exist for this station.

DI2818

DI2818.The XYZ, and position/ellipsoidal ht. are equivalent.

DI2818

DI2818.The ellipsoidal height was determined by GPS observations

DI2818.and is referenced to NAD 83.

DI2818

DI2818. The following values were computed from the NAD 83(2011) position.

DI2818

DI2818;		North	East	Units	Scale	Factor	Converg.
DI2818;SPC OH N	-	167,692.396	594,851.240	MT	0.99994095	-0 02	25.1
DI2818;SPC OH N	-	550,170.80	1,951,607.78	sFT	0.99994095	-0 02	25.1
DI2818;UTM 17	-	4,559,554.898	369,036.139	MT	0.99981109	-1 01	41.2
DI2818!	-	Elev Factor x Scale Factor =		Combined Factor			
DI2818!SPC OH N	-	0.99996008	x 0.99994095	=	0.99990103		
DI2818!UTM 17	-	0.99996008	x 0.99981109	=	0.99977118		

DI2818

DI2818\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF6903659554 (NAD 83)

DI2818

SUPERSEDED SURVEY CONTROL

DI2818

DI2818	ELLIP H (06/27/12)	254.487	(m)			GP(2010.00)	0 0
DI2818	NAD 83(2011)-	41 10 36.35194(N)		082 33 40.91074(W)		AD(2010.00)	c
DI2818	NAD 83(2011)-	41 10 36.35185(N)		082 33 40.91078(W)		AD(2010.00)	c
DI2818	ELLIP H (08/??/11)	254.497	(m)			GP(2010.00)	c c
DI2818	NAD 83(CORS)-	41 10 36.35198(N)		082 33 40.91127(W)		AD(2002.00)	c
DI2818	ELLIP H (11/??/06)	254.495	(m)			GP(2002.00)	c c

DI2818

DI2818.Superseded values are not recommended for survey control.

DI2818

DI2818.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI2818.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI2818

DI2818\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI2818

STATION DESCRIPTION

DI2818

DI2818'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI2818'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI2818'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI2818'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI2818' ftp://cors.ngs.noaa.gov/cors/README.txt

DI2818' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI2818' ftp://cors.ngs.noaa.gov/cors/station\_log

DI2818' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

MD0420 \*\*\*\*\*

MD0420 DESIGNATION - OHIO 722

MD0420 PID - MD0420

MD0420 STATE/COUNTY- OH/DEFIANCE

MD0420 COUNTRY - US

MD0420 USGS QUAD - BRYAN (1977)

MD0420

MD0420 \*CURRENT SURVEY CONTROL

MD0420

MD0420\* NAD 83(2011) POSITION- 41 23 00.36212(N) 084 34 23.08447(W) ADJUSTED

MD0420\* NAD 83(2011) ELLIP HT- 185.672 (meters) (06/27/12) ADJUSTED

MD0420\* NAD 83(2011) EPOCH - 2010.00

MD0420\* [NAVD 88](#) ORTHO HEIGHT - 219.707 (meters) 720.82 (feet) ADJUSTED

MD0420

MD0420 GEOID HEIGHT - -34.014 (meters) GEOID18

MD0420 NAD 83(2011) X - 453,273.429 (meters) COMP

MD0420 NAD 83(2011) Y - -4,771,203.309 (meters) COMP

MD0420 NAD 83(2011) Z - 4,194,590.219 (meters) COMP

MD0420 LAPLACE CORR - -4.72 (seconds) DEFLEC18

MD0420 DYNAMIC HEIGHT - 219.619 (meters) 720.53 (feet) COMP

MD0420 MODELED GRAVITY - 980,219.7 (mgal) NAVD 88

MD0420

MD0420 VERT ORDER - SECOND CLASS 0

MD0420

MD0420 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MD0420 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	1.68	1.53	0.77	0.57	0.78	0.03357003

MD0420 -----

MD0420 -----

MD0420

MD0420 Click [here](#) for local accuracies and other accuracy information.

MD0420

MD0420

MD0420.The horizontal coordinates were established by GPS observations

MD0420.and adjusted by the National Geodetic Survey in June 2012.

MD0420

MD0420.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MD0420.been affixed to the stable North American tectonic plate. See

MD0420.[NA2011](#) for more information.

MD0420

MD0420.The horizontal coordinates are valid at the epoch date displayed above

MD0420.which is a decimal equivalence of Year/Month/Day.

MD0420

MD0420.The orthometric height was determined by differential leveling and

MD0420.adjusted by the NATIONAL GEODETIC SURVEY

MD0420.in June 1991.

MD0420

MD0420.Significant digits in the geoid height do not necessarily reflect accuracy.



MD0420.GEOID18 height accuracy estimate available [here](#).  
MD0420  
MD0420.Click [here](#) to see if photographs exist for this station.  
MD0420  
MD0420.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
MD0420  
MD0420.The Laplace correction was computed from DEFLEC18 derived deflections.  
MD0420  
MD0420.The ellipsoidal height was determined by GPS observations  
MD0420.and is referenced to NAD 83.  
MD0420  
MD0420.The dynamic height is computed by dividing the NAVD 88  
MD0420.geopotential number by the normal gravity value computed on the  
MD0420.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
MD0420.degrees latitude (g = 980.6199 gals.).  
MD0420  
MD0420.The modeled gravity was interpolated from observed gravity values.  
MD0420  
MD0420. The following values were computed from the NAD 83(2011) position.  
MD0420  
MD0420;  
MD0420;SPC OH N - North 192,702.634 East 426,620.073 Units MT Scale Factor 0.99995429 Converg. -1 21 42.9  
MD0420;SPC OH N - 632,225.23 1,399,669.36 sFT 0.99995429 -1 21 42.9  
MD0420;UTM 16 - 4,584,165.443 702,928.100 MT 1.00010681 +1 36 17.9  
MD0420  
MD0420!  
MD0420!SPC OH N - Elev Factor x Scale Factor = Combined Factor  
MD0420!SPC OH N - 0.99997088 x 0.99995429 = 0.99992517  
MD0420!UTM 16 - 0.99997088 x 1.00010681 = 1.00007768  
MD0420  
MD0420\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL0292884165 (NAD 83)  
MD0420  
MD0420 SUPERSEDED SURVEY CONTROL  
MD0420  
MD0420 NAD 83(2007)- 41 23 00.36221(N) 084 34 23.08528(W) AD(2002.00) 0  
MD0420 ELLIP H (02/10/07) 185.686 (m) GP(2002.00)  
MD0420 ELLIP H (10/07/05) 185.677 (m) GP( ) 3 1  
MD0420 NAD 83(1995)- 41 23 00.36216(N) 084 34 23.08473(W) AD( ) 1  
MD0420 ELLIP H (11/30/99) 185.707 (m) GP( ) 3 1  
MD0420 NAVD 88 219.71 (m) 720.8 (f) LEVELING 3  
MD0420 NGVD 29 (??/??/92) 219.857 (m) 721.31 (f) ADJ UNCH 2 0  
MD0420  
MD0420.Superseded values are not recommended for survey control.  
MD0420  
MD0420.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MD0420.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
MD0420  
MD0420\_MARKER: P = PIPE CAP  
MD0420\_SETTING: 17 = SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND  
MD0420\_STAMPING: OHIO 722  
MD0420\_MARK LOGO: USGS  
MD0420\_MAGNETIC: P = MARKER IS A STEEL PIPE  
MD0420\_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY  
MD0420\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MD0420+SATELLITE: SATELLITE OBSERVATIONS - April 03, 1998  
MD0420



MD0420	HISTORY	- Date	Condition	Report By
MD0420	HISTORY	- UNK	MONUMENTED	USGS
MD0420	HISTORY	- 1946	GOOD	CGS
MD0420	HISTORY	- 1985	MARK NOT FOUND	USPSQD
MD0420	HISTORY	- 19980403	GOOD	JCAND

MD0420  
MD0420  
MD0420

STATION DESCRIPTION

MD0420'DESCRIBED BY COAST AND GEODETIC SURVEY 1946  
MD0420'2.6 MI W FROM NEY.  
MD0420'ABOUT 2.6 MILES WEST ALONG STATE HIGHWAY 249 FROM THE POST OFFICE  
MD0420'AT NEY, ABOUT 3.0 MILES EAST ALONG STATE HIGHWAY 249 FROM ITS  
MD0420'JUNCTION WITH STATE HIGHWAY 2N AT FARMER, ABOUT 0.9 MILE WEST OF  
MD0420'THE INTERSECTION OF U.S. HIGHWAY 127, AT A NORTH-SOUTH GRAVEL  
MD0420'CROSS ROAD, 35 FEET SOUTH OF THE CENTER LINE OF THE HIGHWAY, 22  
MD0420'FEET EAST OF THE CENTER LINE OF THE GRAVEL ROAD, 50 FEET SOUTHEAST  
MD0420'AND ACROSS THE GRAVEL ROAD FROM THE SOUTHEAST CORNER OF THE SOUTH  
MD0420'HEAD WALL OF A CULVERT, 5.5 FEET NORTHEAST OF A FENCE CORNER,  
MD0420'4.2 FEET NORTH OF THE FENCE LINE, AND ABOUT 0.5 FOOT BELOW THE  
MD0420'HIGHWAY. A BRONZE CAP RIVETED ON A 3 1/2 INCH PIPE, PROJECTING  
MD0420'4 IN.

MD0420  
MD0420  
MD0420

STATION RECOVERY (1985)

MD0420'RECOVERY NOTE BY US POWER SQUADRON 1985  
MD0420'MARK NOT FOUND.

MD0420  
MD0420  
MD0420

STATION RECOVERY (1998)

MD0420'RECOVERY NOTE BY JC ANDRUS ASSOC 1998 (DAA)  
MD0420'LOCATED IN THE NORTHWESTERLY CORNER OF SECTION 19, TOWN 5 NORTH, RANGE  
MD0420'2 EAST, WASHINGTON TOWNSHIP, DEFIANCE COUNTY, OHIO. TO REACH FROM THE  
MD0420'DEFIANCE COUNTY COURT HOUSE, PROCEED NORTH ON STATE ROUTE 66 0.8 MILES  
MD0420'(1.3 KM) TO STATE ROUTE 15. PROCEED NOTRHWESTERLY ON STATE ROUTE 15  
MD0420'10.5 MILES (16.9 KM) TO STATE ROUTE 249 ON THE WEST EDGE OF THE  
MD0420'VILLAGE OF NEY. PROCEED WEST ON STATE ROUTE 249 2.4 MILES (3.9 KM) TO  
MD0420'BEHNFELDT ROAD. THE MARK IS LOCATED IN THE SOUTHEASTERLY CORNER OF  
MD0420'THE INTERSECTION OF STATE ROUTE 249 AND BEHNFELDT ROAD. MARK IS JUST  
MD0420'UNDER THE SURFACE IN A GRASSEY AREA 35.0 FEET (10.7 M) SOUTH OF THE  
MD0420'CENTERLINE OF STATE ROUTE 249, 22.0 FEET (6.7 M) EAST OF THE  
MD0420'CENTERLINE OF BEHNFELDT ROAD, 32.6 FEET (9.9 M) WEST OF A TREE, AND  
MD0420'19.5 FEET (5.9 M) NORTH OF A POWER POLE.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DK6716 *****
DK6716 HT_MOD      - This is a Height Modernization Survey Station.
DK6716 CORS        - This is a GPS Continuously Operating Reference Station.
DK6716 DESIGNATION - LAKE COUNTY CORS ARP
DK6716 CORS_ID     - OHLA
DK6716 PID         - DK6716
DK6716 STATE/COUNTY- OH/LAKE
DK6716 COUNTRY     - US
DK6716 USGS QUAD   - MENTOR (1992)

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DK6716
DK6716                                *CURRENT SURVEY CONTROL
DK6716

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DK6716* NAD 83(2011) POSITION- 41 43 35.53472(N) 081 17 11.05629(W) ADJUSTED
DK6716* NAD 83(2011) ELLIP HT- 163.427 (meters) (06/??/19) ADJUSTED
DK6716* NAD 83(2011) EPOCH - 2010.00
DK6716* NAVD 88 ORTHO HEIGHT - 197.83 (meters) 649.0 (feet) GPS OBS
DK6716

```

```

DK6716 NAVD 88 orthometric height was determined with geoid model GEOID09
DK6716 GEOID HEIGHT - -34.397 (meters) GEOID09
DK6716 GEOID HEIGHT - -34.415 (meters) GEOID18
DK6716 NAD 83(2011) X - 722,237.662 (meters) COMP
DK6716 NAD 83(2011) Y - -4,712,365.558 (meters) COMP
DK6716 NAD 83(2011) Z - 4,223,092.165 (meters) COMP
DK6716

```

```

DK6716 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DK6716 Standards:
DK6716      FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
DK6716      Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
DK6716 -----
DK6716 NETWORK      0.15   0.39      0.06   0.06   0.20      -0.11057900
DK6716 -----
DK6716
DK6716

```

DK6716.The coordinates were established by GPS observations  
 DK6716.and adjusted by the National Geodetic Survey in June 2019.  
 DK6716  
 DK6716.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has  
 DK6716.been affixed to the stable North American Tectonic Plate.  
 DK6716

DK6716.The coordinates are valid at the epoch date displayed above  
 DK6716.which is a decimal equivalence of Year/Month/Day.  
 DK6716

DK6716.Due to the release of the International GNSS Service (IGS) 2014  
 DK6716.realization of the International Terrestrial Reference Frame of 2014  
 DK6716.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations  
 DK6716.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014  
 DK6716.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2  
 DK6716.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the  
 DK6716.currently published epoch of 2010.00.



DK6716

DK6716.Additional information on MYCS2 is available at

DK6716.<https://geodesy.noaa.gov/CORS/coords.shtml>

DK6716

DK6716.The orthometric height was determined by GPS observations and a

DK6716.high-resolution geoid model using precise GPS observation and

DK6716.processing techniques.

DK6716

DK6716.Significant digits in the geoid height do not necessarily reflect accuracy.

DK6716.GEOID18 height accuracy estimate available [here](#).

DK6716

DK6716.The PID for the CORS L1 Phase Center is DP8527.

DK6716

DK6716.Click [here](#) to see if photographs exist for this station.

DK6716

DK6716.The XYZ, and position/ellipsoidal ht. are equivalent.

DK6716

DK6716.The ellipsoidal height was determined by GPS observations

DK6716.and is referenced to NAD 83.

DK6716

DK6716. The following values were computed from the NAD 83(2011) position.

DK6716

DK6716;		North	East	Units	Scale	Factor	Converg.
DK6716;SPC OH N	-	229,450.256	700,973.922	MT	1.00000523	+0 47	50.2
DK6716;SPC OH N	-	752,788.05	2,299,778.61	sFT	1.00000523	+0 47	50.2
DK6716;UTM 17	-	4,619,454.340	476,179.364	MT	0.99960698	-0 11	26.2

DK6716

DK6716! - Elev Factor x Scale Factor = Combined Factor

DK6716!SPC OH N - 0.99997437 x 1.00000523 = 0.99997960

DK6716!UTM 17 - 0.99997437 x 0.99960698 = 0.99958136

DK6716

DK6716\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMG7617919454 (NAD 83)

DK6716

SUPERSEDED SURVEY CONTROL

DK6716

DK6716 ELLIP H (06/27/12) 163.427 (m) GP(2010.00) 0 0

DK6716 NAD 83(2011)- 41 43 35.53470(N) 081 17 11.05610(W) AD(2010.00) c

DK6716 NAD 83(2011)- 41 43 35.53476(N) 081 17 11.05623(W) AD(2010.00) c

DK6716 ELLIP H (08/??/11) 163.422 (m) GP(2010.00) c c

DK6716 NAD 83(CORS)- 41 43 35.53490(N) 081 17 11.05710(W) AD(2002.00) c

DK6716 ELLIP H (09/??/08) 163.414 (m) GP(2002.00) c c

DK6716

DK6716.Superseded values are not recommended for survey control.

DK6716

DK6716.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DK6716.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DK6716

DK6716\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DK6716

STATION DESCRIPTION

DK6716

DK6716'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DK6716'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DK6716'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DK6716'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.



```
DK6716'  ftp://cors.ngs.noaa.gov/cors/README.txt
DK6716'  ftp://cors.ngs.noaa.gov/cors/coord/coord_14
DK6716'  ftp://cors.ngs.noaa.gov/cors/station_log
DK6716'  https://geodesy.noaa.gov/CORS
```

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*** retrieval complete.
Elapsed Time = 00:00:02
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# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DO4957 *****
DO4957 CORS          - This is a GPS Continuously Operating Reference Station.
DO4957 DESIGNATION  - LUCAS COUNTY 2 CORS ARP
DO4957 CORS_ID     - OHLC
DO4957 PID         - DO4957
DO4957 STATE/COUNTY- OH/LUCAS
DO4957 COUNTRY     - US
DO4957 USGS QUAD   - TOLEDO (1980)
DO4957
DO4957                                *CURRENT SURVEY CONTROL
DO4957
DO4957* NAD 83(2011) POSITION- 41 43 16.40558(N) 083 31 34.58723(W) ADJUSTED
DO4957* NAD 83(2011) ELLIP HT- 151.864 (meters) (06/??/19) ADJUSTED
DO4957* NAD 83(2011) EPOCH - 2010.00
DO4957
DO4957 GEOID HEIGHT - -35.357 (meters) GEOID18
DO4957 NAD 83(2011) X - 537,555.095 (meters) COMP
DO4957 NAD 83(2011) Y - -4,737,374.167 (meters) COMP
DO4957 NAD 83(2011) Z - 4,222,643.974 (meters) COMP
DO4957
DO4957 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DO4957 Standards:
DO4957          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
DO4957          Horiz Ellip                SD_N   SD_E   SD_h          (unitless)
DO4957 -----
DO4957 NETWORK      0.14   0.19                0.03   0.07   0.10          -0.09519300
DO4957 -----
DO4957
DO4957.The coordinates were established by GPS observations
DO4957.and adjusted by the National Geodetic Survey in June 2019.
DO4957
DO4957.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DO4957.been affixed to the stable North American Tectonic Plate.
DO4957
DO4957.The coordinates are valid at the epoch date displayed above
DO4957.which is a decimal equivalence of Year/Month/Day.
DO4957
DO4957.Due to the release of the International GNSS Service (IGS) 2014
DO4957.realization of the International Terrestrial Reference Frame of 2014
DO4957.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DO4957.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DO4957.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DO4957.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DO4957.currently published epoch of 2010.00.
DO4957
DO4957.Additional information on MYCS2 is available at
DO4957.https://geodesy.noaa.gov/CORS/coords.shtml
DO4957

```



DO4957.Significant digits in the geoid height do not necessarily reflect accuracy.  
DO4957.GEOID18 height accuracy estimate available [here](#).

DO4957

DO4957.The PID for the CORS L1 Phase Center is DO4958.

DO4957

DO4957.Click [here](#) to see if photographs exist for this station.

DO4957

DO4957.The XYZ, and position/ellipsoidal ht. are equivalent.

DO4957

DO4957.The ellipsoidal height was determined by GPS observations

DO4957.and is referenced to NAD 83.

DO4957

DO4957. The following values were computed from the NAD 83(2011) position.

DO4957

DO4957;		North	East	Units	Scale	Factor	Converg.
DO4957;SPC OH N	-	228,659.981	514,603.905	MT	1.00000416	-0 40	27.2
DO4957;SPC OH N	-	750,195.29	1,688,329.64	sFT	1.00000416	-0 40	27.2
DO4957;UTM 17	-	4,621,908.928	289,861.383	MT	1.00014343	-1 40	54.7

DO4957

DO4957! - Elev Factor x Scale Factor = Combined Factor

DO4957!SPC OH N - 0.99997618 x 1.00000416 = 0.99998034

DO4957!UTM 17 - 0.99997618 x 1.00014343 = 1.00011961

DO4957

DO4957\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKG8986121908 (NAD 83)

DO4957

DO4957 SUPERSEDED SURVEY CONTROL

DO4957

DO4957 NAD 83(2011)- 41 43 16.40574(N) 083 31 34.58696(W) AD(2010.00) c

DO4957 ELLIP H (02/??/13) 151.857 (m) GP(2010.00) c c

DO4957

DO4957.Superseded values are not recommended for survey control.

DO4957

DO4957.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DO4957.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DO4957

DO4957\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DO4957

DO4957 STATION DESCRIPTION

DO4957

DO4957'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DO4957'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DO4957'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DO4957'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DO4957' ftp://cors.ngs.noaa.gov/cors/README.txt

DO4957' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DO4957' ftp://cors.ngs.noaa.gov/cors/station\_log

DO4957' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DI2820 *****
DI2820 CORS          - This is a GPS Continuously Operating Reference Station.
DI2820 DESIGNATION - LORAIN COUNTY CORS ARP
DI2820 CORS_ID      - OHLO
DI2820 PID          - DI2820
DI2820 STATE/COUNTY- OH/LORAIN
DI2820 COUNTRY      - US
DI2820 USGS QUAD    - OBERLIN (1979)
DI2820
DI2820                                *CURRENT SURVEY CONTROL
DI2820
DI2820* NAD 83(2011) POSITION- 41 17 36.50982(N) 082 13 58.43001(W) ADJUSTED
DI2820* NAD 83(2011) ELLIP HT- 221.285 (meters) (06/??/19) ADJUSTED
DI2820* NAD 83(2011) EPOCH - 2010.00
DI2820
DI2820 GEOID HEIGHT - -34.442 (meters) GEOID18
DI2820 NAD 83(2011) X - 648,611.147 (meters) COMP
DI2820 NAD 83(2011) Y - -4,755,281.047 (meters) COMP
DI2820 NAD 83(2011) Z - 4,187,112.137 (meters) COMP
DI2820
DI2820 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DI2820 Standards:
DI2820          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
DI2820          Horiz Ellip                  SD_N   SD_E   SD_h          (unitless)
DI2820 -----
DI2820 NETWORK      0.12   0.29                0.04   0.05   0.15          -0.14091100
DI2820 -----
DI2820
DI2820 The coordinates were established by GPS observations
DI2820 and adjusted by the National Geodetic Survey in June 2019.
DI2820
DI2820 NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DI2820 been affixed to the stable North American Tectonic Plate.
DI2820
DI2820 The coordinates are valid at the epoch date displayed above
DI2820 which is a decimal equivalence of Year/Month/Day.
DI2820
DI2820 Due to the release of the International GNSS Service (IGS) 2014
DI2820 realization of the International Terrestrial Reference Frame of 2014
DI2820 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DI2820 using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DI2820 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DI2820 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DI2820 currently published epoch of 2010.00.
DI2820
DI2820 Additional information on MYCS2 is available at
DI2820 https://geodesy.noaa.gov/CORS/coords.shtml
DI2820

```



DI2820.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI2820.GEOID18 height accuracy estimate available [here](#).

DI2820

DI2820.The PID for the CORS L1 Phase Center is DL2029.

DI2820

DI2820.Click [here](#) to see if photographs exist for this station.

DI2820

DI2820.The XYZ, and position/ellipsoidal ht. are equivalent.

DI2820

DI2820.The ellipsoidal height was determined by GPS observations

DI2820.and is referenced to NAD 83.

DI2820

DI2820. The following values were computed from the NAD 83(2011) position.

DI2820

DI2820;		North	East	Units	Scale	Factor	Converg.
DI2820;SPC OH N	-	180,685.802	622,371.543	MT	0.99994688	+0 10	31.7
DI2820;SPC OH N	-	592,800.00	2,041,897.30	sFT	0.99994688	+0 10	31.7
DI2820;UTM 17	-	4,572,069.387	396,771.692	MT	0.99973114	-0 48	49.2
DI2820!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DI2820!SPC OH N	-	0.99996529	x	0.99994688	=	0.99991217	
DI2820!UTM 17	-	0.99996529	x	0.99973114	=	0.99969644	

DI2820

DI2820\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF9677172069(NAD 83)

DI2820

SUPERSEDED SURVEY CONTROL

DI2820

DI2820	NAD 83(2011)-	41 17 36.50975(N)	082 13 58.43001(W)	AD(2010.00)	c
DI2820	ELLIP H (08/??/11)	221.297 (m)		GP(2010.00)	c c
DI2820	NAD 83(CORS)-	41 17 36.50995(N)	082 13 58.43035(W)	AD(2002.00)	c
DI2820	ELLIP H (11/??/06)	221.295 (m)		GP(2002.00)	c c

DI2820

DI2820.Superseded values are not recommended for survey control.

DI2820

DI2820.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI2820.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI2820

DI2820\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI2820

STATION DESCRIPTION

DI2820

DI2820'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI2820'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI2820'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI2820'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI2820' ftp://cors.ngs.noaa.gov/cors/README.txt

DI2820' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI2820' ftp://cors.ngs.noaa.gov/cors/station\_log

DI2820' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DM4137 \*\*\*\*\*

DM4137 CORS - This is a GPS Continuously Operating Reference Station.

DM4137 DESIGNATION - MARION OH CORS ARP

DM4137 CORS\_ID - OHMA

DM4137 PID - DM4137

DM4137 STATE/COUNTY- OH/MARION

DM4137 COUNTRY - US

DM4137 USGS QUAD - MARION EAST (1982)

DM4137

DM4137 \*CURRENT SURVEY CONTROL

DM4137

DM4137\* NAD 83(2011) POSITION- 40 36 49.73826(N) 083 04 55.32888(W) ADJUSTED

DM4137\* NAD 83(2011) ELLIP HT- 266.915 (meters) (06/??/19) ADJUSTED

DM4137\* NAD 83(2011) EPOCH - 2010.00

DM4137

DM4137 GEOID HEIGHT - -34.454 (meters) GEOID18

DM4137 NAD 83(2011) X - 584,031.133 (meters) COMP

DM4137 NAD 83(2011) Y - -4,813,518.728 (meters) COMP

DM4137 NAD 83(2011) Z - 4,130,136.067 (meters) COMP

DM4137

DM4137 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DM4137 Standards:

DM4137	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)	
	Horiz	Ellip	SD_N	SD_E	SD_h		
DM4137	-----						
DM4137	NETWORK	0.13	0.28	0.04	0.06	0.14	-0.22822300
DM4137	-----						

DM4137

DM4137

DM4137

DM4137

DM4137

DM4137.The coordinates were established by GPS observations

DM4137.and adjusted by the National Geodetic Survey in June 2019.

DM4137

DM4137.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has  
DM4137.been affixed to the stable North American Tectonic Plate.

DM4137

DM4137.The coordinates are valid at the epoch date displayed above

DM4137.which is a decimal equivalence of Year/Month/Day.

DM4137

DM4137.Due to the release of the International GNSS Service (IGS) 2014

DM4137.realization of the International Terrestrial Reference Frame of 2014

DM4137.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations

DM4137.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014

DM4137.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2

DM4137.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the

DM4137.currently published epoch of 2010.00.

DM4137

DM4137.Additional information on MYCS2 is available at

DM4137.<https://geodesy.noaa.gov/CORS/coords.shtml>

DM4137



DM4137.Significant digits in the geoid height do not necessarily reflect accuracy.  
DM4137.GEOID18 height accuracy estimate available [here](#).

DM4137

DM4137.The PID for the CORS L1 Phase Center is DQ9085.

DM4137

DM4137.Click [here](#) to see if photographs exist for this station.

DM4137

DM4137.The XYZ, and position/ellipsoidal ht. are equivalent.

DM4137

DM4137.The ellipsoidal height was determined by GPS observations

DM4137.and is referenced to NAD 83.

DM4137

DM4137. The following values were computed from the NAD 83(2011) position.

DM4137

DM4137;		North	East	Units	Scale	Factor	Converg.
DM4137;SPC OH N	-	105,341.741	550,747.434	MT	0.99997032	-0 22	56.5
DM4137;SPC OH N	-	345,608.70	1,806,910.54	sFT	0.99997032	-0 22	56.5
DM4137;UTM 17	-	4,497,972.043	323,873.587	MT	0.99998184	-1 21	20.4
DM4137!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DM4137!SPC OH N	-	0.99995813	x	0.99997032	=	0.99992845	
DM4137!UTM 17	-	0.99995813	x	0.99998184	=	0.99993997	

DM4137

DM4137\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLE2387397972 (NAD 83)

DM4137

SUPERSEDED SURVEY CONTROL

DM4137

DM4137	NAD 83(2011)-	40 36 49.73829(N)	083 04 55.32881(W)	AD(2010.00)	c
DM4137	ELLIP H (08/??/11)	266.913 (m)		GP(2010.00)	c c
DM4137	NAD 83(CORS)-	40 36 49.73864(N)	083 04 55.32982(W)	AD(2002.00)	c
DM4137	ELLIP H (11/??/10)	266.905 (m)		GP(2002.00)	c c

DM4137

DM4137.Superseded values are not recommended for survey control.

DM4137

DM4137.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DM4137.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DM4137

DM4137\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DM4137

STATION DESCRIPTION

DM4137

DM4137'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DM4137'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND  
DM4137'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DM4137'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DM4137' ftp://cors.ngs.noaa.gov/cors/README.txt

DM4137' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DM4137' ftp://cors.ngs.noaa.gov/cors/station\_log

DM4137' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 22, 2019

DI1860 \*\*\*\*\*

DI1860 CORS - This is a GPS Continuously Operating Reference Station.

DI1860 DESIGNATION - MAHONING COUNTY CORS ARP

DI1860 CORS\_ID - OHMN

DI1860 PID - DI1860

DI1860 STATE/COUNTY- OH/MAHONING

DI1860 COUNTRY - US

DI1860 USGS QUAD - CANFIELD (1979)

DI1860

DI1860 \*CURRENT SURVEY CONTROL

DI1860

DI1860\* NAD 83(2011) POSITION- 41 01 24.70496(N) 080 46 21.63976(W) ADJUSTED

DI1860\* NAD 83(2011) ELLIP HT- 328.682 (meters) (06/??/19) ADJUSTED

DI1860\* NAD 83(2011) EPOCH - 2010.00

DI1860

DI1860 GEOID HEIGHT - -33.878 (meters) GEOID18

DI1860 NAD 83(2011) X - 772,755.733 (meters) COMP

DI1860 NAD 83(2011) Y - -4,756,764.397 (meters) COMP

DI1860 NAD 83(2011) Z - 4,164,610.649 (meters) COMP

DI1860

DI1860 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DI1860 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
DI1860 NETWORK	0.16	0.42	0.06	0.07	0.21	-0.10578800

DI1860 -----

DI1860 -----

DI1860

DI1860

DI1860

DI1860.The coordinates were established by GPS observations

DI1860.and adjusted by the National Geodetic Survey in June 2019.

DI1860

DI1860.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

DI1860.been affixed to the stable North American Tectonic Plate.

DI1860

DI1860.The coordinates are valid at the epoch date displayed above

DI1860.which is a decimal equivalence of Year/Month/Day.

DI1860

DI1860.Due to the release of the International GNSS Service (IGS) 2014

DI1860.realization of the International Terrestrial Reference Frame of 2014

DI1860.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations

DI1860.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014

DI1860.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2

DI1860.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the

DI1860.currently published epoch of 2010.00.

DI1860

DI1860.Additional information on MYCS2 is available at

DI1860.<https://geodesy.noaa.gov/CORS/coords.shtml>

DI1860



DI1860.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI1860.GEOID18 height accuracy estimate available [here](#).

DI1860

DI1860.The PID for the CORS L1 Phase Center is DL5689.

DI1860

DI1860.Click [here](#) to see if photographs exist for this station.

DI1860

DI1860.The XYZ, and position/ellipsoidal ht. are equivalent.

DI1860

DI1860.The ellipsoidal height was determined by GPS observations

DI1860.and is referenced to NAD 83.

DI1860

DI1860. The following values were computed from the NAD 83(2011) position.

DI1860

DI1860;		North	East	Units	Scale	Factor	Converg.
DI1860;SPC OH N	-	152,112.439	745,258.592	MT	0.99993944	+1 08 05.2	
DI1860;SPC OH N	-	499,055.56	2,445,069.23	sFT	0.99993944	+1 08 05.2	
DI1860;UTM 17	-	4,541,393.911	519,111.359	MT	0.99960450	+0 08 57.1	
DI1860!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DI1860!SPC OH N	-	0.99994845	x	0.99993944	=	0.99988789	
DI1860!UTM 17	-	0.99994845	x	0.99960450	=	0.99955297	

DI1860

DI1860\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF1911141393 (NAD 83)

DI1860

SUPERSEDED SURVEY CONTROL

DI1860

DI1860	NAD 83(2011)-	41 01 24.70493(N)	080 46 21.63970(W)	AD(2010.00)	c
DI1860	ELLIP H (08/??/11)	328.682 (m)		GP(2010.00)	c c
DI1860	NAD 83(CORS)-	41 01 24.70499(N)	080 46 21.64042(W)	AD(2002.00)	c
DI1860	ELLIP H (10/??/06)	328.682 (m)		GP(2002.00)	c c

DI1860

DI1860.Superseded values are not recommended for survey control.

DI1860

DI1860.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI1860.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI1860

DI1860\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI1860

STATION DESCRIPTION

DI1860

DI1860'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI1860'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI1860'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI1860'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI1860' ftp://cors.ngs.noaa.gov/cors/README.txt

DI1860' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI1860' ftp://cors.ngs.noaa.gov/cors/station\_log

DI1860' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DI2824 *****
DI2824 CORS          - This is a GPS Continuously Operating Reference Station.
DI2824 DESIGNATION - MERCER COUNTY CORS ARP
DI2824 CORS_ID      - OHMR
DI2824 PID          - DI2824
DI2824 STATE/COUNTY- OH/MERCER
DI2824 COUNTRY      - US
DI2824 USGS QUAD    - ERASTUS (1980)
DI2824
DI2824                                *CURRENT SURVEY CONTROL
DI2824
DI2824* NAD 83(2011) POSITION- 40 32 45.58330(N) 084 37 50.63693(W) ADJUSTED
DI2824* NAD 83(2011) ELLIP HT- 236.747 (meters) (06/??/19) ADJUSTED
DI2824* NAD 83(2011) EPOCH - 2010.00
DI2824
DI2824 GEOID HEIGHT - -33.453 (meters) GEOID18
DI2824 NAD 83(2011) X - 454,181.225 (meters) COMP
DI2824 NAD 83(2011) Y - -4,832,399.782 (meters) COMP
DI2824 NAD 83(2011) Z - 4,124,396.261 (meters) COMP
DI2824
DI2824 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DI2824 Standards:
DI2824      FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
DI2824      Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
DI2824 -----
DI2824 NETWORK      0.15   0.38              0.05   0.07   0.19      -0.14648900
DI2824 -----
DI2824
DI2824.The coordinates were established by GPS observations
DI2824.and adjusted by the National Geodetic Survey in June 2019.
DI2824
DI2824.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DI2824.been affixed to the stable North American Tectonic Plate.
DI2824
DI2824.The coordinates are valid at the epoch date displayed above
DI2824.which is a decimal equivalence of Year/Month/Day.
DI2824
DI2824.Due to the release of the International GNSS Service (IGS) 2014
DI2824.realization of the International Terrestrial Reference Frame of 2014
DI2824.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DI2824.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DI2824.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DI2824.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DI2824.currently published epoch of 2010.00.
DI2824
DI2824.Additional information on MYCS2 is available at
DI2824.https://geodesy.noaa.gov/CORS/coords.shtml
DI2824

```



DI2824.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI2824.GEOID18 height accuracy estimate available [here](#).

DI2824

DI2824.The PID for the CORS L1 Phase Center is DM5663.

DI2824

DI2824.Click [here](#) to see if photographs exist for this station.

DI2824

DI2824.The XYZ, and position/ellipsoidal ht. are equivalent.

DI2824

DI2824.The ellipsoidal height was determined by GPS observations

DI2824.and is referenced to NAD 83.

DI2824

DI2824. The following values were computed from the NAD 83(2011) position.

DI2824

DI2824;		North	East	Units	Scale	Factor	Converg.
DI2824;SPC OH N	-	99,851.023	419,527.493	MT	0.99998033	-1	23 59.2
DI2824;SPC OH N	-	327,594.56	1,376,399.78	sFT	0.99998033	-1	23 59.2
DI2824;UTM 16	-	4,491,057.607	700,628.967	MT	1.00009549	+1	32 26.4
DI2824!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DI2824!SPC OH N	-	0.99996286	x	0.99998033	=	0.99994319	
DI2824!UTM 16	-	0.99996286	x	1.00009549	=	1.00005835	

DI2824

DI2824\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGK0062891057 (NAD 83)

DI2824

SUPERSEDED SURVEY CONTROL

DI2824

DI2824	ELLIP H (06/27/12)	236.743	(m)			GP(2010.00)	0	0
DI2824	NAD 83(2011)-	40 32 45.58336(N)		084 37 50.63689(W)		AD(2010.00)	c	
DI2824	NAD 83(2011)-	40 32 45.58339(N)		084 37 50.63691(W)		AD(2010.00)	c	
DI2824	ELLIP H (08/??/11)	236.737	(m)			GP(2010.00)	c	c
DI2824	NAD 83(CORS)-	40 32 45.58342(N)		084 37 50.63718(W)		AD(2002.00)	c	
DI2824	ELLIP H (11/??/06)	236.737	(m)			GP(2002.00)	c	c

DI2824

DI2824.Superseded values are not recommended for survey control.

DI2824

DI2824.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI2824.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI2824

DI2824\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI2824

STATION DESCRIPTION

DI2824

DI2824'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI2824'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI2824'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI2824'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI2824' ftp://cors.ngs.noaa.gov/cors/README.txt

DI2824' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI2824' ftp://cors.ngs.noaa.gov/cors/station\_log

DI2824' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2019
DI2826 *****
DI2826 CORS          - This is a GPS Continuously Operating Reference Station.
DI2826 DESIGNATION  - RICHLAND COUNTY CORS ARP
DI2826 CORS_ID      - OHRI
DI2826 PID          - DI2826
DI2826 STATE/COUNTY- OH/RICHLAND
DI2826 COUNTRY      - US
DI2826 USGS QUAD    - MANSFIELD NORTH (1982)
DI2826
DI2826                      *CURRENT SURVEY CONTROL
DI2826
DI2826* NAD 83(2011) POSITION- 40 46 05.33414(N) 082 33 38.35489(W) ADJUSTED
DI2826* NAD 83(2011) ELLIP HT- 365.425 (meters) (06/??/19) ADJUSTED
DI2826* NAD 83(2011) EPOCH - 2010.00
DI2826
DI2826 GEOID HEIGHT - -33.845 (meters) GEOID18
DI2826 NAD 83(2011) X - 626,371.390 (meters) COMP
DI2826 NAD 83(2011) Y - -4,796,998.703 (meters) COMP
DI2826 NAD 83(2011) Z - 4,143,195.807 (meters) COMP
DI2826
DI2826 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DI2826 Standards:
DI2826      FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
DI2826      Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
DI2826 -----
DI2826 NETWORK      0.13   0.20              0.03   0.06   0.10      -0.30559800
DI2826 -----
DI2826
DI2826 The coordinates were established by GPS observations
DI2826 and adjusted by the National Geodetic Survey in June 2019.
DI2826
DI2826 NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DI2826 been affixed to the stable North American Tectonic Plate.
DI2826
DI2826 The coordinates are valid at the epoch date displayed above
DI2826 which is a decimal equivalence of Year/Month/Day.
DI2826
DI2826 Due to the release of the International GNSS Service (IGS) 2014
DI2826 realization of the International Terrestrial Reference Frame of 2014
DI2826 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DI2826 using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DI2826 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DI2826 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DI2826 currently published epoch of 2010.00.
DI2826
DI2826 Additional information on MYCS2 is available at
DI2826 https://geodesy.noaa.gov/CORS/coords.shtml
DI2826

```



DI2826.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI2826.GEOID18 height accuracy estimate available [here](#).

DI2826

DI2826.The PID for the CORS L1 Phase Center is DL1680.

DI2826

DI2826.Click [here](#) to see if photographs exist for this station.

DI2826

DI2826.The XYZ, and position/ellipsoidal ht. are equivalent.

DI2826

DI2826.The ellipsoidal height was determined by GPS observations

DI2826.and is referenced to NAD 83.

DI2826

DI2826. The following values were computed from the NAD 83(2011) position.

DI2826

DI2826;		North	East	Units	Scale Factor	Converg.
DI2826;SPC OH N	-	122,316.777	594,879.255	MT	0.99995273	-0 02 23.4
DI2826;SPC OH N	-	401,300.96	1,951,699.69	sFT	0.99995273	-0 02 23.4
DI2826;UTM 17	-	4,514,191.397	368,285.311	MT	0.99981354	-1 01 09.3
DI2826!	-	Elev Factor	x Scale Factor	=	Combined Factor	
DI2826!SPC OH N	-	0.99994268	x 0.99995273	=	0.99989541	
DI2826!UTM 17	-	0.99994268	x 0.99981354	=	0.99975623	

DI2826

DI2826\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF6828514191 (NAD 83)

DI2826

SUPERSEDED SURVEY CONTROL

DI2826

DI2826	NAD 83(2011)-	40 46 05.33363(N)	082 33 38.35476(W)	AD(2010.00)	c
DI2826	ELLIP H (08/??/11)	365.429 (m)		GP(2010.00)	c c
DI2826	NAD 83(CORS)-	40 46 05.33366(N)	082 33 38.35509(W)	AD(2002.00)	c
DI2826	ELLIP H (11/??/06)	365.433 (m)		GP(2002.00)	c c

DI2826

DI2826.Superseded values are not recommended for survey control.

DI2826

DI2826.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI2826.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI2826

DI2826\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI2826

STATION DESCRIPTION

DI2826

DI2826'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI2826'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND  
DI2826'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI2826'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI2826' ftp://cors.ngs.noaa.gov/cors/README.txt

DI2826' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI2826' ftp://cors.ngs.noaa.gov/cors/station\_log

DI2826' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019  
 DN5844 \*\*\*\*\*  
 DN5844 CORS - This is a GPS Continuously Operating Reference Station.  
 DN5844 DESIGNATION - SOUTH BASS ISLAND CORS ARP  
 DN5844 CORS\_ID - **OHSB**  
 DN5844 PID - DN5844  
 DN5844 STATE/COUNTY- OH/OTTAWA  
 DN5844 COUNTRY - US  
 DN5844 USGS QUAD - PUT-IN-BAY (1969)

DN5844 \*CURRENT SURVEY CONTROL

DN5844\* NAD 83(2011) POSITION- 41 38 11.21595(N) 082 49 47.18064(W) ADJUSTED  
 DN5844\* NAD 83(2011) ELLIP HT- 148.363 (meters) (06/??/19) ADJUSTED  
 DN5844\* NAD 83(2011) EPOCH - 2010.00

DN5844 GEOID HEIGHT - -35.591 (meters) GEOID18  
 DN5844 NAD 83(2011) X - 595,883.841 (meters) COMP  
 DN5844 NAD 83(2011) Y - -4,736,699.246 (meters) COMP  
 DN5844 NAD 83(2011) Z - 4,215,609.048 (meters) COMP

DN5844 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

FGDC (95% conf, cm)	Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N SD_E SD_h	
NETWORK	0.16	0.30	0.05 0.07 0.15	-0.32282200

DN5844.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

DN5844.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

DN5844.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

DN5844.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

DN5844.Additional information on MYCS2 is available at <https://geodesy.noaa.gov/CORS/coords.shtml>



DN5844.Significant digits in the geoid height do not necessarily reflect accuracy.  
DN5844.GEOID18 height accuracy estimate available [here](#).

DN5844

DN5844.The PID for the CORS L1 Phase Center is DN5845.

DN5844

DN5844.Click [here](#) to see if photographs exist for this station.

DN5844

DN5844.The XYZ, and position/ellipsoidal ht. are equivalent.

DN5844

DN5844.The ellipsoidal height was determined by GPS observations

DN5844.and is referenced to NAD 83.

DN5844

DN5844. The following values were computed from the NAD 83(2011) position.

DN5844

DN5844;		North	East	Units	Scale	Factor	Converg.
DN5844;SPC OH N	-	218,793.824	572,523.528	MT	0.99998836	-0 12	59.9
DN5844;SPC OH N	-	717,826.07	1,878,354.27	sFT	0.99998836	-0 12	59.9
DN5844;UTM 17	-	4,611,029.949	347,600.035	MT	0.99988582	-1 12	57.4
DN5844!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DN5844!SPC OH N	-	0.99997673	x	0.99998836	=	0.99996509	
DN5844!UTM 17	-	0.99997673	x	0.99988582	=	0.99986255	

DN5844

DN5844\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLG4760011029(NAD 83)

DN5844

DN5844

SUPERSEDED SURVEY CONTROL

DN5844

DN5844	NAD 83(2011)-	41 38 11.21603(N)	082 49 47.18029(W)	AD(2010.00)	c
DN5844	ELLIP H (02/??/12)	148.352 (m)		GP(2010.00)	c c
DN5844	NAD 83(CORS)-	41 38 11.21631(N)	082 49 47.18150(W)	AD(2002.00)	c
DN5844	ELLIP H (02/??/12)	148.332 (m)		GP(2002.00)	c c

DN5844

DN5844.Superseded values are not recommended for survey control.

DN5844

DN5844.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DN5844.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DN5844

DN5844\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DN5844

DN5844

STATION DESCRIPTION

DN5844

DN5844'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DN5844'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DN5844'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DN5844'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DN5844' ftp://cors.ngs.noaa.gov/cors/README.txt

DN5844' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DN5844' ftp://cors.ngs.noaa.gov/cors/station\_log

DN5844' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

DI1686 \*\*\*\*\*  
 DI1686 CORS - This is a GPS Continuously Operating Reference Station.  
 DI1686 DESIGNATION - UNION COUNTY CORS ARP  
 DI1686 CORS\_ID - **OHUN**  
 DI1686 PID - DI1686  
 DI1686 STATE/COUNTY- OH/UNION  
 DI1686 COUNTRY - US  
 DI1686 USGS QUAD - MARYSVILLE (1973)

DI1686 \*CURRENT SURVEY CONTROL

DI1686\* NAD 83(2011) POSITION- 40 13 58.84899(N) 083 21 39.07470(W) ADJUSTED  
 DI1686\* NAD 83(2011) ELLIP HT- 279.617 (meters) (06/??/19) ADJUSTED  
 DI1686\* NAD 83(2011) EPOCH - 2010.00

DI1686 GEOID HEIGHT - -33.524 (meters) GEOID18  
 DI1686 NAD 83(2011) X - 563,771.635 (meters) COMP  
 DI1686 NAD 83(2011) Y - -4,843,549.796 (meters) COMP  
 DI1686 NAD 83(2011) Z - 4,097,952.250 (meters) COMP

DI1686 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

DI1686	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
DI1686	-----	-----	-----	-----	-----	-----
DI1686	NETWORK	0.13 0.35	0.05	0.05	0.18	-0.05660700
DI1686	-----	-----	-----	-----	-----	-----

DI1686.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

DI1686.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

DI1686.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

DI1686.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

DI1686.Additional information on MYCS2 is available at <https://geodesy.noaa.gov/CORS/coords.shtml>



DI1686.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI1686.GEOID18 height accuracy estimate available [here](#).

DI1686

DI1686.The PID for the CORS L1 Phase Center is DQ5216.

DI1686

DI1686.Click [here](#) to see if photographs exist for this station.

DI1686

DI1686.The XYZ, and position/ellipsoidal ht. are equivalent.

DI1686

DI1686.The ellipsoidal height was determined by GPS observations

DI1686.and is referenced to NAD 83.

DI1686

DI1686. The following values were computed from the NAD 83(2011) position.

DI1686

DI1686;		North	East	Units	Scale	Factor	Converg.
DI1686;SPC OH N	-	63,253.435	526,736.766	MT	1.00004440	-0 33	55.9
DI1686;SPC OH N	-	207,523.98	1,728,135.54	sFT	1.00004440	-0 33	55.9
DI1686;UTM 17	-	4,456,293.438	299,155.330	MT	1.00009659	-1 31	31.4

DI1686!

DI1686!SPC OH N	-	Elev Factor	x	Scale Factor	=	Combined Factor
DI1686!SPC OH N	-	0.99995614	x	1.00004440	=	1.00000054
DI1686!UTM 17	-	0.99995614	x	1.00009659	=	1.00005272

DI1686

DI1686\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKE9915556293 (NAD 83)

DI1686

DI1686

SUPERSEDED SURVEY CONTROL

DI1686

DI1686	NAD 83(2011)-	40 13 58.84897(N)	083 21 39.07466(W)	AD(2010.00)	c
DI1686	ELLIP H (08/??/11)	279.614 (m)		GP(2010.00)	c c
DI1686	NAD 83(CORS)-	40 13 58.84896(N)	083 21 39.07512(W)	AD(2002.00)	c
DI1686	ELLIP H (09/??/06)	279.627 (m)		GP(2002.00)	c c

DI1686

DI1686.Superseded values are not recommended for survey control.

DI1686

DI1686.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI1686.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI1686

DI1686\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI1686

DI1686

STATION DESCRIPTION

DI1686

DI1686'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI1686'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI1686'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI1686'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI1686' ftp://cors.ngs.noaa.gov/cors/README.txt

DI1686' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI1686' ftp://cors.ngs.noaa.gov/cors/station\_log

DI1686' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 24, 2019
DI2830 *****
DI2830 CORS          - This is a GPS Continuously Operating Reference Station.
DI2830 DESIGNATION  - WILLIAMS COUNTY CORS ARP
DI2830 CORS_ID      - OHWI
DI2830 PID          - DI2830
DI2830 STATE/COUNTY- OH/WILLIAMS
DI2830 COUNTRY      - US
DI2830 USGS QUAD    - MONTPELIER (1973)
DI2830
DI2830                                *CURRENT SURVEY CONTROL
DI2830
DI2830* NAD 83(2011) POSITION- 41 34 54.79455(N) 084 33 27.04432(W) ADJUSTED
DI2830* NAD 83(2011) ELLIP HT- 247.754 (meters) (06/??/19) ADJUSTED
DI2830* NAD 83(2011) EPOCH - 2010.00
DI2830
DI2830 GEOID HEIGHT - -34.021 (meters) GEOID18
DI2830 NAD 83(2011) X - 453,189.333 (meters) COMP
DI2830 NAD 83(2011) Y - -4,756,591.875 (meters) COMP
DI2830 NAD 83(2011) Z - 4,211,143.961 (meters) COMP
DI2830
DI2830 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DI2830 Standards:
DI2830          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
DI2830          Horiz Ellip                SD_N   SD_E   SD_h          (unitless)
DI2830 -----
DI2830 NETWORK      0.23   0.42                0.07   0.11   0.21          -0.06285900
DI2830 -----
DI2830
DI2830
DI2830.The coordinates were established by GPS observations
DI2830.and adjusted by the National Geodetic Survey in June 2019.
DI2830
DI2830.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DI2830.been affixed to the stable North American Tectonic Plate.
DI2830
DI2830.The coordinates are valid at the epoch date displayed above
DI2830.which is a decimal equivalence of Year/Month/Day.
DI2830
DI2830.Due to the release of the International GNSS Service (IGS) 2014
DI2830.realization of the International Terrestrial Reference Frame of 2014
DI2830.(ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations
DI2830.using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014
DI2830.epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2
DI2830.(MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the
DI2830.currently published epoch of 2010.00.
DI2830
DI2830
DI2830.Additional information on MYCS2 is available at
DI2830.https://geodesy.noaa.gov/CORS/coords.shtml
DI2830

```



DI2830.Significant digits in the geoid height do not necessarily reflect accuracy.  
DI2830.GEOID18 height accuracy estimate available [here](#).

DI2830

DI2830.The PID for the CORS L1 Phase Center is DM5665.

DI2830

DI2830.Click [here](#) to see if photographs exist for this station.

DI2830

DI2830.The XYZ, and position/ellipsoidal ht. are equivalent.

DI2830

DI2830.The ellipsoidal height was determined by GPS observations

DI2830.and is referenced to NAD 83.

DI2830

DI2830. The following values were computed from the NAD 83(2011) position.

DI2830

DI2830;		North	East	Units	Scale	Factor	Converg.
DI2830;SPC OH N	-	214,705.803	428,441.645	MT	0.99997936	-1 21 06.1	
DI2830;SPC OH N	-	704,413.96	1,405,645.63	sFT	0.99997936	-1 21 06.1	
DI2830;UTM 16	-	4,606,236.588	703,607.238	MT	1.00011019	+1 37 17.8	
DI2830!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
DI2830!SPC OH N	-	0.99996114	x	0.99997936	=	0.99994050	
DI2830!UTM 16	-	0.99996114	x	1.00011019	=	1.00007133	

DI2830

DI2830\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGM0360706236(NAD 83)

DI2830

SUPERSEDED SURVEY CONTROL

DI2830

DI2830	NAD 83(2011)-	41 34 54.79455(N)	084 33 27.04425(W)	AD(2010.00)	c
DI2830	ELLIP H (08/??/11)	247.756 (m)		GP(2010.00)	c c
DI2830	NAD 83(CORS)-	41 34 54.79453(N)	084 33 27.04447(W)	AD(2002.00)	c
DI2830	ELLIP H (11/??/06)	247.753 (m)		GP(2002.00)	c c

DI2830

DI2830.Superseded values are not recommended for survey control.

DI2830

DI2830.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DI2830.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DI2830

DI2830\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI2830

STATION DESCRIPTION

DI2830

DI2830'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

DI2830'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

DI2830'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

DI2830'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

DI2830' ftp://cors.ngs.noaa.gov/cors/README.txt

DI2830' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

DI2830' ftp://cors.ngs.noaa.gov/cors/station\_log

DI2830' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.6

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = MARCH 30, 2020

MC1586 \*\*\*\*\*

MC1586 DESIGNATION - **PATMOS**

MC1586 PID - MC1586

MC1586 STATE/COUNTY- OH/ERIE

MC1586 COUNTRY - US

MC1586 USGS QUAD - KELLEYS ISLAND (2016)

MC1586

MC1586 \*CURRENT SURVEY CONTROL

MC1586

MC1586\* NAD 83(2011) POSITION- 41 36 51.49151(N) 082 41 08.70211(W) ADJUSTED

MC1586\* NAD 83(2011) ELLIP HT- 141.871 (meters) (06/27/12) ADJUSTED

MC1586\* NAD 83(2011) EPOCH - 2010.00

MC1586\* [NAVD 88](#) ORTHO HEIGHT - 177.4 (meters) 582. (feet) VERTCON

MC1586

MC1586 GEOID HEIGHT - -35.487 (meters) GEOID18

MC1586 NAD 83(2011) X - 607,995.765 (meters) COMP

MC1586 NAD 83(2011) Y - -4,736,802.195 (meters) COMP

MC1586 NAD 83(2011) Z - 4,213,766.109 (meters) COMP

MC1586 LAPLACE CORR - 1.94 (seconds) DEFLEC18

MC1586

MC1586 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MC1586 Standards:

MC1586 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

MC1586 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

MC1586 -----

MC1586 NETWORK 2.96 3.92 1.09 1.30 2.00 -0.17323776

MC1586 -----

MC1586 Click [here](#) for local accuracies and other accuracy information.

MC1586

MC1586

MC1586.The horizontal coordinates were established by GPS observations

MC1586.and adjusted by the National Geodetic Survey in June 2012.

MC1586

MC1586.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MC1586.been affixed to the stable North American tectonic plate. See

MC1586.[NA2011](#) for more information.

MC1586

MC1586.The horizontal coordinates are valid at the epoch date displayed above

MC1586.which is a decimal equivalence of Year/Month/Day.

MC1586

MC1586.The NAVD 88 height was computed by applying the VERTCON shift value to

MC1586.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

MC1586

MC1586.Significant digits in the geoid height do not necessarily reflect accuracy.

MC1586.GEOID18 height accuracy estimate available [here](#).

MC1586

MC1586.Click [photographs](#) - Photos may exist for this station.

MC1586



MC1586.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
MC1586

MC1586.The Laplace correction was computed from DEFLEC18 derived deflections.  
MC1586

MC1586.The ellipsoidal height was determined by GPS observations  
MC1586.and is referenced to NAD 83.

MC1586

MC1586. The following values were computed from the NAD 83(2011) position.

MC1586

MC1586;		North	East	Units	Scale	Factor	Converg.
MC1586;SPC OH N	-	216,298.766	584,518.090	MT	0.99998460	-0 07	19.3
MC1586;SPC OH N	-	709,640.20	1,917,706.43	sFT	0.99998460	-0 07	19.3
MC1586;UTM 17	-	4,608,326.585	359,547.833	MT	0.99984276	-1 07	11.0
MC1586!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
MC1586!SPC OH N	-	0.99997775	x	0.99998460	=	0.99996235	
MC1586!UTM 17	-	0.99997775	x	0.99984276	=	0.99982051	

MC1586

MC1586\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLG5954708326 (NAD 83)

MC1586

SUPERSEDED SURVEY CONTROL

MC1586

MC1586	NAD 83(2007)-	41 36 51.49174(N)	082 41 08.70242(W)	AD(2002.00)	0
MC1586	ELLIP H (02/10/07)	141.878 (m)		GP(2002.00)	
MC1586	ELLIP H (10/07/05)	141.886 (m)		GP( )	4 1
MC1586	NAD 83(1995)-	41 36 51.49187(N)	082 41 08.70258(W)	AD( )	2
MC1586	ELLIP H (04/01/98)	141.901 (m)		GP( )	4 1
MC1586	NAD 83(1994)-	41 36 51.49176(N)	082 41 08.70272(W)	AD( )	2
MC1586	NAD 83(1986)-	41 36 51.50322(N)	082 41 08.72201(W)	AD( )	2
MC1586	NGVD 29 (08/25/89)	177.6 (m)	RAPSU86 model used	GPS OBS	

MC1586

MC1586.Superseded values are not recommended for survey control.

MC1586

MC1586.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC1586.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC1586

MC1586\_MARKER: DD = SURVEY DISK

MC1586\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MC1586\_STAMPING: PATMOS 1988

MC1586\_MARK LOGO: OHDNR

MC1586\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT

MC1586\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MC1586+STABILITY: SURFACE MOTION

MC1586\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MC1586+SATELLITE: SATELLITE OBSERVATIONS - August 15, 2017

MC1586

MC1586	HISTORY	-	Date	Condition	Report By
MC1586	HISTORY	-	1988	MONUMENTED	OHDNR
MC1586	HISTORY	-	20061007	GOOD	GEOCAC
MC1586	HISTORY	-	20170815	GOOD	USPSQD

MC1586

STATION DESCRIPTION

MC1586

MC1586'DESCRIBED BY OHIO DEPARTMENT OF NATURAL RESOURCES 1988

MC1586'THE STATION IS AT CAMP PATMOS CHURCH CAMP AT THE NORTHEAST CORNER OF



MC1586'KELLEYS ISLAND.

MC1586'TO REACH FROM THE JUNCTION OF WATER AND DIVISION STREETS ON KELLEYS  
MC1586'ISLAND, GO NORTH 1.5 KM (0.95 MI) ON DIVISION STREET, TURN RIGHT AND  
MC1586'GO 1.1 KM (0.70 MI) EAST ON WARD ROAD TO A JOG LEFT AND THEN RIGHT,  
MC1586'CONTINUE EAST, NOW ON HAMILTON ROAD, 0.5 KM (0.30 MI) TO A TEE  
MC1586'JUNCTION. TURN LEFT AND GO 0.8 KM (0.50 MI) NORTH AND THEN NORTHEAST  
MC1586'ON MONAGAN ROAD TO CAMP PATMOS AND THE STATION ON THE RIGHT SET FLUSH  
MC1586'IN A LAWN.

MC1586'IT IS 48.40 M (158.8 FT) SOUTH OF A FLAGPOLE, 18.84 M (61.8 FT)  
MC1586'NORTHWEST OF THE NORTHWEST CORNER OF A CONCRETE BLOCK BUILDING, 14.94  
MC1586'M (49.0 FT) EAST OF THE TOP OF THE BANK AT THE SHORE OF LAKE ERIE,  
MC1586'3.96 M (13.0 FT) EAST OF THE EAST EDGE OF THE PAVEMENT AND 16.615 M  
MC1586'(54.5 FT) EAST OF RM 1.

MC1586

MC1586 STATION RECOVERY (2006)

MC1586

MC1586'RECOVERY NOTE BY GEOCACHING 2006 (RLM)

MC1586'RECOVERED IN GOOD CONDITION.

MC1586

MC1586 STATION RECOVERY (2017)

MC1586

MC1586'RECOVERY NOTE BY US POWER SQUADRON 2017 (TJH)

MC1586'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = DECEMBER 4, 2019

MB0284 \*\*\*\*\*

MB0284 DESIGNATION - **Q 62**

MB0284 PID - MB0284

MB0284 STATE/COUNTY- PA/MERCER

MB0284 COUNTRY - US

MB0284 USGS QUAD - GREENVILLE WEST (1990)

MB0284

MB0284 \*CURRENT SURVEY CONTROL

MB0284

MB0284\* NAD 83(1986) POSITION- 41 29 04.05 (N) 080 26 38.51 (W) HD\_HELD1

MB0284\* [NAVD 88](#) ORTHO HEIGHT - 301.196 (meters) 988.17 (feet) ADJUSTED

MB0284

MB0284 GEOID HEIGHT - -33.814 (meters) GEOID18

MB0284 DYNAMIC HEIGHT - 301.072 (meters) 987.77 (feet) COMP

MB0284 MODELED GRAVITY - 980,203.3 (mgal) NAVD 88

MB0284

MB0284 VERT ORDER - SECOND CLASS 0

MB0284

MB0284.The horizontal coordinates were determined by differentially corrected  
MB0284.hand held GPS observations or other comparable positioning techniques  
MB0284.and have an estimated accuracy of +/- 3 meters.

MB0284.

MB0284.The orthometric height was determined by differential leveling and  
MB0284.adjusted by the NATIONAL GEODETIC SURVEY

MB0284.in June 1991.

MB0284

MB0284.Significant digits in the geoid height do not necessarily reflect accuracy.  
MB0284.GEOID18 height accuracy estimate available [here](#).

MB0284

MB0284.Click [here](#) to see if photographs exist for this station.

MB0284

MB0284.The dynamic height is computed by dividing the NAVD 88  
MB0284.geopotential number by the normal gravity value computed on the  
MB0284.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
MB0284.degrees latitude (g = 980.6199 gals.).

MB0284

MB0284.The modeled gravity was interpolated from observed gravity values.

MB0284

MB0284;	North	East	Units	Estimated Accuracy
MB0284;SPC PA N -	149,845.0	375,050.8	MT	(+/- 3 meters HH1 GPS)

MB0284

MB0284\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF4641392687 (NAD 83)

MB0284

MB0284 SUPERSEDED SURVEY CONTROL

MB0284

MB0284 NGVD 29 (??/??/92) 301.378 (m) 988.77 (f) ADJ UNCH 2 0

MB0284

MB0284.Superseded values are not recommended for survey control.

MB0284



MB0284.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB0284.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB0284

MB0284\_MARKER: DB = BENCH MARK DISK

MB0284\_SETTING: 37 = SET IN A MASSIVE RETAINING WALL

MB0284\_SP\_SET: WALL

MB0284\_STAMPING: Q 62 1935

MB0284\_MARK LOGO: CGS

MB0284\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

MB0284\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB0284+SATELLITE: SATELLITE OBSERVATIONS - March 29, 2008

MB0284

MB0284	HISTORY	- Date	Condition	Report By
MB0284	HISTORY	- 1935	MONUMENTED	CGS
MB0284	HISTORY	- 20000201	GOOD	PADT
MB0284	HISTORY	- 20070620	GOOD	GEOCAC
MB0284	HISTORY	- 20080329	GOOD	GEOCAC

MB0284

MB0284 STATION DESCRIPTION

MB0284

MB0284'DESCRIBED BY COAST AND GEODETIC SURVEY 1935

MB0284'0.4 MI W FROM JAMESTOWN.

MB0284'0.4 MILE WEST ALONG THE NEW YORK CENTRAL RAILROAD FROM THE

MB0284'STATION AT JAMESTOWN, AT STATION 1881+50, AT 24-FOOT SPAN

MB0284'STONE-ARCH BRIDGE 87 OVER STATE HIGHWAY 458, IN THE TOP OF THE

MB0284'TOP STEP OF THE SOUTHEAST WING WALL, 12 FEET SOUTH OF THE SOUTH

MB0284'RAIL, AND ABOUT 3 FEET LOWER THAN THE TRACK. A STANDARD DISK,

MB0284'STAMPED Q 62 1935.

MB0284

MB0284 STATION RECOVERY (2000)

MB0284

MB0284'RECOVERY NOTE BY PA DEPT OF TRANSP 2000 (JW)

MB0284'RECOVERED IN GOOD CONDITION.

MB0284

MB0284 STATION RECOVERY (2007)

MB0284

MB0284'RECOVERY NOTE BY GEOCACHING 2007 (ACM)

MB0284'RECOVERED IN GOOD CONDITION.

MB0284

MB0284 STATION RECOVERY (2008)

MB0284

MB0284'RECOVERY NOTE BY GEOCACHING 2008 (RLM)

MB0284'ADD TO DESCRIPTION, STATE HIGHWAY 458 IS NOW STATE HIGHWAY 58, AND THE

MB0284'RAILROAD TRACKS HAVE BEEN REMOVED.

\*\*\* retrieval complete.

Elapsed Time = 00:00:13



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019  
MB1307 \*\*\*\*\*  
MB1307 DESIGNATION - **R 176**  
MB1307 PID - MB1307  
MB1307 STATE/COUNTY- OH/MEDINA  
MB1307 COUNTRY - US  
MB1307 USGS QUAD - WESTFIELD CENTER (1994)

MB1307  
MB1307 \*CURRENT SURVEY CONTROL  
MB1307

MB1307\* NAD 83(2011) POSITION- 41 00 44.74388(N) 081 55 22.68098(W) ADJUSTED  
MB1307\* NAD 83(2011) ELLIP HT- 275.939 (meters) (06/27/12) ADJUSTED  
MB1307\* NAD 83(2011) EPOCH - 2010.00

MB1307\* [NAVD 88](#) ORTHO HEIGHT - 309.300 (meters) 1014.76 (feet) ADJUSTED  
MB1307

MB1307 GEOID HEIGHT - -33.344 (meters) GEOID18  
MB1307 NAD 83(2011) X - 677,216.115 (meters) COMP  
MB1307 NAD 83(2011) Y - -4,772,080.512 (meters) COMP  
MB1307 NAD 83(2011) Z - 4,163,645.886 (meters) COMP  
MB1307 LAPLACE CORR - 1.31 (seconds) DEFLEC18  
MB1307 DYNAMIC HEIGHT - 309.163 (meters) 1014.31 (feet) COMP  
MB1307 MODELED GRAVITY - 980,172.7 (mgal) NAVD 88

MB1307  
MB1307 VERT ORDER - FIRST CLASS I  
MB1307

MB1307 Network accuracy estimates per FGDC Geospatial Positioning Accuracy  
MB1307 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	1.58	2.12	0.72	0.55	1.08	-0.09817732

MB1307  
MB1307 Click [here](#) for local accuracies and other accuracy information.  
MB1307  
MB1307

MB1307.The horizontal coordinates were established by GPS observations  
MB1307.and adjusted by the National Geodetic Survey in June 2012.  
MB1307  
MB1307.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has  
MB1307.been affixed to the stable North American tectonic plate. See  
MB1307.[NA2011](#) for more information.  
MB1307

MB1307.The horizontal coordinates are valid at the epoch date displayed above  
MB1307.which is a decimal equivalence of Year/Month/Day.  
MB1307

MB1307.The orthometric height was determined by differential leveling and  
MB1307.adjusted by the NATIONAL GEODETIC SURVEY  
MB1307.in June 1991.  
MB1307

MB1307  
MB1307.Significant digits in the geoid height do not necessarily reflect accuracy.



MB1307.GEOID18 height accuracy estimate available [here](#).  
 MB1307  
 MB1307.Click [here](#) to see if photographs exist for this station.  
 MB1307  
 MB1307.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MB1307  
 MB1307.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MB1307  
 MB1307.The ellipsoidal height was determined by GPS observations  
 MB1307.and is referenced to NAD 83.

MB1307  
 MB1307.The dynamic height is computed by dividing the NAVD 88  
 MB1307.geopotential number by the normal gravity value computed on the  
 MB1307.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 MB1307.degrees latitude (g = 980.6199 gals.).

MB1307  
 MB1307.The modeled gravity was interpolated from observed gravity values.  
 MB1307

MB1307. The following values were computed from the NAD 83(2011) position.

MB1307;		North	East	Units	Scale	Factor	Converg.
MB1307;SPC OH N	-	149,601.844	648,536.377	MT	0.99993960	+0 22	44.7
MB1307;SPC OH N	-	490,818.72	2,127,739.76	sFT	0.99993960	+0 22	44.7
MB1307;UTM 17	-	4,540,547.003	422,391.178	MT	0.99967413	-0 36	20.5
MB1307!	-	Elev Factor	x Scale Factor	=	Combined Factor		
MB1307!SPC OH N	-	0.99995672	x 0.99993960	=	0.99989632		
MB1307!UTM 17	-	0.99995672	x 0.99967413	=	0.99963086		

MB1307  
 MB1307\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF2239140547 (NAD 83)  
 MB1307

MB1307  
 MB1307 SUPERSEDED SURVEY CONTROL

MB1307	NAD 83(2007)-	41 00 44.74390(N)	081 55 22.68176(W)	AD(2002.00)	0
MB1307	ELLIP H (02/10/07)	275.953 (m)		GP(2002.00)	
MB1307	ELLIP H (10/07/05)	275.955 (m)		GP( )	4 2
MB1307	NAD 83(1995)-	41 00 44.74391(N)	081 55 22.68128(W)	AD( )	1
MB1307	ELLIP H (08/20/03)	275.971 (m)		GP( )	4 2
MB1307	NAVD 88 (08/20/03)	309.3 (m)	GEOID99 model used	GPS OBS	
MB1307	NGVD 29 (??/??/92)	309.507 (m)	1015.44 (f)	ADJ UNCH	1 1

MB1307  
 MB1307.Superseded values are not recommended for survey control.  
 MB1307

MB1307.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MB1307.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB1307  
 MB1307\_MARKER: DB = BENCH MARK DISK  
 MB1307\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 MB1307\_STAMPING: R 176 1954  
 MB1307\_MARK LOGO: CGS  
 MB1307\_PROJECTION: PROJECTING 3 CENTIMETERS  
 MB1307\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 MB1307\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 MB1307+STABILITY: SURFACE MOTION  
 MB1307\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR



MB1307+SATELLITE: SATELLITE OBSERVATIONS - April 20, 2017

MB1307

MB1307	HISTORY	- Date	Condition	Report By
MB1307	HISTORY	- 1954	MONUMENTED	CGS
MB1307	HISTORY	- 1967	GOOD	CGS
MB1307	HISTORY	- 1987	GOOD	USPSQD
MB1307	HISTORY	- 2000	GOOD	OH-103
MB1307	HISTORY	- 20110713	GOOD	JCLS
MB1307	HISTORY	- 20160604	GOOD	GEOCAC
MB1307	HISTORY	- 20170420	GOOD	WOOLPT

MB1307

MB1307

STATION DESCRIPTION

MB1307

MB1307'DESCRIBED BY COAST AND GEODETIC SURVEY 1967

MB1307'4.4 MI N FROM CRESTON.

MB1307'ABOUT 2.8 MILES NORTHWEST ALONG THE BALTIMORE AND OHIO RAILROAD

MB1307'FROM THE CROSSING OF STATE HIGHWAY 3 AT CRESTON, THENCE 0.6

MB1307'MILE NORTH ALONG COUNTY ROAD NO. 15, THENCE 0.95 MILE EAST ALONG

MB1307'COUNTY ROAD NO. 46, AT THE WESTFIELD AIRPORT, 113 FEET NORTH OF

MB1307'THE CENTER LINE OF THE COUNTY ROAD, 110 FEET WEST OF THE

MB1307'SOUTHWEST CORNER OF THE TWO-STORIED PORTION OF A WHITE HOUSE,

MB1307'46.2 FEET NORTH OF THE NORTHEAST CORNER OF A CONCRETE BLOCK HANGAR

MB1307'BUILDING, 2 1/2 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF A CONCRETE

MB1307'BASE WHICH FORMERLY SUPPORTED GAS PUMPS, 5 FEET ABOVE THE LEVEL OF THE

MB1307'ROAD AND SET IN THE TOP OF A CONCRETE POST PROJECTING 0.1 FOOT ABOVE

MB1307'THE LEVEL OF THE GROUND.

MB1307

MB1307

STATION RECOVERY (1987)

MB1307

MB1307'RECOVERY NOTE BY US POWER SQUADRON 1987 (ROS)

MB1307'RECOVERED IN GOOD CONDITION.

MB1307

MB1307

STATION RECOVERY (2000)

MB1307

MB1307'RECOVERY NOTE BY MEDINA COUNTY OHIO 2000

MB1307'RECOVERY NOTE BY MEDINA COUNTY SANITARY ENGINEER 2000

MB1307'FOUND IN GOOD CONDITION.

MB1307'

MB1307'PROPERTY IS NO LONGER AN ACTIVE AIRPORT AND IS NOW A PRIVATE

MB1307'RESIDENCE.

MB1307

MB1307

STATION RECOVERY (2011)

MB1307

MB1307'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011

MB1307'RECOVERED IN GOOD CONDITION.

MB1307

MB1307

STATION RECOVERY (2016)

MB1307

MB1307'RECOVERY NOTE BY GEOCACHING 2016 (RLM)

MB1307'COUNTY ROAD 15 IS ALSO KNOWN AS WESTFIELD ROAD AND COUNTY ROAD 46 IS

MB1307'ALSO KNOWN AS SEVILLE ROAD. THE WHITE HOUSE AND THE GAS PUMP BASE

MB1307'HAVE BEEN REMOVED.

MB1307

MB1307

STATION RECOVERY (2017)

MB1307





MB1307'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2017  
MB1307'RECOVERED AS DESCRIBED

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.6

Starting Datasheet Retrieval...

```

1      National Geodetic Survey,      Retrieval Date = FEBRUARY 27, 2020
MC1637 *****
MC1637 CBN - This is a Cooperative Base Network Control Station.
MC1637 DESIGNATION - R 344
MC1637 PID - MC1637
MC1637 STATE/COUNTY- OH/SENECA
MC1637 COUNTRY - US
MC1637 USGS QUAD - TIFFIN NORTH (2016)
MC1637
MC1637 *CURRENT SURVEY CONTROL
MC1637
MC1637* NAD 83(2011) POSITION- 41 07 38.13509(N) 083 14 15.11678(W) ADJUSTED
MC1637* NAD 83(2011) ELLIP HT- 198.446 (meters) (06/27/12) ADJUSTED
MC1637* NAD 83(2011) EPOCH - 2010.00
MC1637* NAVD 88 ORTHO HEIGHT - 233.486 (meters) 766.03 (feet) ADJUSTED
MC1637
MC1637 GEOID HEIGHT - -35.032 (meters) GEOID18
MC1637 NAD 83(2011) X - 566,565.798 (meters) COMP
MC1637 NAD 83(2011) Y - -4,777,982.684 (meters) COMP
MC1637 NAD 83(2011) Z - 4,173,209.616 (meters) COMP
MC1637 LAPLACE CORR - 1.38 (seconds) DEFLEC18
MC1637 DYNAMIC HEIGHT - 233.385 (meters) 765.70 (feet) COMP
MC1637 MODELED GRAVITY - 980,186.0 (mgal) NAVD 88
MC1637
MC1637 VERT ORDER - FIRST CLASS II
MC1637
MC1637 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MC1637 Standards:
MC1637 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MC1637 Horiz Ellip SD_N SD_E SD_h (unitless)
MC1637 -----
MC1637 NETWORK 1.60 2.53 0.73 0.55 1.29 -0.16701505
MC1637 -----
MC1637 Click here for local accuracies and other accuracy information.
MC1637
MC1637
MC1637.The horizontal coordinates were established by GPS observations
MC1637.and adjusted by the National Geodetic Survey in June 2012.
MC1637
MC1637.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MC1637.been affixed to the stable North American tectonic plate. See
MC1637.NA2011 for more information.
MC1637
MC1637.The horizontal coordinates are valid at the epoch date displayed above
MC1637.which is a decimal equivalence of Year/Month/Day.
MC1637
MC1637.The orthometric height was determined by differential leveling and
MC1637.adjusted by the NATIONAL GEODETIC SURVEY
MC1637.in April 1995.

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MC1637

MC1637.Significant digits in the geoid height do not necessarily reflect accuracy.

MC1637.GEOID18 height accuracy estimate available [here](#).

MC1637

MC1637.Click [photographs](#) - Photos may exist for this station.

MC1637

MC1637.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC1637

MC1637.The Laplace correction was computed from DEFLEC18 derived deflections.

MC1637

MC1637.The ellipsoidal height was determined by GPS observations

MC1637.and is referenced to NAD 83.

MC1637

MC1637.The dynamic height is computed by dividing the NAVD 88

MC1637.geopotential number by the normal gravity value computed on the

MC1637.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC1637.degrees latitude (g = 980.6199 gals.).

MC1637

MC1637.The modeled gravity was interpolated from observed gravity values.

MC1637

MC1637. The following values were computed from the NAD 83(2011) position.

MC1637

MC1637;		North	East	Units	Scale	Factor	Converg.
MC1637;SPC OH N	-	162,454.931	538,071.550	MT	0.99993968	-0 29 04.3	
MC1637;SPC OH N	-	532,987.55	1,765,323.08	sFT	0.99993968	-0 29 04.3	
MC1637;UTM 17	-	4,555,297.142	312,175.978	MT	1.00003420	-1 28 19.7	

MC1637

MC1637! - Elev Factor x Scale Factor = Combined Factor

MC1637!SPC OH N - 0.99996887 x 0.99993968 = 0.99990856

MC1637!UTM 17 - 0.99996887 x 1.00003420 = 1.00000307

MC1637

MC1637\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF1217555297(NAD 83)

MC1637

MC1637 SUPERSEDED SURVEY CONTROL

MC1637

MC1637	NAD 83(2007)-	41 07 38.13512(N)	083 14 15.11748(W)	AD(2002.00)	0
MC1637	ELLIP H (02/10/07)	198.471 (m)		GP(2002.00)	
MC1637	ELLIP H (03/08/05)	198.466 (m)		GP( )	4 2
MC1637	NAD 83(1995)-	41 07 38.13512(N)	083 14 15.11747(W)	AD( )	B
MC1637	ELLIP H (08/20/96)	198.486 (m)		GP( )	4 2
MC1637	NAVD 88	233.49 (m)	766.0	(f) LEVELING	3
MC1637	NGVD 29 (01/19/93)	233.673 (m)	766.64	(f) ADJUSTED	1 2

MC1637.No superseded survey control is available for this station.

MC1637

MC1637\_MARKER: F = FLANGE-ENCASED ROD

MC1637\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

MC1637\_STAMPING: R 344 1992

MC1637\_MARK LOGO: NGS

MC1637\_PROJECTION: FLUSH

MC1637\_MAGNETIC: N = NO MAGNETIC MATERIAL

MC1637\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

MC1637\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MC1637+SATELLITE: SATELLITE OBSERVATIONS - July 13, 2011

MC1637\_ROD/PIPE-DEPTH: 2.4 meters

MC1637



MC1637	HISTORY	- Date	Condition	Report By
MC1637	HISTORY	- 1992	MONUMENTED	NGS
MC1637	HISTORY	- 19950808	GOOD	NGS
MC1637	HISTORY	- 20070528	GOOD	JCLS
MC1637	HISTORY	- 20090925	GOOD	SATDAT
MC1637	HISTORY	- 20100412	GOOD	OHDT
MC1637	HISTORY	- 20110713	GOOD	JCLS

MC1637  
MC1637  
MC1637

STATION DESCRIPTION

MC1637'DESCRIBED BY NATIONAL GEODETIC SURVEY 1992  
MC1637'4.7 KM (2.90 MI) WESTERLY ALONG THE CHESSIE SYSTEMS RAILROAD FROM THE  
MC1637'JUNCTION OF STATE HIGHWAY 53 IN TIFFIN, 25.8 M (84.6 FT) SOUTH OF THE  
MC1637'NEAR RAIL, 6.4 M (21.0 FT) EAST OF THE CENTER OF COUNTY ROAD 121, 1.1  
MC1637'M (3.6 FT) NORTH OF A UTILITY POLE, 0.6 M (2.0 FT) BELOW THE LEVEL OF  
MC1637'THE ROAD, AND 0.5 M (1.6 FT) SOUTH OF A WITNESS POST. NOTE--ACCESS TO  
MC1637'THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP. THE ROD WAS DRIVEN TO  
MC1637'REFUSAL AND ANCHORED.

MC1637  
MC1637  
MC1637

STATION RECOVERY (1995)

MC1637'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
MC1637'LOCATED ABOUT 14.5 KM (9.00 MI) EAST OF FOSTORIA, 4.8 KM (3.00 MI)  
MC1637'WEST OF TIFFIN, ON COUNTY ROAD 121 RIGHT-OF-WAY, 1.21 KM (0.75 MI)  
MC1637'SOUTH OF THE JUNCTION WITH COUNTY ROAD 48 AT THE HOPEWELL CHURCH, AND  
MC1637'JUST SOUTH OF A RAILROAD CROSSING. TO REACH FROM THE JUNCTION OF US  
MC1637'HIGHWAY 224 AND STATE ROUTE 18 ABOUT 3.2 KM (2.00 MI) WEST OF TIFFIN,  
MC1637'GO NORTHWEST 2.4 KM (1.50 MI) ON ROUTE 18, TURN SHARP RIGHT AND GO  
MC1637'0.40 KM (0.25 MI) EAST ON COUNTY ROAD 26, TURN LEFT AND GO NORTH ON  
MC1637'COUNTY ROAD 121 0.40 KM (0.25 MI) TO THE MARK ON THE RIGHT. IT IS ON  
MC1637'LINE WITH A ROW OF POWER POLES, 25.8 M (84.6 FT) SOUTH OF THE SOUTH  
MC1637'RAIL OF THE RAILROAD, 6.4 M (21.0 FT) EAST OF THE CENTER OF THE ROAD  
MC1637'AND 0.6 M (2.0 FT) BELOW SAME, 1.1 M (3.6 FT) NORTH OF A POWER POLE,  
MC1637'AND 0.5 M (1.6 FT) SOUTH OF A WITNESS POST.

MC1637  
MC1637  
MC1637

STATION RECOVERY (2007)

MC1637'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2007 (MRY)  
MC1637'RECOVERED IN GOOD CONDITION.

MC1637

STATION RECOVERY (2009)

MC1637'RECOVERY NOTE BY SATELLITE DATA SYSTEMS LTD 2009 (SCB)  
MC1637'RECOVERED AS DESCRIBED.

MC1637

STATION RECOVERY (2010)

MC1637'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2010 (DJB)  
MC1637'MARK WAS FOUND AS DESCRIBED

MC1637

STATION RECOVERY (2011)

MC1637

MC1637'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011  
MC1637'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = DECEMBER 4, 2019

AE2644 \*\*\*\*\*

AE2644 DESIGNATION - **REINHART**

AE2644 PID - AE2644

AE2644 STATE/COUNTY- OH/AUGLAIZE

AE2644 COUNTRY - US

AE2644 USGS QUAD - OSGOOD (1984)

AE2644

AE2644 \*CURRENT SURVEY CONTROL

AE2644

AE2644\* NAD 83(2011) POSITION- 40 21 36.21187(N) 084 26 04.10033(W) ADJUSTED

AE2644\* NAD 83(2011) ELLIP HT- 256.216 (meters) (06/27/12) ADJUSTED

AE2644\* NAD 83(2011) EPOCH - 2010.00

AE2644\* [NAVD 88](#) ORTHO HEIGHT - 289.5 (meters) 950. (feet) GPS OBS

AE2644

AE2644 NAVD 88 orthometric height was determined with geoid model GEOID96

AE2644 GEOID HEIGHT - -33.184 (meters) GEOID96

AE2644 GEOID HEIGHT - -33.229 (meters) GEOID18

AE2644 NAD 83(2011) X - 472,032.077 (meters) COMP

AE2644 NAD 83(2011) Y - -4,844,164.080 (meters) COMP

AE2644 NAD 83(2011) Z - 4,108,697.192 (meters) COMP

AE2644 LAPLACE CORR - -0.04 (seconds) DEFLEC18

AE2644

AE2644 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

AE2644 Standards:

AE2644 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

AE2644 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

AE2644 -----

AE2644 NETWORK 2.00 3.10 0.92 0.68 1.58 0.04519318

AE2644 -----

AE2644 Click [here](#) for local accuracies and other accuracy information.

AE2644

AE2644

AE2644.The horizontal coordinates were established by GPS observations

AE2644.and adjusted by the National Geodetic Survey in June 2012.

AE2644

AE2644.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

AE2644.been affixed to the stable North American tectonic plate. See

AE2644.[NA2011](#) for more information.

AE2644

AE2644.The horizontal coordinates are valid at the epoch date displayed above

AE2644.which is a decimal equivalence of Year/Month/Day.

AE2644

AE2644.The orthometric height was determined by GPS observations and a

AE2644.high-resolution geoid model.

AE2644

AE2644.Significant digits in the geoid height do not necessarily reflect accuracy.

AE2644.GEOID18 height accuracy estimate available [here](#).

AE2644

AE2644.Click [here](#) to see if photographs exist for this station.



AE2644  
AE2644.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
AE2644  
AE2644.The Laplace correction was computed from DEFLEC18 derived deflections.  
AE2644  
AE2644.The ellipsoidal height was determined by GPS observations  
AE2644.and is referenced to NAD 83.  
AE2644  
AE2644. The following values were computed from the NAD 83(2011) position.  
AE2644  
AE2644;  
AE2644;SPC OH N - North East Units Scale Factor Converg.  
AE2644;SPC OH N - 78,821.738 435,689.892 MT 1.00001484 -1 16 15.1  
AE2644;SPC OH N - 258,600.99 1,429,425.92 sFT 1.00001484 -1 16 15.1  
AE2644;UTM 16 - 4,470,881.126 717,850.005 MT 1.00018423 +1 39 43.4  
AE2644  
AE2644! - Elev Factor x Scale Factor = Combined Factor  
AE2644!SPC OH N - 0.99995981 x 1.00001484 = 0.99997465  
AE2644!UTM 16 - 0.99995981 x 1.00018423 = 1.00014403  
AE2644  
AE2644\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGK1785070881 (NAD 83)  
AE2644  
AE2644 SUPERSEDED SURVEY CONTROL  
AE2644  
AE2644 NAD 83(2007)- 40 21 36.21197(N) 084 26 04.10113(W) AD(2002.00) 0  
AE2644 ELLIP H (02/10/07) 256.234 (m) GP(2002.00)  
AE2644 ELLIP H (10/07/05) 256.231 (m) GP( ) 4 1  
AE2644 NAD 83(1995)- 40 21 36.21203(N) 084 26 04.10097(W) AD( ) 1  
AE2644 ELLIP H (09/04/97) 256.241 (m) GP( ) 4 1  
AE2644  
AE2644.Superseded values are not recommended for survey control.  
AE2644  
AE2644.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
AE2644.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
AE2644  
AE2644\_MARKER: DD = SURVEY DISK  
AE2644\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
AE2644\_STAMPING: REINHART  
AE2644\_MARK LOGO: OHDT  
AE2644\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
AE2644\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
AE2644+STABILITY: SURFACE MOTION  
AE2644\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
AE2644+SATELLITE: SATELLITE OBSERVATIONS - December 07, 2016  
AE2644  
AE2644 HISTORY - Date Condition Report By  
AE2644 HISTORY - 1994 MONUMENTED OHDT  
AE2644 HISTORY - 20161207 GOOD OHDNR  
AE2644  
AE2644 STATION DESCRIPTION  
AE2644  
AE2644'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1994 (DR)  
AE2644'IN SECTION 7, TOWN 8 SOUTH, RANGE 4 EAST, JACKSON TOWNSHIP, AUGLAIZE  
AE2644'COUNTY OHIO. TO REACH FROM THE AUGLAIZE COUNTY COURT HOUSE IN  
AE2644'WAPAKONETA, TRAVEL SOUTH ON DIXIE HIGHWAY FOR 4.8 MILES (7.7 KM) TO  
AE2644'ITS INTERSECTION WITH STATE ROUTE 219, PROCEED WEST ON STATE ROUTE 219



AE2644'FOR 12.6 MILES (20.3 KM) TO ITS INTERSECTION WITH STATE ROUTE 364,  
AE2644'PROCEED SOUTH ON STATE ROUTE 364 FOR 9.0 MILES (14.5 KM) TO A BRIDGE  
AE2644'CROSSING MILE CREEK. MARK LIES ON A HIGH POINT JUST SOUTH OF MILE  
AE2644'CREEK, 66 FEET (20.1 M) WEST OF THE CENTERLINE OF STATE ROUTE 364, 55  
AE2644'FEET (16.8 M) NORTH-NORTHWEST OF A TELEPHONE POLE, 74 FEET (22.6 M)  
AE2644'SOUTHWEST OF THE CENTER OF THE SOUTH ABUTMENT OF BRIDGE OVER MILE  
AE2644'CREEK. MARK IS AN ALUMINUM DISK IN A CIRCULAR 18 INCH Poured CONCRETE  
AE2644'MONUMENT WITH A SHACKLE.

AE2644

AE2644

STATION RECOVERY (2016)

AE2644

AE2644'RECOVERY NOTE BY OHIO DEPARTMENT OF NATURAL RESOURCES 2016 (WAM)

AE2644'FOR MORE INFORMATION CONTACT

AE2644'OHIO DEPARTMENT OF NATURAL RESOURCES

AE2644'OFFICE OF REAL ESTATE

AE2644'SURVEY SECTION

AE2644'2045 MORSE RD. BLDG. E2

AE2644'COLUMBUS, OH 43229

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

DG7224 \*\*\*\*\*

DG7224 CBN - This is a Cooperative Base Network Control Station.

DG7224 DESIGNATION - RICHMOND

DG7224 PID - DG7224

DG7224 STATE/COUNTY- OH/ASHTABULA

DG7224 COUNTRY - US

DG7224 USGS QUAD - LEON (1994)

DG7224

DG7224 \*CURRENT SURVEY CONTROL

DG7224

DG7224\* NAD 83(2011) POSITION- 41 40 49.38647(N) 080 34 13.79842(W) ADJUSTED

DG7224\* NAD 83(2011) ELLIP HT- 280.166 (meters) (06/27/12) ADJUSTED

DG7224\* NAD 83(2011) EPOCH - 2010.00

DG7224\* [NAVD 88](#) ORTHO HEIGHT - 314.2 (meters) 1031. (feet) GPS OBS

DG7224

DG7224 NAVD 88 orthometric height was determined with geoid model GEOID03

DG7224 GEOID HEIGHT - -33.975 (meters) GEOID03

DG7224 GEOID HEIGHT - -34.081 (meters) GEOID18

DG7224 NAD 83(2011) X - 781,633.290 (meters) COMP

DG7224 NAD 83(2011) Y - -4,706,423.892 (meters) COMP

DG7224 NAD 83(2011) Z - 4,219,342.619 (meters) COMP

DG7224 LAPLACE CORR - 0.69 (seconds) DEFLEC18

DG7224

DG7224 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

DG7224 Standards:

DG7224 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

DG7224 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

DG7224 -----

DG7224 NETWORK 0.63 1.57 0.28 0.23 0.80 -0.02517163

DG7224 -----

DG7224 Click [here](#) for local accuracies and other accuracy information.

DG7224

DG7224

DG7224.The horizontal coordinates were established by GPS observations

DG7224.and adjusted by the National Geodetic Survey in June 2012.

DG7224

DG7224.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

DG7224.been affixed to the stable North American tectonic plate. See

DG7224.[NA2011](#) for more information.

DG7224

DG7224.The horizontal coordinates are valid at the epoch date displayed above

DG7224.which is a decimal equivalence of Year/Month/Day.

DG7224

DG7224.The orthometric height was determined by GPS observations and a

DG7224.high-resolution geoid model.

DG7224

DG7224.Significant digits in the geoid height do not necessarily reflect accuracy.

DG7224.GEOID18 height accuracy estimate available [here](#).

DG7224





DG7224.Click [here](#) to see if photographs exist for this station.

DG7224

DG7224.The X, Y, and Z were computed from the position and the ellipsoidal ht.

DG7224

DG7224.The Laplace correction was computed from DEFLEC18 derived deflections.

DG7224

DG7224.The ellipsoidal height was determined by GPS observations

DG7224.and is referenced to NAD 83.

DG7224

DG7224. The following values were computed from the NAD 83(2011) position.

DG7224

DG7224;		North	East	Units	Scale	Factor	Converg.
DG7224;SPC OH N	-	225,398.777	760,644.336	MT	0.99999628	+1 16	03.3
DG7224;SPC OH N	-	739,495.82	2,495,547.29	sFT	0.99999628	+1 16	03.3
DG7224;UTM 17	-	4,614,379.841	535,747.685	MT	0.99961573	+0 17	08.2
DG7224!	-	Elev Factor x Scale Factor = Combined Factor					
DG7224!SPC OH N	-	0.99995606	x	0.99999628	=	0.99995234	
DG7224!UTM 17	-	0.99995606	x	0.99961573	=	0.99957181	

DG7224

DG7224\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNG3574714379 (NAD 83)

DG7224

SUPERSEDED SURVEY CONTROL

DG7224

DG7224	NAD 83(2007)-	41 40 49.38662(N)	080 34 13.79919(W)	AD(2002.00)	0
DG7224	ELLIP H (02/10/07)	280.179 (m)		GP(2002.00)	
DG7224	NAD 83(1995)-	41 40 49.38670(N)	080 34 13.79933(W)	AD( )	A
DG7224	ELLIP H (09/23/04)	280.182 (m)		GP( )	4 1

DG7224

DG7224.Superseded values are not recommended for survey control.

DG7224

DG7224.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

DG7224.See file [dsdata.pdf](#) to determine how the superseded data were derived.

DG7224

DG7224\_MARKER: DD = SURVEY DISK

DG7224\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

DG7224\_STAMPING: RICHMOND 2002

DG7224\_MARK LOGO: NONE

DG7224\_PROJECTION: RECESSED 18 CENTIMETERS

DG7224\_MAGNETIC: O = OTHER; SEE DESCRIPTION

DG7224\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

DG7224\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

DG7224+SATELLITE: SATELLITE OBSERVATIONS - June 06, 2003

DG7224\_ROD/PIPE-DEPTH: 8.53 meters

DG7224\_SLEEVE-DEPTH : 0.9 meters

DG7224

DG7224	HISTORY	-	Date	Condition	Report By
DG7224	HISTORY	-	200211	MONUMENTED	OH-007
DG7224	HISTORY	-	20030606	GOOD	WOOLPT

DG7224

STATION DESCRIPTION

DG7224

DG7224'DESCRIBED BY WOOLPERT CONSULTANTS 2003 (GTF)

DG7224'THE STATION IS LOCATED IN RICHMOND TOWNSHIP, ABOUT 5.2 MI NORTH OF

DG7224'ANDOVER, 5.0 MI EAST OF DORSET, 2.4 MI SOUTH OF NORTH RICHMOND, AND



DG7224'2.8 MI WEST OF THE OHIO/PENNSYLVANIA STATE LINE.

DG7224'

DG7224'TO REACH THE STATION FROM THE INTERSECTION OF COUNTY ROAD 6, STATE  
DG7224'ROUTE 7, AND STATE ROUTE 85 IN ANDOVER, GO NORTH FOR 5.1 MI ON ROUTE  
DG7224'7 TO FOOTVILLE-RICHMOND RD. AND THE STATION IN THE NORTHWEST QUADRANT  
DG7224'OF THE INTERSECTION.

DG7224'

DG7224'THE STATION IS A BRONZE DISK ON A STAINLESS STEEL ROD DRIVEN TO  
DG7224'REFUSAL, STAMPED ---RICHMOND 2002---, SET IN A CONCRETE MONUMENT  
DG7224'RECESSED 18.2 CM BELOW THE GROUND AND INSIDE A MONUMENT BOX. THE  
DG7224'STATION IS 17.6 FT SOUTH OF THE EAST POST OF THE RICHMOND TOWN HALL  
DG7224'SIGN, 30.7 FT WEST OF THE WEST EDGE OF ROUTE 7/COUNTY ROAD 6  
DG7224'PAVEMENT, 41.3 FT NORTH OF POWER POLE NUMBER 100151, AND 53.2 FT EAST  
DG7224'OF THE SOUTHEAST CORNER OF THE TOWN HALL BUILDING.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = DECEMBER  9, 2019
DG7225 *****
DG7225 CBN - This is a Cooperative Base Network Control Station.
DG7225 DESIGNATION - RIDG31
DG7225 PID - DG7225
DG7225 STATE/COUNTY- OH/HENRY
DG7225 COUNTRY - US
DG7225 USGS QUAD - RIDGEVILLE CORNERS (1977)
DG7225
DG7225 *CURRENT SURVEY CONTROL
DG7225
DG7225* NAD 83(2011) POSITION- 41 25 39.53276(N) 084 20 29.31073(W) ADJUSTED
DG7225* NAD 83(2011) ELLIP HT- 183.401 (meters) (06/27/12) ADJUSTED
DG7225* NAD 83(2011) EPOCH - 2010.00
DG7225* NAVD 88 ORTHO HEIGHT - 218.0 (meters) 715. (feet) GPS OBS
DG7225
DG7225 NAVD 88 orthometric height was determined with geoid model GEOID03
DG7225 GEOID HEIGHT - -34.582 (meters) GEOID03
DG7225 GEOID HEIGHT - -34.611 (meters) GEOID18
DG7225 NAD 83(2011) X - 472,235.666 (meters) COMP
DG7225 NAD 83(2011) Y - -4,766,098.403 (meters) COMP
DG7225 NAD 83(2011) Z - 4,198,271.924 (meters) COMP
DG7225 LAPLACE CORR - -6.10 (seconds) DEFLEC18
DG7225
DG7225 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DG7225 Standards:
DG7225 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
DG7225 Horiz Ellip SD_N SD_E SD_h (unitless)
DG7225 -----
DG7225 NETWORK 0.56 1.47 0.26 0.18 0.75 0.02923432
DG7225 -----
DG7225 Click here for local accuracies and other accuracy information.
DG7225
DG7225
DG7225.The horizontal coordinates were established by GPS observations
DG7225.and adjusted by the National Geodetic Survey in June 2012.
DG7225
DG7225.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DG7225.been affixed to the stable North American tectonic plate. See
DG7225.NA2011 for more information.
DG7225
DG7225.The horizontal coordinates are valid at the epoch date displayed above
DG7225.which is a decimal equivalence of Year/Month/Day.
DG7225
DG7225.The orthometric height was determined by GPS observations and a
DG7225.high-resolution geoid model.
DG7225
DG7225.Significant digits in the geoid height do not necessarily reflect accuracy.
DG7225.GEOID18 height accuracy estimate available here.
DG7225

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DG7225.Click [here](#) to see if photographs exist for this station.  
 DG7225  
 DG7225.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 DG7225  
 DG7225.The Laplace correction was computed from DEFLEC18 derived deflections.  
 DG7225  
 DG7225.The ellipsoidal height was determined by GPS observations  
 DG7225.and is referenced to NAD 83.  
 DG7225  
 DG7225. The following values were computed from the NAD 83(2011) position.  
 DG7225

DG7225;		North	East	Units	Scale	Factor	Converg.
DG7225;SPC OH N	-	197,177.112	446,090.640	MT	0.99995883	-1	12 35.1
DG7225;SPC OH N	-	646,905.24	1,463,549.04	sFT	0.99995883	-1	12 35.1
DG7225;UTM 16	-	4,589,643.229	722,144.689	MT	1.00020735	+1	45 35.3
DG7225!	-	Elev Factor x Scale Factor = Combined Factor					
DG7225!SPC OH N	-	0.99997123	x	0.99995883	=	0.99993007	
DG7225!UTM 16	-	0.99997123	x	1.00020735	=	1.00017858	

DG7225\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL2214489643 (NAD 83)

SUPERSEDED SURVEY CONTROL

DG7225	NAD 83(2007)-	41 25 39.53288(N)	084 20 29.31156(W)	AD(2002.00)	0
DG7225	ELLIP H (02/10/07)	183.414 (m)		GP(2002.00)	
DG7225	NAD 83(1995)-	41 25 39.53281(N)	084 20 29.31158(W)	AD( )	A
DG7225	ELLIP H (09/23/04)	183.409 (m)		GP( )	4 1

DG7225.Superseded values are not recommended for survey control.  
 DG7225  
 DG7225.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 DG7225.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 DG7225

DG7225\_MARKER: DD = SURVEY DISK  
 DG7225\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 DG7225\_MARK LOGO: OH-069  
 DG7225\_PROJECTION: RECESSED 8 CENTIMETERS  
 DG7225\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
 DG7225\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 DG7225+STABILITY: SURFACE MOTION  
 DG7225\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 DG7225+SATELLITE: SATELLITE OBSERVATIONS - 2003

DG7225	HISTORY	- Date	Condition	Report By
DG7225	HISTORY	- 2003	MONUMENTED	OH-039

STATION DESCRIPTION

DG7225'DESCRIBED BY DEFIANCE COUNTY OHIO 2003 (WS)  
 DG7225'THE STATION IS LOCATED 10 MI NORTH AND 1 MI EAST OF THE DEFIANCE  
 DG7225'COUNTY COURTHOUSE, AT THE DEFIANCE-HENRY-WILLIAMS COUNTY LINE, ON  
 DG7225'PUBLIC RIGHT-OF-WAY AND THE PROPERTY OF WILLIAM AMOS.  
 DG7225'  
 DG7225'TO REACH FROM THE JUNCTION OF US HIGHWAY 24 AND STATE ROUTE 66 ON THE



DG7225'NORTH SIDE OF DEFIANCE, GO NORTH ON ROUTE 66 FOR 8.25 MI TO THE  
DG7225'INTERSECTION OF DEFIANCE-WILLIAMS COUNTY LINE ROAD. TURN RIGHT AND  
DG7225'GO EAST ON THE COUNTY LINE ROAD FOR 1.0 MI TO THE INTERSECTION WITH  
DG7225'CARPENTER ROAD AND THE STATION ON THE LEFT.

DG7225'

DG7225'THE STATION IS A BRASS CAP SET IN A ROUND CONCRETE MONUMENT. LOCATED  
DG7225'49.28 FT EAST OF CARPENTER ROAD AND 20 FT NORTH OF THE COUNTY LINE  
DG7225'ROAD CENTERLINE.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

AB6088 \*\*\*\*\*

AB6088 CBN - This is a Cooperative Base Network Control Station.

AB6088 DESIGNATION - **RND HEAD**

AB6088 PID - AB6088

AB6088 STATE/COUNTY- OH/HARDIN

AB6088 COUNTRY - US

AB6088 USGS QUAD - ROUNDHEAD (1982)

AB6088

AB6088 \*CURRENT SURVEY CONTROL

AB6088

AB6088\* NAD 83(2011) POSITION- 40 34 18.46297(N) 083 50 16.10572(W) ADJUSTED

AB6088\* NAD 83(2011) ELLIP HT- 278.979 (meters) (06/27/12) ADJUSTED

AB6088\* NAD 83(2011) EPOCH - 2010.00

AB6088\* [NAVD 88](#) ORTHO HEIGHT - 313.4 (meters) 1028. (feet) GPS OBS

AB6088

AB6088 NAVD 88 orthometric height was determined with geoid model GEOID93

AB6088 GEOID HEIGHT - -34.486 (meters) GEOID93

AB6088 GEOID HEIGHT - -34.461 (meters) GEOID18

AB6088 NAD 83(2011) X - 520,815.410 (meters) COMP

AB6088 NAD 83(2011) Y - -4,823,831.455 (meters) COMP

AB6088 NAD 83(2011) Z - 4,126,600.430 (meters) COMP

AB6088 LAPLACE CORR - -2.81 (seconds) DEFLEC18

AB6088

AB6088 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

AB6088 Standards:

AB6088 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

AB6088 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

AB6088 -----

AB6088 NETWORK 1.23 2.53 0.58 0.38 1.29 -0.03689762

AB6088 -----

AB6088 Click [here](#) for local accuracies and other accuracy information.

AB6088

AB6088

AB6088.The horizontal coordinates were established by GPS observations

AB6088.and adjusted by the National Geodetic Survey in June 2012.

AB6088

AB6088.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

AB6088.been affixed to the stable North American tectonic plate. See

AB6088.[NA2011](#) for more information.

AB6088

AB6088.The horizontal coordinates are valid at the epoch date displayed above

AB6088.which is a decimal equivalence of Year/Month/Day.

AB6088

AB6088.The orthometric height was determined by GPS observations and a

AB6088.high-resolution geoid model.

AB6088

AB6088.Significant digits in the geoid height do not necessarily reflect accuracy.

AB6088.GEOID18 height accuracy estimate available [here](#).

AB6088



AB6088.Click [here](#) to see if photographs exist for this station.  
 AB6088  
 AB6088.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 AB6088  
 AB6088.The Laplace correction was computed from DEFLEC18 derived deflections.  
 AB6088  
 AB6088.The ellipsoidal height was determined by GPS observations  
 AB6088.and is referenced to NAD 83.  
 AB6088  
 AB6088. The following values were computed from the NAD 83(2011) position.

AB6088;		North	East	Units	Scale	Factor	Converg.
AB6088;SPC OH N	-	101,380.053	486,725.185	MT	0.99997636	-0 52	43.9
AB6088;SPC OH N	-	332,611.06	1,596,864.21	sFT	0.99997636	-0 52	43.9
AB6088;UTM 17	-	4,495,094.906	259,782.881	MT	1.00031034	-1 50	47.7
AB6088!	-	Elev Factor x Scale Factor = Combined Factor					
AB6088!SPC OH N	-	0.99995624	x	0.99997636	=	0.99993260	
AB6088!UTM 17	-	0.99995624	x	1.00031034	=	1.00026657	

AB6088 U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKE5978295094 (NAD 83)  
 AB6088

SUPERSEDED SURVEY CONTROL

AB6088	NAD 83(2007)-	40 34 18.46307(N)	083 50 16.10649(W)	AD(2002.00)	0
AB6088	ELLIP H (02/10/07)	278.996 (m)		GP(2002.00)	
AB6088	ELLIP H (03/08/05)	278.987 (m)		GP( )	4 2
AB6088	NAD 83(1995)-	40 34 18.46312(N)	083 50 16.10644(W)	AD( )	B
AB6088	ELLIP H (08/20/96)	279.010 (m)		GP( )	4 2

AB6088  
 AB6088.Superseded values are not recommended for survey control.  
 AB6088  
 AB6088.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 AB6088.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 AB6088

AB6088\_MARKER: DD = SURVEY DISK  
 AB6088\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.+)  
 AB6088\_STAMPING: RND HEAD 1995  
 AB6088\_MARK LOGO: OHDT  
 AB6088\_PROJECTION: FLUSH  
 AB6088\_MAGNETIC: T = STEEL SPIKE ADJACENT TO MONUMENT  
 AB6088\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 AB6088\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 AB6088+SATELLITE: SATELLITE OBSERVATIONS - 1995  
 AB6088\_ROD/PIPE-DEPTH: 9.8 meters  
 AB6088\_SLEEVE-DEPTH : 1.1 meters

AB6088	HISTORY	- Date	Condition	Report By
AB6088	HISTORY	- 1995	MONUMENTED	OHDT

STATION DESCRIPTION

AB6088  
 AB6088'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1995 (EAA)  
 AB6088'STATION IS LOCATED 1.4 KM (0.85 MI) NORTH OF ROUNDHEAD, OHIO ON STATE  
 AB6088'ROUTE 235. TO REACH THE STATION FROM THE JUNCTION OF STATE ROUTES 117



AB6088'AND 235 IN ROUNDHEAD, GO NORTH 1.4 KM (0.85 MI) ON STATE ROUTE 235 TO  
AB6088'STATION ON LEFT (WEST) . STATION LIES 12.2 M (40.0 FT) LEFT (WEST) OF  
AB6088'CENTERLINE OF STATE ROUTE 235, 54 M (177.2 FT) SOUTH OF CENTER OF  
AB6088'FIELD DRIVE, 51.8 M (169.9 FT) SOUTH OF FENCE CORNER POST AND 0.3 M  
AB6088'(1.0 FT) EAST OF ORANGE FIBERGLASS NOAA WITNESS POST. MARK IS UNDER A  
AB6088'PROTECTIVE ALUMINUM COVER ALSO STAMPED --RND HEAD 1995--. MARK IS IN  
AB6088'PUBLIC RIGHT-OF-WAY AND IS ACCESSIBLE AT ALL TIMES. NOTE--SLEEVE DEPTH  
AB6088'DOES NOT MEET CLASS A REQUIREMENTS.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 24, 2019
KZ0175 *****
KZ0175 DESIGNATION -   S 238
KZ0175 PID           -   KZ0175
KZ0175 STATE/COUNTY- OH/WAYNE
KZ0175 COUNTRY       -   US
KZ0175 USGS QUAD     -   WEST SALEM (1981)
KZ0175
KZ0175                                *CURRENT SURVEY CONTROL
KZ0175
KZ0175* NAD 83(2011) POSITION- 40 52 42.46029(N) 082 06 29.35962(W) ADJUSTED
KZ0175* NAD 83(2011) ELLIP HT- 319.200 (meters) (06/27/12) ADJUSTED
KZ0175* NAD 83(2011) EPOCH   - 2010.00
KZ0175* NAVD 88 ORTHO HEIGHT - 352.418 (meters) 1156.22 (feet) ADJUSTED
KZ0175
KZ0175 GEOID HEIGHT   -          -33.223 (meters) GEOID18
KZ0175 NAD 83(2011) X - 663,131.761 (meters) COMP
KZ0175 NAD 83(2011) Y - -4,783,934.739 (meters) COMP
KZ0175 NAD 83(2011) Z - 4,152,436.240 (meters) COMP
KZ0175 LAPLACE CORR   -           2.88 (seconds) DEFLEC18
KZ0175 DYNAMIC HEIGHT - 352.261 (meters) 1155.71 (feet) COMP
KZ0175 MODELED GRAVITY - 980,168.6 (mgal) NAVD 88
KZ0175
KZ0175 VERT ORDER     -   SECOND      CLASS 0
KZ0175
KZ0175 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KZ0175 Standards:
KZ0175          FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
KZ0175          Horiz Ellip              SD_N   SD_E   SD_h      (unitless)
KZ0175 -----
KZ0175 NETWORK      1.26   1.82              0.61   0.33   0.93      0.17118257
KZ0175 -----
KZ0175 Click here for local accuracies and other accuracy information.
KZ0175
KZ0175
KZ0175.The horizontal coordinates were established by GPS observations
KZ0175.and adjusted by the National Geodetic Survey in June 2012.
KZ0175
KZ0175.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KZ0175.been affixed to the stable North American tectonic plate. See
KZ0175.NA2011 for more information.
KZ0175
KZ0175.The horizontal coordinates are valid at the epoch date displayed above
KZ0175.which is a decimal equivalence of Year/Month/Day.
KZ0175
KZ0175.The orthometric height was determined by differential leveling and
KZ0175.adjusted by the NATIONAL GEODETIC SURVEY
KZ0175.in June 1991.
KZ0175
KZ0175.Significant digits in the geoid height do not necessarily reflect accuracy.

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KZ0175.GEOID18 height accuracy estimate available [here](#).  
 KZ0175  
 KZ0175.Click [here](#) to see if photographs exist for this station.  
 KZ0175  
 KZ0175.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 KZ0175  
 KZ0175.The Laplace correction was computed from DEFLEC18 derived deflections.  
 KZ0175  
 KZ0175.The ellipsoidal height was determined by GPS observations  
 KZ0175.and is referenced to NAD 83.  
 KZ0175  
 KZ0175.The dynamic height is computed by dividing the NAVD 88  
 KZ0175.geopotential number by the normal gravity value computed on the  
 KZ0175.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 KZ0175.degrees latitude (g = 980.6199 gals.).

KZ0175  
 KZ0175.The modeled gravity was interpolated from observed gravity values.  
 KZ0175  
 KZ0175. The following values were computed from the NAD 83(2011) position.  
 KZ0175  

KZ0175;		North	East	Units	Scale	Factor	Converg.
KZ0175;SPC OH N	-	134,638.848	633,026.457	MT	0.99994457	+0 15	26.7
KZ0175;SPC OH N	-	441,727.62	2,076,854.30	sFT	0.99994457	+0 15	26.7
KZ0175;UTM 17	-	4,525,856.210	406,630.597	MT	0.99970730	-0 43	31.1

KZ0175  
 KZ0175!  

KZ0175!		Elev Factor	x	Scale Factor	=	Combined Factor
KZ0175!SPC OH N	-	0.99994993	x	0.99994457	=	0.99989450
KZ0175!UTM 17	-	0.99994993	x	0.99970730	=	0.99965725

KZ0175\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMF0663025856 (NAD 83)

SUPERSEDED SURVEY CONTROL

KZ0175	NAD 83(2007)-	40 52 42.46009(N)	082 06 29.36061(W)	AD(2002.00)	0
KZ0175	ELLIP H (02/10/07)	319.217 (m)		GP(2002.00)	
KZ0175	ELLIP H (10/07/05)	319.205 (m)		GP( )	4 1
KZ0175	NAD 83(1995)-	40 52 42.46020(N)	082 06 29.36239(W)	AD( )	1
KZ0175	ELLIP H (10/25/00)	319.207 (m)		GP( )	4 1
KZ0175	NAVD 88	352.42 (m)	1156.2	(f) LEVELING	3
KZ0175	NGVD 29 (??/??/92)	352.617 (m)	1156.88	(f) ADJ UNCH	2 0

KZ0175.Superseded values are not recommended for survey control.  
 KZ0175  
 KZ0175.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 KZ0175.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 KZ0175

KZ0175\_MARKER: DB = BENCH MARK DISK  
 KZ0175\_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE  
 KZ0175\_SP\_SET: CULVERT HEADWALL  
 KZ0175\_STAMPING: S 238 1959  
 KZ0175\_MARK LOGO: CGS  
 KZ0175\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 KZ0175\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 KZ0175+STABILITY: SURFACE MOTION  
 KZ0175\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR



KZ0175+SATELLITE: SATELLITE OBSERVATIONS - August 23, 2018

KZ0175

KZ0175	HISTORY	- Date	Condition	Report By
KZ0175	HISTORY	- 1959	MONUMENTED	CGS
KZ0175	HISTORY	- 1987	GOOD	OHDT
KZ0175	HISTORY	- 19980323	GOOD	GCS
KZ0175	HISTORY	- 20141115	GOOD	GEOCAC
KZ0175	HISTORY	- 20180823	GOOD	USPSQD

KZ0175

KZ0175

STATION DESCRIPTION

KZ0175

KZ0175'DESCRIBED BY COAST AND GEODETIC SURVEY 1959

KZ0175'AT LATTASBURG.

KZ0175'AT LATTASBURG, ABOUT 43 YARDS SOUTHEAST OF THE JUNCTION OF STATE  
KZ0175'HIGHWAYS 301 AND 302 AND COUNTY ROAD 72, 29 FEET SOUTHWEST OF THE  
KZ0175'CENTER LINE OF HIGHWAY 302, IN TOP OF THE SOUTHWEST HEAD WALL  
KZ0175'TO A 6-FOOT CONCRETE BOX CULVERT UNDER HIGHWAY 302, 3 1/2 FEET  
KZ0175'SOUTHEAST OF THE NORTHWEST END OF THE HEAD WALL, ABOUT 6 FEET  
KZ0175'BELOW THE LEVEL OF THE INTERSECTION, AND ABOUT LEVEL WITH HIGHWAY  
KZ0175'302.

KZ0175

KZ0175

STATION RECOVERY (1987)

KZ0175

KZ0175'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1987 (DMK)

KZ0175'RECOVERED IN GOOD CONDITION.

KZ0175

KZ0175

STATION RECOVERY (1998)

KZ0175

KZ0175'RECOVERY NOTE BY GEODETIC CONSULTING SERVICES 1998 (KDZ)

KZ0175'RECOVERED AS DESCRIBED.

KZ0175

KZ0175

STATION RECOVERY (2014)

KZ0175

KZ0175'RECOVERY NOTE BY GEOCACHING 2014 (RLM)

KZ0175'RECOVERED AS DESCRIBED.

KZ0175

KZ0175

STATION RECOVERY (2018)

KZ0175

KZ0175'RECOVERY NOTE BY US POWER SQUADRON 2018 (MLG)

KZ0175'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

MB1708 \*\*\*\*\*

MB1708 DESIGNATION - **S 321**

MB1708 PID - MB1708

MB1708 STATE/COUNTY- OH/ASHTABULA

MB1708 COUNTRY - US

MB1708 USGS QUAD - CONNEAUT (1996)

MB1708

MB1708 \*CURRENT SURVEY CONTROL

MB1708

MB1708\* NAD 83(1986) POSITION- 41 56 35.75 (N) 080 31 17.67 (W) HD\_HELD1

MB1708\* [NAVD 88](#) ORTHO HEIGHT - 206.269 (meters) 676.73 (feet) ADJUSTED

MB1708

MB1708 GEOID HEIGHT - -34.631 (meters) GEOID18

MB1708 DYNAMIC HEIGHT - 206.195 (meters) 676.49 (feet) COMP

MB1708 MODELED GRAVITY - 980,259.5 (mgal) NAVD 88

MB1708

MB1708 VERT ORDER - FIRST CLASS II

MB1708

MB1708.The horizontal coordinates were determined by differentially corrected

MB1708.hand held GPS observations or other comparable positioning techniques

MB1708.and have an estimated accuracy of +/- 3 meters.

MB1708.

MB1708.The orthometric height was determined by differential leveling and

MB1708.adjusted by the NATIONAL GEODETIC SURVEY

MB1708.in June 1991.

MB1708

MB1708.Significant digits in the geoid height do not necessarily reflect accuracy.

MB1708.GEOID18 height accuracy estimate available [here](#).

MB1708

MB1708.Click [here](#) to see if photographs exist for this station.

MB1708

MB1708.The dynamic height is computed by dividing the NAVD 88

MB1708.geopotential number by the normal gravity value computed on the

MB1708.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB1708.degrees latitude (g = 980.6199 gals.).

MB1708

MB1708.The modeled gravity was interpolated from observed gravity values.

MB1708

MB1708;	North	East	Units	Estimated Accuracy
MB1708;SPC OH N -	254,681.1	764,054.7	MT	(+/- 3 meters HH1 GPS)

MB1708

MB1708\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNG3965743587 (NAD 83)

MB1708

MB1708 SUPERSEDED SURVEY CONTROL

MB1708

MB1708 NGVD 29 (06/03/92) 206.469 (m) 677.39 (f) ADJUSTED 1 2

MB1708

MB1708.Superseded values are not recommended for survey control.

MB1708



MB1708.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB1708.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
MB1708

MB1708\_MARKER: F = FLANGE-ENCASED ROD  
MB1708\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)  
MB1708\_STAMPING: S 321 1981  
MB1708\_MARK LOGO: NGS  
MB1708\_PROJECTION: FLUSH  
MB1708\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
MB1708\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
MB1708\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MB1708+SATELLITE: SATELLITE OBSERVATIONS - April 14, 2007  
MB1708\_ROD/PIPE-DEPTH: 17.0 meters

MB1708	HISTORY	- Date	Condition	Report By
MB1708	HISTORY	- 1981	MONUMENTED	NGS
MB1708	HISTORY	- 1988	GOOD	USPSQD
MB1708	HISTORY	- 19931115	GOOD	OHDT
MB1708	HISTORY	- 19960704	GOOD	USPSQD
MB1708	HISTORY	- 20070414	GOOD	GEOCAC

MB1708

STATION DESCRIPTION

MB1708

MB1708'DESCRIBED BY NATIONAL GEODETIC SURVEY 1981  
MB1708'3.0 KM (1.9 MI) EAST FROM CONNEAUT.  
MB1708'3.0 KILOMETERS (1.9 MILES) EAST ALONG US HIGHWAY 20 FROM THE US POST  
MB1708'OFFICE IN CONNEAUT TO THE MARK ON THE RIGHT, THE MARK IS AT THE  
MB1708'SOUTHEAST CORNER OF THE CONCRETE BASE OF A 5-FOOT HIGH GRANITE STONE  
MB1708'MONUMENT WITH A PLAQUE INSCRIBED NORTHEAST BOUNDARY MARKER, 0.2  
MB1708'KILOMETER (0.1 MILE) WEST OF THE OHIO AND PENNSYLVANIA STATE LINE,  
MB1708'NOTE THIS MARK MAY ALSO BE REACHED BY GOING 4.3 KILOMETERS (2.7 MILES)  
MB1708'WEST-SOUTHWEST ALONG US HIGHWAY 20 FROM THE US POST OFFICE IN WEST  
MB1708'SPRINGFIELD PENNSYLVANIA, 9.14 METERS (30.0 FT) SOUTH OF THE EASTBOUND  
MB1708'LANE OF THE HIHGWAY, 23.77 METERS (78.0 FEET) WEST-SOUTHWEST OF  
MB1708'A 48-INCH OAK TREE AND 0.3 METER (1.0 FOOT) SOUTHEAST OF THE  
MB1708'SOUTHEAST CORNER OF THE MONUMENT.  
MB1708'THE MARK IS 0.18 M ABOVE THE HIGHWAY.

MB1708

STATION RECOVERY (1988)

MB1708'RECOVERY NOTE BY US POWER SQUADRON 1988 (GM)  
MB1708'RECOVERED IN GOOD CONDITION.

MB1708

STATION RECOVERY (1993)

MB1708'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1993 (BM)  
MB1708'RECOVERED IN GOOD CONDITION.

MB1708

STATION RECOVERY (1996)

MB1708'RECOVERY NOTE BY US POWER SQUADRON 1996  
MB1708'RECOVERED IN GOOD CONDITION.

MB1708

STATION RECOVERY (2007)

MB1708

MB1708'RECOVERY NOTE BY GEOCACHING 2007 (RLM)  
MB1708'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = JANUARY 19, 2020
AE2618 *****
AE2618 DESIGNATION - SHINDEL
AE2618 PID - AE2618
AE2618 STATE/COUNTY- OH/MERCER
AE2618 COUNTRY - US
AE2618 USGS QUAD - MENDON (2016)
AE2618
AE2618 *CURRENT SURVEY CONTROL
AE2618
AE2618* NAD 83(2011) POSITION- 40 42 47.57959(N) 084 34 49.03426(W) ADJUSTED
AE2618* NAD 83(2011) ELLIP HT- 221.527 (meters) (06/27/12) ADJUSTED
AE2618* NAD 83(2011) EPOCH - 2010.00
AE2618* NAVD 88 ORTHO HEIGHT - 255.2 (meters) 837. (feet) GPS OBS
AE2618
AE2618 NAVD 88 orthometric height was determined with geoid model GEOID96
AE2618 GEOID HEIGHT - -33.592 (meters) GEOID96
AE2618 GEOID HEIGHT - -33.631 (meters) GEOID18
AE2618 NAD 83(2011) X - 457,292.453 (meters) COMP
AE2618 NAD 83(2011) Y - -4,819,948.407 (meters) COMP
AE2618 NAD 83(2011) Z - 4,138,479.797 (meters) COMP
AE2618 LAPLACE CORR - -3.67 (seconds) DEFLEC18
AE2618
AE2618 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AE2618 Standards:
AE2618 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
AE2618 Horiz Ellip SD_N SD_E SD_h (unitless)
AE2618 -----
AE2618 NETWORK 1.76 2.72 0.81 0.59 1.39 0.04792703
AE2618 -----
AE2618 Click here for local accuracies and other accuracy information.
AE2618
AE2618
AE2618.The horizontal coordinates were established by GPS observations
AE2618.and adjusted by the National Geodetic Survey in June 2012.
AE2618
AE2618.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AE2618.been affixed to the stable North American tectonic plate. See
AE2618.NA2011 for more information.
AE2618
AE2618.The horizontal coordinates are valid at the epoch date displayed above
AE2618.which is a decimal equivalence of Year/Month/Day.
AE2618
AE2618.The orthometric height was determined by GPS observations and a
AE2618.high-resolution geoid model.
AE2618
AE2618.Significant digits in the geoid height do not necessarily reflect accuracy.
AE2618.GEOID18 height accuracy estimate available here.
AE2618

```



AE2618.Click [photographs](#) - Photos may exist for this station.

AE2618

AE2618.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AE2618

AE2618.The Laplace correction was computed from DEFLEC18 derived deflections.

AE2618

AE2618.The ellipsoidal height was determined by GPS observations

AE2618.and is referenced to NAD 83.

AE2618

AE2618. The following values were computed from the NAD 83(2011) position.

AE2618

AE2618;		North	East	Units	Scale	Factor	Converg.
AE2618;SPC OH N	-	118,311.377	424,242.237	MT	0.99995817	-1 21	59.9
AE2618;SPC OH N	-	388,159.91	1,391,868.07	sFT	0.99995817	-1 21	59.9
AE2618;UTM 16	-	4,509,738.224	704,390.217	MT	1.00011422	+1 34	43.9
AE2618!	-	Elev Factor x Scale Factor =		Combined Factor			
AE2618!SPC OH N	-	0.99996525	x 0.99995817	=	0.99992342		
AE2618!UTM 16	-	0.99996525	x 1.00011422	=	1.00007947		

AE2618

AE2618\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL0439009738 (NAD 83)

AE2618

SUPERSEDED SURVEY CONTROL

AE2618

AE2618	NAD 83(2007)-	40 42 47.57968(N)	084 34 49.03506(W)	AD(2002.00)	0
AE2618	ELLIP H (02/10/07)	221.545 (m)		GP(2002.00)	
AE2618	ELLIP H (10/07/05)	221.543 (m)		GP( )	4 1
AE2618	NAD 83(1995)-	40 42 47.57994(N)	084 34 49.03506(W)	AD( )	1
AE2618	ELLIP H (09/04/97)	221.539 (m)		GP( )	4 1

AE2618.No superseded survey control is available for this station.

AE2618

AE2618\_MARKER: F = FLANGE-ENCASED ROD

AE2618\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

AE2618\_STAMPING: SHINDEL

AE2618\_MARK LOGO: OHDT

AE2618\_PROJECTION: RECESSED 8 CENTIMETERS

AE2618\_MAGNETIC: I = MARKER IS A STEEL ROD

AE2618\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AE2618\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AE2618+SATELLITE: SATELLITE OBSERVATIONS - October 03, 2010

AE2618\_ROD/PIPE-DEPTH: 5.7 meters

AE2618\_SLEEVE-DEPTH : 1.1 meters

AE2618

AE2618 HISTORY - Date Condition Report By

AE2618 HISTORY - 1995 MONUMENTED OHDT

AE2618 HISTORY - 20101003 GOOD GEOCAC

AE2618

STATION DESCRIPTION

AE2618

AE2618'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1995 (KM)  
AE2618'IN THE NORTHEAST QUARTER OF SECTION 12, TOWN 4 SOUTH, RANGE 2 EAST,  
AE2618'DUBLIN TOWNSHIP, MERCER COUNTY, OHIO. TO REACH FROM THE MERCER COUNTY  
AE2618'COURT HOUSE IN CELINA, TRAVEL NORTH ON US 127 FOR 11.2 MILES. (18.0  
AE2618'KM) MARK IS IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF STATE  
AE2618'ROUTE 117 AND US 127, 50 FEET (15.2 M) SOUTH OF THE CENTERLINE OF



AE2618'STATE ROUTE 117, 135 FEET (41.1 M) EAST OF THE CENTERLINE OF US 127,  
AE2618'15 FEET (4.6 M) WEST OF A 10 INCH DIAMETER POST FOR TELEPHONE  
AE2618'UTILITIES. MARK IS A STEEL ROD IN AN ALUMINUM MONUMENT BOX ADJACENT  
AE2618'TO A METAL POST PLACED BY THE MERCER COUNTY ENGINEER.

AE2618

AE2618

STATION RECOVERY (2010)

AE2618

AE2618'RECOVERY NOTE BY GEOCACHING 2010 (RLM)

AE2618'RECOVERED IN GOOD CONDITION.

AE2618'

\*\*\* retrieval complete.

Elapsed Time = 00:00:01





# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

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AJ7196 *****
AJ7196 CORS - This is a GPS Continuously Operating Reference Station.
AJ7196 DESIGNATION - SIDNEY CORS ARP
AJ7196 CORS_ID - SIDN
AJ7196 PID - AJ7196
AJ7196 STATE/COUNTY- OH/SHELBY
AJ7196 COUNTRY - US
AJ7196 USGS QUAD - SIDNEY (1982)

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AJ7196 \*CURRENT SURVEY CONTROL

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AJ7196* NAD 83(2011) POSITION- 40 18 37.26523(N) 084 10 15.90683(W) ADJUSTED
AJ7196* NAD 83(2011) ELLIP HT- 293.415 (meters) (06/??/19) ADJUSTED
AJ7196* NAD 83(2011) EPOCH - 2010.00
AJ7196
AJ7196 GEOID HEIGHT - -33.152 (meters) GEOID18
AJ7196 NAD 83(2011) X - 494,661.217 (meters) COMP
AJ7196 NAD 83(2011) Y - -4,845,525.459 (meters) COMP
AJ7196 NAD 83(2011) Z - 4,104,513.686 (meters) COMP

```

AJ7196 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

AJ7196	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
AJ7196	-----	-----	-----	-----	-----	-----
AJ7196	NETWORK	0.13 0.24	0.03	0.06	0.12	-0.24503100
AJ7196	-----	-----	-----	-----	-----	-----

AJ7196.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

AJ7196.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

AJ7196.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

AJ7196.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

AJ7196.Additional information on MYCS2 is available at <https://geodesy.noaa.gov/CORS/coords.shtml>



AJ7196.Significant digits in the geoid height do not necessarily reflect accuracy.  
AJ7196.GEOID18 height accuracy estimate available [here](#).

AJ7196

AJ7196.The PID for the CORS L1 Phase Center is DQ2075.

AJ7196

AJ7196.Click [here](#) to see if photographs exist for this station.

AJ7196

AJ7196.The XYZ, and position/ellipsoidal ht. are equivalent.

AJ7196

AJ7196.The ellipsoidal height was determined by GPS observations

AJ7196.and is referenced to NAD 83.

AJ7196

AJ7196. The following values were computed from the NAD 83(2011) position.

AJ7196

AJ7196;		North	East	Units	Scale	Factor	Converg.
AJ7196;SPC OH N	-	72,840.638	457,952.743	MT	1.00002583	-1 05	52.2
AJ7196;SPC OH N	-	238,977.99	1,502,466.62	sFT	1.00002583	-1 05	52.2
AJ7196;UTM 16	-	4,466,045.082	740,394.661	MT	1.00031143	+1 49	51.5
AJ7196!	-	Elev Factor x Scale Factor =		Combined Factor			
AJ7196!SPC OH N	-	0.99995397	x 1.00002583	=	0.99997980		
AJ7196!UTM 16	-	0.99995397	x 1.00031143	=	1.00026539		

AJ7196

AJ7196\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGK4039466045 (NAD 83)

AJ7196

SUPERSEDED SURVEY CONTROL

AJ7196

AJ7196	ELLIP H (06/27/12)	293.422 (m)				GP(2010.00)	0 0
AJ7196	NAD 83(2011)-	40 18 37.26519(N)	084 10	15.90650(W)	AD(2010.00)	c	
AJ7196	NAD 83(2011)-	40 18 37.26527(N)	084 10	15.90664(W)	AD(2010.00)	c	
AJ7196	ELLIP H (08/??/11)	293.396 (m)			GP(2010.00)	c c	
AJ7196	ELLIP H (02/10/07)	293.434 (m)			GP(2002.00)		
AJ7196	NAD 83(2007)-	40 18 37.26536(N)	084 10	15.90731(W)	AD(2002.00)	c	
AJ7196	NAD 83(CORS)-	40 18 37.26536(N)	084 10	15.90731(W)	AD(2002.00)	c	
AJ7196	ELLIP H (03/??/02)	293.434 (m)			GP(2002.00)	c c	
AJ7196	NAD 83(CORS)-	40 18 37.26537(N)	084 10	15.90730(W)	AD(1997.00)	c	
AJ7196	ELLIP H (01/??/02)	293.434 (m)			GP(1997.00)	c c	

AJ7196

AJ7196.Superseded values are not recommended for survey control.

AJ7196.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AJ7196.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AJ7196\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

AJ7196

STATION DESCRIPTION

AJ7196'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

AJ7196'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

AJ7196'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

AJ7196'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

AJ7196' ftp://cors.ngs.noaa.gov/cors/README.txt

AJ7196' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

AJ7196' ftp://cors.ngs.noaa.gov/cors/station\_log

AJ7196' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = JANUARY 23, 2020
KZ1449 *****
KZ1449 FBN          - This is a Federal Base Network Control Station.
KZ1449 DESIGNATION - T 23
KZ1449 PID          - KZ1449
KZ1449 STATE/COUNTY- OH/MARION
KZ1449 COUNTRY      - US
KZ1449 USGS QUAD    - MARION WEST (2016)
KZ1449
KZ1449                                *CURRENT SURVEY CONTROL
KZ1449
KZ1449* NAD 83(2011) POSITION- 40 35 40.88196(N) 083 13 02.51128(W) ADJUSTED
KZ1449* NAD 83(2011) ELLIP HT- 244.887 (meters) (06/27/12) ADJUSTED
KZ1449* NAD 83(2011) EPOCH - 2010.00
KZ1449* NAVD 88 ORTHO HEIGHT - 279.495 (meters) 916.98 (feet) ADJUSTED
KZ1449
KZ1449 GEOID HEIGHT - -34.578 (meters) GEOID18
KZ1449 NAD 83(2011) X - 572,821.625 (meters) COMP
KZ1449 NAD 83(2011) Y - -4,816,240.847 (meters) COMP
KZ1449 NAD 83(2011) Z - 4,128,509.111 (meters) COMP
KZ1449 LAPLACE CORR - 2.05 (seconds) DEFLEC18
KZ1449 DYNAMIC HEIGHT - 279.353 (meters) 916.51 (feet) COMP
KZ1449 MODELED GRAVITY - 980,110.5 (mgal) NAVD 88
KZ1449
KZ1449 VERT ORDER - SECOND CLASS 0
KZ1449
KZ1449 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KZ1449 Standards:
KZ1449          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
KZ1449          Horiz Ellip          SD_N   SD_E   SD_h          (unitless)
KZ1449 -----
KZ1449 NETWORK    0.28    0.88          0.12   0.11   0.45          0.08376571
KZ1449 -----
KZ1449 Click here for local accuracies and other accuracy information.
KZ1449
KZ1449
KZ1449.The horizontal coordinates were established by GPS observations
KZ1449.and adjusted by the National Geodetic Survey in June 2012.
KZ1449
KZ1449.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KZ1449.been affixed to the stable North American tectonic plate. See
KZ1449.NA2011 for more information.
KZ1449
KZ1449.The horizontal coordinates are valid at the epoch date displayed above
KZ1449.which is a decimal equivalence of Year/Month/Day.
KZ1449
KZ1449.The orthometric height was determined by differential leveling and
KZ1449.adjusted by the NATIONAL GEODETIC SURVEY
KZ1449.in June 1991.

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KZ1449

KZ1449.Significant digits in the geoid height do not necessarily reflect accuracy.

KZ1449.GEOID18 height accuracy estimate available [here](#).

KZ1449

KZ1449.Click [photographs](#) - Photos may exist for this station.

KZ1449

KZ1449.The X, Y, and Z were computed from the position and the ellipsoidal ht.

KZ1449

KZ1449.The Laplace correction was computed from DEFLEC18 derived deflections.

KZ1449

KZ1449.The ellipsoidal height was determined by GPS observations

KZ1449.and is referenced to NAD 83.

KZ1449

KZ1449.The dynamic height is computed by dividing the NAVD 88

KZ1449.geopotential number by the normal gravity value computed on the

KZ1449.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

KZ1449.degrees latitude (g = 980.6199 gals.).

KZ1449

KZ1449.The modeled gravity was interpolated from observed gravity values.

KZ1449

KZ1449. The following values were computed from the NAD 83(2011) position.

KZ1449

KZ1449;		North	East	Units	Scale	Factor	Converg.
KZ1449;SPC OH N	-	103,303.227	539,278.543	MT	0.99997300	-0 28 16.6	
KZ1449;SPC OH N	-	338,920.67	1,769,283.02	sFT	0.99997300	-0 28 16.6	
KZ1449;UTM 17	-	4,496,128.443	312,371.334	MT	1.00003335	-1 26 35.8	
KZ1449!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
KZ1449!SPC OH N	-	0.99996159	x	0.99997300	=	0.99993459	
KZ1449!UTM 17	-	0.99996159	x	1.00003335	=	0.99999494	

KZ1449

KZ1449\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLE1237196128 (NAD 83)

KZ1449

KZ1449 SUPERSEDED SURVEY CONTROL

KZ1449

KZ1449	NAD 83(2007)-	40 35 40.88207(N)	083 13 02.51204(W)	AD(2002.00)	0
KZ1449	ELLIP H (02/10/07)	244.900 (m)		GP(2002.00)	
KZ1449	ELLIP H (09/23/04)	244.895 (m)		GP( )	4 1
KZ1449	ELLIP H (05/14/03)	244.884 (m)		GP( )	3 1
KZ1449	NAD 83(1995)-	40 35 40.88207(N)	083 13 02.51196(W)	AD( )	B
KZ1449	ELLIP H (08/20/96)	244.955 (m)		GP( )	4 2
KZ1449	NAVD 88	279.50 (m)	917.0 (f)	LEVELING	3
KZ1449	NGVD 29 (??/??/92)	279.634 (m)	917.43 (f)	ADJ UNCH	2 0

KZ1449.No superseded survey control is available for this station.

KZ1449

KZ1449\_MARKER: DB = BENCH MARK DISK

KZ1449\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

KZ1449\_STAMPING: T 23 1934

KZ1449\_MARK LOGO: CGS

KZ1449\_PROJECTION: PROJECTING 2 CENTIMETERS

KZ1449\_MAGNETIC: N = NO MAGNETIC MATERIAL

KZ1449\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

KZ1449+STABILITY: SURFACE MOTION

KZ1449\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

KZ1449+SATELLITE: SATELLITE OBSERVATIONS - January 22, 2016



KZ1449				
KZ1449	HISTORY	- Date	Condition	Report By
KZ1449	HISTORY	- 1934	MONUMENTED	CGS
KZ1449	HISTORY	- 1960	GOOD	CGS
KZ1449	HISTORY	- 19950815	GOOD	OHDT
KZ1449	HISTORY	- 19970730	GOOD	WOOLPT
KZ1449	HISTORY	- 20021126	GOOD	NGS
KZ1449	HISTORY	- 20030710	GOOD	OHDT
KZ1449	HISTORY	- 20120629	GOOD	WOOLPT
KZ1449	HISTORY	- 20160122	GOOD	MCA

KZ1449

KZ1449

STATION DESCRIPTION

KZ1449

KZ1449'DESCRIBED BY COAST AND GEODETIC SURVEY 1960

KZ1449'2 MI E FROM ESPYVILLE.

KZ1449'ABOUT 2.05 MILES EAST ALONG THE ERIE RAILROAD FROM THE CROSSING  
 KZ1449'OF ROAD 84 AT EPSYVILLE, 89 FEET SOUTHWEST OF AND ACROSS THE  
 KZ1449'TRACK FROM MILEPOLE M 4, AT THE CROSSING OF HIGHWAY 203, 1.1  
 KZ1449'MILE SOUTH OF BIG ISLAND, 38 FEET SOUTH OF THE SOUTH RAIL OF SOUTH  
 KZ1449'TRACK, 35 FEET EAST OF THE CENTER LINE OF HIGHWAY 203, 12 1/2  
 KZ1449'FEET NORTHEAST OF A FENCE CORNER, 33 1/2 FEET SOUTHEAST OF A  
 KZ1449'FLASHING CROSSING SIGN, 23 1/2 FEET NORTHEAST OF TELEPHONE POLE  
 KZ1449'NO. 40, 19 FEET EAST OF POWER LINE POLE NO. 1039 57 (SUPPORTING  
 KZ1449'A METER BOX FOR FLASING SIGN), ABOUT 5 FEET BELOW THE LEVEL OF  
 KZ1449'THE TRACK, AND SET IN TOP OF A CONCRETE POST PROJECTING 3 INCHES.

KZ1449

KZ1449

STATION RECOVERY (1995)

KZ1449

KZ1449'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 1995

KZ1449'STATION IS LOCATED 8.0 KM (4.95 MI) EAST OF NEW BLOOMINGTON, 7.2 KM  
 KZ1449'(4.45 MI) NORTH OF GREEN CAMP, AND 7.7 KM (4.80 MI) WEST OF THE CITY  
 KZ1449'OF MARION, ALONG STATE HIGHWAY 203 AT AN OLD ABANDONED RAILROAD GRADE.  
 KZ1449'TO REACH FROM THE JUNCTION OF STATE HIGHWAYS 309 AND 95 IN MARION, GO  
 KZ1449'WEST ON STATE HIGHWAY 95 FOR 6.6 KM (4.10 MI) TO THE INTERSECTION OF  
 KZ1449'STATE HIGHWAY 203, TURN RIGHT, NORTH, ON STATE HIGHWAY 203 FOR 1.06 KM  
 KZ1449'(0.65 MI) TO AN ABANDONED RAILROAD GRADE AND THE NORTHWEST CORNER OF A  
 KZ1449'CULTIVATED FIELD AND THE STATION ON THE RIGHT AND ACROSS THE HIGHWAY  
 KZ1449'FROM GRAIN SILOS. STATION MARK IS A STANDARD COASTAL AND GEODETIC  
 KZ1449'SURVEY BENCH MARK DISK SET IN TOP OF A SQUARE CONCRETE POST PROJECTING  
 KZ1449'2 CM . STATION MARK IS 13.1 M (43.0 FT) SOUTH OF THE APPROXIMATE  
 KZ1449'CENTER OF THE ABANDONED RAILROAD GRADE, 9.8 M (32.2 FT) EAST OF THE  
 KZ1449'HIGHWAY CENTERLINE, 1.04 M (3.41 FT) SOUTHEAST OF A TELEPHONE  
 KZ1449'UNDERGROUND CABLE SIGN AND 0.20 M (0.66 FT) WEST OF A FIBERGLASS AND  
 KZ1449'METAL WITNESS POST. NOTE--PARK ACROSS HIGHWAY FROM STATION.

KZ1449

KZ1449

STATION RECOVERY (1997)

KZ1449

KZ1449'RECOVERY NOTE BY WOOLPERT CONSULTANTS 1997 (JWK)

KZ1449'RECOVERED AS DESCRIBED.

KZ1449

KZ1449

STATION RECOVERY (2002)

KZ1449

KZ1449'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2002 (RSR)

KZ1449'RECOVERED IN GOOD CONDITION BY MAKEEVER AND ASSOCIATES.

KZ1449



KZ1449 STATION RECOVERY (2003)  
KZ1449  
KZ1449'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2003 (JAS)  
KZ1449'RECOVERED AS DESCRIBED.  
KZ1449  
KZ1449 STATION RECOVERY (2012)  
KZ1449  
KZ1449'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2012 (BH)  
KZ1449'RECOVERED IN GOOD CONDITION.  
KZ1449  
KZ1449 STATION RECOVERY (2016)  
KZ1449  
KZ1449'RECOVERY NOTE BY METRO CONSULTING ASSOCIATES 2016 (CCM)  
KZ1449'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

MB0615 \*\*\*\*\*

MB0615 DESIGNATION - **T 161**

MB0615 PID - MB0615

MB0615 STATE/COUNTY- OH/TRUMBULL

MB0615 COUNTRY - US

MB0615 USGS QUAD - CHAMPION (1994)

MB0615

MB0615 \*CURRENT SURVEY CONTROL

MB0615

MB0615\* NAD 83(1986) POSITION- 41 16 48.0 (N) 080 48 47.2 (W) HD\_HELD2

MB0615\* [NAVD 88](#) ORTHO HEIGHT - 280.426 (meters) 920.03 (feet) ADJUSTED

MB0615

MB0615 GEOID HEIGHT - -33.861 (meters) GEOID18

MB0615 DYNAMIC HEIGHT - 280.307 (meters) 919.64 (feet) COMP

MB0615 MODELED GRAVITY - 980,192.7 (mgal) NAVD 88

MB0615

MB0615 VERT ORDER - SECOND CLASS 0

MB0615

MB0615.The horizontal coordinates were established by autonomous hand held GPS observations and have an estimated accuracy of +/- 10 meters.

MB0615.

MB0615.The orthometric height was determined by differential leveling and adjusted by the NATIONAL GEODETIC SURVEY

MB0615.in June 1991.

MB0615

MB0615.Significant digits in the geoid height do not necessarily reflect accuracy.

MB0615.GEOID18 height accuracy estimate available [here](#).

MB0615

MB0615.Click [here](#) to see if photographs exist for this station.

MB0615

MB0615.The dynamic height is computed by dividing the NAVD 88

MB0615.geopotential number by the normal gravity value computed on the

MB0615.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB0615.degrees latitude (g = 980.6199 gals.).

MB0615

MB0615.The modeled gravity was interpolated from observed gravity values.

MB0615

MB0615; North East Units Estimated Accuracy

MB0615;SPC OH N - 180,522. 741,308. MT (+/- 10 meters HH2 GPS)

MB0615

MB0615\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF1565069857(NAD 83)

MB0615

MB0615 SUPERSEDED SURVEY CONTROL

MB0615

MB0615 NGVD 29 (??/??/92) 280.604 (m) 920.62 (f) ADJ UNCH 2 0

MB0615

MB0615.Superseded values are not recommended for survey control.

MB0615

MB0615.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.



MB0615. See file [dsdata.pdf](#) to determine how the superseded data were derived.

MB0615

MB0615\_MARKER: DB = BENCH MARK DISK

MB0615\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MB0615\_STAMPING: T 161 1950

MB0615\_MARK LOGO: CGS

MB0615\_PROJECTION: PROJECTING 5 CENTIMETERS

MB0615\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MB0615+STABILITY: SURFACE MOTION

MB0615\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MB0615+SATELLITE: SATELLITE OBSERVATIONS - April 22, 2019

MB0615

MB0615	HISTORY	- Date	Condition	Report By
MB0615	HISTORY	- 1950	MONUMENTED	CGS
MB0615	HISTORY	- 1984	GOOD	LOCSUR
MB0615	HISTORY	- 19970920	GOOD	USPSQD
MB0615	HISTORY	- 20080326	GOOD	GEOCAC
MB0615	HISTORY	- 20190422	GOOD	USPSQD

MB0615

STATION DESCRIPTION

MB0615

MB0615'DESCRIBED BY COAST AND GEODETIC SURVEY 1950

MB0615'4.3 MI NE FROM WARREN.

MB0615'2.1 MILES NORTH ALONG MAHONING AVENUE FROM THE TRUMBULL COUNTY

MB0615'COURTHOUSE AT WARREN, THENCE ABOUT 1.2 MILES EAST ALONG NORTH

MB0615'RIVER ROAD, THENCE 1 MILE NORTH ALONG NORTH PARK ROAD, AT THE

MB0615'ENTRANCE TO THE LYON AIRPORT. IT IS 27 FEET EAST OF THE

MB0615'CENTERLINE OF THE ROAD, 124 FEET SOUTH OF THE CENTERLINE OF THE

MB0615'ROAD LEADING EAST TO THE HANGER, 42 FEET NORTH OF THE

MB0615'CENTERLINE OF A DRIVEWAY LEADING EAST TO A HOUSE, 4.5 FEET

MB0615'NORTH OF A POWER LINE POLE, 2.5 FEET SOUTH OF A WHITE WITNESS

MB0615'POST AND ABOUT LEVEL WITH THE ROAD. A STANDARD DISK SET IN

MB0615'THE TOP OF A CONCRETE POST PROJECTING 2 INCHES.

MB0615

STATION RECOVERY (1984)

MB0615

MB0615'RECOVERY NOTE BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1984

MB0615'ABOUT 2.1 MILES NORTH MAHONING AVENUE FROM THE TRUMBULL COUNTY

MB0615'COURTHOUSE AT WARREN, THENCE ABOUT 1.2 MILES EAST ALONG NORTH RIVER

MB0615'ROAD, THENCE 1 MILE NORTH ALONG NORTH PARK ROAD AT A SPUR TRACK

MB0615'ENTRANCE, IT IS 21 FEET EAST OF THE CENTERLINE OF PAVEMENT, 51 FEET

MB0615'NORTH OF THE NORTH RAIL OF SPUR TRACK TO K MART CORPORATON

MB0615'DISTRIBUTION PAVEMENT, 51 FEET NORTH OF THE NORTH RAIL OF SPUR TRACK

MB0615'TO K MART CORORATION DISTRIBUTION WAREHOUSE AND 14 FEET NORTH OF A

MB0615'POWER POLE DATE 1952, NUMBER 49 T 1/22 OHIO EDISON CO.

MB0615

STATION RECOVERY (1997)

MB0615

MB0615'RECOVERY NOTE BY US POWER SQUADRON 1997

MB0615'RECOVERED IN GOOD CONDITION.

MB0615

STATION RECOVERY (2008)

MB0615

MB0615'RECOVERY NOTE BY GEOCACHING 2008 (RLM)

MB0615'ADD TO DESCRIPTION, THE MARK IS FLUSH WITH THE GROUND AND ABOUT 1.5





MB0615'FEET BELOW THE LEVEL OF THE ROAD.

MB0615

MB0615

STATION RECOVERY (2019)

MB0615

MB0615'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)

MB0615'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

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1      National Geodetic Survey,      Retrieval Date = NOVEMBER 24, 2019
MB1585 *****
MB1585 DESIGNATION - T 322
MB1585 PID - MB1585
MB1585 STATE/COUNTY- OH/CUYAHOGA
MB1585 COUNTRY - US
MB1585 USGS QUAD - EAST CLEVELAND (1994)
MB1585
MB1585 *CURRENT SURVEY CONTROL
MB1585
MB1585* NAD 83(2011) POSITION- 41 37 13.12600(N) 081 30 11.99583(W) ADJUSTED
MB1585* NAD 83(2011) ELLIP HT- 151.361 (meters) (06/27/12) ADJUSTED
MB1585* NAD 83(2011) EPOCH - 2010.00
MB1585* NAVD 88 ORTHO HEIGHT - 185.785 (meters) 609.53 (feet) ADJUSTED
MB1585
MB1585 GEOID HEIGHT - -34.401 (meters) GEOID18
MB1585 NAD 83(2011) X - 705,548.745 (meters) COMP
MB1585 NAD 83(2011) Y - -4,722,815.756 (meters) COMP
MB1585 NAD 83(2011) Z - 4,214,271.414 (meters) COMP
MB1585 LAPLACE CORR - 2.46 (seconds) DEFLEC18
MB1585 DYNAMIC HEIGHT - 185.715 (meters) 609.30 (feet) COMP
MB1585 MODELED GRAVITY - 980,241.3 (mgal) NAVD 88
MB1585
MB1585 VERT ORDER - FIRST CLASS II
MB1585
MB1585 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB1585 Standards:
MB1585 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
MB1585 Horiz Ellip SD_N SD_E SD_h (unitless)
MB1585 -----
MB1585 NETWORK 8.57 6.98 4.22 2.01 3.56 -0.11737688
MB1585 -----
MB1585 Click here for local accuracies and other accuracy information.
MB1585
MB1585
MB1585.The horizontal coordinates were established by GPS observations
MB1585.and adjusted by the National Geodetic Survey in June 2012.
MB1585
MB1585.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB1585.been affixed to the stable North American tectonic plate. See
MB1585.NA2011 for more information.
MB1585
MB1585.The horizontal coordinates are valid at the epoch date displayed above
MB1585.which is a decimal equivalence of Year/Month/Day.
MB1585
MB1585.The orthometric height was determined by differential leveling and
MB1585.adjusted by the NATIONAL GEODETIC SURVEY
MB1585.in June 1991.
MB1585
MB1585.Significant digits in the geoid height do not necessarily reflect accuracy.

```





MB1585\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)  
MB1585\_STAMPING: T 322 1981  
MB1585\_MARK LOGO: NGS  
MB1585\_PROJECTION: FLUSH  
MB1585\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MB1585\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
MB1585\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MB1585+SATELLITE: SATELLITE OBSERVATIONS - September 25, 2017  
MB1585\_ROD/PIPE-DEPTH: 4.9 meters

MB1585

HISTORY	- Date	Condition	Report By
HISTORY	- 1981	MONUMENTED	NGS
HISTORY	- 19891005	GOOD	NGS
HISTORY	- 19900325	GOOD	AEROS
HISTORY	- 20040920	GOOD	OHDT
HISTORY	- 20050619	GOOD	COMPDA
HISTORY	- 20090719	GOOD	GEOCAC
HISTORY	- 20170925	GOOD	USPSQD

MB1585

STATION DESCRIPTION

MB1585

MB1585'DESCRIBED BY NATIONAL GEODETIC SURVEY 1981  
MB1585'IN EUCLID.  
MB1585'THE MARK IS ABOVE LEVEL WITH BOULEVARD.  
MB1585'IN EUCLID, AT THE SOUTHWEST ANGLE OF THE JUNCTION OF LAKE SHORE  
MB1585'BOULEVARD AND EAST 260TH STREET, AT THE NORTH SIDE OF THE EUCLID FIRE  
MB1585'STATION NUMBER 3 BUILDING, 9.3 METERS (30.5 FEET) SOUTHEAST OF THE  
MB1585'SOUTH CURB OF THE BOULEVARD, 20.12 METERS (66.0 FEET) WEST OF THE  
MB1585'CENTER LINE OF THE STREET, 6.8 METERS (22.3 FEET) EAST OF THE CURB OF  
MB1585'THE FIRE STATION DRIVEWAY, 1.13 METERS (3.7 FEET) NORTH OF THE  
MB1585'FLAGPOLE.

MB1585

STATION RECOVERY (1989)

MB1585

MB1585'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989  
MB1585'IN EUCLID, AT THE SOUTHWEST ANGLE OF THE JUNCTION OF LAKE SHORE  
MB1585'BOULEVARD (STATE ROUTE 83) AND EAST 260TH STREET, AT THE NORTH SIDE  
MB1585'OF THE EUCLID FIRE STATION NUMBER 3 BUILDING, 9.3 METERS (30.5 FEET)  
MB1585'SOUTHEAST OF THE SOUTH CURB OF THE BOULEVARD, 20.12 METERS (66.0  
MB1585'FEET) WEST OF THE CENTER LINE OF THE STREET, 6.8 METERS (22.3 FEET)  
MB1585'EAST OF THE CURB OF THE FIRE STATION DRIVEWAY, 1.13 METERS (3.7 FEET)  
MB1585'NORTH OF THE FLAGPOLE.

MB1585

STATION RECOVERY (1990)

MB1585

MB1585'RECOVERY NOTE BY AERO SERVICE CORPORATION 1990  
MB1585'RECOVERED IN GOOD CONDITION.

MB1585

STATION RECOVERY (2004)

MB1585

MB1585'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)  
MB1585'RECOVERED IN GOOD CONDITION.

MB1585

STATION RECOVERY (2005)

MB1585



MB1585'RECOVERY NOTE BY COMPASSDATA INC 2005 (ST)  
MB1585'RECOVERED IN GOOD CONDITION.  
MB1585  
MB1585 STATION RECOVERY (2009)  
MB1585  
MB1585'RECOVERY NOTE BY GEOCACHING 2009 (RLM)  
MB1585'RECOVERED IN GOOD CONDITION.  
MB1585  
MB1585 STATION RECOVERY (2017)  
MB1585  
MB1585'RECOVERY NOTE BY US POWER SQUADRON 2017 (TJH)  
MB1585'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.6

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = FEBRUARY 27, 2020  
 MC1639 \*\*\*\*\*  
 MC1639 DESIGNATION - **T 344**  
 MC1639 PID - MC1639  
 MC1639 STATE/COUNTY- OH/SENECA  
 MC1639 COUNTRY - US  
 MC1639 USGS QUAD - BLOOMVILLE (2016)

MC1639 \*CURRENT SURVEY CONTROL

MC1639*	NAD 83(1986) POSITION-	41 07 28.	(N) 083 02 05.	(W)	SCALED
MC1639*	<a href="#">NAVD 88</a> ORTHO HEIGHT -	257.941 (meters)	846.26 (feet)		ADJUSTED
MC1639	GEOID HEIGHT -	-35.059 (meters)			GEOID18
MC1639	DYNAMIC HEIGHT -	257.825 (meters)	845.88 (feet)		COMP
MC1639	MODELED GRAVITY -	980,169.7 (mgal)			NAVD 88

MC1639 VERT ORDER - FIRST CLASS II

MC1639.The horizontal coordinates were scaled from a map and have an estimated accuracy of +/- 6 seconds.

MC1639.The orthometric height was determined by differential leveling and adjusted by the NATIONAL GEODETIC SURVEY in April 1995.

MC1639.Significant digits in the geoid height do not necessarily reflect accuracy. GEOID18 height accuracy estimate available [here](#).

MC1639.Click [photographs](#) - Photos may exist for this station.

MC1639.The dynamic height is computed by dividing the NAVD 88 geopotential number by the normal gravity value computed on the Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45 degrees latitude (g = 980.6199 gals.).

MC1639.The modeled gravity was interpolated from observed gravity values.

MC1639;	North	East	Units	Estimated Accuracy
MC1639;SPC OH N -	162,020.	555,100.	MT	(+/- 180 meters Scaled)

MC1639\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF291545 (NAD 83)

MC1639 SUPERSEDED SURVEY CONTROL

MC1639	NGVD 29 (01/19/93)	258.116 (m)	846.84 (f)	ADJUSTED	1 2
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MC1639.No superseded survey control is available for this station.

MC1639\_MARKER: F = FLANGE-ENCASED ROD



MC1639\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)  
MC1639\_STAMPING: T 344 1992  
MC1639\_MARK LOGO: NGS  
MC1639\_PROJECTION: FLUSH  
MC1639\_MAGNETIC: N = NO MAGNETIC MATERIAL  
MC1639\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
MC1639\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MC1639+SATELLITE: SATELLITE OBSERVATIONS - January 29, 2020  
MC1639\_ROD/PIPE-DEPTH: 6.7 meters  
MC1639\_SLEEVE-DEPTH : 0.9 meters

MC1639  
MC1639 HISTORY - Date Condition Report By  
MC1639 HISTORY - 1992 MONUMENTED NGS  
MC1639 HISTORY - 20200129 GOOD INDIV

MC1639

MC1639 STATION DESCRIPTION

MC1639

MC1639'DESCRIBED BY NATIONAL GEODETIC SURVEY 1992  
MC1639'10.2 KM (6.35 MI) EASTERLY ALONG THE CHESSIE SYSTEMS RAILROAD FROM THE  
MC1639'JUNCTION OF STATE HIGHWAY 53 IN TIFFIN, THENCE 0.4 KM (0.25 MI)  
MC1639'NORTHERLY ALONG COUNTY ROAD 43, THENCE 1.6 KM (1.00 MI) EASTERLY ALONG  
MC1639'STATE HIGHWAY 18, 21.9 M (71.9 FT) EAST OF THE CENTER OF COUNTY ROAD  
MC1639'175, 11.9 M (39.0 FT) NORTH OF THE HIGHWAY CENTERLINE, 1.3 M  
MC1639'(4.3 FT) EAST OF A UTILITY POLE, 0.7 M (2.3 FT) BELOW THE LEVEL OF  
MC1639'THE HIGHWAY, AND 0.5 M (1.6 FT) SOUTH OF A WITNESS POST AND FENCE.  
MC1639'NOTE--ACCESS TO THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP. THE  
MC1639'SLEEVE DEPTH DOES NOT MEET THE SPECIFICATIONS FOR A CLASS A MARK.

MC1639

MC1639 STATION RECOVERY (2020)

MC1639

MC1639'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2020 (WRW)  
MC1639'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = JANUARY 23, 2020

LA2550 \*\*\*\*\*

LA2550 DESIGNATION - **T 348**

LA2550 PID - LA2550

LA2550 STATE/COUNTY- OH/ALLEN

LA2550 COUNTRY - US

LA2550 USGS QUAD - CAIRO (2016)

LA2550

LA2550 \*CURRENT SURVEY CONTROL

LA2550

LA2550\* NAD 83(1986) POSITION- 40 48 17.67 (N) 084 01 05.23 (W) HD\_HELD1

LA2550\* [NAVD 88](#) ORTHO HEIGHT - 262.748 (meters) 862.03 (feet) ADJUSTED

LA2550

LA2550 GEOID HEIGHT - -34.888 (meters) GEOID18

LA2550 DYNAMIC HEIGHT - 262.619 (meters) 861.61 (feet) COMP

LA2550 MODELED GRAVITY - 980,126.6 (mgal) NAVD 88

LA2550

LA2550 VERT ORDER - FIRST CLASS II

LA2550

LA2550.The horizontal coordinates were determined by differentially corrected

LA2550.hand held GPS observations or other comparable positioning techniques

LA2550.and have an estimated accuracy of +/- 3 meters.

LA2550.

LA2550.The orthometric height was determined by differential leveling and

LA2550.adjusted by the NATIONAL GEODETIC SURVEY

LA2550.in January 1994.

LA2550

LA2550.Significant digits in the geoid height do not necessarily reflect accuracy.

LA2550.GEOID18 height accuracy estimate available [here](#).

LA2550

LA2550.Click [photographs](#) - Photos may exist for this station.

LA2550

LA2550.The dynamic height is computed by dividing the NAVD 88

LA2550.geopotential number by the normal gravity value computed on the

LA2550.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

LA2550.degrees latitude (g = 980.6199 gals.).

LA2550

LA2550.The modeled gravity was interpolated from observed gravity values.

LA2550

LA2550; North East Units Estimated Accuracy

LA2550;SPC OH N - 127,511.8 471,909.8 MT (+/- 3 meters HH1 GPS)

LA2550

LA2550\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL5153521379 (NAD 83)

LA2550

LA2550 SUPERSEDED SURVEY CONTROL

LA2550

LA2550.No superseded survey control is available for this station.

LA2550

LA2550\_MARKER: I = METAL ROD





LA2550\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)
LA2550\_STAMPING: T 348 1993
LA2550\_MARK LOGO: NGS
LA2550\_PROJECTION: FLUSH
LA2550\_MAGNETIC: I = MARKER IS A STEEL ROD
LA2550\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
LA2550\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
LA2550+SATELLITE: SATELLITE OBSERVATIONS - 1993
LA2550\_ROD/PIPE-DEPTH: 9.3 meters
LA2550\_SLEEVE-DEPTH : 0.9 meters

LA2550

HISTORY	Date	Condition	Report By
HISTORY	- 1993	MONUMENTED	NGS

LA2550 STATION DESCRIPTION
LA2550 DESCRIBED BY NATIONAL GEODETIC SURVEY 1993
LA2550 10.4 KM (6.45 MI) NORTHERLY ALONG INTERSTATE HIGHWAY 75 FROM THE
LA2550 JUNCTION OF STATE HIGHWAY 117 IN LIMA (EXIT 125), 550.0 M (1804.5 FT)
LA2550 SOUTHWEST OF THE CENTER OF THAYER ROAD, 38.1 M (125.0 FT) SOUTHWEST
LA2550 OF THE SOUTHEAST END OF A CULVERT, 24.8 M (81.4 FT) SOUTHEAST OF THE
LA2550 CENTERLINE OF THE NORTHBOUND LANES OF THE HIGHWAY, 1.4 M (4.6 FT)
LA2550 BELOW THE LEVEL OF THE HIGHWAY, AND 0.6 M (2.0 FT) NORTHWEST OF A
LA2550 WITNESS POST AND FENCE. NOTE--ACCESS TO THE DATUM POINT IS THROUGH A
LA2550 5-INCH LOGO CAP. THE SLEEVE DEPTH DOES NOT MEET THE SPECIFICATIONS
LA2550 FOR A CLASS A MARK.

\*\*\* retrieval complete.
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = JANUARY 6, 2020

KZ2428 \*\*\*\*\*

KZ2428 DESIGNATION - **T 350**

KZ2428 PID - KZ2428

KZ2428 STATE/COUNTY- OH/HANCOCK

KZ2428 COUNTRY - US

KZ2428 USGS QUAD - ARLINGTON (1972)

KZ2428

KZ2428 \*CURRENT SURVEY CONTROL

KZ2428

KZ2428\* NAD 83(2011) POSITION- 40 58 30.90934(N) 083 43 51.96979(W) ADJUSTED

KZ2428\* NAD 83(2011) ELLIP HT- 211.273 (meters) (06/27/12) ADJUSTED

KZ2428\* NAD 83(2011) EPOCH - 2010.00

KZ2428\* [NAVD 88](#) ORTHO HEIGHT - 246.711 (meters) 809.42 (feet) ADJUSTED

KZ2428

KZ2428 GEOID HEIGHT - -35.439 (meters) GEOID18

KZ2428 NAD 83(2011) X - 526,597.378 (meters) COMP

KZ2428 NAD 83(2011) Y - -4,793,716.072 (meters) COMP

KZ2428 NAD 83(2011) Z - 4,160,487.189 (meters) COMP

KZ2428 LAPLACE CORR - 0.93 (seconds) DEFLEC18

KZ2428 DYNAMIC HEIGHT - 246.591 (meters) 809.02 (feet) COMP

KZ2428 MODELED GRAVITY - 980,132.7 (mgal) NAVD 88

KZ2428

KZ2428 VERT ORDER - FIRST CLASS II

KZ2428

KZ2428 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

KZ2428 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
NETWORK	1.22	2.23	0.57	0.39	1.14	-0.05199005

KZ2428

KZ2428 -----

KZ2428

KZ2428 Click [here](#) for local accuracies and other accuracy information.

KZ2428

KZ2428

KZ2428.The horizontal coordinates were established by GPS observations

KZ2428.and adjusted by the National Geodetic Survey in June 2012.

KZ2428

KZ2428.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

KZ2428.been affixed to the stable North American tectonic plate. See

KZ2428.[NA2011](#) for more information.

KZ2428

KZ2428.The horizontal coordinates are valid at the epoch date displayed above

KZ2428.which is a decimal equivalence of Year/Month/Day.

KZ2428

KZ2428.The orthometric height was determined by differential leveling and

KZ2428.adjusted by the NATIONAL GEODETIC SURVEY

KZ2428.in January 1994.

KZ2428

KZ2428.Significant digits in the geoid height do not necessarily reflect accuracy.



KZ2428.GEOID18 height accuracy estimate available [here](#).  
 KZ2428  
 KZ2428.Click [here](#) to see if photographs exist for this station.  
 KZ2428  
 KZ2428.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 KZ2428  
 KZ2428.The Laplace correction was computed from DEFLEC18 derived deflections.  
 KZ2428  
 KZ2428.The ellipsoidal height was determined by GPS observations  
 KZ2428.and is referenced to NAD 83.  
 KZ2428  
 KZ2428.The dynamic height is computed by dividing the NAVD 88  
 KZ2428.geopotential number by the normal gravity value computed on the  
 KZ2428.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 KZ2428.degrees latitude (g = 980.6199 gals.).

KZ2428  
 KZ2428.The modeled gravity was interpolated from observed gravity values.  
 KZ2428  
 KZ2428. The following values were computed from the NAD 83(2011) position.  
 KZ2428  

KZ2428;		North	East	Units	Scale Factor	Converg.
KZ2428;SPC OH N	-	146,044.229	496,391.826	MT	0.99994044	-0 48 31.6
KZ2428;SPC OH N	-	479,146.77	1,628,578.85	sFT	0.99994044	-0 48 31.6
KZ2428;UTM 17	-	4,539,602.541	270,211.842	MT	1.00024993	-1 47 30.0

KZ2428  
 KZ2428!  
 KZ2428!SPC OH N  
 KZ2428!UTM 17

KZ2428  
 KZ2428\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF7021139602 (NAD 83)  
 KZ2428

KZ2428  
 KZ2428 SUPERSEDED SURVEY CONTROL  
 KZ2428

KZ2428	NAD 83(2007)-	40 58 30.90940(N)	083 43 51.97056(W)	AD(2002.00)	0
KZ2428	ELLIP H (02/10/07)	211.289 (m)		GP(2002.00)	
KZ2428	ELLIP H (10/07/05)	211.287 (m)		GP( )	4 1
KZ2428	NAD 83(1995)-	40 58 30.90936(N)	083 43 51.97034(W)	AD( )	1
KZ2428	ELLIP H (04/01/98)	211.318 (m)		GP( )	4 1
KZ2428	NAD 83(1986)-	40 58 30.91905(N)	083 43 51.98185(W)	AD( )	1
KZ2428	NAVD 88	246.71 (m)	809.4 (f)	LEVELING	3

KZ2428  
 KZ2428.Superseded values are not recommended for survey control.  
 KZ2428  
 KZ2428.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 KZ2428.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 KZ2428

KZ2428\_MARKER: I = METAL ROD  
 KZ2428\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)  
 KZ2428\_STAMPING: T 350 1993  
 KZ2428\_MARK LOGO: NGS  
 KZ2428\_PROJECTION: FLUSH  
 KZ2428\_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT  
 KZ2428\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 KZ2428\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 KZ2428+SATELLITE: SATELLITE OBSERVATIONS - August 24, 1994



KZ2428\_ROD/PIPE-DEPTH: 6.0 meters

KZ2428\_SLEEVE-DEPTH : 0.9 meters

KZ2428

KZ2428	HISTORY	- Date	Condition	Report By
KZ2428	HISTORY	- 1993	MONUMENTED	NGS
KZ2428	HISTORY	- 19940824	GOOD	OH-063

KZ2428

KZ2428 STATION DESCRIPTION

KZ2428

KZ2428'DESCRIBED BY NATIONAL GEODETIC SURVEY 1993

KZ2428'11.8 KM (7.35 MI) SOUTHERLY ALONG INTERSTATE HIGHWAY 75 FROM THE  
KZ2428'JUNCTION OF STATE HIGHWAY 224 IN FINDLAY (EXIT 159), 395.0 M (1295.9  
KZ2428'FT) SOUTHWEST OF THE CENTER OF STATE HIGHWAY 698, 61.4 M (201.4 FT)  
KZ2428'SOUTH OF THE SOUTHEAST LEG OF A HIGHWAY INFORMATION SIGN, 27.9 M  
KZ2428'(91.5 FT) SOUTHEAST OF THE CENTERLINE OF THE NORTHBOUND LANES OF THE  
KZ2428'HIGHWAY, 0.8 M (2.6 FT) NORTHWEST OF A WITNESS POST AND A BRACED  
KZ2428'FENCE POST, AND 0.3 M (1.0 FT) ABOVE THE LEVEL OF THE HIGHWAY.  
KZ2428'NOTE--ACCESS TO THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP. THE  
KZ2428'SLEEVE DEPTH DOES NOT MEET THE SPECIFICATIONS FOR A CLASS A MARK.

KZ2428

KZ2428 STATION RECOVERY (1994)

KZ2428

KZ2428'RECOVERY NOTE BY HANCOCK COUNTY OHIO 1994 (TM)

KZ2428'RECOVERED AS DESCRIBED.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

```

AJ7198 *****
AJ7198 CORS - This is a GPS Continuously Operating Reference Station.
AJ7198 DESIGNATION - TIFFIN CORS ARP
AJ7198 CORS_ID - TIFF
AJ7198 PID - AJ7198
AJ7198 STATE/COUNTY- OH/SENECA
AJ7198 COUNTRY - US
AJ7198 USGS QUAD - TIFFIN SOUTH (1977)

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AJ7198 \*CURRENT SURVEY CONTROL

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AJ7198* NAD 83(2011) POSITION- 41 04 29.89639(N) 083 09 01.41465(W) ADJUSTED
AJ7198* NAD 83(2011) ELLIP HT- 211.618 (meters) (06/??/19) ADJUSTED
AJ7198* NAD 83(2011) EPOCH - 2010.00
AJ7198
AJ7198 GEOID HEIGHT - -35.063 (meters) GEOID18
AJ7198 NAD 83(2011) X - 574,288.313 (meters) COMP
AJ7198 NAD 83(2011) Y - -4,780,915.644 (meters) COMP
AJ7198 NAD 83(2011) Z - 4,168,842.305 (meters) COMP

```

AJ7198 Network accuracy estimates per FGDC Geospatial Positioning Accuracy Standards:

AJ7198	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE (unitless)
	Horiz	Ellip	SD_N	SD_E	SD_h	
AJ7198	-----	-----	-----	-----	-----	-----
AJ7198	NETWORK	0.24 0.46	0.08	0.11	0.23	-0.25479600
AJ7198	-----	-----	-----	-----	-----	-----

AJ7198.The coordinates were established by GPS observations and adjusted by the National Geodetic Survey in June 2019.

AJ7198.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has been affixed to the stable North American Tectonic Plate.

AJ7198.The coordinates are valid at the epoch date displayed above which is a decimal equivalence of Year/Month/Day.

AJ7198.Due to the release of the International GNSS Service (IGS) 2014 realization of the International Terrestrial Reference Frame of 2014 (ITRF2014), NGS reprocessed all NOAA CORS Network and some IGS stations using data collected between 1/1/1996 and 1/30/2017. The resulting ITRF2014 epoch 2010.00 coordinates, referred to as Multi-Year CORS Solution 2 (MYCS2), were transformed to NAD 83 (2011/PA11/MA11) maintaining the currently published epoch of 2010.00.

AJ7198.Additional information on MYCS2 is available at <https://geodesy.noaa.gov/CORS/coords.shtml>



AJ7198.Significant digits in the geoid height do not necessarily reflect accuracy.  
AJ7198.GEOID18 height accuracy estimate available [here](#).

AJ7198

AJ7198.The PID for the CORS L1 Phase Center is DQ2076.

AJ7198

AJ7198.Click [here](#) to see if photographs exist for this station.

AJ7198

AJ7198.The XYZ, and position/ellipsoidal ht. are equivalent.

AJ7198

AJ7198.The ellipsoidal height was determined by GPS observations

AJ7198.and is referenced to NAD 83.

AJ7198

AJ7198. The following values were computed from the NAD 83(2011) position.

AJ7198

AJ7198;		North	East	Units	Scale	Factor	Converg.
AJ7198;SPC OH N	-	156,590.277	545,344.952	MT	0.99993915	-0 25	38.2
AJ7198;SPC OH N	-	513,746.60	1,789,185.90	sFT	0.99993915	-0 25	38.2
AJ7198;UTM 17	-	4,549,307.626	319,347.863	MT	1.00000167	-1 24	47.8
AJ7198!	-	Elev Factor x Scale Factor =		Combined Factor			
AJ7198!SPC OH N	-	0.99996681	x 0.99993915	=	0.99990596		
AJ7198!UTM 17	-	0.99996681	x 1.00000167	=	0.99996848		

AJ7198

AJ7198\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF1934749307 (NAD 83)

AJ7198

AJ7198

SUPERSEDED SURVEY CONTROL

AJ7198	ELLIP H (06/27/12)	211.628	(m)				GP(2010.00)	0 0
AJ7198	NAD 83(2011)-	41 04 29.89666	(N)	083 09	01.41467	(W)	AD(2010.00)	c
AJ7198	NAD 83(2011)-	41 04 29.89631	(N)	083 09	01.41449	(W)	AD(2010.00)	c
AJ7198	ELLIP H (08/??/11)	211.618	(m)				GP(2010.00)	c c
AJ7198	NAD 83(CORS)-	41 04 29.89682	(N)	083 09	01.41552	(W)	AD(2002.00)	c
AJ7198	ELLIP H (09/??/08)	211.637	(m)				GP(2002.00)	c c
AJ7198	ELLIP H (02/10/07)	211.640	(m)				GP(2002.00)	
AJ7198	NAD 83(2007)-	41 04 29.89677	(N)	083 09	01.41545	(W)	AD(2002.00)	c
AJ7198	NAD 83(CORS)-	41 04 29.89677	(N)	083 09	01.41545	(W)	AD(2002.00)	c
AJ7198	ELLIP H (03/??/02)	211.640	(m)				GP(2002.00)	c c
AJ7198	NAD 83(CORS)-	41 04 29.89676	(N)	083 09	01.41527	(W)	AD(1997.00)	c
AJ7198	ELLIP H (01/??/02)	211.640	(m)				GP(1997.00)	c c

AJ7198.Superseded values are not recommended for survey control.

AJ7198.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AJ7198.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AJ7198\_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

AJ7198

STATION DESCRIPTION

AJ7198'DESCRIBED BY NATIONAL GEODETIC SURVEY 2019

AJ7198'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND

AJ7198'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

AJ7198'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

AJ7198' ftp://cors.ngs.noaa.gov/cors/README.txt

AJ7198' ftp://cors.ngs.noaa.gov/cors/coord/coord\_14

AJ7198' ftp://cors.ngs.noaa.gov/cors/station\_log

AJ7198' https://geodesy.noaa.gov/CORS

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

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PROGRAM = datasheet95, VERSION = 8.12.5.4
1      National Geodetic Survey,  Retrieval Date = DECEMBER  4, 2019
MD0373 *****
MD0373 DESIGNATION -  V 198
MD0373 PID          -  MD0373
MD0373 STATE/COUNTY-  IN/DE KALB
MD0373 COUNTRY      -  US
MD0373 USGS QUAD    -  BUTLER EAST (1994)
MD0373
MD0373                                *CURRENT SURVEY CONTROL
MD0373
MD0373* NAD 83(2011) POSITION- 41 25 23.88487(N) 084 52 15.74117(W) NO CHECK
MD0373* NAD 83(2011) ELLIP HT- 233.507 (meters) (06/27/12) NO CHECK
MD0373* NAD 83(2011) EPOCH - 2010.00
MD0373* NAVD 88 ORTHO HEIGHT - 266.867 (meters) 875.55 (feet) ADJUSTED
MD0373
MD0373 GEOID HEIGHT - -33.398 (meters) GEOID18
MD0373 NAD 83(2011) X - 428,196.725 (meters) COMP
MD0373 NAD 83(2011) Y - -4,770,615.028 (meters) COMP
MD0373 NAD 83(2011) Z - 4,197,943.093 (meters) COMP
MD0373 LAPLACE CORR - -3.18 (seconds) DEFLEC18
MD0373 DYNAMIC HEIGHT - 266.763 (meters) 875.20 (feet) COMP
MD0373 MODELED GRAVITY - 980,224.7 (mgal) NAVD 88
MD0373
MD0373 VERT ORDER - SECOND CLASS 0
MD0373
MD0373 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MD0373 Standards:
MD0373          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
MD0373          Horiz Ellip          SD_N   SD_E   SD_h          (unitless)
MD0373 -----
MD0373 NETWORK      1.18   3.43          0.56   0.36   1.75          0.03018170
MD0373 -----
MD0373 Click here for local accuracies and other accuracy information.
MD0373
MD0373
MD0373.The horizontal coordinates were established by GPS observations
MD0373.and adjusted by the National Geodetic Survey in June 2012.
MD0373
MD0373.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MD0373.been affixed to the stable North American tectonic plate. See
MD0373.NA2011 for more information.
MD0373
MD0373.The horizontal coordinates are valid at the epoch date displayed above
MD0373.which is a decimal equivalence of Year/Month/Day.
MD0373
MD0373.No horizontal observational check was made to the station.
MD0373.
MD0373.The orthometric height was determined by differential leveling and
MD0373.adjusted by the NATIONAL GEODETIC SURVEY
MD0373.in June 1991.

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MD0373	HISTORY	- Date	Condition	Report By
MD0373	HISTORY	- 1946	MONUMENTED	CGS
MD0373	HISTORY	- 1968	GOOD	INHND
MD0373	HISTORY	- 20061116	GOOD	INDIV
MD0373	HISTORY	- 20090521	GOOD	WOOLPT
MD0373	HISTORY	- 20100907	GOOD	DLZCOR
MD0373	HISTORY	- 20141106	GOOD	USI

MD0373  
MD0373  
MD0373

STATION DESCRIPTION

MD0373'DESCRIBED BY INDIANA HIGHWAY DEPARTMENT 1968  
MD0373'0.4 MI S FROM BUTLER.  
MD0373'ABOUT 0.4 MILE SOUTH ALONG S.R. 1 FROM ITS INTERSECTION OF U.S.  
MD0373'6 IN BUTLER, ABOUT 38 YDS. NORTH OF THE CITY LIMITS OF BUTLER,  
MD0373'98.5 FT. SOUTHEAST OF THE SOUTHEAST RAIL OF THE SOUTHEAST TRACK  
MD0373'WABASH RAILROAD, 31 FT. EAST OF S.R. 1 CENTERLINE 2.1 FT HIGHER  
MD0373'THAN SAME, 1.7 FT. NORTH OF A STEEL WITNESS POST AND PROJECTING 0.2  
MD0373'FT. ABOVE THE GROUND.

MD0373  
MD0373  
MD0373

STATION RECOVERY (2006)

MD0373'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (DAB)  
MD0373'RECOVERED IN GOOD CONDITION.

MD0373  
MD0373  
MD0373

STATION RECOVERY (2009)

MD0373'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2009 (BJM)  
MD0373'THIS STATION WAS RECOVERED AS DESCRIBED AND FOUND IN GOOD CONDITION.  
MD0373'

MD0373'NOTE-UPDATES TO THE DESCRIPTION ARE AS FOLLOWS, THE STATION IS 123.7  
MD0373'FT (37.7 M) SOUTH OF THE SOUTH RAIL, 65.5 FT (20.0 M) SOUTH-SOUTHWEST  
MD0373'OF A UTILITY POLE AND 1.6 FT (0.5 M) NORTH OF A METAL WITNESS POST.  
MD0373'

MD0373  
MD0373

STATION RECOVERY (2010)

MD0373'RECOVERY NOTE BY DLZ CORPORATION 2010 (JSJ)  
MD0373'STATION FOUND APPROX .40 TENTHS OF A MILE SOUTH OF SR-1 AND SR-6 IN  
MD0373'BUTLER INDIANA. THE STATION IS LOCATED APPROX 38 YARDS SOUTH OF THE  
MD0373'SECOND RR CROSSING ON SR-1, AND APPROX 11 PACES EAST OF THE CL OF  
MD0373'SR-1, APPROX 1' SOUTH OF WITNESS POST AND IS SET IN 1'X1' CONCRETE  
MD0373'PROTRUDING .300' ABOVE GRADE.

MD0373  
MD0373  
MD0373

STATION RECOVERY (2014)

MD0373'RECOVERY NOTE BY USI CONSULTANTS INC 2014 (CHS)  
MD0373'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = JANUARY 23, 2020

MD0125 \*\*\*\*\*

MD0125 DESIGNATION - **V 314**

MD0125 PID - MD0125

MD0125 STATE/COUNTY- OH/PAULDING

MD0125 COUNTRY - US

MD0125 USGS QUAD - OAKWOOD (2016)

MD0125

MD0125 \*CURRENT SURVEY CONTROL

MD0125

MD0125\* NAD 83(1995) POSITION- 41 05 34.00408(N) 084 25 08.45560(W) NO CHECK

MD0125\* [NAVD 88](#) ORTHO HEIGHT - 217.455 (meters) 713.43 (feet) ADJUSTED

MD0125

MD0125 GEOID HEIGHT - -34.297 (meters) GEOID18

MD0125 LAPLACE CORR - -6.13 (seconds) DEFLEC18

MD0125 DYNAMIC HEIGHT - 217.362 (meters) 713.13 (feet) COMP

MD0125 MODELED GRAVITY - 980,192.1 (mgal) NAVD 88

MD0125

MD0125 HORZ ORDER - THIRD

MD0125 VERT ORDER - FIRST CLASS I

MD0125

MD0125.The horizontal coordinates were established by classical geodetic methods

MD0125.and adjusted by the National Geodetic Survey in April 1998.

MD0125.

MD0125.No horizontal observational check was made to the station.

MD0125.

MD0125.The orthometric height was determined by differential leveling and

MD0125.adjusted by the NATIONAL GEODETIC SURVEY

MD0125.in April 1995.

MD0125

MD0125.Significant digits in the geoid height do not necessarily reflect accuracy.

MD0125.GEOID18 height accuracy estimate available [here](#).

MD0125

MD0125.Click [photographs](#) - Photos may exist for this station.

MD0125

MD0125.The Laplace correction was computed from DEFLEC18 derived deflections.

MD0125

MD0125.The dynamic height is computed by dividing the NAVD 88

MD0125.geopotential number by the normal gravity value computed on the

MD0125.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MD0125.degrees latitude (g = 980.6199 gals.).

MD0125

MD0125.The modeled gravity was interpolated from observed gravity values.

MD0125

MD0125. The following values were computed from the NAD 83(1995) position.

MD0125

MD0125; North East Units Scale Factor Converg.

MD0125;SPC OH N - 160,137.627 438,792.702 MT 0.99993924 -1 15 38.5

MD0125;SPC OH N - 525,384.86 1,439,605.72 sFT 0.99993924 -1 15 38.5



MD0125;UTM 16 - 4,552,266.750 716,770.195 MT 1.00017836 +1 41 49.5  
MD0125

MD0125! - Elev Factor x Scale Factor = Combined Factor

MD0125!SPC OH N - 0.99997127 x 0.99993924 = 0.99991051

MD0125!UTM 16 - 0.99997127 x 1.00017836 = 1.00014963

MD0125

MD0125\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL1677052266 (NAD 83)

MD0125

MD0125 SUPERSEDED SURVEY CONTROL

MD0125

MD0125 NAD 83 (1986) - 41 05 34.00854 (N) 084 25 08.46844 (W) AD ( ) 3

MD0125 NAD 27 - 41 05 33.82800 (N) 084 25 08.66500 (W) AD ( ) 3

MD0125 NAVD 88 (06/15/91) 217.438 (m) 713.38 (f) SUPERSEDED 1 1

MD0125 NGVD 29 (01/19/93) 217.625 (m) 713.99 (f) ADJUSTED 1 1

MD0125 NGVD 29 (??/??/92) 217.607 (m) 713.93 (f) SUPERSEDED 1 1

MD0125 NGVD 29 217.61 (m) 713.9 (f) LEVELING 3

MD0125.No superseded survey control is available for this station.

MD0125

MD0125\_MARKER: DB = BENCH MARK DISK

MD0125\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

MD0125\_STAMPING: V 314 1968

MD0125\_MARK LOGO: CGS

MD0125\_MAGNETIC: N = NO MAGNETIC MATERIAL

MD0125\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MD0125+STABILITY: SURFACE MOTION

MD0125\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MD0125+SATELLITE: SATELLITE OBSERVATIONS - April 10, 2010

MD0125

MD0125 HISTORY - Date Condition Report By

MD0125 HISTORY - 1968 MONUMENTED CGS

MD0125 HISTORY - 19921020 GOOD NGS

MD0125 HISTORY - 20100410 GOOD GEOCAC

MD0125

MD0125 STATION DESCRIPTION

MD0125

MD0125'DESCRIBED BY COAST AND GEODETIC SURVEY 1968

MD0125'AT MELROSE.

MD0125'AT MELROSE, NEAR THE CROSSING OF THE NORFOLK AND WESTERN RAILWAY

MD0125'AND STATE HIGHWAY 113, AT THE JUNCTION OF COUNTY ROAD 177 LEADING

MD0125'NORTH, 239 FEET NORTH-NORTHWEST OF THE NORTH RAIL AT THE CENTER

MD0125'OF THE HIGHWAY CROSSING THE TRACK, 65 FEET NORTH OF THE CENTER

MD0125'LINE OF THE HIGHWAY, 35 FEET WEST OF THE CENTER LINE OF THE

MD0125'COUNTY ROAD, 2 FEET WEST OF POWER LINE POLE 458D336, 461 FEET

MD0125'EAST OF MELROSE RM 2, 2 FEET EAST OF A METAL WITNESS POST,

MD0125'1 FOOT BELOW THE LEVEL OF THE HIGHWAY AND SET IN THE TOP OF A

MD0125'CONCRETE POST PROJECTING 2 INCHES ABOVE THE LEVEL OF THE GROUND.

MD0125'IN SECTION 29, R 4 E, T 2 N.

MD0125

MD0125 STATION RECOVERY (1992)

MD0125

MD0125'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1992

MD0125'0.1 KM (0.05 MI) NORTHERLY ALONG STATE STREET FROM THE POST OFFICE IN

MD0125'MELROSE, 20.0 M (65.6 FT) NORTHEAST OF THE CENTERLINE OF STATE

MD0125'HIGHWAY 613, 10.6 M (34.8 FT) WEST OF THE STREET CENTER, 0.8 M (2.6

MD0125'FT) WEST OF AN UNDERGROUND CABLE JUNCTION BOX, 0.7 M (2.3 FT) NORTH



WOOLPERT

MD0125'OF UTILITY LIGHT POLE NUMBER 45803-36, 0.6 M (2.0 FT) EAST OF A  
MD0125'WITNESS POST, 0.3 M (1.0 FT) BELOW THE LEVEL OF THE STREET, AND THE  
MD0125'MONUMENT IS FLUSH WITH THE GROUND SURFACE.

MD0125

MD0125

STATION RECOVERY (2010)

MD0125

MD0125'RECOVERY NOTE BY GEOCACHING 2010 (RLM)

MD0125'RECOVERED IN GOOD CONDITION.

MD0125'

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = JANUARY  6, 2020
KZ2418 *****
KZ2418 CBN          - This is a Cooperative Base Network Control Station.
KZ2418 PACS        - This is a Primary Airport Control Station.
KZ2418 DESIGNATION - V 349
KZ2418 PID         - KZ2418
KZ2418 STATE/COUNTY- OH/HANCOCK
KZ2418 COUNTRY     - US
KZ2418 USGS QUAD   - BLUFFTON (1988)
KZ2418
KZ2418                                *CURRENT SURVEY CONTROL
KZ2418
KZ2418* NAD 83(2011) POSITION- 40 53 05.62883(N) 083 52 40.93687(W) ADJUSTED
KZ2418* NAD 83(2011) ELLIP HT- 223.663 (meters) (06/27/12) ADJUSTED
KZ2418* NAD 83(2011) EPOCH - 2010.00
KZ2418* NAVD 88 ORTHO HEIGHT - 258.946 (meters) 849.56 (feet) ADJUSTED
KZ2418
KZ2418 GEOID HEIGHT - -35.290 (meters) GEOID18
KZ2418 NAD 83(2011) X - 515,004.238 (meters) COMP
KZ2418 NAD 83(2011) Y - -4,801,596.610 (meters) COMP
KZ2418 NAD 83(2011) Z - 4,152,914.089 (meters) COMP
KZ2418 LAPLACE CORR - -2.15 (seconds) DEFLEC18
KZ2418 DYNAMIC HEIGHT - 258.817 (meters) 849.14 (feet) COMP
KZ2418 MODELED GRAVITY - 980,121.5 (mgal) NAVD 88
KZ2418
KZ2418 VERT ORDER - FIRST CLASS II
KZ2418
KZ2418 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KZ2418 Standards:
KZ2418          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
KZ2418          Horiz Ellip                SD_N   SD_E   SD_h          (unitless)
KZ2418 -----
KZ2418 NETWORK    0.86   1.74                0.40   0.28   0.89          -0.06173784
KZ2418 -----
KZ2418 Click here for local accuracies and other accuracy information.
KZ2418
KZ2418
KZ2418.This mark is at Bolton Field Airport (TZR)
KZ2418.This mark is at Bluffton Airport (5G7)
KZ2418
KZ2418.The horizontal coordinates were established by GPS observations
KZ2418.and adjusted by the National Geodetic Survey in June 2012.
KZ2418
KZ2418.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KZ2418.been affixed to the stable North American tectonic plate. See
KZ2418.NA2011 for more information.
KZ2418
KZ2418.The horizontal coordinates are valid at the epoch date displayed above
KZ2418.which is a decimal equivalence of Year/Month/Day.
KZ2418

```



KZ2418.The orthometric height was determined by differential leveling and  
 KZ2418.adjusted by the NATIONAL GEODETIC SURVEY  
 KZ2418.in January 1994.

KZ2418

KZ2418.Significant digits in the geoid height do not necessarily reflect accuracy.  
 KZ2418.GEOID18 height accuracy estimate available [here](#).

KZ2418

KZ2418.Click [here](#) to see if photographs exist for this station.

KZ2418

KZ2418.The X, Y, and Z were computed from the position and the ellipsoidal ht.

KZ2418

KZ2418.The Laplace correction was computed from DEFLEC18 derived deflections.

KZ2418

KZ2418.The ellipsoidal height was determined by GPS observations

KZ2418.and is referenced to NAD 83.

KZ2418

KZ2418.The dynamic height is computed by dividing the NAVD 88

KZ2418.geopotential number by the normal gravity value computed on the

KZ2418.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

KZ2418.degrees latitude (g = 980.6199 gals.).

KZ2418

KZ2418.The modeled gravity was interpolated from observed gravity values.

KZ2418

KZ2418. The following values were computed from the NAD 83(2011) position.

KZ2418

KZ2418;		North	East	Units	Scale	Factor	Converg.
KZ2418;SPC OH N	-	136,196.801	483,868.365	MT	0.99994421	-0 54	19.1
KZ2418;SPC OH N	-	446,839.00	1,587,491.46	sFT	0.99994421	-0 54	19.1
KZ2418;UTM 17	-	4,529,967.691	257,517.221	MT	1.00032375	-1 53	05.0
KZ2418!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
KZ2418!SPC OH N	-	0.99996492	x	0.99994421	=	0.99990913	
KZ2418!UTM 17	-	0.99996492	x	1.00032375	=	1.00028866	

KZ2418

KZ2418\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF5751729967 (NAD 83)

KZ2418

KZ2418 SUPERSEDED SURVEY CONTROL

KZ2418

KZ2418	NAD 83(2007)-	40 53 05.62898 (N)	083 52 40.93766 (W)	AD(2002.00)	0
KZ2418	ELLIP H (02/10/07)	223.678 (m)		GP(2002.00)	
KZ2418	ELLIP H (03/08/05)	223.662 (m)		GP( )	4 2
KZ2418	NAD 83(1995)-	40 53 05.62887 (N)	083 52 40.93718 (W)	AD( )	B
KZ2418	ELLIP H (08/20/96)	223.692 (m)		GP( )	4 2
KZ2418	NAD 83(1986)-	40 53 05.63831 (N)	083 52 40.95012 (W)	AD( )	1
KZ2418	NAVD 88	258.95 (m)	849.6 (f)	LEVELING	3

KZ2418

KZ2418.Superseded values are not recommended for survey control.

KZ2418

KZ2418.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

KZ2418.See file [dsdata.pdf](#) to determine how the superseded data were derived.

KZ2418

KZ2418\_MARKER: I = METAL ROD

KZ2418\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

KZ2418\_STAMPING: V 349 1993

KZ2418\_MARK LOGO: NGS



KZ2418\_PROJECTION: FLUSH  
KZ2418\_MAGNETIC: N = NO MAGNETIC MATERIAL  
KZ2418\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
KZ2418\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
KZ2418+SATELLITE: SATELLITE OBSERVATIONS - November 09, 1995  
KZ2418\_ROD/PIPE-DEPTH: 2.5 meters  
KZ2418\_SLEEVE-DEPTH : 0.90 meters

KZ2418	HISTORY	- Date	Condition	Report By
KZ2418	HISTORY	- 1993	MONUMENTED	NGS
KZ2418	HISTORY	- 19940822	GOOD	OH-063
KZ2418	HISTORY	- 19951109	GOOD	NGS

KZ2418

KZ2418 STATION DESCRIPTION

KZ2418

KZ2418'DESCRIBED BY NATIONAL GEODETIC SURVEY 1993  
KZ2418'26.1 KM (16.20 MI) NORTHERLY ALONG INTERSTATE HIGHWAY 75 FROM THE  
KZ2418'JUNCTION OF STATE HIGHWAY 117 IN LIMA (EXIT 125), 192.0 M (629.9 FT)  
KZ2418'EAST OF THE CENTER OF COUNTY LINE ROAD, 60.0 M (196.8 FT) EAST OF THE  
KZ2418'EXTENDED CENTER OF A HIGHWAY CROSSOVER, 17.9 M (58.7 FT) SOUTH OF THE  
KZ2418'CENTERLINE OF THE NORTHBOUND LANES OF THE HIGHWAY, 6.3 M (20.7 FT)  
KZ2418'WEST OF A BRACED FENCE POST, 0.7 M (2.3 FT) NORTH OF A WITNESS POST  
KZ2418'AND FENCE, AND 0.4 M (1.3 FT) BELOW THE LEVEL OF THE HIGHWAY.  
KZ2418'NOTE--ACCESS TO THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP. THE  
KZ2418'SLEEVE DEPTH DOES NOT MEET THE SPECIFICATIONS FOR A CLASS A MARK.  
KZ2418'THE ROD WAS DRIVEN TO REFUSAL AND ANCHORED.

KZ2418

KZ2418 STATION RECOVERY (1994)

KZ2418'RECOVERY NOTE BY HANCOCK COUNTY OHIO 1994 (TM)

KZ2418'RECOVERED AS DESCRIBED.

KZ2418

STATION RECOVERY (1995)

KZ2418

KZ2418'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
KZ2418'NOTE--THIS IS THE PAC STATION. THE STATION IS ABOUT 29 KM (18.00 MI)  
KZ2418'NORTHEAST OF LIMA, ON THE SOUTHEAST SIDE OF BLUFFTON, NEAR THE WEST  
KZ2418'CORNER OF THE BLUFFTON AIRPORT, JUST EAST OF THE HANCOCK-ALLEN COUNTY  
KZ2418'LINE, ALONG INTERSTATE HIGHWAY 75 AND IN THE HIGHWAY RIGHT-OF-WAY.  
KZ2418'OWNERSHIP--OHIO DEPARTMENT OF TRANSPORTATION. TO REACH FROM THE  
KZ2418'UNDERPASS AT THE SOUTHWEST ONE OF TWO JUNCTIONS OF INTERSTATE HIGHWAY  
KZ2418'75 AND STATE HIGHWAY 130 (EXIT 140) ON THE SOUTHEAST SIDE OF BLUFFTON,  
KZ2418'GO NORTHEAST ON HIGHWAY 75 FOR 1.89 KM (1.15 MI) TO THE STATION ON THE  
KZ2418'RIGHT, 0.20 KM (0.10 MI) NORTHEAST OF THE COUNTY LINE OVERPASS. THE  
KZ2418'STATION IS A PUNCH HOLE TOP CENTER OF A STAINLESS STEEL ROD IN A 2 CM  
KZ2418'GREASE FILLED SLEEVE 90 CM LONG ENCASED IN A 12.7 CM PVC PIPE WITH A  
KZ2418'LOGO CAP SURROUNDED BY CONCRETE SET FLUSH WITH THE GROUND. IT IS 61.7  
KZ2418'M (202.4 FT) EAST-NORTHEAST OF THE EXTENDED CENTER OF A HIGHWAY  
KZ2418'CROSSOVER, 18.3 M (60.0 FT) SOUTH-SOUTHEAST OF, AND 0.4 M (1.3 FT)  
KZ2418'LOWER THAN THE NORTHEAST-BOUND LANES OF THE HIGHWAY, 6.3 M (20.7 FT)  
KZ2418'WEST OF A BRACED FENCE POST, AND 0.7 M (2.3 FT) NORTH-NORTHWEST OF A  
KZ2418'FIBERGLASS WITNESS POST IN A FENCE. NOTE--SLEEVE DEPTH DOES NOT MEET  
KZ2418'CLASS A CRITERIA. DESCRIBED BY D.G. AUG

\*\*\* retrieval complete.

Elapsed Time = 00:00:01

## The NGS Data Sheet



See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.6

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = MARCH 30, 2020

MC1588 \*\*\*\*\*

MC1588 DESIGNATION - **VICTORY**

MC1588 PID - MC1588

MC1588 STATE/COUNTY- OH/OTTAWA

MC1588 COUNTRY - US

MC1588 USGS QUAD - PUT-IN-BAY (2016)

MC1588

MC1588 \*CURRENT SURVEY CONTROL

MC1588

MC1588\* NAD 83(2011) POSITION- 41 38 31.69950(N) 082 50 13.99899(W) NO CHECK

MC1588\* NAD 83(2011) ELLIP HT- 139.658 (meters) (06/27/12) NO CHECK

MC1588\* NAD 83(2011) EPOCH - 2010.00

MC1588\* [NAVD 88](#) ORTHO HEIGHT - 175.3 (meters) 575. (feet) VERTCON

MC1588

MC1588 GEOID HEIGHT - -35.594 (meters) GEOID18

MC1588 NAD 83(2011) X - 595,214.807 (meters) COMP

MC1588 NAD 83(2011) Y - -4,736,353.601 (meters) COMP

MC1588 NAD 83(2011) Z - 4,216,075.561 (meters) COMP

MC1588 LAPLACE CORR - 0.92 (seconds) DEFLEC18

MC1588

MC1588 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

MC1588 Standards:

MC1588 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

MC1588 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

MC1588 -----

MC1588 NETWORK 5.62 6.55 2.26 2.30 3.34 -0.24300286

MC1588 -----

MC1588 Click [here](#) for local accuracies and other accuracy information.

MC1588

MC1588

MC1588.The horizontal coordinates were established by GPS observations

MC1588.and adjusted by the National Geodetic Survey in June 2012.

MC1588

MC1588.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

MC1588.been affixed to the stable North American tectonic plate. See

MC1588.[NA2011](#) for more information.

MC1588

MC1588.The horizontal coordinates are valid at the epoch date displayed above

MC1588.which is a decimal equivalence of Year/Month/Day.

MC1588

MC1588.No horizontal observational check was made to the station.

MC1588.

MC1588.The NAVD 88 height was computed by applying the VERTCON shift value to

MC1588.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

MC1588

MC1588.Significant digits in the geoid height do not necessarily reflect accuracy.

MC1588.GEOID18 height accuracy estimate available [here](#).

MC1588

MC1588.Click [photographs](#) - Photos may exist for this station.

MC1588





MC1588.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
MC1588

MC1588.The Laplace correction was computed from DEFLEC18 derived deflections.  
MC1588

MC1588.The ellipsoidal height was determined by GPS observations  
MC1588.and is referenced to NAD 83.

MC1588

MC1588. The following values were computed from the NAD 83(2011) position.

MC1588

MC1588;		North	East	Units	Scale	Factor	Converg.
MC1588;SPC OH N	-	219,428.139	571,905.282	MT	0.99998936	-0	13 17.5
MC1588;SPC OH N	-	719,907.15	1,876,325.91	sFT	0.99998936	-0	13 17.5
MC1588;UTM 17	-	4,611,674.885	346,993.008	MT	0.99988810	-1	13 15.7
MC1588!	-	Elev Factor	x	Scale Factor	=	Combined Factor	
MC1588!SPC OH N	-	0.99997810	x	0.99998936	=	0.99996746	
MC1588!UTM 17	-	0.99997810	x	0.99988810	=	0.99986620	

MC1588

MC1588\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLG4699311674 (NAD 83)

MC1588

SUPERSEDED SURVEY CONTROL

MC1588

MC1588	NAD 83(2007)-	41 38 31.69967(N)	082 50 13.99835(W)	AD(2002.00)	0
MC1588	ELLIP H (02/10/07)	139.654 (m)		GP(2002.00)	
MC1588	ELLIP H (10/07/05)	139.656 (m)		GP( )	4 1
MC1588	NAD 83(1995)-	41 38 31.69960(N)	082 50 13.99849(W)	AD( )	2
MC1588	ELLIP H (04/01/98)	139.667 (m)		GP( )	4 1
MC1588	NAD 83(1994)-	41 38 31.69957(N)	082 50 13.99860(W)	AD( )	2
MC1588	NAD 83(1986)-	41 38 31.70779(N)	082 50 14.01745(W)	AD( )	2
MC1588	NGVD 29 (08/25/89)	175.6 (m)	RAPSU86 model used	GPS OBS	

MC1588

MC1588.Superseded values are not recommended for survey control.

MC1588

MC1588.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC1588.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC1588

MC1588\_MARKER: DD = SURVEY DISK

MC1588\_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE

MC1588\_SP\_SET: BREAKWALL

MC1588\_STAMPING: VICTORY 1988

MC1588\_MARK LOGO: OHDNR

MC1588\_MAGNETIC: N = NO MAGNETIC MATERIAL

MC1588\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

MC1588+STABILITY: SURFACE MOTION

MC1588\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MC1588+SATELLITE: SATELLITE OBSERVATIONS - August 05, 2019

MC1588

MC1588	HISTORY	-	Date	Condition	Report By
MC1588	HISTORY	-	1988	MONUMENTED	OHDNR
MC1588	HISTORY	-	20050625	GOOD	USPSQD
MC1588	HISTORY	-	20070526	GOOD	GEOCAC
MC1588	HISTORY	-	20091020	GOOD	OHDT
MC1588	HISTORY	-	20150725	GOOD	USPSQD
MC1588	HISTORY	-	20170805	GOOD	USPSQD
MC1588	HISTORY	-	20190805	GOOD	USPSQD



MC1588

MC1588

STATION DESCRIPTION

MC1588

MC1588'DESCRIBED BY OHIO DEPARTMENT OF NATURAL RESOURCES 1988  
MC1588'THE STATION IS LOCATED ABOUT 25 KM (15.55 MI) NORTHWEST OF MARBLEHEAD,  
MC1588'15 KM (9.30 MI) NORTHEAST OF PORT CLINTON, IN SOUTH BASS STATE PARK ON  
MC1588'THE WEST SHORE OF SOUTH BASS ISLAND. IT IS SET IN THE EAST END OF THE  
MC1588'CONCRETE BREAKWALL AT THE BOAT LAUNCHING RAMP, 46.23 M (151.7 FT) EAST  
MC1588'OF THE WEST END OF THE BREAKWALL, 4.27 M (14.0 FT) WEST OF THE PAVED  
MC1588'ROAD AT THE EAST END OF THE BREAKWALL, 3.76 M (12.3 FT) NORTH OF THE  
MC1588'SOUTH EDGE, AND 2.71 M (8.9 FT) SOUTH OF THE NORTH EDGE OF THE  
MC1588'BREAKWALL.

MC1588

MC1588

STATION RECOVERY (2005)

MC1588

MC1588'RECOVERY NOTE BY US POWER SQUADRON 2005

MC1588'RECOVERED IN GOOD CONDITION.

MC1588

MC1588

STATION RECOVERY (2007)

MC1588

MC1588'RECOVERY NOTE BY GEOCACHING 2007 (RLM)

MC1588'RECOVERED IN GOOD CONDITION.

MC1588

MC1588

STATION RECOVERY (2009)

MC1588

MC1588'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2009 (MJW)

MC1588'RECOVERED IN GOOD CONDITION.

MC1588

MC1588

STATION RECOVERY (2015)

MC1588

MC1588'RECOVERY NOTE BY US POWER SQUADRON 2015 (MLG)

MC1588'RECOVERED IN GOOD CONDITION.

MC1588

MC1588

STATION RECOVERY (2017)

MC1588

MC1588'RECOVERY NOTE BY US POWER SQUADRON 2017 (TJH)

MC1588'RECOVERED IN GOOD CONDITION.

MC1588

MC1588

STATION RECOVERY (2019)

MC1588

MC1588'RECOVERY NOTE BY US POWER SQUADRON 2019 (TJH)

MC1588'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = DECEMBER 11, 2019
AB6047 *****
AB6047 CBN          - This is a Cooperative Base Network Control Station.
AB6047 PACS        - This is a Primary Airport Control Station.
AB6047 DESIGNATION - VNW A
AB6047 PID         - AB6047
AB6047 STATE/COUNTY- OH/VAN WERT
AB6047 COUNTRY     - US
AB6047 USGS QUAD   - VAN WERT (1982)
AB6047
AB6047                                *CURRENT SURVEY CONTROL
AB6047
AB6047* NAD 83(2011) POSITION- 40 51 54.92608(N) 084 37 04.77232(W) ADJUSTED
AB6047* NAD 83(2011) ELLIP HT- 203.969 (meters) (06/27/12) ADJUSTED
AB6047* NAD 83(2011) EPOCH - 2010.00
AB6047* NAVD 88 ORTHO HEIGHT - 237.68 (meters) 779.8 (feet) GPS OBS
AB6047
AB6047 NAVD 88 orthometric height was determined with geoid model GEOID93
AB6047 GEOID HEIGHT - -33.746 (meters) GEOID93
AB6047 GEOID HEIGHT - -33.751 (meters) GEOID18
AB6047 NAD 83(2011) X - 453,084.609 (meters) COMP
AB6047 NAD 83(2011) Y - -4,809,253.311 (meters) COMP
AB6047 NAD 83(2011) Z - 4,151,251.998 (meters) COMP
AB6047 LAPLACE CORR - -5.33 (seconds) DEFLEC18
AB6047
AB6047 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AB6047 Standards:
AB6047          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
AB6047          Horiz Ellip                    SD_N   SD_E   SD_h          (unitless)
AB6047 -----
AB6047 NETWORK      0.77    1.61                0.36   0.25   0.82          -0.04926210
AB6047 -----
AB6047 Click here for local accuracies and other accuracy information.
AB6047
AB6047
AB6047.This mark is at Van Wert County Airport (VNW)
AB6047
AB6047.The horizontal coordinates were established by GPS observations
AB6047.and adjusted by the National Geodetic Survey in June 2012.
AB6047
AB6047.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AB6047.been affixed to the stable North American tectonic plate. See
AB6047.NA2011 for more information.
AB6047
AB6047.The horizontal coordinates are valid at the epoch date displayed above
AB6047.which is a decimal equivalence of Year/Month/Day.
AB6047
AB6047.The orthometric height was determined by GPS observations and a
AB6047.high-resolution geoid model.
AB6047

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AB6047.GPS derived orthometric heights for airport stations designated as AB6047.PACS or SACS are published to 2 decimal places. This maintains AB6047.centimeter relative accuracy between the PACS and SACS. It does AB6047.not indicate centimeter accuracy relative to other marks which are AB6047.part of the NAVD 88 network.

AB6047

AB6047.Significant digits in the geoid height do not necessarily reflect accuracy.

AB6047.GEOID18 height accuracy estimate available [here](#).

AB6047

AB6047.Click [here](#) to see if photographs exist for this station.

AB6047

AB6047.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AB6047

AB6047.The Laplace correction was computed from DEFLEC18 derived deflections.

AB6047

AB6047.The ellipsoidal height was determined by GPS observations

AB6047.and is referenced to NAD 83.

AB6047

AB6047. The following values were computed from the NAD 83(2011) position.

AB6047

AB6047;		North	East	Units	Scale	Factor	Converg.
AB6047;SPC OH N	-	135,266.342	421,467.230	MT	0.99994535	-1 23	29.1
AB6047;SPC OH N	-	443,786.32	1,382,763.74	sFT	0.99994535	-1 23	29.1
AB6047;UTM 16	-	4,526,530.619	700,746.339	MT	1.00009603	+1 33	32.5

AB6047

AB6047! - Elev Factor x Scale Factor = Combined Factor

AB6047!SPC OH N - 0.99996801 x 0.99994535 = 0.99991336

AB6047!UTM 16 - 0.99996801 x 1.00009603 = 1.00006403

AB6047

AB6047\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16TGL0074626530 (NAD 83)

AB6047

AB6047 SUPERSEDED SURVEY CONTROL

AB6047

AB6047	NAD 83(2007)-	40 51 54.92619(N)	084 37 04.77313(W)	AD(2002.00)	0
AB6047	ELLIP H (02/10/07)	203.987 (m)		GP(2002.00)	
AB6047	ELLIP H (03/08/05)	203.985 (m)		GP( )	4 2
AB6047	NAD 83(1995)-	40 51 54.92608(N)	084 37 04.77285(W)	AD( )	B
AB6047	ELLIP H (08/20/96)	204.009 (m)		GP( )	4 2

AB6047

AB6047.Superseded values are not recommended for survey control.

AB6047

AB6047.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AB6047.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AB6047

AB6047\_MARKER: DD = SURVEY DISK

AB6047\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.+)

AB6047\_STAMPING: WERTPORT VNW A 1995

AB6047\_MARK LOGO: OHDT

AB6047\_PROJECTION: FLUSH

AB6047\_MAGNETIC: O = OTHER; SEE DESCRIPTION

AB6047\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AB6047\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AB6047+SATELLITE: SATELLITE OBSERVATIONS - August 13, 1997

AB6047\_ROD/PIPE-DEPTH: 7.0 meters

AB6047\_SLEEVE-DEPTH : 1.1 meters



AB6047  
AB6047 HISTORY - Date Condition Report By  
AB6047 HISTORY - 1995 MONUMENTED OHDT  
AB6047 HISTORY - 19951115 GOOD NGS  
AB6047 HISTORY - 19970813 GOOD NGS

AB6047  
AB6047  
AB6047

STATION DESCRIPTION

AB6047'DESCRIBED BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
AB6047'NOTE--THIS IS THE PAC STATION. THE STATION IS LOCATED ABOUT 18 KM  
AB6047'(11.20 MI) EAST OF THE OHIO-INDIANA BORDER, 2 KM (1.25 MI) WEST OF VAN  
AB6047'WERT AT THE VAN WERT COUNTY AIRPORT, IN LOW BRUSH NEAR THE NORTHWEST  
AB6047'CORNER OF THE AIRFIELD, AND ALONG AN ACCESS ROAD JUST WEST OF RUNWAY  
AB6047'END 9. OWNER AND MANAGER--GLENN C. ROGERS, 1400 LEESON AVENUE, VAN  
AB6047'WERT, OH. 45891-1523. PHONE 419-238-5255. TO REACH FROM THE  
AB6047'JUNCTION OF STATE HIGHWAYS 118 AND 116, AND U.S. HIGHWAY 127 IN VAN  
AB6047'WERT, GO WEST ON HIGHWAY 118 FOR 0.32 KM (0.20 MI) TO A CROSSROAD.  
AB6047'TURN LEFT, SOUTHWEST, ON HIGHWAY 118 FOR 0.48 KM (0.30 MI) TO A PAVED  
AB6047'ROAD RIGHT. TURN RIGHT, WEST, ON LEESON AVENUE FOR 1.21 KM (0.75 MI)  
AB6047'TO THE FIRST AIRPORT ENTRANCE ON THE LEFT LEADING TO THE OFFICE.  
AB6047'CONTINUE AHEAD, WEST, ON LEESON AVENUE FOR 1.12 KM (0.70 MI) TO A  
AB6047'GRAVEL ROAD ON THE LEFT NEAR THE WEST END OF THE AIRFIELD. TURN LEFT,  
AB6047'SOUTH, FOR ABOUT 80 M (262.5 FT) TO THE STATION ON THE LEFT. THE  
AB6047'STATION IS A SURVEY DISK ATOP AN ALUMINUM ALLOY ROD IN A GREASE FILLED  
AB6047'SLEEVE ENCASED IN A 12.7 CM PVC PIPE WITH A LOGO CAP SURROUNDED BY  
AB6047'CONCRETE SET FLUSH WITH THE GROUND. IT IS 84.8 M (278.2 FT) SOUTH OF  
AB6047'THE CENTER OF LEESON AVENUE, 4.0 M (13.1 FT) EAST OF THE CENTER OF THE  
AB6047'GRAVEL ROAD, 122.4 M (401.6 FT) NORTHWEST OF THE NORTHWEST CORNER OF  
AB6047'THE RUNWAY, AND 0.3 M (1.0 FT) EAST OF A FIBERGLASS WITNESS POST.  
AB6047'NOTE--SLEEVE DEPTH DOES NOT MEET CLASS A CRITERIA. DESCRIBED BY D.G.  
AB6047'AUG

AB6047  
AB6047  
AB6047

STATION RECOVERY (1997)

AB6047'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)  
AB6047'RECOVERED AS DESCRIBED.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

```

PROGRAM = datasheet95, VERSION = 8.12.5.4
1      National Geodetic Survey,      Retrieval Date = JANUARY  6, 2020
MC1644 *****
MC1644 CBN          - This is a Cooperative Base Network Control Station.
MC1644 PACS        - This is a Primary Airport Control Station.
MC1644 DESIGNATION - W 350
MC1644 PID         - MC1644
MC1644 STATE/COUNTY- OH/HANCOCK
MC1644 COUNTRY     - US
MC1644 USGS QUAD   - FINDLAY (1979)
MC1644
MC1644                      *CURRENT SURVEY CONTROL
MC1644
MC1644* NAD 83(2011) POSITION- 41 00 45.54437(N) 083 41 03.08608(W) ADJUSTED
MC1644* NAD 83(2011) ELLIP HT- 205.366 (meters) (06/27/12) ADJUSTED
MC1644* NAD 83(2011) EPOCH - 2010.00
MC1644* NAVD 88 ORTHO HEIGHT - 240.808 (meters) 790.05 (feet) ADJUSTED
MC1644
MC1644 GEOID HEIGHT - -35.435 (meters) GEOID18
MC1644 NAD 83(2011) X - 530,221.945 (meters) COMP
MC1644 NAD 83(2011) Y - -4,790,570.866 (meters) COMP
MC1644 NAD 83(2011) Z - 4,163,618.208 (meters) COMP
MC1644 LAPLACE CORR - 1.65 (seconds) DEFLEC18
MC1644 DYNAMIC HEIGHT - 240.693 (meters) 789.67 (feet) COMP
MC1644 MODELED GRAVITY - 980,139.2 (mgal) NAVD 88
MC1644
MC1644 VERT ORDER - FIRST CLASS II
MC1644
MC1644 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MC1644 Standards:
MC1644          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
MC1644          Horiz Ellip          SD_N   SD_E   SD_h          (unitless)
MC1644 -----
MC1644 NETWORK    0.97    1.96          0.45   0.32   1.00          -0.06669983
MC1644 -----
MC1644 Click here for local accuracies and other accuracy information.
MC1644
MC1644
MC1644.This mark is at Findlay Airport (FDY)
MC1644
MC1644.The horizontal coordinates were established by GPS observations
MC1644.and adjusted by the National Geodetic Survey in June 2012.
MC1644
MC1644.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MC1644.been affixed to the stable North American tectonic plate. See
MC1644.NA2011 for more information.
MC1644
MC1644.The horizontal coordinates are valid at the epoch date displayed above
MC1644.which is a decimal equivalence of Year/Month/Day.
MC1644
MC1644.The orthometric height was determined by differential leveling and

```



MC1644.adjusted by the NATIONAL GEODETIC SURVEY  
 MC1644.in January 1994.

MC1644

MC1644.Significant digits in the geoid height do not necessarily reflect accuracy.  
 MC1644.GEOID18 height accuracy estimate available [here](#).

MC1644

MC1644.Click [here](#) to see if photographs exist for this station.

MC1644

MC1644.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC1644

MC1644.The Laplace correction was computed from DEFLEC18 derived deflections.

MC1644

MC1644.The ellipsoidal height was determined by GPS observations

MC1644.and is referenced to NAD 83.

MC1644

MC1644.The dynamic height is computed by dividing the NAVD 88

MC1644.geopotential number by the normal gravity value computed on the

MC1644.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC1644.degrees latitude (g = 980.6199 gals.).

MC1644

MC1644.The modeled gravity was interpolated from observed gravity values.

MC1644

MC1644. The following values were computed from the NAD 83(2011) position.

MC1644

MC1644;		North	East	Units	Scale Factor	Converg.
MC1644;SPC OH N	-	150,142.187	500,396.037	MT	0.99993960	-0 46 40.6
MC1644;SPC OH N	-	492,591.49	1,641,716.00	sFT	0.99993960	-0 46 40.6
MC1644;UTM 17	-	4,543,632.364	274,287.022	MT	1.00022708	-1 45 43.8
MC1644!	-	Elev Factor	x Scale Factor	=	Combined Factor	
MC1644!SPC OH N	-	0.99996779	x 0.99993960	=	0.99990739	
MC1644!UTM 17	-	0.99996779	x 1.00022708	=	1.00019486	

MC1644

MC1644\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF7428743632 (NAD 83)

MC1644

MC1644	-----		
MC1644	PID	Reference Object	Distance
MC1644			Geod. Az
MC1644			dddmss.s
MC1644	AA7366	WILSON	187.830 METERS 32752
MC1644	-----		

MC1644

MC1644 SUPERSEDED SURVEY CONTROL

MC1644

MC1644	NAD 83(2007)-	41 00 45.54442(N)	083 41 03.08684(W)	AD(2002.00)	0
MC1644	ELLIP H (02/10/07)	205.382 (m)		GP(2002.00)	
MC1644	ELLIP H (03/08/05)	205.389 (m)		GP( )	4 2
MC1644	NAD 83(1995)-	41 00 45.54442(N)	083 41 03.08656(W)	AD( )	B
MC1644	ELLIP H (08/20/96)	205.425 (m)		GP( )	4 2
MC1644	NAD 83(1986)-	41 00 45.55417(N)	083 41 03.09777(W)	AD( )	1
MC1644	NAVD 88	240.81 (m)	790.1 (f)	LEVELING	3

MC1644

MC1644.Superseded values are not recommended for survey control.

MC1644

MC1644.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC1644.See file [dsdata.pdf](#) to determine how the superseded data were derived.



MC1644

MC1644\_MARKER: F = FLANGE-ENCASED ROD

MC1644\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)

MC1644\_STAMPING: W 350 1993

MC1644\_MARK LOGO: NGS

MC1644\_PROJECTION: FLUSH

MC1644\_MAGNETIC: N = NO MAGNETIC MATERIAL

MC1644\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

MC1644\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

MC1644+SATELLITE: SATELLITE OBSERVATIONS - June 03, 2014

MC1644\_ROD/PIPE-DEPTH: 3.1 meters

MC1644\_SLEEVE-DEPTH : 0.90 meters

MC1644

MC1644	HISTORY	- Date	Condition	Report By
MC1644	HISTORY	- 1993	MONUMENTED	NGS
MC1644	HISTORY	- 19940824	GOOD	OH-063
MC1644	HISTORY	- 19951109	GOOD	NGS
MC1644	HISTORY	- 20110614	GOOD	JCLS
MC1644	HISTORY	- 20140603	GOOD	WOOLPT

MC1644

MC1644 STATION DESCRIPTION

MC1644

MC1644'DESCRIBED BY NATIONAL GEODETIC SURVEY 1993

MC1644'3.8 KM (2.35 MI) SOUTHERLY ALONG INTERSTATE HIGHWAY 75 FROM THE  
MC1644'JUNCTION OF STATE HIGHWAY 224 IN FINDLAY (EXIT 159), THENCE 1.2 KM  
MC1644'(0.75 MI) EASTERLY ALONG AN EXIT RAMP (EXIT 156), THENCE 1.9 KM (1.20  
MC1644'MI) SOUTHERLY ALONG LIMA AVENUE (COUNTY ROAD 313), 22.2 M (72.8 FT)  
MC1644'NORTHWEST OF THE CENTERLINE OF THE AVENUE, 16.9 M (55.4 FT) EAST OF  
MC1644'THE SOUTHEAST CORNER OF A COUNTY MAINTENANCE BUILDING, 10.5 M (34.4  
MC1644'FT) WEST OF THE CENTERLINE OF TOWNSHIP ROAD 67, 0.7 M (2.3 FT) SOUTH  
MC1644'OF THE MOST SOUTHERLY OF 2 LEGS OF A SIGN (HANCOCK COUNTY ENGINEER),  
MC1644'AND 0.6 M (2.0 FT) BELOW THE LEVEL OF THE AVENUE. NOTE--ACCESS TO  
MC1644'THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP. THE SLEEVE DEPTH DOES  
MC1644'NOT MEET THE SPECIFICATIONS FOR A CLASS A MARK.

MC1644

MC1644 STATION RECOVERY (1994)

MC1644

MC1644'RECOVERY NOTE BY HANCOCK COUNTY OHIO 1994 (TM)

MC1644'RECOVERED AS DESCRIBED.

MC1644

MC1644 STATION RECOVERY (1995)

MC1644

MC1644'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

MC1644'NOTE--THIS IS THE PAC STATION. NOTE--NOTIFY HANCOCK COUNTY ENGINEER  
MC1644'IF LEAVING AN INSTRUMENT DURING BUSINESS HOURS. IF OBSERVATIONS ARE  
MC1644'AFTER BUSINESS HOURS IT WILL REQUIRE SOMEONE TO REMAIN WITH THE  
MC1644'INSTRUMENT. THE STATION IS LOCATED ABOUT 2 KM (1.25 MI)  
MC1644'SOUTH-SOUTHWEST OF FINDLAY, IN THE NORTHWEST QUADRANT OF THE JUNCTION  
MC1644'OF LIMA AVENUE AND COUNTY ROAD 67, ACROSS THE INTERSECTION FROM THE  
MC1644'NORTHWEST CORNER OF THE FINDLAY AIRFIELD, AND IN THE SOUTHEAST CORNER  
MC1644'OF THE HANCOCK COUNTY ENGINEERS OFFICE YARD. TO REACH FROM THE  
MC1644'UNDERPASS AT THE JUNCTION OF INTERSTATE HIGHWAY 75, U.S. HIGHWAY 68  
MC1644'AND STATE HIGHWAY 15 (EXIT 156) ON THE SOUTH SIDE OF FINDLAY, GO  
MC1644'SOUTHEAST ON HIGHWAYS 68 AND 15 FOR 0.56 KM (0.35 MI) TO THE LIMA  
MC1644'AVENUE EXIT ON THE RIGHT. TURN RIGHT, SOUTHWEST, ON THE EXIT ROAD FOR





MC1644'0.24 KM (0.15 MI) TO THE JUNCTION OF LIMA AVENUE. TURN LEFT,  
MC1644'WEST-SOUTHWEST, ON LIMA AVENUE FOR 1.9 KM (1.20 MI) TO THE JUNCTION OF  
MC1644'COUNTY ROAD 67 AND THE STATION ON THE RIGHT. THE STATION IS A PUNCH  
MC1644'HOLE TOP CENTER OF A STAINLESS STEEL ROD IN A 25 CM GREASE FILLED  
MC1644'SLEEVE 90 CM LONG ENCASED IN A 12.7 CM PVC PIPE WITH A LOGO CAP  
MC1644'SURROUNDED BY CONCRETE SET FLUSH WITH THE GROUND. IT IS 15.9 M (52.2  
MC1644'FT) NORTHWEST OF, AND 0.6 M (2.0 FT) LOWER THAN THE CENTER OF LIMA  
MC1644'AVENUE, 22.2 M (72.8 FT) EAST OF THE SOUTHEAST CORNER OF A COUNTY  
MC1644'MAINTENANCE BUILDING, 11.3 M (37.1 FT) WEST OF THE CENTER OF COUNTY  
MC1644'ROAD 67, AND 0.7 M (2.3 FT) SOUTH OF THE SOUTH ONE OF TWO LEGS OF A  
MC1644'SIGN--HANCOCK COUNTY ENGINEER. NOTE--THE SLEEVE DEPTH DOES NOT MEET  
MC1644'CLASS A REQUIREMENTS. DESCRIBED BY D.G. AUG

MC1644

MC1644

STATION RECOVERY (2011)

MC1644

MC1644'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011

MC1644'RECOVERED IN GOOD CONDITION.

MC1644

MC1644

STATION RECOVERY (2014)

MC1644

MC1644'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2014 (DMH)

MC1644'HANCOCK COUNTY ENGINEER NO LONGER REQUIRES EQUIPMENT TO BE ATTENDED

MC1644'WHEN OCCUPYING STATION DURING NON-BUSINESS HOURS. THE MARK IS 53.5 FT

MC1644'(16.3 M) NORTHWEST OF THE CENTERLINE OF LIMA AVENUE, 36.8 FT (11.2 M)

MC1644'WEST OF THE CENTERLINE OF CARLIN STREET, 22.3 FT (6.8 M) EAST OF THE

MC1644'SOUTHEAST CORNER OF AN ASPHALT PARKING LOT AND 3.2 FT (1.0 M)

MC1644'SOUTHEAST OF THE SOUTHEAST WOODEN POST OF THE HANCOCK COUNTY ENGINEER

MC1644'SIGN.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = JANUARY 6, 2020

KZ2273 \*\*\*\*\*

KZ2273 DESIGNATION - **WYA 30 0050**

KZ2273 PID - KZ2273

KZ2273 STATE/COUNTY- OH/WYANDOT

KZ2273 COUNTRY - US

KZ2273 USGS QUAD - FOREST (1980)

KZ2273

KZ2273 \*CURRENT SURVEY CONTROL

KZ2273

KZ2273\* NAD 83(2011) POSITION- 40 50 08.18001(N) 083 30 23.07034(W) ADJUSTED

KZ2273\* NAD 83(2011) ELLIP HT- 239.118 (meters) (06/27/12) ADJUSTED

KZ2273\* NAD 83(2011) EPOCH - 2010.00

KZ2273\* [NAVD 88](#) ORTHO HEIGHT - 274.3 (meters) 900. (feet) GPS OBS

KZ2273

KZ2273 NAVD 88 orthometric height was determined with geoid model GEOID93

KZ2273 GEOID HEIGHT - -35.09 (meters) GEOID93

KZ2273 GEOID HEIGHT - -35.074 (meters) GEOID18

KZ2273 NAD 83(2011) X - 546,543.440 (meters) COMP

KZ2273 NAD 83(2011) Y - -4,801,725.090 (meters) COMP

KZ2273 NAD 83(2011) Z - 4,148,784.126 (meters) COMP

KZ2273 LAPLACE CORR - 2.15 (seconds) DEFLEC18

KZ2273

KZ2273 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

KZ2273 Standards:

KZ2273 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

KZ2273 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

KZ2273 -----

KZ2273 NETWORK 2.07 3.49 0.99 0.60 1.78 0.01787145

KZ2273 -----

KZ2273 Click [here](#) for local accuracies and other accuracy information.

KZ2273

KZ2273

KZ2273.The horizontal coordinates were established by GPS observations

KZ2273.and adjusted by the National Geodetic Survey in June 2012.

KZ2273

KZ2273.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

KZ2273.been affixed to the stable North American tectonic plate. See

KZ2273.[NA2011](#) for more information.

KZ2273

KZ2273.The horizontal coordinates are valid at the epoch date displayed above

KZ2273.which is a decimal equivalence of Year/Month/Day.

KZ2273

KZ2273.The orthometric height was determined by GPS observations and a

KZ2273.high-resolution geoid model.

KZ2273

KZ2273.Significant digits in the geoid height do not necessarily reflect accuracy.

KZ2273.GEOID18 height accuracy estimate available [here](#).

KZ2273

KZ2273.Click [here](#) to see if photographs exist for this station.



KZ2273  
 KZ2273.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 KZ2273  
 KZ2273.The Laplace correction was computed from DEFLEC18 derived deflections.  
 KZ2273  
 KZ2273.The ellipsoidal height was determined by GPS observations  
 KZ2273.and is referenced to NAD 83.

KZ2273  
 KZ2273. The following values were computed from the NAD 83(2011) position.

KZ2273

KZ2273;		North	East	Units	Scale	Factor	Converg.
KZ2273;SPC OH N	-	130,295.474	515,121.963	MT	0.99994730	-0 39	40.2
KZ2273;SPC OH N	-	427,477.73	1,690,029.31	sFT	0.99994730	-0 39	40.2
KZ2273;UTM 17	-	4,523,531.454	288,674.447	MT	1.00014970	-1 38	22.3

KZ2273  
 KZ2273!  
 - Elev Factor x Scale Factor = Combined Factor  
 KZ2273!SPC OH N - 0.99996249 x 0.99994730 = 0.99990979  
 KZ2273!UTM 17 - 0.99996249 x 1.00014970 = 1.00011219

KZ2273

KZ2273:		Primary Azimuth Mark	Grid Az
KZ2273:SPC OH N	-	WYA 30 0085	123 16 21.9
KZ2273:UTM 17	-	WYA 30 0085	124 15 04.0

KZ2273  
 KZ2273\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TKF8867423531 (NAD 83)  
 KZ2273

KZ2273

KZ2273	PID	Reference Object	Distance	Geod. Az
KZ2273				ddmmss.s
KZ2273	KZ2274	WYA 30 0085	APPROX. 0.6 KM	1223641.7

KZ2273  
 KZ2273  
 KZ2273 SUPERSEDED SURVEY CONTROL

KZ2273	NAD 83(2007)-	40 50 08.18001(N)	083 30 23.07122(W)	AD(2002.00)	0
KZ2273	ELLIP H (02/10/07)	239.115 (m)		GP(2002.00)	
KZ2273	ELLIP H (10/07/05)	239.114 (m)		GP( )	4 1
KZ2273	NAD 83(1995)-	40 50 08.17996(N)	083 30 23.07099(W)	AD( )	1
KZ2273	ELLIP H (04/01/98)	239.143 (m)		GP( )	4 1
KZ2273	NAD 83(1986)-	40 50 08.18662(N)	083 30 23.08362(W)	AD( )	1
KZ2273	NGVD 29 (07/23/91)	274.4 (m)	UNKNOWN model used	GPS OBS	

KZ2273  
 KZ2273.Superseded values are not recommended for survey control.

KZ2273  
 KZ2273.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 KZ2273.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 KZ2273

KZ2273\_MARKER: DH = HORIZONTAL CONTROL DISK  
 KZ2273\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.)  
 KZ2273\_STAMPING: WYANDOT 0050 US30  
 KZ2273\_MARK LOGO: OHDT  
 KZ2273\_PROJECTION: FLUSH  
 KZ2273\_MAGNETIC: O = OTHER; SEE DESCRIPTION  
 KZ2273\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 KZ2273\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 KZ2273+SATELLITE: SATELLITE OBSERVATIONS - August 22, 1994



KZ2273\_ROD/PIPE-DEPTH: 12.4 meters

KZ2273\_SLEEVE-DEPTH : 1.0 meters

KZ2273

KZ2273	HISTORY	- Date	Condition	Report By
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KZ2273	HISTORY	- 1990	MONUMENTED	OHDT
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KZ2273	HISTORY	- 19940822	GOOD	OH-063
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KZ2273

KZ2273 STATION DESCRIPTION

KZ2273

KZ2273'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1990

KZ2273'STATION IS LOCATED 2.56 MI (4.12 KM) NORTH-NORTHEAST OF THE TOWN OF

KZ2273'FOREST, 11.0 MI (17.7 KM) WEST OF UPPER SANDUSKY, ON COUNTY R/W IN

KZ2273'THE SOUTHWEST QUARTER OF SECTION 29, T 2 S, R 12 E, RICHLAND TWP.,

KZ2273'1018 FT (310.3 M) NORTH OF TWO LANE US 30 (LINCOLN HWY.).

KZ2273'TO REACH FROM THE JUNCTION OF STATE ROUTE 37 AND EAST-WEST RAILROAD IN

KZ2273'FOREST, GO NORTH 2.45 MI (3.94 KM) TO US 30, TURN RIGHT AND GO EAST

KZ2273'0.75 MI (1.21 KM) TO COUNTY ROAD 78, THEN NORTH 0.2 MI (0.3 KM) TO

KZ2273'MARK ON THE LEFT.

KZ2273'MARK IS 1018 FT (310.3 M) NORTH OF US 30 CENTERLINE, 22 FT (6.7 M)

KZ2273'WEST OF COUNTY ROAD 78 CENTERLINE, 885 FT (269.7 M) SOUTH OF THE SOUTH

KZ2273'SIDE OF FRAME HOUSE AT ADDRESS 10615, AND 1.0 FT (0.3 M) EAST OF A

KZ2273'ORANGE FIBERGLASS WITNESS POST.

KZ2273

KZ2273 STATION RECOVERY (1994)

KZ2273

KZ2273'RECOVERY NOTE BY HANCOCK COUNTY OHIO 1994 (TM)

KZ2273'RECOVERED AS DESCRIBED.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.5

Starting Datasheet Retrieval...

1 National Geodetic Survey, Retrieval Date = JANUARY 27, 2020

KZ2277 \*\*\*\*\*

KZ2277 DESIGNATION - **WYA 30 0880**

KZ2277 PID - KZ2277

KZ2277 STATE/COUNTY- OH/WYANDOT

KZ2277 COUNTRY - US

KZ2277 USGS QUAD - UPPER SANDUSKY (2016)

KZ2277

KZ2277 \*CURRENT SURVEY CONTROL

KZ2277

KZ2277\* NAD 83(2011) POSITION- 40 49 56.62366(N) 083 20 55.41937(W) ADJUSTED

KZ2277\* NAD 83(2011) ELLIP HT- 223.432 (meters) (06/27/12) ADJUSTED

KZ2277\* NAD 83(2011) EPOCH - 2010.00

KZ2277\* [NAVD 88](#) ORTHO HEIGHT - 258.4 (meters) 848. (feet) VERTCON

KZ2277

KZ2277 GEOID HEIGHT - -34.980 (meters) GEOID18

KZ2277 NAD 83(2011) X - 559,781.564 (meters) COMP

KZ2277 NAD 83(2011) Y - -4,800,422.539 (meters) COMP

KZ2277 NAD 83(2011) Z - 4,148,504.142 (meters) COMP

KZ2277 LAPLACE CORR - 0.77 (seconds) DEFLEC18

KZ2277

KZ2277 Network accuracy estimates per FGDC Geospatial Positioning Accuracy

KZ2277 Standards:

KZ2277 FGDC (95% conf, cm) Standard deviation (cm) CorrNE

KZ2277 Horiz Ellip SD\_N SD\_E SD\_h (unitless)

KZ2277 -----

KZ2277 NETWORK 2.54 2.94 0.97 1.10 1.50 0.11302459

KZ2277 -----

KZ2277 Click [here](#) for local accuracies and other accuracy information.

KZ2277

KZ2277

KZ2277.The horizontal coordinates were established by GPS observations

KZ2277.and adjusted by the National Geodetic Survey in June 2012.

KZ2277

KZ2277.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has

KZ2277.been affixed to the stable North American tectonic plate. See

KZ2277.[NA2011](#) for more information.

KZ2277

KZ2277.The horizontal coordinates are valid at the epoch date displayed above

KZ2277.which is a decimal equivalence of Year/Month/Day.

KZ2277

KZ2277.The NAVD 88 height was computed by applying the VERTCON shift value to

KZ2277.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

KZ2277

KZ2277.Significant digits in the geoid height do not necessarily reflect accuracy.

KZ2277.GEOID18 height accuracy estimate available [here](#).

KZ2277

KZ2277.Click [photographs](#) - Photos may exist for this station.

KZ2277



KZ2277.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
KZ2277

KZ2277.The Laplace correction was computed from DEFLEC18 derived deflections.  
KZ2277

KZ2277.The ellipsoidal height was determined by GPS observations  
KZ2277.and is referenced to NAD 83.

KZ2277

KZ2277. The following values were computed from the NAD 83(2011) position.

KZ2277

KZ2277;		North	East	Units	Scale	Factor	Converg.
KZ2277;SPC OH N	-	129,797.591	528,416.452	MT	0.99994753	-0 33	27.3
KZ2277;SPC OH N	-	425,844.26	1,733,646.31	sFT	0.99994753	-0 33	27.3
KZ2277;UTM 17	-	4,522,806.489	301,960.733	MT	1.00008275	-1 32	10.4
KZ2277!	-	Elev Factor x Scale Factor = Combined Factor					
KZ2277!SPC OH N	-	0.99996495	0.99994753	=	0.99991248		
KZ2277!UTM 17	-	0.99996495	1.00008275	=	1.00004770		

KZ2277

KZ2277\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF0196022806(NAD 83)

KZ2277

SUPERSEDED SURVEY CONTROL

KZ2277

KZ2277	NAD 83(2007)-	40 49 56.62380(N)	083 20 55.42015(W)	AD(2002.00)	0
KZ2277	ELLIP H (02/10/07)	223.444 (m)		GP(2002.00)	
KZ2277	ELLIP H (10/07/05)	223.442 (m)		GP( )	4 1
KZ2277	NAD 83(1995)-	40 49 56.62377(N)	083 20 55.41982(W)	AD( )	1
KZ2277	ELLIP H (04/01/98)	223.467 (m)		GP( )	4 1
KZ2277	NAD 83(1986)-	40 49 56.62913(N)	083 20 55.43238(W)	AD( )	1
KZ2277	NGVD 29 (07/23/91)	258.6 (m)	UNKNOWN model used	GPS OBS	

KZ2277.No superseded survey control is available for this station.

KZ2277

KZ2277\_MARKER: DH = HORIZONTAL CONTROL DISK

KZ2277\_SETTING: 60 = ALUMINUM ALLOY ROD IN SLEEVE (10 FT.+)

KZ2277\_STAMPING: WYANDOT 0880 US30

KZ2277\_MARK LOGO: OHDT

KZ2277\_PROJECTION: FLUSH

KZ2277\_MAGNETIC: T = STEEL SPIKE ADJACENT TO MONUMENT

KZ2277\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

KZ2277\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

KZ2277+SATELLITE: SATELLITE OBSERVATIONS - 1990

KZ2277\_ROD/PIPE-DEPTH: 11.0 meters

KZ2277\_SLEEVE-DEPTH : 1.0 meters

KZ2277

KZ2277 HISTORY - Date Condition Report By

KZ2277 HISTORY - 1990 MONUMENTED OHDT

KZ2277

STATION DESCRIPTION

KZ2277

KZ2277'DESCRIBED BY OHIO DEPARTMENT OF TRANSPORTATION 1990

KZ2277'STATION IS LOCATED 3.0 MI (4.8 KM) WEST OF UPPER SANDUSKY ON TWO LANE

KZ2277'US 30 (LINCOLN HWY.) R/W, IN THE NORTHEAST QUARTER OF SECTION 34, T 2

KZ2277'S, R 13 E, SALEM TWP.

KZ2277'TO REACH FROM THE JUNCTION OF US 30 AND NORTH-SOUTH RAILROAD TRACKS

KZ2277'NEAR THE WESTERN CORPORATION LIMIT OF UPPER SANDUSKY, GO WEST 3.0 MI

KZ2277'(4.8 KM) ON US 30 (LINCOLN HWY.) TO A TEE INTERSECTION WITH TWP. RD.



KZ2277'103 AND THE STATION SOUTHEAST OF INTERSECTION.  
KZ2277'MARK IS 46.8 FT (14.3 M) SOUTH OF US 30 CENTERLINE, 89.5 FT (27.3 M)  
KZ2277'EAST OF TWP. RD. 103 CENTERLINE, 69.1 FT (21.1 M) NORTHWEST OF OHIO  
KZ2277'POWER CO. POWER POLE NUMBERED 772/118, 74.5 FT (22.7 M) NORTHEAST OF  
KZ2277'POWER POLE NUMBERED 772/183, AND 1.5 FT (0.5 M) NORTH OF A ORANGE  
KZ2277'FIBERGLASS WITNESS POST.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2019

MB1449 \*\*\*\*\*

MB1449 DESIGNATION - **X 150**

MB1449 PID - MB1449

MB1449 STATE/COUNTY- OH/TRUMBULL

MB1449 COUNTRY - US

MB1449 USGS QUAD - NEWTON FALLS (1994)

MB1449

MB1449 \*CURRENT SURVEY CONTROL

MB1449

MB1449\* NAD 83(1986) POSITION- 41 12 53.35 (N) 080 58 46.68 (W) HD\_HELD1

MB1449\* [NAVD 88](#) ORTHO HEIGHT - 284.913 (meters) 934.75 (feet) ADJUSTED

MB1449

MB1449 GEOID HEIGHT - -33.800 (meters) GEOID18

MB1449 DYNAMIC HEIGHT - 284.790 (meters) 934.35 (feet) COMP

MB1449 MODELED GRAVITY - 980,182.8 (mgal) NAVD 88

MB1449

MB1449 VERT ORDER - SECOND CLASS 0

MB1449

MB1449.The horizontal coordinates were determined by differentially corrected  
 MB1449.hand held GPS observations or other comparable positioning techniques  
 MB1449.and have an estimated accuracy of +/- 3 meters.

MB1449.

MB1449.The orthometric height was determined by differential leveling and  
 MB1449.adjusted by the NATIONAL GEODETIC SURVEY

MB1449.in June 1991.

MB1449

MB1449.Significant digits in the geoid height do not necessarily reflect accuracy.

MB1449.GEOID18 height accuracy estimate available [here](#).

MB1449

MB1449.Click [here](#) to see if photographs exist for this station.

MB1449

MB1449.The dynamic height is computed by dividing the NAVD 88

MB1449.geopotential number by the normal gravity value computed on the

MB1449.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MB1449.degrees latitude (g = 980.6199 gals.).

MB1449

MB1449.The modeled gravity was interpolated from observed gravity values.

MB1449

MB1449;	North	East	Units	Estimated Accuracy
MB1449;SPC OH N	- 173,027.9	727,486.3	MT	(+/- 3 meters HH1 GPS)

MB1449

MB1449\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TNF0170762604 (NAD 83)

MB1449

MB1449 SUPERSEDED SURVEY CONTROL

MB1449

MB1449 NGVD 29 (??/??/92) 285.079 (m) 935.30 (f) ADJ UNCH 2 0

MB1449

MB1449.Superseded values are not recommended for survey control.

MB1449





MB1449.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
MB1449.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
MB1449

MB1449\_MARKER: DB = BENCH MARK DISK  
MB1449\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
MB1449\_STAMPING: X 150 1949  
MB1449\_MARK LOGO: CGS  
MB1449\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
MB1449+STABILITY: SURFACE MOTION  
MB1449\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MB1449+SATELLITE: SATELLITE OBSERVATIONS - April 18, 2007  
MB1449

MB1449	HISTORY	- Date	Condition	Report By
MB1449	HISTORY	- 1949	MONUMENTED	CGS
MB1449	HISTORY	- 1950	GOOD	CGS
MB1449	HISTORY	- 20070418	GOOD	GEOCAC

MB1449

STATION DESCRIPTION

MB1449

MB1449'DESCRIBED BY COAST AND GEODETIC SURVEY 1950  
MB1449'2.1 MI SW FROM BRACEVILLE.  
MB1449'ABOUT 1.1 MILES WEST ALONG THE ERIE RAILROAD FROM ITS  
MB1449'STATION AT BRACEVILLE, THENCE ABOUT 1 MILE SOUTH ALONG STATE  
MB1449'HIGHWAY 534 AND ABOUT 60 YARDS NORTH OF A FARM HOUSE AT THE  
MB1449'NORTHWEST CORNER OF A FENCE SURROUNDING THE FARM YARD. IT IS  
MB1449'30 FEET EAST OF THE CENTERLINE OF THE HIGHWAY, 6.5 FEET EAST OF  
MB1449'THE CORNER FENCE POST AND 32.5 FEET SOUTH OF A 16 INCH TREE. IT  
MB1449'IS 2 FEET EAST OF A WHITE WITNESS POST AND 2 FEET LOWER THAN  
MB1449'THE CENTERLINE OF THE HIGHWAY. A STANDARD DISK SET IN THE TOP  
MB1449'OF A CONCRETE POST PROJECTING 2 INCHES. NOTE-- THIS MARK CAN ALSO  
MB1449'BE REACHED BY GOING 2 MILES NORTH ALONG STATE HIGHWAY 534 FROM  
MB1449'THE POST OFFICE AT NEWTIN FALLS.

MB1449

STATION RECOVERY (2007)

MB1449

MB1449'RECOVERY NOTE BY GEOCACHING 2007 (RLM)  
MB1449'ADD TO DESCRIPTION, THE FARM HOUSE IS HOUSE NUMBER 1119 AND THE FENCE,  
MB1449'CORNER FENCE POST, AND 16-INCH TREE ARE GONE.

\*\*\* retrieval complete.

Elapsed Time = 00:00:01



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

```

PROGRAM = datasheet95, VERSION = 8.12.5.4
1      National Geodetic Survey,      Retrieval Date = NOVEMBER 24, 2019
MB1620 *****
MB1620 CBN      - This is a Cooperative Base Network Control Station.
MB1620 TIDAL BM - This is a Tidal Bench Mark.
MB1620 DESIGNATION - X 323
MB1620 PID      - MB1620
MB1620 STATE/COUNTY- OH/LAKE
MB1620 COUNTRY  - US
MB1620 USGS QUAD - CHESTERLAND (1994)
MB1620
MB1620                                *CURRENT SURVEY CONTROL
MB1620
MB1620* NAD 83(2011) POSITION- 41 45 10.22622(N) 081 17 17.93623(W) ADJUSTED
MB1620* NAD 83(2011) ELLIP HT- 141.416 (meters) (06/27/12) ADJUSTED
MB1620* NAD 83(2011) EPOCH - 2010.00
MB1620* NAVD 88 ORTHO HEIGHT - 175.790 (meters) 576.74 (feet) ADJUSTED
MB1620
MB1620 GEOID HEIGHT - -34.484 (meters) GEOID18
MB1620 NAD 83(2011) X - 721,783.400 (meters) COMP
MB1620 NAD 83(2011) Y - -4,710,450.857 (meters) COMP
MB1620 NAD 83(2011) Z - 4,225,257.482 (meters) COMP
MB1620 LAPLACE CORR - 1.25 (seconds) DEFLEC18
MB1620 DYNAMIC HEIGHT - 175.727 (meters) 576.53 (feet) COMP
MB1620 MODELED GRAVITY - 980,261.1 (mgal) NAVD 88
MB1620
MB1620 VERT ORDER - SECOND CLASS I
MB1620
MB1620 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
MB1620 Standards:
MB1620          FGDC (95% conf, cm)          Standard deviation (cm)          CorrNE
MB1620          Horiz Ellip          SD_N   SD_E   SD_h          (unitless)
MB1620 -----
MB1620 NETWORK    0.44    1.02          0.20   0.15   0.52          0.01972514
MB1620 -----
MB1620 Click here for local accuracies and other accuracy information.
MB1620
MB1620
MB1620.The horizontal coordinates were established by GPS observations
MB1620.and adjusted by the National Geodetic Survey in June 2012.
MB1620
MB1620.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
MB1620.been affixed to the stable North American tectonic plate. See
MB1620.NA2011 for more information.
MB1620
MB1620.The horizontal coordinates are valid at the epoch date displayed above
MB1620.which is a decimal equivalence of Year/Month/Day.
MB1620
MB1620.The orthometric height was determined by differential leveling and
MB1620.adjusted by the NATIONAL GEODETIC SURVEY
MB1620.in April 2014.

```



MB1620  
 MB1620.No vertical observational check was made to the station.  
 MB1620  
 MB1620.Significant digits in the geoid height do not necessarily reflect accuracy.  
 MB1620.GEOID18 height accuracy estimate available [here](#).  
 MB1620  
 MB1620.This Tidal Bench Mark is designated as VM 17140  
 MB1620.by the [CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS AND SERVICES](#).  
 MB1620  
 MB1620.Click [here](#) to see if photographs exist for this station.  
 MB1620  
 MB1620.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 MB1620  
 MB1620.The Laplace correction was computed from DEFLEC18 derived deflections.  
 MB1620  
 MB1620.The ellipsoidal height was determined by GPS observations  
 MB1620.and is referenced to NAD 83.  
 MB1620  
 MB1620.The dynamic height is computed by dividing the NAVD 88  
 MB1620.geopotential number by the normal gravity value computed on the  
 MB1620.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 MB1620.degrees latitude (g = 980.6199 gals.).  
 MB1620  
 MB1620.The modeled gravity was interpolated from observed gravity values.  
 MB1620  
 MB1620. The following values were computed from the NAD 83(2011) position.  
 MB1620  
 MB1620;  
 MB1620;SPC OH N                    -    North                    East                    Units Scale Factor Converg.  
 MB1620;SPC OH N                    -    232,369.235    700,774.338    MT    1.00001062    +0 47 45.7  
 MB1620;SPC OH N                    -    762,364.73    2,299,123.81    sFT    1.00001062    +0 47 45.7  
 MB1620;UTM 17                    -    4,622,375.155    476,030.199    MT    0.99960707    -0 11 31.2  
 MB1620  
 MB1620!  
 MB1620!SPC OH N                    -    Elev Factor    x    Scale Factor    =    Combined Factor  
 MB1620!SPC OH N                    -    0.99997782    x    1.00001062    =    0.99998844  
 MB1620!UTM 17                    -    0.99997782    x    0.99960707    =    0.99958490  
 MB1620  
 MB1620\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TMG7603022375(NAD 83)

PID	Reference Object	Distance	Geod. Az
			dddmmss.s
AH9235 906 3053 F		224.454 METERS	13800

SUPERSEDED SURVEY CONTROL

ELLIP H (10/11/07)	141.407 (m)	GP ( )	4 2
NAD 83(2007)- 41 45 10.22629(N)		081 17 17.93698(W)	AD(2002.00) 0
ELLIP H (02/10/07)	141.440 (m)		GP(2002.00)
ELLIP H (09/23/04)	141.445 (m)		GP ( ) 4 1
NAD 83(1995)- 41 45 10.22577(N)		081 17 17.93704(W)	AD ( ) B
ELLIP H (08/20/96)	141.458 (m)		GP ( ) 4 2
NAVD 88 (09/10/13)	175.795 (m)	576.75 (f)	SUPERSEDED 2 1
NAVD 88	175.84 (m)	576.9 (f)	LEVELING 3
NAVD 88 (02/15/07)	175.838 (m)	576.90 (f)	SUPERSEDED 2 1



MB1620 NAVD 88 (09/23/04) 175.9 (m) GEOID03 model used GPS OBS  
 MB1620 NAVD 88 176.03 (m) 577.5 (f) LEVELING 3  
 MB1620 NAVD 88 (06/15/91) 176.025 (m) 577.51 (f) SUPERSEDED 1 2  
 MB1620 NGVD 29 (06/03/92) 176.252 (m) 578.25 (f) ADJUSTED 1 2  
 MB1620

MB1620.Superseded values are not recommended for survey control.  
 MB1620

MB1620.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 MB1620.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 MB1620

MB1620\_MARKER: F = FLANGE-ENCASED ROD  
 MB1620\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)  
 MB1620\_STAMPING: X 323 1981  
 MB1620\_MARK LOGO: NGS  
 MB1620\_PROJECTION: FLUSH  
 MB1620\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 MB1620\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
 MB1620\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 MB1620+SATELLITE: SATELLITE OBSERVATIONS - November 20, 2018  
 MB1620\_ROD/PIPE-DEPTH: 10.9 meters  
 MB1620

MB1620 HISTORY	- Date	Condition	Report By
MB1620 HISTORY	- 1981	MONUMENTED	NGS
MB1620 HISTORY	- 1988	GOOD	USPSQD
MB1620 HISTORY	- 19891005	GOOD	NGS
MB1620 HISTORY	- 19950718	GOOD	NGS
MB1620 HISTORY	- 2003	GOOD	OHDT
MB1620 HISTORY	- 20040921	GOOD	OHDT
MB1620 HISTORY	- 2005	GOOD	NGS
MB1620 HISTORY	- 20060921	GOOD	NGS
MB1620 HISTORY	- 20100607	GOOD	NGS
MB1620 HISTORY	- 20110612	GOOD	GEOCAC
MB1620 HISTORY	- 20130218	GOOD	TERRSV
MB1620 HISTORY	- 20160810	GOOD	USPSQD
MB1620 HISTORY	- 20181120	GOOD	USPSQD

MB1620

STATION DESCRIPTION

MB1620

MB1620'DESCRIBED BY NATIONAL GEODETIC SURVEY 1981  
 MB1620'IN FAIRPORT HARBOR.  
 MB1620'THE MARK IS ABOVE LEVEL WITH PARK ENTRANCE.  
 MB1620'IN FAIRPORT HARBOR, ON THE WEST SIDE OF GRAND HARBOR AT THE ENTRANCE  
 MB1620'TO THE HEADLANDS BEACH STATE PARK, 15.25 METERS (50.0 FEET) WEST OF  
 MB1620'THE CENTER OF THE PARK ENTRANCE ROAD, 14.74 METERS (48.0 FEET) EAST OF  
 MB1620'THE CENTER OF THE PARK EXIT ROAD, 6.4 METERS (21.0 FEET) SOUTHEAST OF  
 MB1620'THE SOUTHWEST CORNER OF THE PARK SIGN AT THE ENTRANCE, 2.65 METERS  
 MB1620'(8.7 FEET) SOUTH OF AN UNDERGROUND DRUM WITH LIGHTS FOR THE SIGN.  
 MB1620

MB1620

STATION RECOVERY (1988)

MB1620

MB1620'RECOVERY NOTE BY US POWER SQUADRON 1988 (HFW)  
 MB1620'RECOVERED IN GOOD CONDITION.  
 MB1620

MB1620

STATION RECOVERY (1989)

MB1620



MB1620'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989  
MB1620'IN FAIRPORT HARBOR, ON THE WEST SIDE OF GRAND HARBOR AT THE ENTRANCE  
MB1620'TO THE HEADLANDS BEACH STATE PARK, 15.25 METERS (50.0 FEET) WEST OF  
MB1620'THE CENTER OF THE PARK ENTRANCE ROAD, 14.74 METERS (48.0 FEET) EAST  
MB1620'OF THE CENTER OF THE PARK EXIT ROAD, 6.4 METERS (21.0 FEET) SOUTHEAST  
MB1620'OF THE SOUTHWEST CORNER OF THE PARK SIGN AT THE ENTRANCE, AND 5.85 M  
MB1620'(19.2 FT) SOUTH OF THE SIGN.

MB1620  
MB1620 STATION RECOVERY (1995)  
MB1620

MB1620'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)  
MB1620'THE STATION IS LOCATED AT THE ENTRANCE TO HEADLANDS BEACH STATE PARK,  
MB1620'JUST WEST OF FAIRPORT HARBOR. TO REACH FROM THE JUNCTION OF STATE  
MB1620'ROUTES 2 AND 44 ABOUT 4.0 KM (2.50 MI) SOUTH OF FAIRPORT HARBOR, GO  
MB1620'NORTH 4.0 KM (2.50 MI) ON ROUTE 44 TO THE ENTRANCE TO HEADLANDS BEACH  
MB1620'STATE PARK AND THE STATION IN THE LAWN IN FRONT OF THE PARK ENTRANCE  
MB1620'SIGN. IT IS 15.2 M (49.9 FT) WEST OF THE CENTER OF THE PARK ENTRANCE  
MB1620'ROAD, 14.6 M (47.9 FT) EAST OF THE CENTER OF THE PARK EXIT ROAD, 6.4 M  
MB1620'(21.0 FT) SOUTHEAST OF THE SOUTHWEST CORNER OF THE PARK SIGN AT THE  
MB1620'ENTRANCE, AND 5.9 M (19.4 FT) SOUTH OF THE SIGN. THE MARK IS IN  
MB1620'PUBLIC RIGHT-OF-WAY AND IS ACCESSIBLE AT ALL TIMES.

MB1620  
MB1620 STATION RECOVERY (2003)  
MB1620

MB1620'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2003 (DRA)  
MB1620'RECOVERED AS DESCRIBED.

MB1620  
MB1620 STATION RECOVERY (2004)  
MB1620

MB1620'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)  
MB1620'RECOVERED IN GOOD CONDITION.

MB1620  
MB1620 STATION RECOVERY (2005)  
MB1620

MB1620'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2005 (DAC)  
MB1620'RECOVERED AS DESCRIBED.

MB1620  
MB1620 STATION RECOVERY (2006)  
MB1620

MB1620'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2006 (SFH)  
MB1620'RECOVERED AS DESCRIBED.

MB1620  
MB1620 STATION RECOVERY (2010)  
MB1620

MB1620'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2010 (JDR)  
MB1620'RECOVERED AS DESCRIBED. THIS STATION WAS NOT OBSERVED DURING THIS  
MB1620'PROJECT DUE TO PAST OBSERVATIONS SHOWING MOVEMENT.

MB1620  
MB1620 STATION RECOVERY (2011)  
MB1620

MB1620'RECOVERY NOTE BY GEOCACHING 2011 (RLM)  
MB1620'RECOVERED IN GOOD CONDITION.

MB1620  
MB1620 STATION RECOVERY (2013)  
MB1620



MB1620'RECOVERY NOTE BY TERRA SURV 2013 (JVH)  
MB1620'RECOVERED AS DESCRIBED.  
MB1620  
MB1620 STATION RECOVERY (2016)  
MB1620  
MB1620'RECOVERY NOTE BY US POWER SQUADRON 2016 (JTH)  
MB1620'THE WITNESS POST IS MISSING.  
MB1620  
MB1620 STATION RECOVERY (2018)  
MB1620  
MB1620'RECOVERY NOTE BY US POWER SQUADRON 2018 (TJH)  
MB1620'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.  
Elapsed Time = 00:00:02





MC1011.Significant digits in the geoid height do not necessarily reflect accuracy.  
MC1011.GEOID18 height accuracy estimate available [here](#).

MC1011

MC1011.Click [photographs](#) - Photos may exist for this station.

MC1011

MC1011.The X, Y, and Z were computed from the position and the ellipsoidal ht.

MC1011

MC1011.The Laplace correction was computed from DEFLEC18 derived deflections.

MC1011

MC1011.The ellipsoidal height was determined by GPS observations

MC1011.and is referenced to NAD 83.

MC1011

MC1011.The dynamic height is computed by dividing the NAVD 88

MC1011.geopotential number by the normal gravity value computed on the

MC1011.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

MC1011.degrees latitude (g = 980.6199 gals.).

MC1011

MC1011.The modeled gravity was interpolated from observed gravity values.

MC1011

MC1011. The following values were computed from the NAD 83(2011) position.

MC1011

MC1011;		North	East	Units	Scale Factor	Converg.
MC1011;SPC OH N	-	206,188.164	547,779.701	MT	0.99997049	-0 24 39.7
MC1011;SPC OH N	-	676,469.00	1,797,173.90	sFT	0.99997049	-0 24 39.7
MC1011;UTM 17	-	4,598,858.123	322,641.298	MT	0.99998712	-1 24 34.1
MC1011!	-	Elev Factor	x Scale Factor	=	Combined Factor	
MC1011!SPC OH N	-	0.99997765	x 0.99997049	=	0.99994814	
MC1011!UTM 17	-	0.99997765	x 0.99998712	=	0.99996477	

MC1011

MC1011\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF2264198858 (NAD 83)

MC1011

SUPERSEDED SURVEY CONTROL

MC1011

MC1011	NAD 83(2007)-	41 31 18.22742(N)	083 07 32.35704(W)	AD(2002.00)	0
MC1011	ELLIP H (02/10/07)	142.505 (m)		GP(2002.00)	
MC1011	ELLIP H (10/07/05)	142.520 (m)		GP( )	4 1
MC1011	NAD 83(1995)-	41 31 18.22740(N)	083 07 32.35712(W)	AD( )	1
MC1011	ELLIP H (04/01/98)	142.580 (m)		GP( )	4 1
MC1011	NAD 83(1994)-	41 31 18.22734(N)	083 07 32.35702(W)	AD( )	1
MC1011	NAD 83(1986)-	41 31 18.23814(N)	083 07 32.37046(W)	AD( )	1
MC1011	NAVD 88	178.04 (m)	584.1 (f)	LEVELING	3
MC1011	NGVD 29 (06/03/92)	178.245 (m)	584.79 (f)	ADJUSTED	1 2

MC1011

MC1011.Superseded values are not recommended for survey control.

MC1011

MC1011.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

MC1011.See file [dsdata.pdf](#) to determine how the superseded data were derived.

MC1011

MC1011\_MARKER: I = METAL ROD

MC1011\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

MC1011\_STAMPING: Y 316 1980

MC1011\_MARK LOGO: NGS

MC1011\_PROJECTION: FLUSH

MC1011\_MAGNETIC: I = MARKER IS A STEEL ROD





MC1011\_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD  
MC1011+STABILITY: POSITION/ELEVATION WELL  
MC1011\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
MC1011+SATELLITE: SATELLITE OBSERVATIONS - April 26, 2012  
MC1011\_ROD/PIPE-DEPTH: 6.4 meters

MC1011	HISTORY	- Date	Condition	Report By
MC1011	HISTORY	- 1980	MONUMENTED	NGS
MC1011	HISTORY	- 19930924	GOOD	GEOMET
MC1011	HISTORY	- 20040729	POOR	OHDT
MC1011	HISTORY	- 20120426	GOOD	WOOLPT

MC1011

MC1011 STATION DESCRIPTION

MC1011

MC1011'DESCRIBED BY NATIONAL GEODETIC SURVEY 1980

MC1011'1.76 KM EAST FROM OAK HARBOR.

MC1011'1.60 KILOMETERS (1.0 MILE) EAST ALONG THE PENN CENTRAL RAILROAD FROM  
MC1011'THE CROSSING OF STATE HIGHWAY 19 AT OAK HARBOR, THENCE 0.16 KILOMETER  
MC1011'(0.1 MILE) NORTH ALONG BEHLMAN ROAD, SET IN THE LAWN ON THE WEST SIDE  
MC1011'OF A LARGE RED AND WHITE METAL SIDED BARN, 45.4 METERS (149.0 FEET)  
MC1011'SOUTH-SOUTHWEST OF THE SOUTHWEST CORNER OF THE PORCH OF THE WEST SIDE  
MC1011'OF A TWO-STORY WHITE HOUSE, 36.3 METERS (119.0 FEET) WEST AND IN LINE  
MC1011'WITH THE SOUTH FACE OF THE SOUTHWEST CORNER OF THE BARN, 18.9 METERS  
MC1011'(62.0 FEET) SOUTH OF THE CENTER OF A GRAVEL DRIVE LEADING TO THE  
MC1011'HOUSE AND BARN, 11.0 METERS (36.0 FEET) EAST OF THE CENTER OF BEHLMAN  
MC1011'ROAD.

MC1011'THE MARK IS 0.6 M BELOW ROAD.

MC1011

MC1011 STATION RECOVERY (1993)

MC1011

MC1011'RECOVERY NOTE BY GEOMETRICS GPS INCORPORATED 1993

MC1011'RECOVERED IN GOOD CONDITION.

MC1011

MC1011 STATION RECOVERY (2004)

MC1011

MC1011'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2004 (JS)

MC1011'LOCAL ENGINEERING FIRM HAS PLACED A PLASTIC LOGO CAP ON THE STAINLESS  
MC1011'STEEL ROD. MARK SHOULD NOT BE USED FOR ELEVATION UNTIL THIS CAP IS  
MC1011'REMOVED

MC1011

MC1011 STATION RECOVERY (2012)

MC1011

MC1011'RECOVERY NOTE BY WOOLPERT CONSULTANTS 2012 (CJS)

MC1011'RECOVERED IN GOOD CONDITION.

\*\*\* retrieval complete.

Elapsed Time = 00:00:02



# The NGS Data Sheet

See file [dsdata.pdf](#) for more information about the datasheet.

PROGRAM = datasheet95, VERSION = 8.12.5.4

```

1      National Geodetic Survey,      Retrieval Date = NOVEMBER 24, 2019
AA3881 *****
AA3881 FBN - This is a Federal Base Network Control Station.
AA3881 DESIGNATION - ZOB B
AA3881 PID - AA3881
AA3881 STATE/COUNTY- OH/LORAIN
AA3881 COUNTRY - US
AA3881 USGS QUAD - OBERLIN (1979)
AA3881
AA3881 *CURRENT SURVEY CONTROL
AA3881
AA3881* NAD 83(2011) POSITION- 41 17 51.09272(N) 082 12 20.13743(W) ADJUSTED
AA3881* NAD 83(2011) ELLIP HT- 211.038 (meters) (06/27/12) ADJUSTED
AA3881* NAD 83(2011) EPOCH - 2010.00
AA3881* NAVD 88 ORTHO HEIGHT - 245.467 (meters) 805.34 (feet) ADJUSTED
AA3881
AA3881 GEOID HEIGHT - -34.415 (meters) GEOID18
AA3881 NAD 83(2011) X - 650,835.825 (meters) COMP
AA3881 NAD 83(2011) Y - -4,754,669.630 (meters) COMP
AA3881 NAD 83(2011) Z - 4,187,443.388 (meters) COMP
AA3881 LAPLACE CORR - 2.85 (seconds) DEFLEC18
AA3881 DYNAMIC HEIGHT - 245.365 (meters) 805.00 (feet) COMP
AA3881 MODELED GRAVITY - 980,202.9 (mgal) NAVD 88
AA3881
AA3881 VERT ORDER - FIRST CLASS II
AA3881
AA3881 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AA3881 Standards:
AA3881 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
AA3881 Horiz Ellip SD_N SD_E SD_h (unitless)
AA3881 -----
AA3881 NETWORK 0.45 1.04 0.19 0.18 0.53 0.04574627
AA3881 -----
AA3881 Click here for local accuracies and other accuracy information.
AA3881
AA3881
AA3881.This mark is at Lorain Co Regional Airport (22G)
AA3881
AA3881.The horizontal coordinates were established by GPS observations
AA3881.and adjusted by the National Geodetic Survey in June 2012.
AA3881
AA3881.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AA3881.been affixed to the stable North American tectonic plate. See
AA3881.NA2011 for more information.
AA3881
AA3881.The horizontal coordinates are valid at the epoch date displayed above
AA3881.which is a decimal equivalence of Year/Month/Day.
AA3881
AA3881.The orthometric height was determined by differential leveling and
AA3881.adjusted by the NATIONAL GEODETIC SURVEY

```



AA3881.in April 2001.

AA3881

AA3881.Significant digits in the geoid height do not necessarily reflect accuracy.

AA3881.GEOID18 height accuracy estimate available [here](#).

AA3881

AA3881.Click [here](#) to see if photographs exist for this station.

AA3881

AA3881.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AA3881

AA3881.The Laplace correction was computed from DEFLEC18 derived deflections.

AA3881

AA3881.The ellipsoidal height was determined by GPS observations

AA3881.and is referenced to NAD 83.

AA3881

AA3881.The dynamic height is computed by dividing the NAVD 88

AA3881.geopotential number by the normal gravity value computed on the

AA3881.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AA3881.degrees latitude (g = 980.6199 gals.).

AA3881

AA3881.The modeled gravity was interpolated from observed gravity values.

AA3881

AA3881. The following values were computed from the NAD 83(2011) position.

AA3881

AA3881;		North	East	Units	Scale Factor	Converg.
AA3881;SPC OH N	-	181,143.018	624,656.856	MT	0.99994716	+0 11 36.3
AA3881;SPC OH N	-	594,300.05	2,049,395.04	sFT	0.99994716	+0 11 36.3
AA3881;UTM 17	-	4,572,486.993	399,064.056	MT	0.99972538	-0 47 44.6
AA3881!	-	Elev Factor	x Scale Factor	=	Combined Factor	
AA3881!SPC OH N	-	0.99996690	x 0.99994716	=	0.99991406	
AA3881!UTM 17	-	0.99996690	x 0.99972538	=	0.99969229	

AA3881

AA3881\_U.S. NATIONAL GRID SPATIAL ADDRESS: 17TLF9906472486(NAD 83)

AA3881

AA3881	PID	Reference Object	Distance	Geod. Az
AA3881				dddmmss.s
AA3881	AA3882	ZOB A	200.250 METERS	18211

AA3881

AA3881

SUPERSEDED SURVEY CONTROL

AA3881

AA3881	NAD 83(2007)-	41 17 51.09284(N)	082 12 20.13822(W)	AD(2002.00)	0
AA3881	ELLIP H (02/10/07)	211.053 (m)		GP(2002.00)	
AA3881	ELLIP H (09/23/04)	211.068 (m)		GP( )	4 1
AA3881	ELLIP H (08/20/96)	211.045 (m)		GP( )	4 1
AA3881	NAD 83(1995)-	41 17 51.09248(N)	082 12 20.13834(W)	AD( )	A
AA3881	ELLIP H (06/30/95)	211.138 (m)		GP( )	1 1
AA3881	NAVD 88	245.47 (m)	805.3 (f)	LEVELING	3

AA3881

AA3881.Superseded values are not recommended for survey control.

AA3881

AA3881.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AA3881.See file [dsdata.pdf](#) to determine how the superseded data were derived.

AA3881



AA3881\_MARKER: I = METAL ROD  
AA3881\_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)  
AA3881\_STAMPING: ZOB B 1994  
AA3881\_MARK LOGO: NGS  
AA3881\_PROJECTION: FLUSH  
AA3881\_MAGNETIC: N = NO MAGNETIC MATERIAL  
AA3881\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL  
AA3881\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
AA3881+SATELLITE: SATELLITE OBSERVATIONS - January 21, 2009  
AA3881\_ROD/PIPE-DEPTH: 6.00 meters  
AA3881\_SLEEVE-DEPTH : 1.00 meters  
AA3881

AA3881	HISTORY	- Date	Condition	Report By
AA3881	HISTORY	- 1994	MONUMENTED	NOS
AA3881	HISTORY	- 19950330	GOOD	NGS
AA3881	HISTORY	- 19951114	GOOD	NGS
AA3881	HISTORY	- 2000	GOOD	OH-103
AA3881	HISTORY	- 20030710	GOOD	OHDT
AA3881	HISTORY	- 20090121	GOOD	INDIV

AA3881  
AA3881

#### STATION DESCRIPTION

AA3881'DESCRIBED BY NATIONAL OCEAN SERVICE 1994 (JDR)  
AA3881'THE STATION IS LOCATED ABOUT 9.0 MI (14.5 KM) SOUTHWEST OF ELYRIA, 7.0  
AA3881'MI (11.3 KM) SOUTH OF THE OHIO TURNPIKE (I-80,I-90), 5.0 MI (8.0 KM)  
AA3881'NORTH-NORTHEAST OF KIPTON, 4.0 MI (6.4 KM) NORTH OF PITTSFIELD NEAR  
AA3881'THE EAST EDGE OF OBERLIN AT THE FAA ARTCC FACILITY NEAR THE NORTH END  
AA3881'OF THE FACILITY. FOR ACCESS CONTACT MR. CHUCK FROST, TECHINCAL  
AA3881'SUPPORT ASSISTANT MANAGER, 326 EAST LORAIN ST, OBERLIN, OH 44074.  
AA3881'PHONE (216)774-0379.

AA3881'

AA3881'TO REACH THE STATION FROM THE JUNCTION OF STATE ROUTE 511 (LORAIN ST)  
AA3881'AND STATE ROUTE 58 (MAIN ST) IN OBERLIN, PROCEED EASTERLY ON STATE  
AA3881'ROUTE 511 (LORAIN ST) FOR 0.65 MI (1.05 KM) TO A FLASHING LIGHT  
AA3881'(YELLOW) AND A ROAD ON THE LEFT AND THE ENTRANCE TO THE FAA ARTCC  
AA3881'FACILITY. TURN LEFT AND PROCEED NORTHERLY ON SHALLENBERGER DRIVE FOR  
AA3881'0.1 MI (0.2 KM) TO A GUARD HOUSE AND GATE. PASS THRU GATE AND  
AA3881'CONTINUE NORTHERLY ON SHALLENBERGER DRIVE FOR 0.15 MI (0.24 KM) TO THE  
AA3881'STATION ON THE LEFT.

AA3881'

AA3881'STATION IS LOCATED 59.7 FT (18.2 M) SOUTH OF THE SOUTHEAST CORNER OF A  
AA3881'FIVE DOOR GARAGE, 45.3 FT (13.8 M) WEST OF THE CENTER OF THE  
AA3881'SHALLENBERGER DRIVE, 32.3 FT (9.8 M) NORTHEAST OF THE NORTHEAST CORNER  
AA3881'OF A SMALL RED BRICK STRUCTURE AROUND A GENERATOR WITH WOODEN DOORS  
AA3881'FACING NORTH, AND 3.2 FT (1.0 M) SOUTH OF THE SOUTH EDGE OF A CONCRETE  
AA3881'SIDEWALK.

AA3881

AA3881

#### STATION RECOVERY (1995)

AA3881

AA3881'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (GAS)  
AA3881'1.0 KM (0.60 MI) EASTERLY ALONG STATE HIGHWAY 511 FROM THE JUNCTION OF  
AA3881'STATE HIGHWAY 58 IN OBERLIN, THENCE 0.4 KM (0.25 MI) NORTHERLY PASSING  
AA3881'THROUGH A SECURITY GATE AND ALONG SHALLENBERGER DRIVE, 18.2 M (59.7  
AA3881'FT) SOUTH OF THE SOUTHEAST CORNER OF A 5 CAR GARAGE, 13.8 M (45.3 FT)  
AA3881'WEST OF AND LEVEL WITH THE DRIVE CENTER, 9.8 M (32.2 FT) NORTHEAST OF



AA3881'THE NORTHEAST CORNER OF A BRICK FENCE ENCLOSING A GENERATOR, AND 3.2 M  
AA3881'(10.5 FT) SOUTH OF THE SOUTH EDGE OF A SIDEWALK. NOTE--ACCESS TO THE  
AA3881'DATUM POINT IS THROUGH A 5-INCH LOGO CAP. THE SLEEVE DEPTH DOES NOT  
AA3881'MEET THE SPECIFICATIONS FOR A CLASS A MARK.

AA3881

AA3881

STATION RECOVERY (1995)

AA3881

AA3881'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1995 (AJL)

AA3881'RECOVERED AS DESCRIBED.

AA3881

AA3881

STATION RECOVERY (2000)

AA3881

AA3881'RECOVERY NOTE BY MEDINA COUNTY OHIO 2000

AA3881'RECOVERY NOTE BY MEDINA COUNTY SANITARY ENGINEER 2000

AA3881'FOUND IN GOOD CONDITION.

AA3881'

AA3881'PHONE NUMBER TO CALL FOR ACCESS TO STATION IS NOW (440)774-0379.

AA3881'STATION IS NO LONGER VISIBLE FROM ZOB A DUE TO A NEW ONE-STORY

AA3881'BUILDING.

AA3881'

AA3881

AA3881

STATION RECOVERY (2003)

AA3881

AA3881'RECOVERY NOTE BY OHIO DEPARTMENT OF TRANSPORTATION 2003 (JAS)

AA3881'RECOVERED AS DESCRIBED.

AA3881

AA3881

STATION RECOVERY (2009)

AA3881

AA3881'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2009 (KAR)

AA3881'NEW CONTACT FOR ACCESS TO STATION IS GARY ZIMMET 440-774-0354.

\*\*\* retrieval complete.





Elapsed Time = 00:00:02

## Section 4: GCP Observation and Control Recovery Logs

This section contains the station observation sheets and photos for all the LiDAR ground control stations (GCPs) and recovered geodetic control stations for the USGS Ohio Statewide Phase 1 2019 B19 Project. The stations appear as they are ordered in the final coordinate listing of Section 2. CORS were not documented, as these stations were not physically recovered.




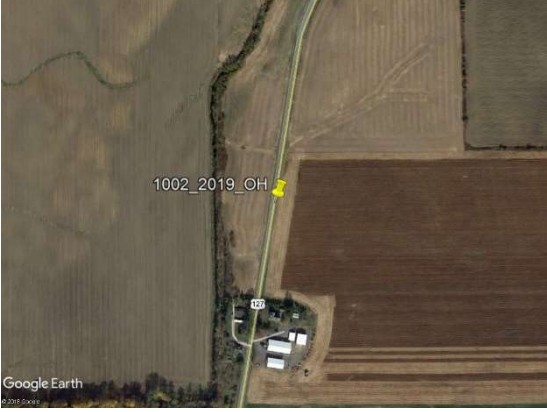


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1001_2019_OH	<b>Northing (US ft)</b> 751801.697	<b>Easting (US ft)</b> 1460556.314	<b>Elevation (US ft)</b> 852.858	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°42'55.03332"	<b>Longitude (Global)</b> W84°21'37.96340"	<b>Ellipsoid Height (US ft)</b> 740.323	
<b>Location Photo</b>    NORTH				
 <p>1001_2019_OH, 3S, 20191107</p>		 <p>1001_2019_OH, 3E, 20191107</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1002_2019_OH	<b>Northing (US ft)</b> 732535.900	<b>Easting (US ft)</b> 1447277.231	<b>Elevation (US ft)</b> 829.575	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°39'41.90815"	<b>Longitude (Global)</b> W84°24'27.45609"	<b>Ellipsoid Height (US ft)</b> 717.384	
<b>Location Photo</b>    NORTH				
 <p>1002_2019_OH, 3N, 20191107</p>		 <p>1002_2019_OH, 3E, 20191107</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1003_2019_OH	<b>Northing (US ft)</b> 714971.484	<b>Easting (US ft)</b> 1443837.158	<b>Elevation (US ft)</b> 801.616	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°36'47.67427"	<b>Longitude (Global)</b> W84°25'07.67608"	<b>Ellipsoid Height (US ft)</b> 689.408	
<b>Location Photo</b>    NORTH				
 <p>1003_2019_OH, 3S, 20191108</p>		 <p>1003_2019_OH, 3E, 20191108</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1004_2019_OH	<b>Northing (US ft)</b> 697219.809	<b>Easting (US ft)</b> 1435374.078	<b>Elevation (US ft)</b> 773.463	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°33'50.48070"	<b>Longitude (Global)</b> W84°26'53.84349"	<b>Ellipsoid Height (US ft)</b> 661.332	
<b>Location Photo</b>   NORTH				
 <p>1004_2019_OH, 3N, 20191205</p>		 <p>1004_2019_OH, 3W, 20191205</p>		


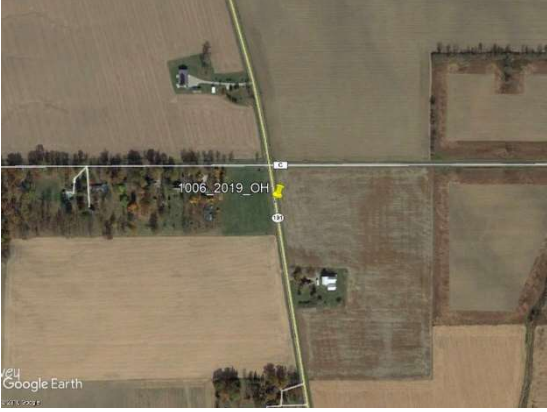




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1005_2019_OH	<b>Northing (US ft)</b> 678890.998	<b>Easting (US ft)</b> 1438943.350	<b>Elevation (US ft)</b> 717.272	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°30'50.22229"	<b>Longitude (Global)</b> W84°26'01.55565"	<b>Ellipsoid Height (US ft)</b> 604.909	
<b>Location Photo</b>    NORTH				
 <p>1005_2019_OH, 3S, 20191205</p>		 <p>1005_2019_OH, 3W, 20191205</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1006_2019_OH	<b>Northing (US ft)</b> 657550.819	<b>Easting (US ft)</b> 1445512.133	<b>Elevation (US ft)</b> 713.376	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°27'20.85899"	<b>Longitude (Global)</b> W84°24'29.09351"	<b>Ellipsoid Height (US ft)</b> 600.631	
<b>Location Photo</b>    NORTH				
 <p>1006_2019_OH, 3S, 20191205</p>		 <p>1006_2019_OH, 3E, 20191205</p>		




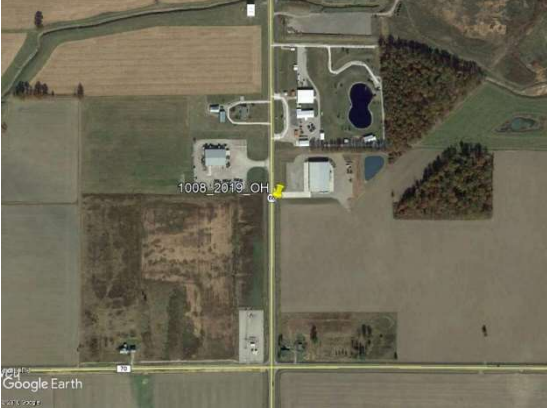



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1007_2019_OH	<b>Northing (US ft)</b> 639671.512	<b>Easting (US ft)</b> 1448678.224	<b>Elevation (US ft)</b> 702.084	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°24'24.93031"	<b>Longitude (Global)</b> W84°23'42.42023"	<b>Ellipsoid Height (US ft)</b> 589.066	
Location Photo    NORTH				
 <p>1007_2019_OH, 3S, 20191205</p>		 <p>1007_2019_OH, 3E, 20191205</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1008_2019_OH	<b>Northing (US ft)</b> 621629.887	<b>Easting (US ft)</b> 1457755.454	<b>Elevation (US ft)</b> 716.820	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°21'28.64373"	<b>Longitude (Global)</b> W84°21'38.27144"	<b>Ellipsoid Height (US ft)</b> 603.342	
Location Photo    NORTH				
 <p>1008_2019_OH, 3S, 20191206</p>		 <p>1008_2019_OH, 3W, 20191206</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1009_2019_OH	<b>Northing (US ft)</b> 603198.843	<b>Easting (US ft)</b> 1457267.867	<b>Elevation (US ft)</b> 722.403	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°18'26.47356"	<b>Longitude (Global)</b> W84°21'39.50712"	<b>Ellipsoid Height (US ft)</b> 608.895	
<b>Location Photo</b>    NORTH				
 <p>1009_2019_OH, 3S, 20191210</p>		 <p>1009_2019_OH, 3E, 20191210</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1010_2019_OH	<b>Northing (US ft)</b> 583046.698	<b>Easting (US ft)</b> 1456807.863	<b>Elevation (US ft)</b> 712.544	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°15'07.30504"	<b>Longitude (Global)</b> W84°21'39.89896"	<b>Ellipsoid Height (US ft)</b> 599.134	
<b>Location Photo</b>    NORTH				
 <p>1010_2019_OH, 3S, 20191206</p>	 <p>1010_2019_OH, 3W, 20191206</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1011_2019_OH	<b>Northing (US ft)</b> 559769.052	<b>Easting (US ft)</b> 1466588.583	<b>Elevation (US ft)</b> 715.574	
<b>Point Type</b> BARE EARTH	<b>Latitude (Global)</b> N41°11'19.39568"	<b>Longitude (Global)</b> W84°19'25.49922"	<b>Ellipsoid Height (US ft)</b> 601.960	
Location Photo    NORTH				
 <p>1011_2019_OH, 3N, 20191206</p>		 <p>1011_2019_OH, 3E, 20191206</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1012_2019_OH	<b>Northing (US ft)</b> 537993.280	<b>Easting (US ft)</b> 1481965.985	<b>Elevation (US ft)</b> 719.991	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°07'47.40313"	<b>Longitude (Global)</b> W84°15'58.63545"	<b>Ellipsoid Height (US ft)</b> 605.899	
<b>Location Photo</b>    NORTH				
 <p>1012_2019_OH, 3N, 20191209</p>		 <p>1012_2019_OH, 3W, 20191209</p>		


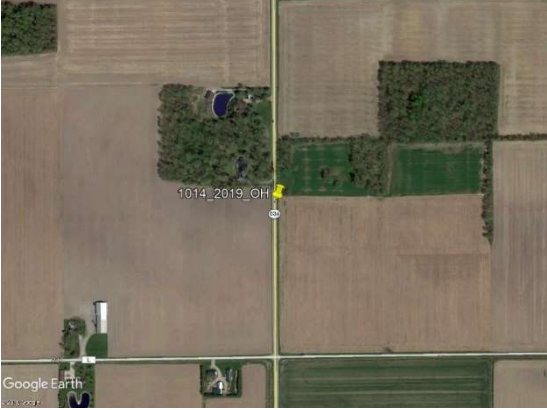




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1013_2019_OH	<b>Northing (US ft)</b> 515864.164	<b>Easting (US ft)</b> 1471130.103	<b>Elevation (US ft)</b> 721.731	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°04'06.59855"	<b>Longitude (Global)</b> W84°18'14.23113"	<b>Ellipsoid Height (US ft)</b> 608.079	
<b>Location Photo</b>   NORTH				
 <p>1013_2019_OH, 3S, 20191209</p>		 <p>1013_2019_OH, 3E, 20191209</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1014_2019_OH	<b>Northing (US ft)</b> 493781.917	<b>Easting (US ft)</b> 1473434.012	<b>Elevation (US ft)</b> 724.322	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°00'28.91628"	<b>Longitude (Global)</b> W84°17'38.22722"	<b>Ellipsoid Height (US ft)</b> 610.586	
<b>Location Photo</b>   NORTH				
 <p>1014_2019_OH, 3N, 20191209</p>		 <p>1014_2019_OH, 3W, 20191209</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1015_2019_OH	<b>Northing (US ft)</b> 472439.125	<b>Easting (US ft)</b> 1473514.343	<b>Elevation (US ft)</b> 739.889	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°56'58.08365"	<b>Longitude (Global)</b> W84°17'31.45947"	<b>Ellipsoid Height (US ft)</b> 626.215	
<b>Location Photo</b>    NORTH				
 <p>1015_2019_OH, 3N, 20191211</p>		 <p>1015_2019_OH, 3E, 20191211</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1016_2019_OH	<b>Northing (US ft)</b> 450606.488	<b>Easting (US ft)</b> 1473156.822	<b>Elevation (US ft)</b> 752.154	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°53'22.32105"	<b>Longitude (Global)</b> W84°17'30.27279"	<b>Ellipsoid Height (US ft)</b> 638.715	
<b>Location Photo</b>    NORTH				
 <p>1016_2019_OH, 3S, 20191211</p>		 <p>1016_2019_OH, 3E, 20191211</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1017_2019_OH	<b>Northing (US ft)</b> 432427.049	<b>Easting (US ft)</b> 1470965.373	<b>Elevation (US ft)</b> 775.700	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°50'22.27515"	<b>Longitude (Global)</b> W84°17'53.92088"	<b>Ellipsoid Height (US ft)</b> 662.617	
<b>Location Photo</b>    NORTH				
 <p>1017_2019_OH, 3S, 20191211</p>		 <p>1017_2019_OH, 3W, 20191211</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1018_2019_OH	<b>Northing (US ft)</b> 414832.696	<b>Easting (US ft)</b> 1460499.300	<b>Elevation (US ft)</b> 797.190	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°47'26.30121"	<b>Longitude (Global)</b> W84°20'05.25004"	<b>Ellipsoid Height (US ft)</b> 684.706	
<b>Location Photo</b>   NORTH				
 <p>1018_2019_OH, 3N, 20191211</p>		 <p>1018_2019_OH, 3W, 20191211</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1019_2019_OH	<b>Northing (US ft)</b> 393601.168	<b>Easting (US ft)</b> 1466796.590	<b>Elevation (US ft)</b> 812.585	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°43'57.84807"	<b>Longitude (Global)</b> W84°18'37.66371"	<b>Ellipsoid Height (US ft)</b> 700.428	
Location Photo    NORTH				
 <p>1019_2019_OH, 3N, 20191211</p>		 <p>1019_2019_OH, 3W, 20191211</p>		


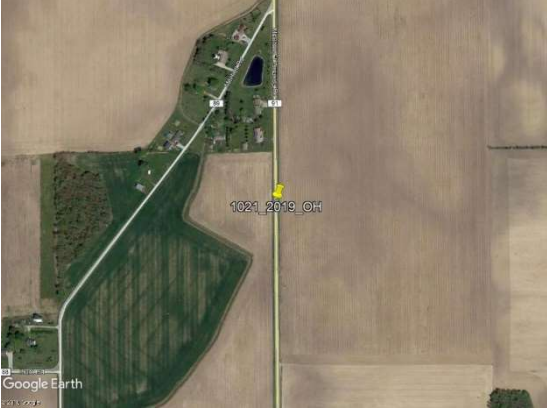




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1020_2019_OH	<b>Northing (US ft)</b> 375391.869	<b>Easting (US ft)</b> 1464255.131	<b>Elevation (US ft)</b> 869.415	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°40'57.42875"	<b>Longitude (Global)</b> W84°19'05.73936"	<b>Ellipsoid Height (US ft)</b> 757.708	
<b>Location Photo</b>    NORTH				
 <p>1020_2019_OH, 3N, 20191105</p>		 <p>1020_2019_OH, 3E, 20191105</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1021_2019_OH	<b>Northing (US ft)</b> 354577.454	<b>Easting (US ft)</b> 1469179.874	<b>Elevation (US ft)</b> 848.424	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°37'32.80306"	<b>Longitude (Global)</b> W84°17'56.25566"	<b>Ellipsoid Height (US ft)</b> 737.052	
<b>Location Photo</b>   NORTH				
 <p>1021_2019_OH, 3N, 20191105</p>		 <p>1021_2019_OH, 3E, 20191105</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1022_2019_OH	<b>Northing (US ft)</b> 337052.651	<b>Easting (US ft)</b> 1452331.280	<b>Elevation (US ft)</b> 866.523	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°34'36.17769"	<b>Longitude (Global)</b> W84°21'29.87694"	<b>Ellipsoid Height (US ft)</b> 755.790	
<b>Location Photo</b>    NORTH				
 <p>1022_2019_OH, 3N, 20191105</p>	 <p>1022_2019_OH, 3E, 20191105</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1023_2019_OH	<b>Northing (US ft)</b> 319272.394	<b>Easting (US ft)</b> 1445535.394	<b>Elevation (US ft)</b> 868.495	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°31'39.08104"	<b>Longitude (Global)</b> W84°22'52.95851"	<b>Ellipsoid Height (US ft)</b> 758.222	
<b>Location Photo</b>   NORTH				
 <p>1023_2019_OH, 3S, 20191125</p>		 <p>1023_2019_OH, 3E, 20191125</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1024_2019_OH	<b>Northing (US ft)</b> 298427.255	<b>Easting (US ft)</b> 1446264.660	<b>Elevation (US ft)</b> 908.813	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°28'13.30071"	<b>Longitude (Global)</b> W84°22'37.70699"	<b>Ellipsoid Height (US ft)</b> 798.985	
<b>Location Photo</b>    NORTH				
 <p>1024_2019_OH, 3S, 20191125</p>		 <p>1024_2019_OH, 3E, 20191125</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1025_2019_OH	<b>Northing (US ft)</b> 280932.594	<b>Easting (US ft)</b> 1445829.153	<b>Elevation (US ft)</b> 960.562	
<b>Point Type</b> END OF STRIPE	<b>Latitude (Global)</b> N40°25'20.37285"	<b>Longitude (Global)</b> W84°22'38.46846"	<b>Ellipsoid Height (US ft)</b> 851.121	
Location Photo    NORTH				
 <p>1025_2019_OH, 3N, 20191125</p>	 <p>1025_2019_OH, 3W, 20191125</p>			



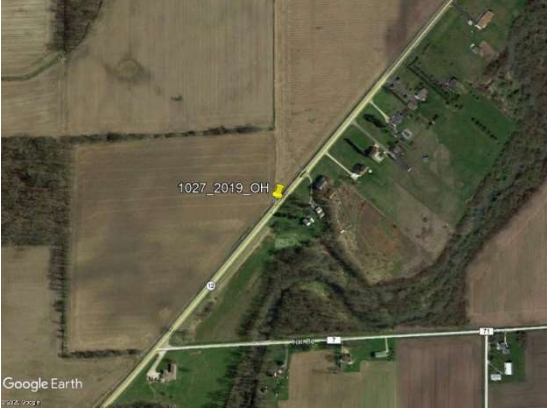

# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1026_2019_OH	<b>Northing (US ft)</b> 262557.142	<b>Easting (US ft)</b> 1429582.029	<b>Elevation (US ft)</b> 950.512	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°22'15.32955"	<b>Longitude (Global)</b> W84°26'03.21757"	<b>Ellipsoid Height (US ft)</b> 841.452	
<b>Location Photo</b>    NORTH				
 <p>1026_2019_OH, 3N, 20191125</p>	 <p>1026_2019_OH, 3E, 20191125</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1027_2019_OH	<b>Northing (US ft)</b> 582468.682	<b>Easting (US ft)</b> 1772825.558	<b>Elevation (US ft)</b> 685.321	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°15'47.65052"	<b>Longitude (Global)</b> W83°12'42.35577"	<b>Ellipsoid Height (US ft)</b> 570.335	
Location Photo    NORTH				
 <p>1027_2019_OH, 3N, 20200129</p>		 <p>1027_2019_OH, 3W, 20200129</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1028_2019_OH	<b>Northing (US ft)</b> 563778.768	<b>Easting (US ft)</b> 1752701.919	<b>Elevation (US ft)</b> 724.534	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°12'41.28101"	<b>Longitude (Global)</b> W83°17'03.66015"	<b>Ellipsoid Height (US ft)</b> 609.449	
Location Photo    NORTH				
 <p>1028_2019_OH, 3N, 20200129</p>		 <p>1028_2019_OH, 3W, 20200129</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1029_2019_OH	<b>Northing (US ft)</b> 546081.920	<b>Easting (US ft)</b> 1784477.299	<b>Elevation (US ft)</b> 729.458	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°09'49.04137"	<b>Longitude (Global)</b> W83°10'06.13098"	<b>Ellipsoid Height (US ft)</b> 614.642	
<b>Location Photo</b>   NORTH				
 <p>1029_2019_OH, 3N, 20200129</p>		 <p>1029_2019_OH, 3W, 20200129</p>		




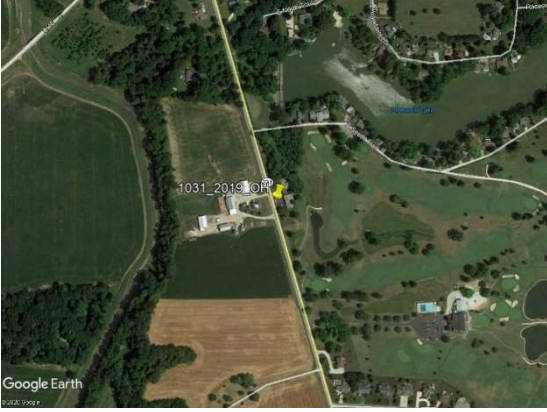


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1030_2019_OH	<b>Northing (US ft)</b> 527274.843	<b>Easting (US ft)</b> 1769075.221	<b>Elevation (US ft)</b> 769.437	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°06'42.00028"	<b>Longitude (Global)</b> W83°13'25.46656"	<b>Ellipsoid Height (US ft)</b> 654.402	
<b>Location Photo</b>    NORTH				
 <p>1030_2019_OH, 3N, 20200129</p>		 <p>1030_2019_OH, 3W, 20200129</p>		




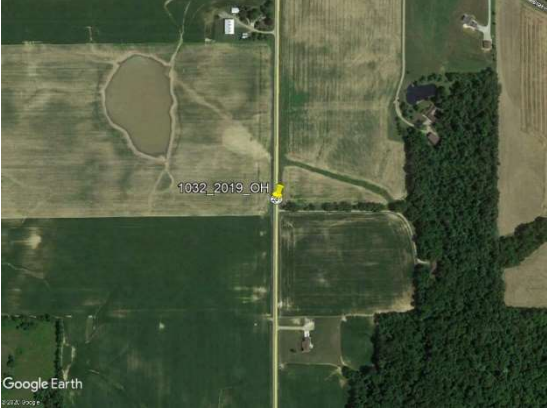




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1031_2019_OH	<b>Northing (US ft)</b> 509112.996	<b>Easting (US ft)</b> 1783240.713	<b>Elevation (US ft)</b> 789.586	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°03'43.66725"	<b>Longitude (Global)</b> W83°10'18.57551"	<b>Ellipsoid Height (US ft)</b> 674.421	
<b>Location Photo</b>    NORTH				
 <p>1031_2019_OH, 3N, 20200129</p>		 <p>1031_2019_OH, 3W, 20200129</p>		


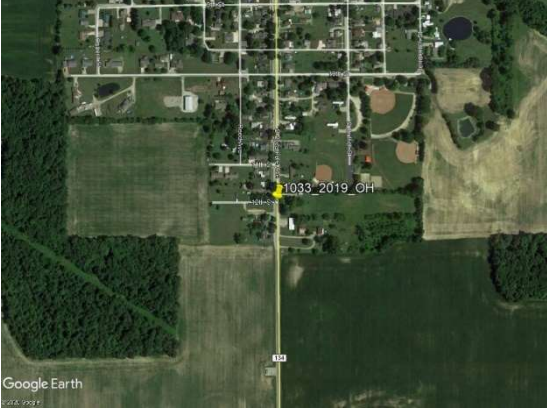




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1032_2019_OH	<b>Northing (US ft)</b> 487309.969	<b>Easting (US ft)</b> 1783457.283	<b>Elevation (US ft)</b> 837.968	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°00'08.25067"	<b>Longitude (Global)</b> W83°10'13.56025"	<b>Ellipsoid Height (US ft)</b> 722.757	
<b>Location Photo</b>    NORTH				
 <p>1032_2019_OH, 3S, 20200129</p>		 <p>1032_2019_OH, 3W, 20200129</p>		


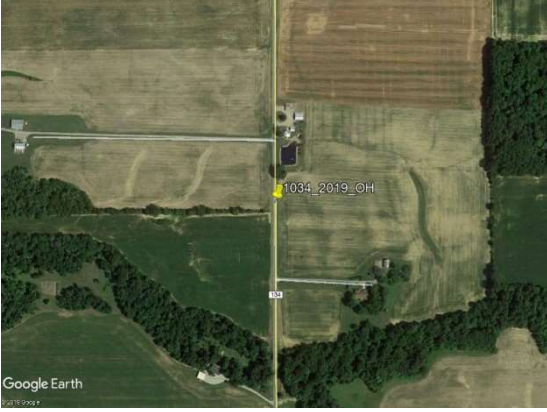




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1033_2019_OH	<b>Northing (US ft)</b> 465767.092	<b>Easting (US ft)</b> 1783416.361	<b>Elevation (US ft)</b> 845.226	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°56'35.38306"	<b>Longitude (Global)</b> W83°10'11.93548"	<b>Ellipsoid Height (US ft)</b> 730.134	
<b>Location Photo</b>   NORTH				
 <p>1033_2019_OH, 3S, 20200130</p>		 <p>1033_2019_OH, 3W, 20200130</p>		




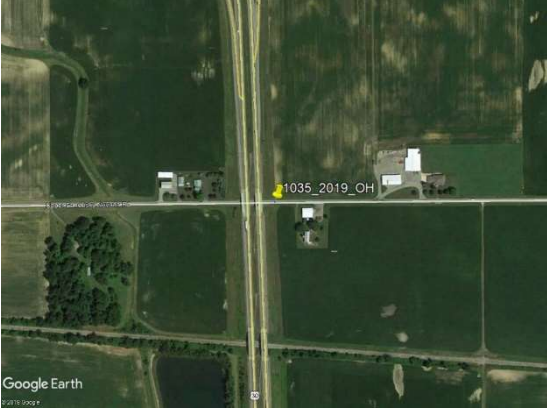


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1034_2019_OH	<b>Northing (US ft)</b> 444367.579	<b>Easting (US ft)</b> 1783228.819	<b>Elevation (US ft)</b> 871.608	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°53'03.91920"	<b>Longitude (Global)</b> W83°10'12.23685"	<b>Ellipsoid Height (US ft)</b> 756.733	
<b>Location Photo</b>    NORTH				
 <p>1034_2019_OH, 3N, 20200124</p>		 <p>1034_2019_OH, 3E, 20200124</p>		




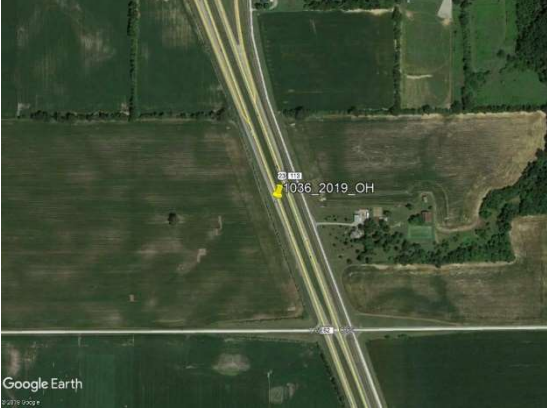



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1035_2019_OH	<b>Northing (US ft)</b> 423120.421	<b>Easting (US ft)</b> 1764675.174	<b>Elevation (US ft)</b> 862.831	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°49'32.49576"	<b>Longitude (Global)</b> W83°14'11.45883"	<b>Ellipsoid Height (US ft)</b> 748.025	
<b>Location Photo</b>    NORTH				
 <p>1035_2019_OH, 3S, 20200123</p>		 <p>1035_2019_OH, 3W, 20200123</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1036_2019_OH	<b>Northing (US ft)</b> 405280.803	<b>Easting (US ft)</b> 1762813.705	<b>Elevation (US ft)</b> 893.049	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°46'36.06459"	<b>Longitude (Global)</b> W83°14'33.69645"	<b>Ellipsoid Height (US ft)</b> 778.488	
<b>Location Photo</b>    NORTH				
 <p>1036_2019_OH, 3N, 20200123</p>		 <p>1036_2019_OH, 3E, 20200123</p>		

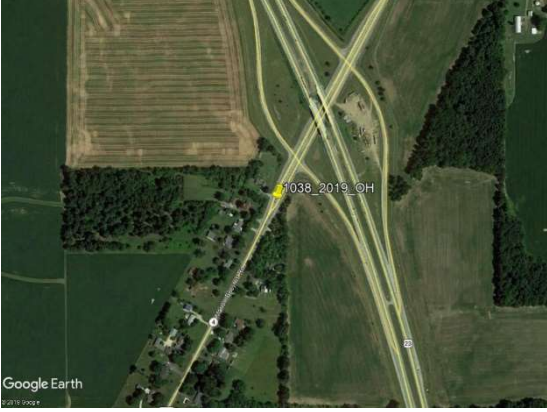



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1037_2019_OH	<b>Northing (US ft)</b> 384514.939	<b>Easting (US ft)</b> 1779404.784	<b>Elevation (US ft)</b> 907.449	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°43'12.21262"	<b>Longitude (Global)</b> W83°10'55.92840"	<b>Ellipsoid Height (US ft)</b> 793.390	
<b>Location Photo</b>    NORTH				
 <p>1037_2019_OH, 3N, 20200123</p>		 <p>1037_2019_OH, 3E, 20200123</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1038_2019_OH	<b>Northing (US ft)</b> 363499.462	<b>Easting (US ft)</b> 1798831.889	<b>Elevation (US ft)</b> 977.251	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°39'45.97679"	<b>Longitude (Global)</b> W83°06'41.70808"	<b>Ellipsoid Height (US ft)</b> 863.776	
<b>Location Photo</b>    NORTH				
 <p>1038_2019_OH, 3N, 20200123</p>		 <p>1038_2019_OH, 3E, 20200123</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1039_2019_OH	<b>Northing (US ft)</b> 345367.420	<b>Easting (US ft)</b> 1793329.467	<b>Elevation (US ft)</b> 964.389	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°36'46.42091"	<b>Longitude (Global)</b> W83°07'51.40596"	<b>Ellipsoid Height (US ft)</b> 851.110	
<b>Location Photo</b>    NORTH				
 <p>1039_2019_OH, 3N, 20200122</p>	 <p>1039_2019_OH, 3E, 20200122</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1040_2019_OH	<b>Northing (US ft)</b> 324810.007	<b>Easting (US ft)</b> 1680377.065		<b>Elevation (US ft)</b> 1033.782
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°33'12.61763"	<b>Longitude (Global)</b> W83°32'12.76016"		<b>Ellipsoid Height (US ft)</b> 920.176
<b>Location Photo</b>   NORTH				
 <p>1040_2019_OH, 3N, 20200122</p>	 <p>1040_2019_OH, 3W, 20200122</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1041_2019_OH	<b>Northing (US ft)</b> 303870.591	<b>Easting (US ft)</b> 1670128.227	<b>Elevation (US ft)</b> 1073.931	
<b>Point Type</b> END OF STRIPE	<b>Latitude (Global)</b> N40°29'44.49288"	<b>Longitude (Global)</b> W83°34'22.18838"	<b>Ellipsoid Height (US ft)</b> 960.927	
<b>Location Photo</b>    NORTH				
 <p>1041_2019_OH, 3S, 20200122</p>		 <p>1041_2019_OH, 3E, 20200122</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1042_2019_OH	<b>Northing (US ft)</b> 289905.242	<b>Easting (US ft)</b> 1769907.437	<b>Elevation (US ft)</b> 925.731	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°27'36.59798"	<b>Longitude (Global)</b> W83°12'49.21782"	<b>Ellipsoid Height (US ft)</b> 813.084	
Location Photo    NORTH				
 <p>1042_2019_OH, 3N, 20200122</p>		 <p>1042_2019_OH, 3E, 20200122</p>		


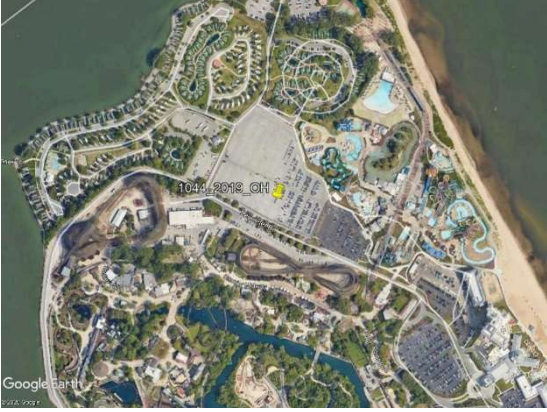




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1043_2019_OH	<b>Northing (US ft)</b> 279085.777	<b>Easting (US ft)</b> 1784361.573	<b>Elevation (US ft)</b> 924.066	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°25'50.81364"	<b>Longitude (Global)</b> W83°09'41.16870"	<b>Ellipsoid Height (US ft)</b> 811.786	
Location Photo    NORTH				
 <p>1043_2019_OH, 3N, 20200122</p>		 <p>1043_2019_OH, 3E, 20200122</p>		




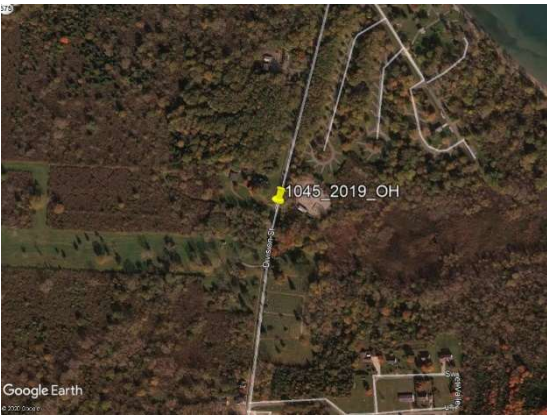


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1044_2019_OH	<b>Northing (US ft)</b> 663360.019	<b>Easting (US ft)</b> 1916818.452	<b>Elevation (US ft)</b> 578.466	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°29'14.22893"	<b>Longitude (Global)</b> W82°41'19.07465"	<b>Ellipsoid Height (US ft)</b> 462.310	
<b>Location Photo</b>   NORTH				
 <p>1044_2019_OH, 3N, 20200128</p>		 <p>1044_2019_OH, 3E, 20200128</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1045_2019_OH	<b>Northing (US ft)</b> 708470.481	<b>Easting (US ft)</b> 1911714.569	<b>Elevation (US ft)</b> 579.920	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°36'39.80152"	<b>Longitude (Global)</b> W82°42'27.54862"	<b>Ellipsoid Height (US ft)</b> 463.422	
<b>Location Photo</b>    NORTH				
 <p>1045_2019_OH, 3N, 20200325</p>		 <p>1045_2019_OH, 3W, 20200325</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1046_2019_OH	<b>Northing (US ft)</b> 644579.772	<b>Easting (US ft)</b> 1915661.458	<b>Elevation (US ft)</b> 591.196	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°26'08.65180"	<b>Longitude (Global)</b> W82°41'33.73181"	<b>Ellipsoid Height (US ft)</b> 475.256	
<b>Location Photo</b>   NORTH				
 <p>1046_2019_OH, 3N, 20200128</p>		 <p>1046_2019_OH, 3E, 20200128</p>		




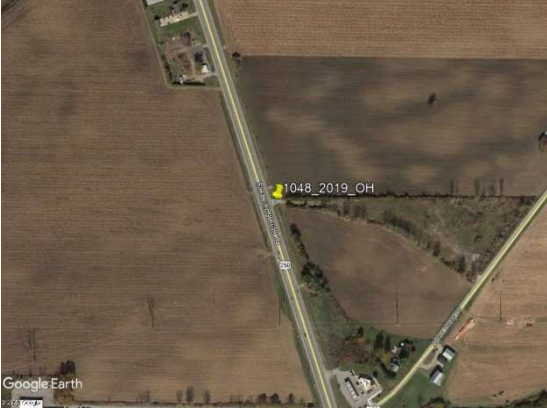


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1047_2019_OH	<b>Northing (US ft)</b> 626313.975	<b>Easting (US ft)</b> 1928095.847	<b>Elevation (US ft)</b> 636.858	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°23'08.41920"	<b>Longitude (Global)</b> W82°38'50.07276"	<b>Ellipsoid Height (US ft)</b> 521.329	
<b>Location Photo</b>    NORTH				
 <p>1047_2019_OH, 3N, 20200128</p>		 <p>1047_2019_OH, 3E, 20200128</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1048_2019_OH	<b>Northing (US ft)</b> 609113.128	<b>Easting (US ft)</b> 1933660.173	<b>Elevation (US ft)</b> 647.930	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°20'18.55328"	<b>Longitude (Global)</b> W82°37'36.74474"	<b>Ellipsoid Height (US ft)</b> 532.729	
<b>Location Photo</b>   NORTH				
 <p>1048_2019_OH, 3N, 20200128</p>		 <p>1048_2019_OH, 3W, 20200128</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1049_2019_OH	<b>Northing (US ft)</b> 587532.391	<b>Easting (US ft)</b> 1939453.878	<b>Elevation (US ft)</b> 673.372	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°16'45.39898"	<b>Longitude (Global)</b> W82°36'20.44741"	<b>Ellipsoid Height (US ft)</b> 558.616	
<b>Location Photo</b>   NORTH				
 <p>1049_2019_OH, 3N, 20191120</p>		 <p>1049_2019_OH, 3E, 20191120</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1050_2019_OH	<b>Northing (US ft)</b> 562755.374	<b>Easting (US ft)</b> 1943981.190	<b>Elevation (US ft)</b> 824.711	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°12'40.63338"	<b>Longitude (Global)</b> W82°35'20.81692"	<b>Ellipsoid Height (US ft)</b> 710.515	
<b>Location Photo</b>    NORTH				
 <p>1050_2019_OH, 3S, 20191120</p>		 <p>1050_2019_OH, 3E, 20191120</p>		


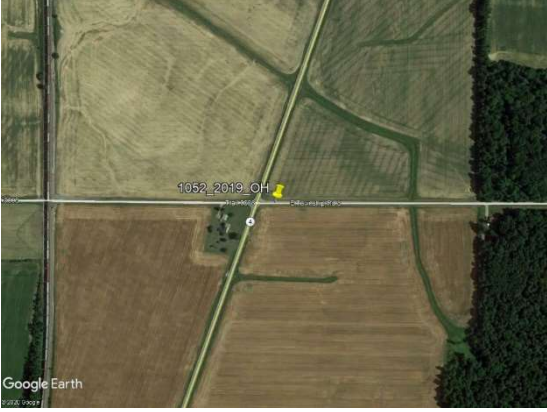




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1051_2019_OH	<b>Northing (US ft)</b> 544902.970	<b>Easting (US ft)</b> 1927728.391	<b>Elevation (US ft)</b> 819.834	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°09'44.01760"	<b>Longitude (Global)</b> W82°38'53.08011"	<b>Ellipsoid Height (US ft)</b> 705.707	
<b>Location Photo</b>   NORTH				
 <p>1051_2019_OH, 3S, 20200127.</p>		 <p>1051_2019_OH, 3E, 20200127.</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1052_2019_OH	<b>Northing (US ft)</b> 525975.723	<b>Easting (US ft)</b> 1867655.287	<b>Elevation (US ft)</b> 907.989	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°06'35.24911"	<b>Longitude (Global)</b> W82°51'57.47827"	<b>Ellipsoid Height (US ft)</b> 793.381	
<b>Location Photo</b>    NORTH				
 <p>1052_2019_OH, 3N, 20200127</p>		 <p>1052_2019_OH, 3W, 20200127</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1053_2019_OH	<b>Northing (US ft)</b> 504042.791	<b>Easting (US ft)</b> 1874029.409	<b>Elevation (US ft)</b> 936.644	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°02'58.78544"	<b>Longitude (Global)</b> W82°50'33.07957"	<b>Ellipsoid Height (US ft)</b> 822.442	
<b>Location Photo</b>   NORTH				
 <p>1053_2019_OH, 3S, 20200127</p>		 <p>1053_2019_OH, 3W, 20200127</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1054_2019_OH	<b>Northing (US ft)</b> 486841.470	<b>Easting (US ft)</b> 1826084.330	<b>Elevation (US ft)</b> 949.376	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°00'06.48635"	<b>Longitude (Global)</b> W83°00'57.54336"	<b>Ellipsoid Height (US ft)</b> 834.717	
<b>Location Photo</b>    NORTH				
 <p>1054_2019_OH, 3N, 20200127</p>		 <p>1054_2019_OH, 3W, 20200127</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1055_2019_OH	<b>Northing (US ft)</b> 468082.482	<b>Easting (US ft)</b> 1826072.461	<b>Elevation (US ft)</b> 972.173	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°57'01.12652"	<b>Longitude (Global)</b> W83°00'56.25163"	<b>Ellipsoid Height (US ft)</b> 857.718	
<b>Location Photo</b>    NORTH				
 <p>1055_2019_OH, 3S, 20200124</p>		 <p>1055_2019_OH, 3W, 20200124</p>		



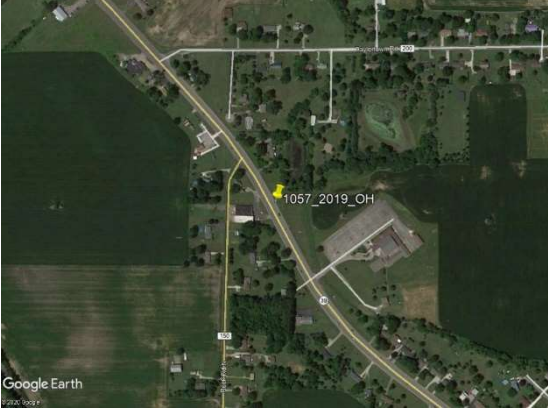


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1056_2019_OH	<b>Northing (US ft)</b> 450446.081	<b>Easting (US ft)</b> 1870641.482	<b>Elevation (US ft)</b> 1017.387	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°54'09.05329"	<b>Longitude (Global)</b> W82°51'14.46044"	<b>Ellipsoid Height (US ft)</b> 903.899	
<b>Location Photo</b>    NORTH				
 <p>1056_2019_OH, 3N, 20200127</p>		 <p>1056_2019_OH, 3E, 20200127</p>		


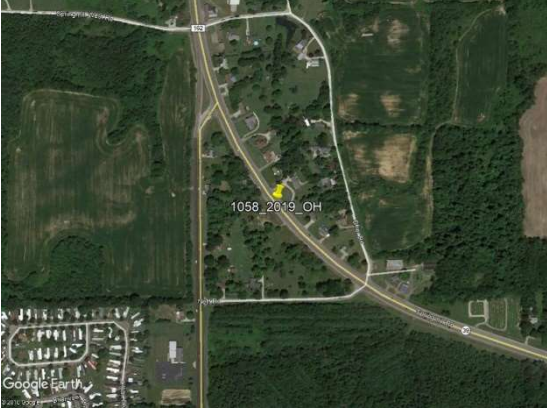




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1057_2019_OH	<b>Northing (US ft)</b> 432926.777	<b>Easting (US ft)</b> 1932991.145	<b>Elevation (US ft)</b> 1139.777	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°51'17.64267"	<b>Longitude (Global)</b> W82°37'42.11597"	<b>Ellipsoid Height (US ft)</b> 1027.838	
<b>Location Photo</b>   NORTH				
 <p>1057_2019_OH, 3N, 20200128</p>		 <p>1057_2019_OH, 3E, 20200128</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1058_2019_OH	<b>Northing (US ft)</b> 415515.201	<b>Easting (US ft)</b> 1944011.956	<b>Elevation (US ft)</b> 1261.039	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°48'25.72682"	<b>Longitude (Global)</b> W82°35'18.46027"	<b>Ellipsoid Height (US ft)</b> 1149.638	
<b>Location Photo</b>   NORTH				
 <p>1058_2019_OH, 3S, 20191112</p>		 <p>1058_2019_OH, 3E, 20191112</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1059_2019_OH	<b>Northing (US ft)</b> 398096.059	<b>Easting (US ft)</b> 1967278.232		<b>Elevation (US ft)</b> 1145.217
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°45'33.72235"	<b>Longitude (Global)</b> W82°30'15.87730"		<b>Ellipsoid Height (US ft)</b> 1034.490
Location Photo    NORTH				
 <p>1059_2019_OH, 3N, 20191112</p>	 <p>1059_2019_OH, 3W, 20191112</p>			


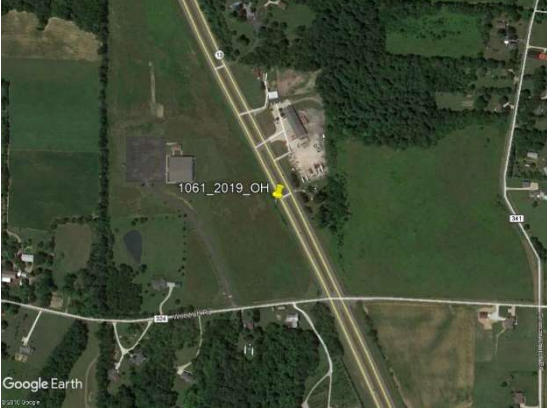




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1060_2019_OH	<b>Northing (US ft)</b> 381034.810	<b>Easting (US ft)</b> 1967413.506	<b>Elevation (US ft)</b> 1261.608	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°42'45.13140"	<b>Longitude (Global)</b> W82°30'14.10941"	<b>Ellipsoid Height (US ft)</b> 1151.042	
<b>Location Photo</b>   NORTH				
 <p>1060_2019_OH, 3S, 20191112</p>		 <p>1060_2019_OH, 3E, 20191112</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1061_2019_OH	<b>Northing (US ft)</b> 363640.954	<b>Easting (US ft)</b> 1963739.181	<b>Elevation (US ft)</b> 1400.325	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°39'53.24880"	<b>Longitude (Global)</b> W82°31'01.78041"	<b>Ellipsoid Height (US ft)</b> 1289.784	
<b>Location Photo</b>    NORTH				
 <p>1061_2019_OH, 3S, 20191112</p>	 <p>1061_2019_OH, 3W, 20191112</p>			





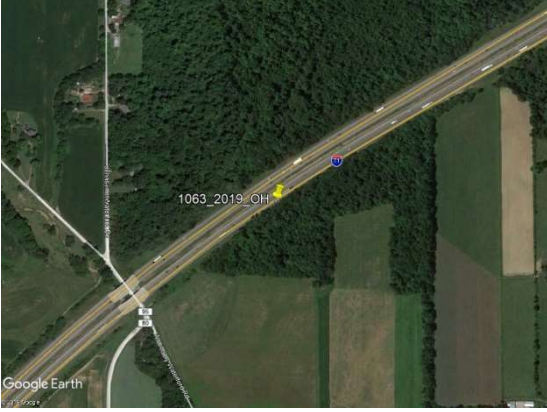

# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1062_2019_OH	<b>Northing (US ft)</b> 343292.136	<b>Easting (US ft)</b> 1946433.920	<b>Elevation (US ft)</b> 1203.674	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°36'32.07572"	<b>Longitude (Global)</b> W82°34'46.10743"	<b>Ellipsoid Height (US ft)</b> 1092.868	
Location Photo    NORTH				
 <p>1062_2019_OH, 3N, 20191216</p>		 <p>1062_2019_OH, 3W, 20191216</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1063_2019_OH	<b>Northing (US ft)</b> 325795.584	<b>Easting (US ft)</b> 1929866.991	<b>Elevation (US ft)</b> 1277.293	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°33'38.97698"	<b>Longitude (Global)</b> W82°38'20.55125"	<b>Ellipsoid Height (US ft)</b> 1166.308	
<b>Location Photo</b>    NORTH				
 <p>1063_2019_OH, 3N, 20191216</p>	 <p>1063_2019_OH, 3W, 20191216</p>			


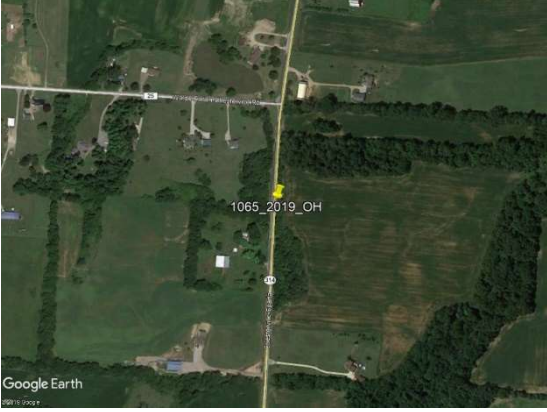




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1064_2019_OH	<b>Northing (US ft)</b> 308791.251	<b>Easting (US ft)</b> 1921241.499		<b>Elevation (US ft)</b> 1230.952
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°30'50.79619"	<b>Longitude (Global)</b> W82°40'11.87842"		<b>Ellipsoid Height (US ft)</b> 1119.824
Location Photo    NORTH				
 <p>1064_2019_OH, 3N, 20191216</p>		 <p>1064_2019_OH, 3E, 20191216</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1065_2019_OH	<b>Northing (US ft)</b> 287530.961	<b>Easting (US ft)</b> 1913720.511	<b>Elevation (US ft)</b> 1157.395	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°27'20.55459"	<b>Longitude (Global)</b> W82°41'48.63466"	<b>Ellipsoid Height (US ft)</b> 1046.109	
<b>Location Photo</b>    NORTH				
 <p>1065_2019_OH, 3N, 20191216</p>		 <p>1065_2019_OH, 3E, 20191216</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1066_2019_OH	<b>Northing (US ft)</b> 269931.926	<b>Easting (US ft)</b> 1918267.221	<b>Elevation (US ft)</b> 1303.982	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°24'26.74555"	<b>Longitude (Global)</b> W82°40'49.34716"	<b>Ellipsoid Height (US ft)</b> 1192.731	
Location Photo    NORTH				
 <p>1066_2019_OH, 3N, 20191216</p>		 <p>1066_2019_OH, 3E, 20191216</p>		


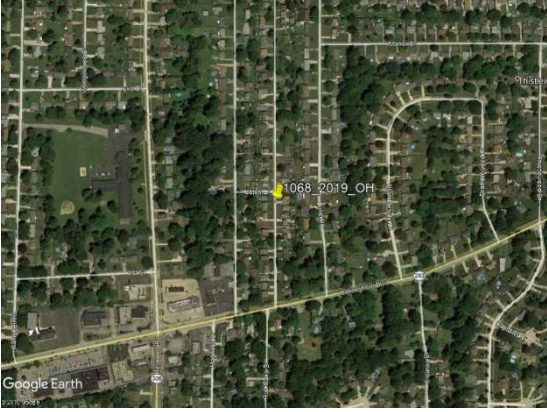




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1067_2019_OH	<b>Northing (US ft)</b> 245641.627	<b>Easting (US ft)</b> 1908926.116	<b>Elevation (US ft)</b> 1261.609	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°20'26.51100"	<b>Longitude (Global)</b> W82°42'49.32757"	<b>Ellipsoid Height (US ft)</b> 1150.162	
Location Photo  NORTH				
 <p>1067_2019_OH, 3S, 20191216</p>		 <p>1067_2019_OH, 3W, 20191216</p>		


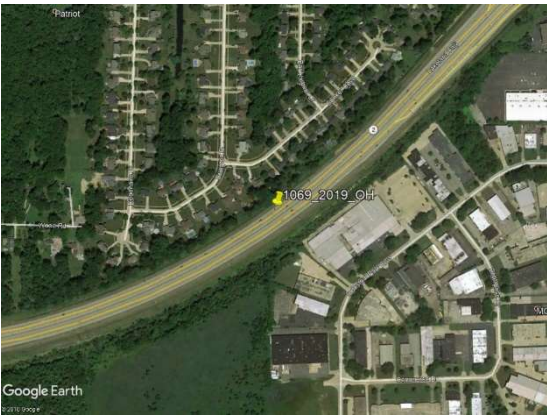



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1068_2019_OH	<b>Northing (US ft)</b> 743864.400	<b>Easting (US ft)</b> 2275718.251	<b>Elevation (US ft)</b> 623.756	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°42'10.56948"	<b>Longitude (Global)</b> W81°22'29.84874"	<b>Ellipsoid Height (US ft)</b> 510.823	
<b>Location Photo</b>    NORTH				
 <p>1068_2019_OH, 3S, 20191113</p>		 <p>1068_2019_OH, 3E, 20191113</p>		




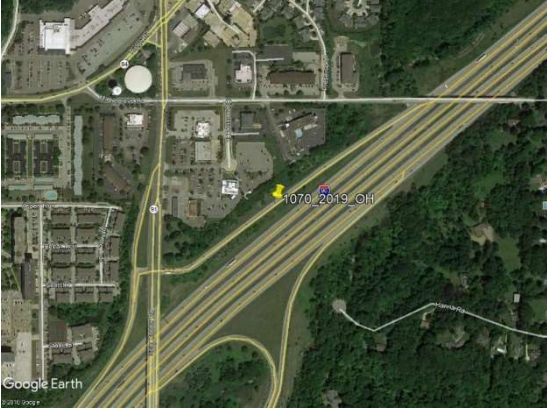


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1069_2019_OH	<b>Northing (US ft)</b> 727750.075	<b>Easting (US ft)</b> 2272760.129	<b>Elevation (US ft)</b> 627.599	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°39'31.75632"	<b>Longitude (Global)</b> W81°23'11.55434"	<b>Ellipsoid Height (US ft)</b> 514.963	
<b>Location Photo</b>    NORTH				
 <p>1069_2019_OH, 3S, 20191113</p>		 <p>1069_2019_OH, 3E, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1070_2019_OH	<b>Northing (US ft)</b> 707672.843	<b>Easting (US ft)</b> 2259144.424	<b>Elevation (US ft)</b> 736.020	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°36'15.09371"	<b>Longitude (Global)</b> W81°26'14.13787"	<b>Ellipsoid Height (US ft)</b> 623.550	
<b>Location Photo</b>   NORTH				
 <p>1070_2019_OH, 3S, 20191113</p>		 <p>1070_2019_OH, 3W, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1071_2019_OH	<b>Northing (US ft)</b> 691783.085	<b>Easting (US ft)</b> 2218828.547	<b>Elevation (US ft)</b> 602.488	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°33'42.63122"	<b>Longitude (Global)</b> W81°35'06.98254"	<b>Ellipsoid Height (US ft)</b> 489.651	
<b>Location Photo</b>    NORTH				
 <p>1071_2019_OH, 3S, 20191113</p>		 <p>1071_2019_OH, 3E, 20191113</p>		




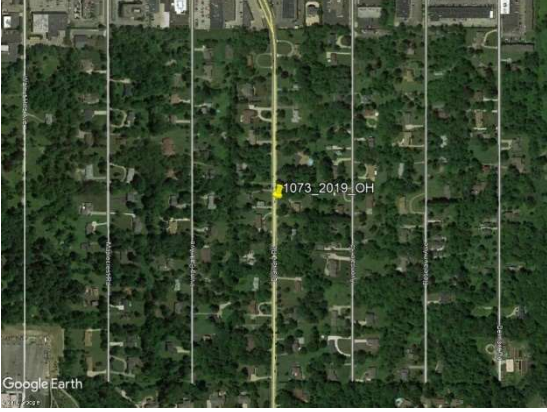


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1072_2019_OH	<b>Northing (US ft)</b> 666115.639	<b>Easting (US ft)</b> 2214873.956	<b>Elevation (US ft)</b> 849.428	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N41°29'29.45679"	<b>Longitude (Global)</b> W81°36'02.48214"	<b>Ellipsoid Height (US ft)</b> 737.022	
<b>Location Photo</b>    NORTH				
 <p>1072_2019_OH, 3N, 20191116</p>		 <p>1072_2019_OH, 3E, 20191116</p>		




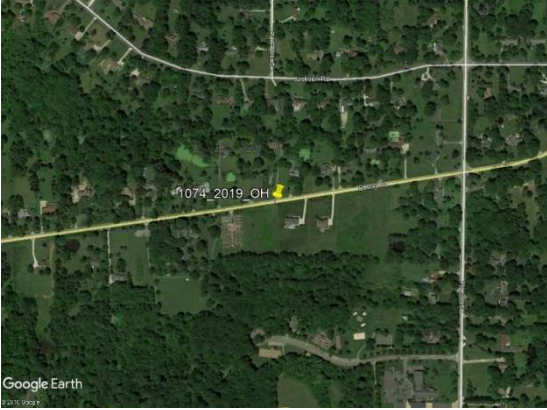




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1073_2019_OH	<b>Northing (US ft)</b> 654495.100	<b>Easting (US ft)</b> 2248032.745	<b>Elevation (US ft)</b> 1153.819	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°27'31.04644"	<b>Longitude (Global)</b> W81°28'48.57647"	<b>Ellipsoid Height (US ft)</b> 1042.075	
<b>Location Photo</b>    NORTH				
 <p>1073_2019_OH, 3N, 20191115</p>		 <p>1073_2019_OH, 3W, 20191115</p>		


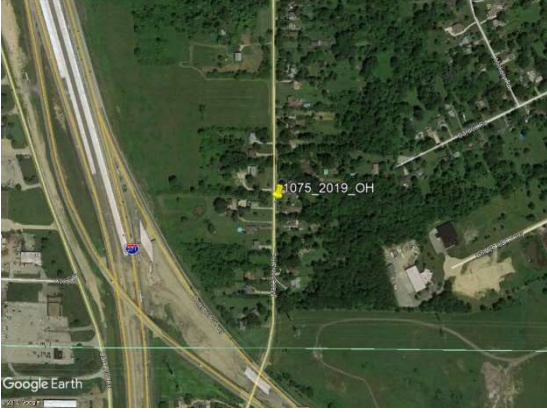



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1074_2019_OH	<b>Northing (US ft)</b> 646732.950	<b>Easting (US ft)</b> 2251492.034	<b>Elevation (US ft)</b> 1207.972	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°26'13.95778"	<b>Longitude (Global)</b> W81°28'04.35232"	<b>Ellipsoid Height (US ft)</b> 1096.370	
<b>Location Photo</b>    NORTH				
 <p>1074_2019_OH, 3N, 20191115</p>	 <p>1074_2019_OH, 3E, 20191115</p>			




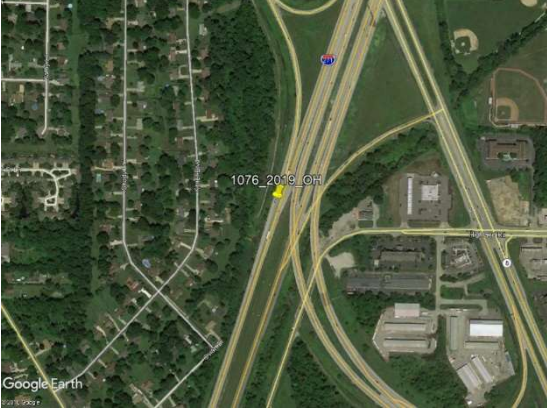


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1075_2019_OH	<b>Northing (US ft)</b> 615740.088	<b>Easting (US ft)</b> 2240793.970	<b>Elevation (US ft)</b> 1065.851	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°21'08.98338"	<b>Longitude (Global)</b> W81°30'29.43162"	<b>Ellipsoid Height (US ft)</b> 954.509	
Location Photo    NORTH				
 <p>1075_2019_OH, 3S, 20191114</p>	 <p>1075_2019_OH, 3W, 20191114</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1076_2019_OH	<b>Northing (US ft)</b> 596468.648	<b>Easting (US ft)</b> 2237835.968	<b>Elevation (US ft)</b> 980.156	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°17'58.91324"	<b>Longitude (Global)</b> W81°31'11.05657"	<b>Ellipsoid Height (US ft)</b> 869.059	
<b>Location Photo</b>    NORTH				
 <p>1076_2019_OH, 3S, 20191117</p>		 <p>1076_2019_OH, 3E, 20191117</p>		




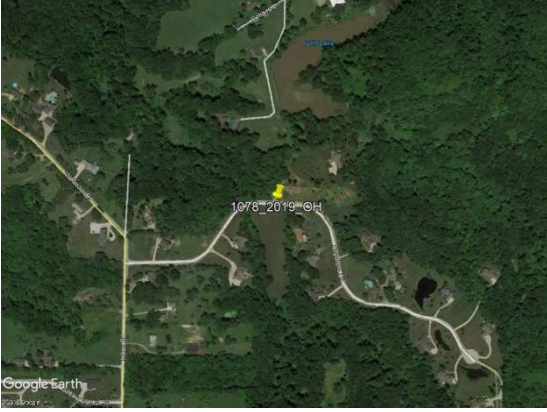



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1077_2019_OH	<b>Northing (US ft)</b> 574155.041	<b>Easting (US ft)</b> 2243529.259	<b>Elevation (US ft)</b> 1020.104	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°14'17.81466"	<b>Longitude (Global)</b> W81°29'59.81958"	<b>Ellipsoid Height (US ft)</b> 909.396	
<b>Location Photo</b>    NORTH				
 <p>1077_2019_OH, 3S, 20191117</p>		 <p>1077_2019_OH, 3E, 20191117</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1078_2019_OH	<b>Northing (US ft)</b> 558308.479	<b>Easting (US ft)</b> 2237340.303	<b>Elevation (US ft)</b> 946.052	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°11'41.94074"	<b>Longitude (Global)</b> W81°31'23.15062"	<b>Ellipsoid Height (US ft)</b> 835.610	
<b>Location Photo</b>    NORTH				
 <p>1078_2019_OH, 3N, 20191117</p>	 <p>1078_2019_OH, 3W, 20191117</p>			




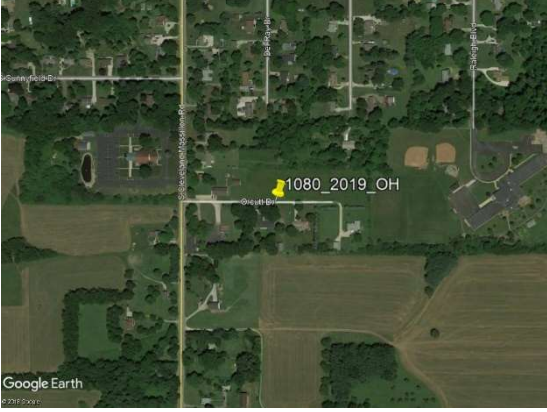


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1079_2019_OH	<b>Northing (US ft)</b> 537177.900	<b>Easting (US ft)</b> 2178840.664	<b>Elevation (US ft)</b> 1134.166	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°08'18.92916"	<b>Longitude (Global)</b> W81°44'10.79264"	<b>Ellipsoid Height (US ft)</b> 1024.131	
<b>Location Photo</b>    NORTH				
 <p>1079_2019_OH, 3N, 20191111</p>		 <p>1079_2019_OH, 3E, 20191111</p>		




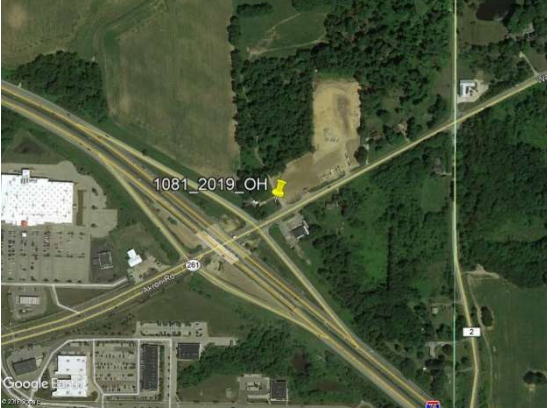




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1080_2019_OH	<b>Northing (US ft)</b> 520036.049	<b>Easting (US ft)</b> 2204764.745	<b>Elevation (US ft)</b> 1066.948	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°05'27.17712"	<b>Longitude (Global)</b> W81°38'34.18071"	<b>Ellipsoid Height (US ft)</b> 957.261	
<b>Location Photo</b>   NORTH				
 <p>1080_2019_OH, 3N, 20191111</p>		 <p>1080_2019_OH, 3W, 20191111</p>		


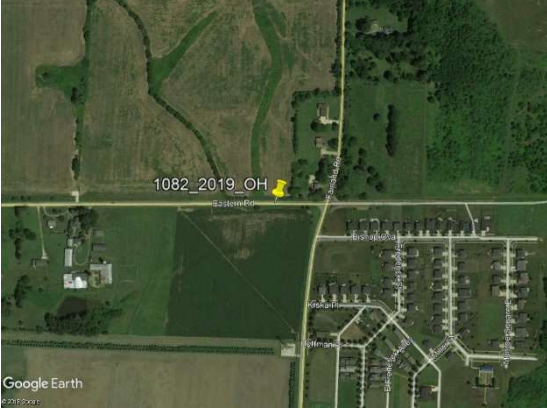




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1081_2019_OH	<b>Northing (US ft)</b> 503256.282	<b>Easting (US ft)</b> 2191588.120	<b>Elevation (US ft)</b> 1124.069	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°02'42.62546"	<b>Longitude (Global)</b> W81°41'28.30088"	<b>Ellipsoid Height (US ft)</b> 1014.729	
Location Photo    NORTH				
 <p>1081_2019_OH, 3S, 20191111</p>	 <p>1081_2019_OH, 3W, 20191111</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1082_2019_OH	<b>Northing (US ft)</b> 482833.935	<b>Easting (US ft)</b> 2211037.883	<b>Elevation (US ft)</b> 1119.962	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°59'18.97858"	<b>Longitude (Global)</b> W81°37'17.14817"	<b>Ellipsoid Height (US ft)</b> 1010.870	
<b>Location Photo</b>    NORTH				
 <p>1082_2019_OH, 3N, 20191110</p>		 <p>1082_2019_OH, 3W, 20191110</p>		






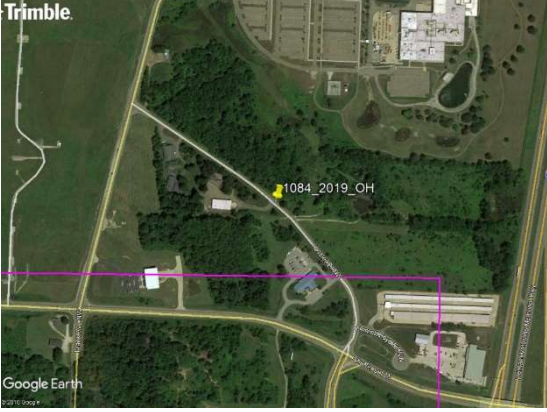


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1083_2019_OH	<b>Northing (US ft)</b> 485403.297	<b>Easting (US ft)</b> 2217618.010	<b>Elevation (US ft)</b> 963.500	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°59'43.70183"	<b>Longitude (Global)</b> W81°35'50.99838"	<b>Ellipsoid Height (US ft)</b> 854.326	
<b>Location Photo</b>   NORTH				
 <p>1083_2019_OH, 3S, 20191110</p>		 <p>1083_2019_OH, 3E, 20191110</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1084_2019_OH	<b>Northing (US ft)</b> 451717.712	<b>Easting (US ft)</b> 2262693.667	<b>Elevation (US ft)</b> 1147.184	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°54'05.84357"	<b>Longitude (Global)</b> W81°26'08.53573"	<b>Ellipsoid Height (US ft)</b> 1038.051	
Location Photo    NORTH				
 <p>1084_2019_OH, 3N, 20191110</p>		 <p>1084_2019_OH, 3W, 20191110</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1085_2019_OH	<b>Northing (US ft)</b> 844705.744	<b>Easting (US ft)</b> 2507201.406	<b>Elevation (US ft)</b> 632.761	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°58'05.90659"	<b>Longitude (Global)</b> W80°31'08.76692"	<b>Ellipsoid Height (US ft)</b> 518.975	
<b>Location Photo</b>    NORTH				
 <p>1085_2019_OH, 3S, 20190131</p>	 <p>1085_2019_OH, 3E, 20190131</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1086_2019_OH	<b>Northing (US ft)</b> 826445.734	<b>Easting (US ft)</b> 2494057.193	<b>Elevation (US ft)</b> 724.392	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°55'08.48325"	<b>Longitude (Global)</b> W80°34'08.06135"	<b>Ellipsoid Height (US ft)</b> 610.993	
<b>Location Photo</b>    NORTH				
 <p>1086_2019_OH, 3S, 20191105</p>		 <p>1086_2019_OH, 3W, 20191105</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1087_2019_OH	<b>Northing (US ft)</b> 805335.259	<b>Easting (US ft)</b> 2467990.239	<b>Elevation (US ft)</b> 860.586	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°51'45.54581"	<b>Longitude (Global)</b> W80°39'58.63443"	<b>Ellipsoid Height (US ft)</b> 747.521	
Location Photo    NORTH				
 <p>1087_2019_OH, 3N, 20191105</p>		 <p>1087_2019_OH, 3E, 20191105</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1088_2019_OH	<b>Northing (US ft)</b> 784394.821	<b>Easting (US ft)</b> 2467641.918	<b>Elevation (US ft)</b> 902.655	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°48'18.79510"	<b>Longitude (Global)</b> W80°40'09.04533"	<b>Ellipsoid Height (US ft)</b> 790.022	
<b>Location Photo</b>    NORTH				
 <p>1088_2019_OH, 3N, 20191105</p>		 <p>1088_2019_OH, 3E, 20191105</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1089_2019_OH	<b>Northing (US ft)</b> 763510.391	<b>Easting (US ft)</b> 2456816.810	<b>Elevation (US ft)</b> 933.465	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°44'54.73898"	<b>Longitude (Global)</b> W80°42'37.60335"	<b>Ellipsoid Height (US ft)</b> 821.143	
Location Photo    NORTH				
 <p>1089_2019_OH, 3E, 20191106</p>		 <p>1089_2019_OH, 3S, 20191106</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1090_2019_OH	<b>Northing (US ft)</b> 746917.887	<b>Easting (US ft)</b> 2495380.436	<b>Elevation (US ft)</b> 1044.957	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°42'02.73097"	<b>Longitude (Global)</b> W80°34'13.83303"	<b>Ellipsoid Height (US ft)</b> 933.140	
<b>Location Photo</b>    NORTH				
 <p>1090_2019_OH, 3S, 20190131</p>	 <p>1090_2019_OH, 3E, 20190131</p>			




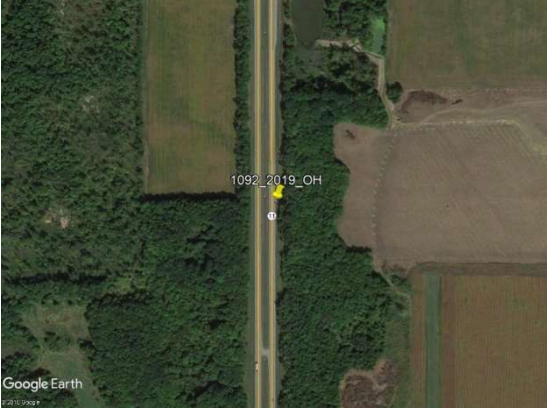




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1091_2019_OH	<b>Northing (US ft)</b> 727901.721	<b>Easting (US ft)</b> 2472737.199	<b>Elevation (US ft)</b> 975.032	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°38'59.74506"	<b>Longitude (Global)</b> W80°39'17.56372"	<b>Ellipsoid Height (US ft)</b> 863.378	
Location Photo    NORTH				
 <p>1091_2019_OH, 3NE, 20190130</p>	 <p>1091_2019_OH, 3NW, 20190130</p>			


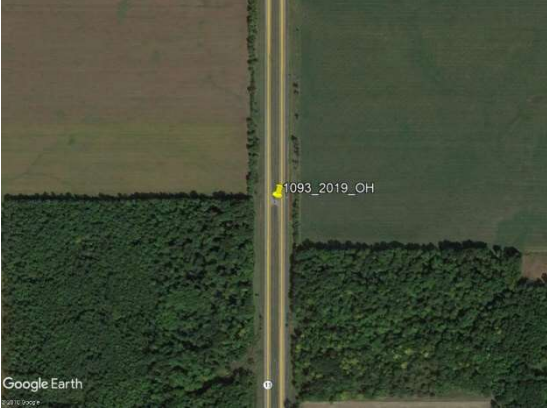




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1092_2019_OH	<b>Northing (US ft)</b> 709364.957	<b>Easting (US ft)</b> 2457177.085	<b>Elevation (US ft)</b> 1071.695	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°35'59.84805"	<b>Longitude (Global)</b> W80°42'47.48460"	<b>Ellipsoid Height (US ft)</b> 960.237	
<b>Location Photo</b>    NORTH				
 <p>1092_2019_OH, 3N, 20191105</p>		 <p>1092_2019_OH, 3W, 20191105</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1093_2019_OH	<b>Northing (US ft)</b> 689885.066	<b>Easting (US ft)</b> 2457519.185	<b>Elevation (US ft)</b> 1086.466	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°32'47.36068"	<b>Longitude (Global)</b> W80°42'48.23473"	<b>Ellipsoid Height (US ft)</b> 975.221	
<b>Location Photo</b>    NORTH				
 <p>1093_2019_OH, 3N, 20191105</p>		 <p>1093_2019_OH, 3W, 20191105</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1094_2019_OH	<b>Northing (US ft)</b> 669684.335	<b>Easting (US ft)</b> 2458046.996	<b>Elevation (US ft)</b> 1053.018	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°29'27.71193"	<b>Longitude (Global)</b> W80°42'46.73784"	<b>Ellipsoid Height (US ft)</b> 941.936	
<b>Location Photo</b>    NORTH				
 <p>1094_2019_OH, 3N, 20191105</p>		 <p>1094_2019_OH, 3W, 20191105</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1095_2019_OH	<b>Northing (US ft)</b> 653101.250	<b>Easting (US ft)</b> 2451763.792	<b>Elevation (US ft)</b> 933.223	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°26'45.16531"	<b>Longitude (Global)</b> W80°44'13.68863"	<b>Ellipsoid Height (US ft)</b> 822.205	
<b>Location Photo</b>   NORTH				
 <p>1095_2019_OH, 3N, 20191106</p>		 <p>1095_2019_OH, 3E, 20191106</p>		




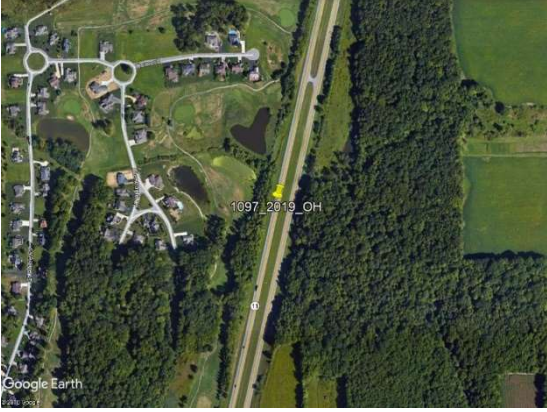


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1096_2019_OH	<b>Northing (US ft)</b> 632968.606	<b>Easting (US ft)</b> 2460320.234	<b>Elevation (US ft)</b> 1050.481	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°23'24.56651"	<b>Longitude (Global)</b> W80°42'26.78847"	<b>Ellipsoid Height (US ft)</b> 939.507	
<b>Location Photo</b>    NORTH				
 <p>1096_2019_OH, 3S, 20191106</p>		 <p>1096_2019_OH, 3W, 20191106</p>		






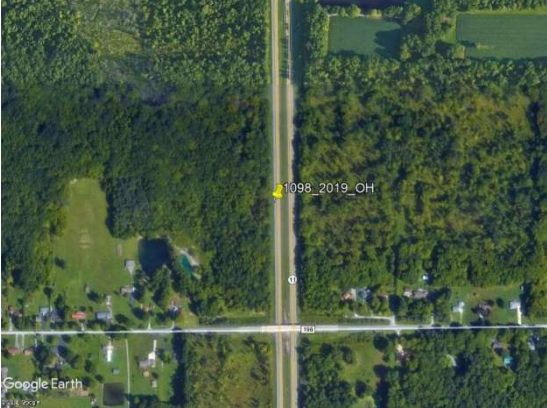


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1097_2019_OH	<b>Northing (US ft)</b> 615924.906	<b>Easting (US ft)</b> 2462069.177	<b>Elevation (US ft)</b> 1069.592	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°20'35.84690"	<b>Longitude (Global)</b> W80°42'08.45573"	<b>Ellipsoid Height (US ft)</b> 958.606	
<b>Location Photo</b>   NORTH				
 <p>1097_2019_OH, 3S, 20191106</p>		 <p>1097_2019_OH, 3W, 20191106</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1098_2019_OH	<b>Northing (US ft)</b> 596239.928	<b>Easting (US ft)</b> 2461765.087	<b>Elevation (US ft)</b> 1060.164	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°17'21.45083"	<b>Longitude (Global)</b> W80°42'17.75333"	<b>Ellipsoid Height (US ft)</b> 949.146	
Location Photo    NORTH				
 <p>1098_2019_OH, 3S, 20191106</p>		 <p>1098_2019_OH, 3W, 20191106</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1099_2019_OH	<b>Northing (US ft)</b> 579550.369	<b>Easting (US ft)</b> 2461067.246	<b>Elevation (US ft)</b> 1089.673	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°14'36.72274"	<b>Longitude (Global)</b> W80°42'31.38330"	<b>Ellipsoid Height (US ft)</b> 978.614	
<b>Location Photo</b>    NORTH				
 <p>1099_2019_OH, 3N, 20191108</p>	 <p>1099_2019_OH, 3W, 20191108</p>			




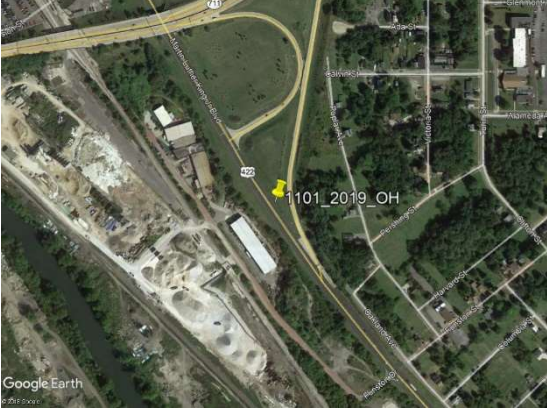

# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1100_2019_OH	<b>Northing (US ft)</b> 562580.823	<b>Easting (US ft)</b> 2463132.278	<b>Elevation (US ft)</b> 1010.177	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°11'48.66553"	<b>Longitude (Global)</b> W80°42'08.93404"	<b>Ellipsoid Height (US ft)</b> 899.040	
<b>Location Photo</b>    NORTH				
 <p>1100_2019_OH, 3N, 20191108</p>		 <p>1100_2019_OH, 3W, 20191108</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1101_2019_OH	<b>Northing (US ft)</b> 535244.153	<b>Easting (US ft)</b> 2471116.938	<b>Elevation (US ft)</b> 905.629	
<b>Point Type</b> LONG GRASS	<b>Latitude (Global)</b> N41°07'16.97361"	<b>Longitude (Global)</b> W80°40'31.98462"	<b>Ellipsoid Height (US ft)</b> 794.327	
<b>Location Photo</b>   NORTH				
 <p>1101_2019_OH, 3N, 20191108</p>	 <p>1101_2019_OH, 3E, 20191108</p>			


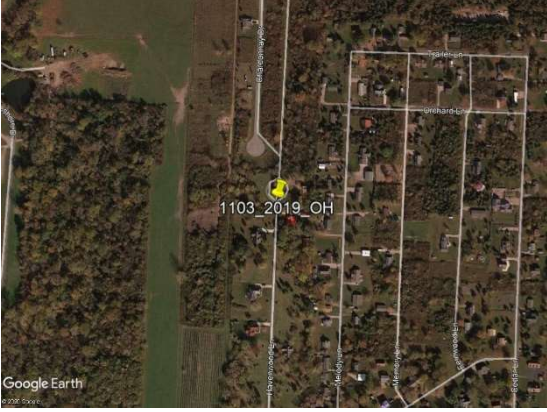




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1102_2019_OH	<b>Northing (US ft)</b> 704646.457	<b>Easting (US ft)</b> 1917363.379	<b>Elevation (US ft)</b> 598.314	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°36'02.14747"	<b>Longitude (Global)</b> W82°41'13.07750"	<b>Ellipsoid Height (US ft)</b> 481.889	
<b>Location Photo</b>    NORTH				
 <p>1102_2019_OH, 3E, 20200325</p>		 <p>1102_2019_OH, 3S, 20200325</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1103_2019_OH	<b>Northing (US ft)</b> 700961.148	<b>Easting (US ft)</b> 1914938.110	<b>Elevation (US ft)</b> 592.709	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°35'25.68493"	<b>Longitude (Global)</b> W82°41'44.89070"	<b>Ellipsoid Height (US ft)</b> 476.271	
<b>Location Photo</b>   NORTH				
 <p>1103_2019_OH, 3N, 20200325</p>		 <p>1103_2019_OH, 3W, 20200325</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1104_2019_OH	<b>Northing (US ft)</b> 489814.627	<b>Easting (US ft)</b> 1422973.660	<b>Elevation (US ft)</b> 729.667	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°59'38.94692"	<b>Longitude (Global)</b> W84°28'35.10425"	<b>Ellipsoid Height (US ft)</b> 617.541	
<b>Location Photo</b>    NORTH				
 <p>1104_2019_OH, 3N, 20191210</p>		 <p>1104_2019_OH, 3W, 20191210</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1105_2019_OH	<b>Northing (US ft)</b> 428298.855	<b>Easting (US ft)</b> 1586605.114	<b>Elevation (US ft)</b> 890.585	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°50'02.31053"	<b>Longitude (Global)</b> W83°52'48.65577"	<b>Ellipsoid Height (US ft)</b> 775.192	
<b>Location Photo</b>    NORTH				
 <p>1105_2019_OH_3S, 20200121</p>		 <p>1105_2019_OH_3E, 20200121</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1106_2019_OH	<b>Northing (US ft)</b> 597273.535	<b>Easting (US ft)</b> 2081737.806	<b>Elevation (US ft)</b> 774.184	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°18'19.17789"	<b>Longitude (Global)</b> W82°05'16.21344"	<b>Ellipsoid Height (US ft)</b> 661.718	
<b>Location Photo</b>    NORTH				
				







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1107_2019_OH	<b>Northing (US ft)</b> 642492.563	<b>Easting (US ft)</b> 1417588.178	<b>Elevation (US ft)</b> 718.406	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°24'45.92210"	<b>Longitude (Global)</b> W84°30'31.17508"	<b>Ellipsoid Height (US ft)</b> 606.427	
Location Photo    NORTH				
 <p>1107_2019_OH, 3N, 20191107</p>		 <p>1107_2019_OH, 3E, 20191107</p>		




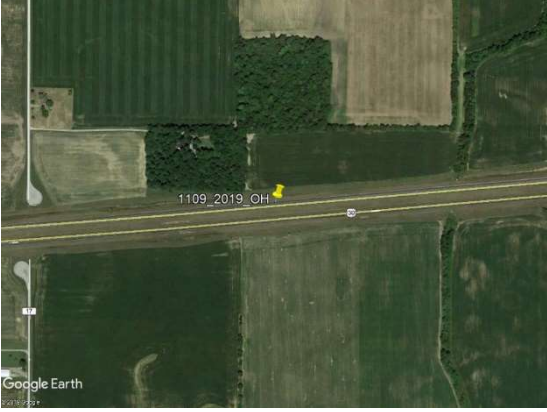




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1108_2019_OH	<b>Northing (US ft)</b> 388151.464	<b>Easting (US ft)</b> 1394858.876	<b>Elevation (US ft)</b> 826.098	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°42'48.19917"	<b>Longitude (Global)</b> W84°34'10.20306"	<b>Ellipsoid Height (US ft)</b> 715.718	
Location Photo    NORTH				
 <p>1108_2019_OH, 3N, 20191126</p>		 <p>1108_2019_OH, 3E, 20191126</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1109_2019_OH	<b>Northing (US ft)</b> 423450.395	<b>Easting (US ft)</b> 1681346.995	<b>Elevation (US ft)</b> 895.898	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°49'27.38150"	<b>Longitude (Global)</b> W83°32'15.39854"	<b>Ellipsoid Height (US ft)</b> 780.526	
<b>Location Photo</b>   NORTH				
 <p>1109_2019_OH, 3N, 20191218</p>		 <p>1109_2019_OH, 3W, 20191218</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1110_2019_OH	<b>Northing (US ft)</b> 404602.209	<b>Easting (US ft)</b> 1885513.456	<b>Elevation (US ft)</b> 1143.611	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°46'36.60442"	<b>Longitude (Global)</b> W82°47'58.72566"	<b>Ellipsoid Height (US ft)</b> 1031.101	
<b>Location Photo</b>    NORTH				
 <p>1110_2019_OH, 3S, 20200128</p>		 <p>1110_2019_OH, 3W, 20200128</p>		


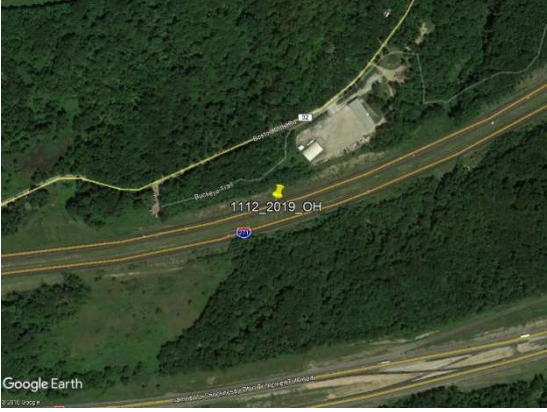




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1111_2019_OH	<b>Northing (US ft)</b> 573211.996	<b>Easting (US ft)</b> 1907759.212		<b>Elevation (US ft)</b> 734.811
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N41°14'23.31703"	<b>Longitude (Global)</b> W82°43'15.10927"		<b>Ellipsoid Height (US ft)</b> 619.883
Location Photo    NORTH				
 <p>1111_2019_OH, 3N, 20200128</p>		 <p>1111_2019_OH, 3E, 20200128</p>		




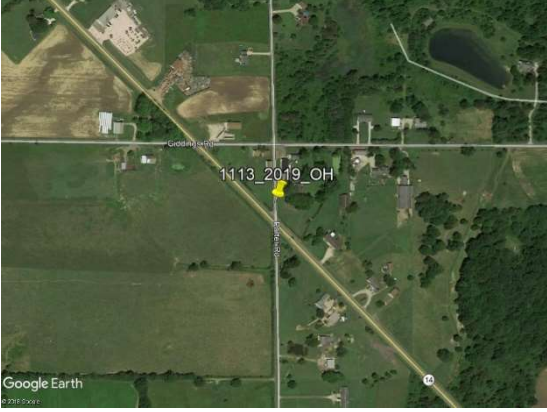


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1112_2019_OH	<b>Northing (US ft)</b> 580397.651	<b>Easting (US ft)</b> 2224185.061	<b>Elevation (US ft)</b> 879.839	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°15'21.60739"	<b>Longitude (Global)</b> W81°34'12.14725"	<b>Ellipsoid Height (US ft)</b> 768.930	
Location Photo    NORTH				
 <p>1112_2019_OH, 3S, 20191117</p>	 <p>1112_2019_OH, 3W, 20191117</p>			




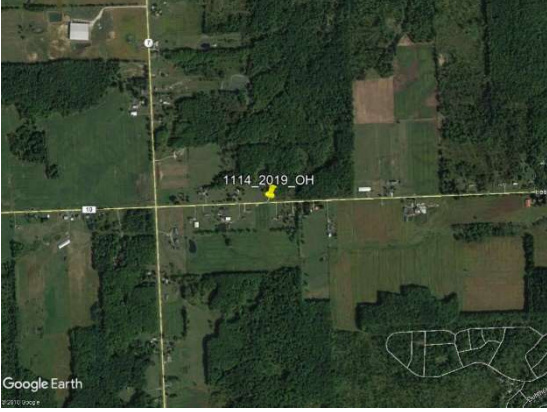




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1113_2019_OH	<b>Northing (US ft)</b> 518084.515	<b>Easting (US ft)</b> 2348346.626	<b>Elevation (US ft)</b> 1100.156	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°04'49.71649"	<b>Longitude (Global)</b> W81°07'19.53453"	<b>Ellipsoid Height (US ft)</b> 989.877	
<b>Location Photo</b>    NORTH				
 <p>1113_2019_OH, 3S, 20191109</p>		 <p>1113_2019_OH, 3W, 20191109</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1114_2019_OH	<b>Northing (US ft)</b> 729760.690	<b>Easting (US ft)</b> 2497503.974	<b>Elevation (US ft)</b> 1083.735	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°39'12.80314"	<b>Longitude (Global)</b> W80°33'50.86628"	<b>Ellipsoid Height (US ft)</b> 972.156	
Location Photo    NORTH				
 <p>1114_2019_OH, 3N, 20190130</p>		 <p>1114_2019_OH, 3W, 20190130</p>		




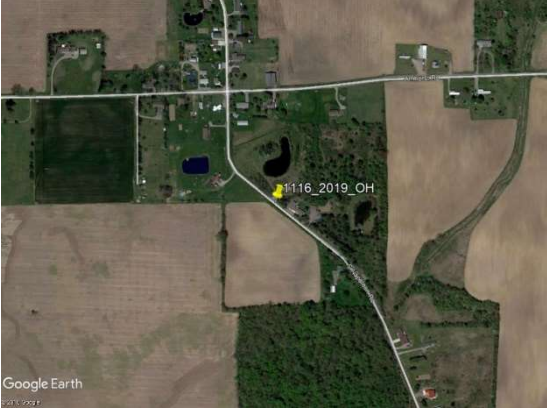


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1115_2019_OH	<b>Northing (US ft)</b> 252779.720	<b>Easting (US ft)</b> 1429266.278	<b>Elevation (US ft)</b> 953.931	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°20'38.66776"	<b>Longitude (Global)</b> W84°26'04.49418"	<b>Ellipsoid Height (US ft)</b> 845.041	
<b>Location Photo</b>    NORTH				
 <p>1115_2019_OH, 3N, 20191125</p>		 <p>1115_2019_OH, 3E, 20191125</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1116_2019_OH	<b>Northing (US ft)</b> 362099.585	<b>Easting (US ft)</b> 1582247.607	<b>Elevation (US ft)</b> 1045.114	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°39'07.56023"	<b>Longitude (Global)</b> W83°53'31.59309"	<b>Ellipsoid Height (US ft)</b> 931.439	
<b>Location Photo</b>    NORTH				
 <p>1116_2019_OH, 3N, 20191105</p>		 <p>1116_2019_OH, 3W, 20191105</p>		


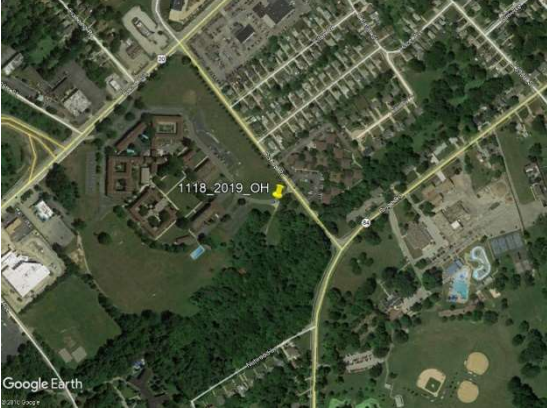




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1117_2019_OH	<b>Northing (US ft)</b> 719197.553	<b>Easting (US ft)</b> 2248222.275	<b>Elevation (US ft)</b> 615.962	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°38'10.23672"	<b>Longitude (Global)</b> W81°28'36.11690"	<b>Ellipsoid Height (US ft)</b> 503.065	
<b>Location Photo</b>    NORTH				
 <p>1117_2019_OH, 3N, 20191113</p>	 <p>1117_2019_OH, 3W, 20191113</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1118_2019_OH	<b>Northing (US ft)</b> 705030.140	<b>Easting (US ft)</b> 2247350.244	<b>Elevation (US ft)</b> 722.869	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°35'50.37724"	<b>Longitude (Global)</b> W81°28'49.78128"	<b>Ellipsoid Height (US ft)</b> 610.232	
<b>Location Photo</b>    NORTH				
 <p>1118_2019_OH, 3N, 20191113</p>		 <p>1118_2019_OH, 3W, 20191113</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1119_2019_OH	<b>Northing (US ft)</b> 712168.285	<b>Easting (US ft)</b> 2248712.057	<b>Elevation (US ft)</b> 653.427	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°37'00.73777"	<b>Longitude (Global)</b> W81°28'30.75489"	<b>Ellipsoid Height (US ft)</b> 540.669	
<b>Location Photo</b>    NORTH				
 <p>1119_2019_OH, 3S, 20191113</p>		 <p>1119_2019_OH, 3W, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brandon Murphy
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1120_2019_OH	<b>Northing (US ft)</b> 698234.473	<b>Easting (US ft)</b> 2248006.085	<b>Elevation (US ft)</b> 837.530	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°34'43.16614"	<b>Longitude (Global)</b> W81°28'42.19760"	<b>Ellipsoid Height (US ft)</b> 725.055	
Location Photo    NORTH				
 <p>1120_2019_OH, 3S, 20200107</p>		 <p>1120_2019_OH, 3W, 20200107</p>		




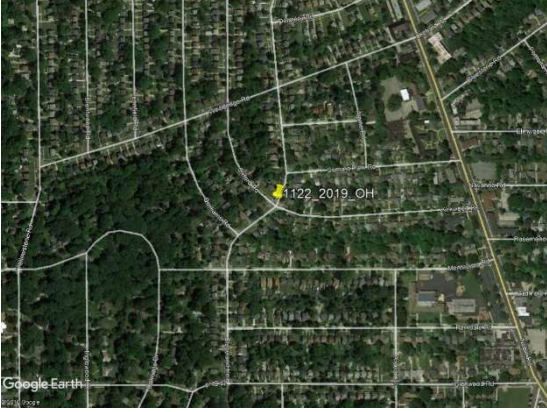


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1121_2019_OH	<b>Northing (US ft)</b> 685283.770	<b>Easting (US ft)</b> 2243106.901	<b>Elevation (US ft)</b> 976.423	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°32'35.78501"	<b>Longitude (Global)</b> W81°29'48.61637"	<b>Ellipsoid Height (US ft)</b> 864.123	
<b>Location Photo</b>    NORTH				
 <p>1121_2019_OH, 3N, 20191113</p>		 <p>1121_2019_OH, 3E, 20191113</p>		




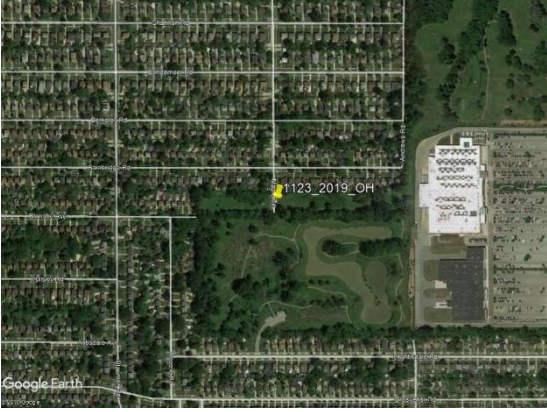




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1122_2019_OH	<b>Northing (US ft)</b> 678964.173	<b>Easting (US ft)</b> 2230182.362	<b>Elevation (US ft)</b> 947.695	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°31'34.78544"	<b>Longitude (Global)</b> W81°32'39.48506"	<b>Ellipsoid Height (US ft)</b> 835.302	
<b>Location Photo</b>    NORTH				
 <p>1122_2019_OH, 3N, 20191113</p>		 <p>1122_2019_OH, 3E, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1123_2019_OH	<b>Northing (US ft)</b> 672507.797	<b>Easting (US ft)</b> 2230236.720	<b>Elevation (US ft)</b> 994.390	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°30'30.99418"	<b>Longitude (Global)</b> W81°32'39.70051"	<b>Ellipsoid Height (US ft)</b> 882.124	
<b>Location Photo</b>   NORTH				
 <p>1123_2019_OH, 3N, 20191113</p>		 <p>1123_2019_OH, 3E, 20191113</p>		




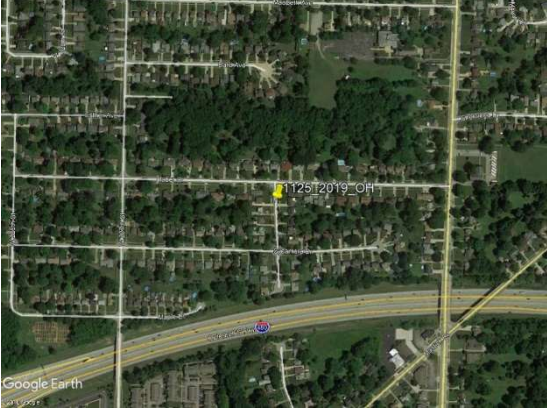


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1124_2019_OH	<b>Northing (US ft)</b> 660289.512	<b>Easting (US ft)</b> 2206467.132	<b>Elevation (US ft)</b> 689.362	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°28'32.73857"	<b>Longitude (Global)</b> W81°37'53.70825"	<b>Ellipsoid Height (US ft)</b> 576.933	
<b>Location Photo</b>   NORTH				
 <p>1124_2019_OH, 3N, 20191114</p>		 <p>1124_2019_OH, 3E, 20191114</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1125_2019_OH	<b>Northing (US ft)</b> 641771.138	<b>Easting (US ft)</b> 2141690.364	<b>Elevation (US ft)</b> 746.077	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°25'35.28290"	<b>Longitude (Global)</b> W81°52'06.43897"	<b>Ellipsoid Height (US ft)</b> 633.535	
<b>Location Photo</b>   NORTH				
 <p>1125_2019_OH, 3N, 20191114</p>		 <p>1125_2019_OH, 3E, 20191114</p>		


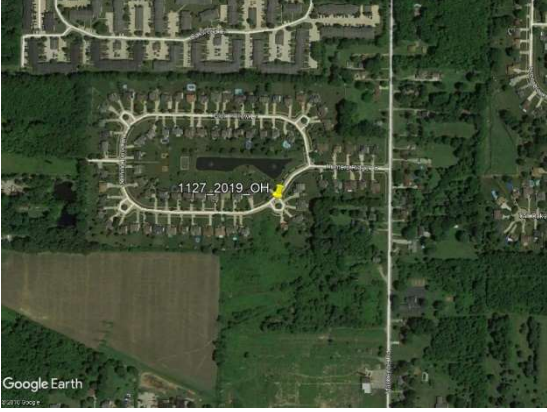


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brandon Murphy
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1126_2019_OH	<b>Northing (US ft)</b> 635727.394	<b>Easting (US ft)</b> 2126846.920	<b>Elevation (US ft)</b> 776.069	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°24'36.58653"	<b>Longitude (Global)</b> W81°55'21.81585"	<b>Ellipsoid Height (US ft)</b> 663.479	
<b>Location Photo</b>   NORTH				
 <p>1126_2019_OH, 3S, 20200107</p>		 <p>1126_2019_OH, 3W, 20200107</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1127_2019_OH	<b>Northing (US ft)</b> 627324.650	<b>Easting (US ft)</b> 2123010.518	<b>Elevation (US ft)</b> 781.885	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°23'13.81383"	<b>Longitude (Global)</b> W81°56'12.87631"	<b>Ellipsoid Height (US ft)</b> 669.412	
Location Photo    NORTH				
 <p>1127_2019_OH, 3N, 20191114</p>		 <p>1127_2019_OH, 3E, 20191114</p>		




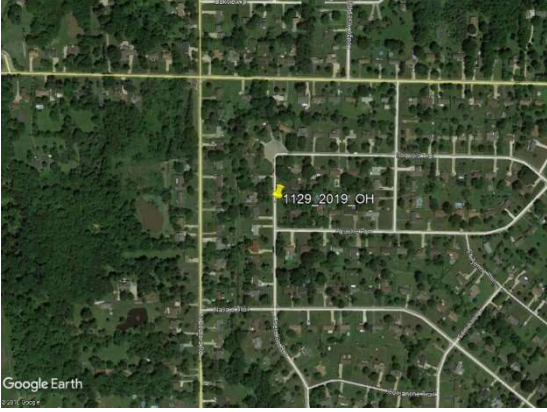




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1128_2019_OH	<b>Northing (US ft)</b> 620979.043	<b>Easting (US ft)</b> 2128423.374	<b>Elevation (US ft)</b> 778.337	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°22'10.76656"	<b>Longitude (Global)</b> W81°55'02.41981"	<b>Ellipsoid Height (US ft)</b> 666.058	
<b>Location Photo</b>    NORTH				
 <p>1128_2019_OH, 3N, 20191119</p>		 <p>1128_2019_OH, 3E, 20191119</p>		


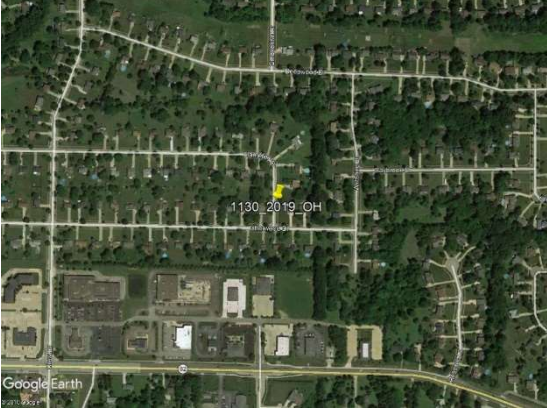




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1129_2019_OH	<b>Northing (US ft)</b> 608810.338	<b>Easting (US ft)</b> 2241118.902	<b>Elevation (US ft)</b> 1011.154	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°20'00.48172"	<b>Longitude (Global)</b> W81°30'26.20546"	<b>Ellipsoid Height (US ft)</b> 899.915	
<b>Location Photo</b>    NORTH				
 <p>1129_2019_OH, 3N, 20191114</p>		 <p>1129_2019_OH, 3E, 20191114</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1130_2019_OH	<b>Northing (US ft)</b> 602660.795	<b>Easting (US ft)</b> 2243183.170	<b>Elevation (US ft)</b> 1029.968	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°18'59.49170"	<b>Longitude (Global)</b> W81°30'00.07136"	<b>Ellipsoid Height (US ft)</b> 918.833	
<b>Location Photo</b>   NORTH				
 <p>1130_2019_OH, 3N, 20191114</p>		 <p>1130_2019_OH, 3E, 20191114</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1131_2019_OH	<b>Northing (US ft)</b> 506806.526	<b>Easting (US ft)</b> 2198265.364	<b>Elevation (US ft)</b> 1128.044	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°03'17.08331"	<b>Longitude (Global)</b> W81°40'00.71348"	<b>Ellipsoid Height (US ft)</b> 1018.633	
Location Photo    NORTH				
 <p>1131_2019, OH, 3N, 10191111</p>	 <p>1131_2019, OH, 3E, 10191111</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1132_2019_OH	<b>Northing (US ft)</b> 590519.117	<b>Easting (US ft)</b> 2235858.622	<b>Elevation (US ft)</b> 963.528	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°17'00.35044"	<b>Longitude (Global)</b> W81°31'37.83184"	<b>Ellipsoid Height (US ft)</b> 852.503	
Location Photo    NORTH				
 <p>1132_2019_OH, 3S, 20191117</p>		 <p>1132_2019_OH, 3E, 20191117</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1133_2019_OH	<b>Northing (US ft)</b> 572847.490	<b>Easting (US ft)</b> 2230761.028	<b>Elevation (US ft)</b> 703.102	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°14'06.30883"	<b>Longitude (Global)</b> W81°32'47.13141"	<b>Ellipsoid Height (US ft)</b> 592.327	
<b>Location Photo</b>    NORTH				
 <p>1133_2019_OH, 3N, 20191117</p>		 <p>1133_2019_OH, 3E, 20191117</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1134_2019_OH	<b>Northing (US ft)</b> 566865.039	<b>Easting (US ft)</b> 2249975.425	<b>Elevation (US ft)</b> 1010.818	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°13'05.04971"	<b>Longitude (Global)</b> W81°28'36.56529"	<b>Ellipsoid Height (US ft)</b> 900.273	
<b>Location Photo</b>   NORTH				
 <p>1134_2019_OH, 3N, 20191117</p>		 <p>1134_2019_OH, 3E, 20191117</p>		


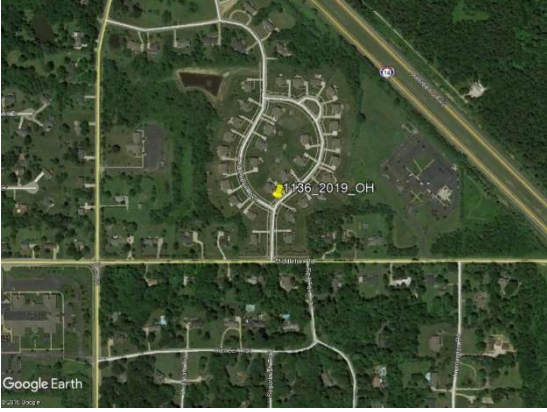




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1135_2019_OH	<b>Northing (US ft)</b> 561807.440	<b>Easting (US ft)</b> 2256222.503	<b>Elevation (US ft)</b> 1007.599	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°12'14.34783"	<b>Longitude (Global)</b> W81°27'15.61621"	<b>Ellipsoid Height (US ft)</b> 897.173	
<b>Location Photo</b>   NORTH				
 <p>1135_2019_OH, 3N, 20191111</p>		 <p>1135_2019_OH, 3E, 20191111</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1136_2019_OH	<b>Northing (US ft)</b> 586249.410	<b>Easting (US ft)</b> 2268923.380	<b>Elevation (US ft)</b> 1076.465	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N41°16'14.29674"	<b>Longitude (Global)</b> W81°24'25.45562"	<b>Ellipsoid Height (US ft)</b> 965.754	
<b>Location Photo</b>    NORTH				
 <p>1136_2019_OH, 3N, 20191116</p>	 <p>1136_2019_OH, 3W, 20191116</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1137_2019_OH	<b>Northing (US ft)</b> 547691.905	<b>Easting (US ft)</b> 2275430.592	<b>Elevation (US ft)</b> 1041.816	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°09'52.53377"	<b>Longitude (Global)</b> W81°23'06.69643"	<b>Ellipsoid Height (US ft)</b> 931.623	
Location Photo    NORTH				
 <p>1137_2019_OH, 3S, 20191111</p>	 <p>1137_2019_OH, 3W, 20191111</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1138_2019_OH	<b>Northing (US ft)</b> 681360.443	<b>Easting (US ft)</b> 1899125.518	<b>Elevation (US ft)</b> 657.561	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°32'11.63047"	<b>Longitude (Global)</b> W82°45'12.23870"	<b>Ellipsoid Height (US ft)</b> 541.094	
<b>Location Photo</b>   NORTH				
 <p>1138_2019_OH, 3S, 20200128</p>	 <p>1138_2019_OH, 3W, 20200128</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1139_2019_OH	<b>Northing (US ft)</b> 699603.146	<b>Easting (US ft)</b> 1875511.183	<b>Elevation (US ft)</b> 587.872	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°35'11.07185"	<b>Longitude (Global)</b> W82°50'23.68722"	<b>Ellipsoid Height (US ft)</b> 471.136	
<b>Location Photo</b>   NORTH				
 <p>1139_2019_OH, 3N, 20200128</p>		 <p>1139_2019_OH, 3E, 20200128</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1140_2019_OH	<b>Northing (US ft)</b> 717552.966	<b>Easting (US ft)</b> 1877896.774	<b>Elevation (US ft)</b> 604.859	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°38'08.50065"	<b>Longitude (Global)</b> W82°49'53.19199"	<b>Ellipsoid Height (US ft)</b> 488.077	
<b>Location Photo</b>   NORTH				
 <p>1140_2019_OH, 3NE, 20200326</p>		 <p>1140_2019_OH, 3NW, 20200326</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1141_2019_OH	<b>Northing (US ft)</b> 724383.465	<b>Easting (US ft)</b> 1885477.153	<b>Elevation (US ft)</b> 576.083	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°39'16.25565"	<b>Longitude (Global)</b> W82°48'13.67697"	<b>Ellipsoid Height (US ft)</b> 459.347	
<b>Location Photo</b>   NORTH				
 <p>1141_2019_OH, 3NE, 20200326</p>	 <p>1141_2019_OH, 3SE, 20200326</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1142_2019_OH	<b>Northing (US ft)</b> 737024.945	<b>Easting (US ft)</b> 1883620.004	<b>Elevation (US ft)</b> 578.994	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°41'21.08200"	<b>Longitude (Global)</b> W82°48'38.73474"	<b>Ellipsoid Height (US ft)</b> 462.280	
Location Photo    NORTH				
 <p>1142_2019_OH, 3N, 20200327</p>		 <p>1142_2019_OH, 3E, 20200327</p>		




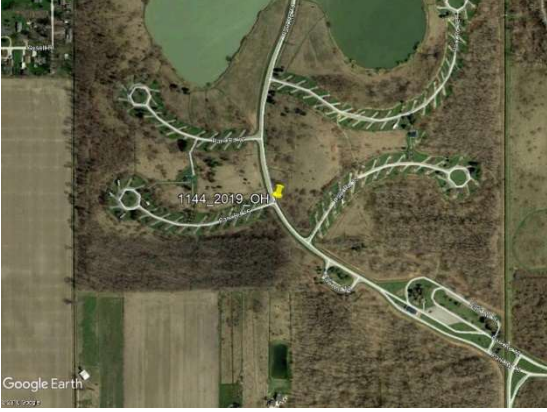




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1143_2019_OH	<b>Northing (US ft)</b> 703982.640	<b>Easting (US ft)</b> 1805461.368	<b>Elevation (US ft)</b> 577.833	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°35'50.62609"	<b>Longitude (Global)</b> W83°05'45.87979"	<b>Ellipsoid Height (US ft)</b> 461.047	
<b>Location Photo</b>   NORTH				
 <p>1143_2019_OH, 3N, 20191112</p>		 <p>1143_2019_OH, 3W, 20191112</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1144_2019_OH	<b>Northing (US ft)</b> 734690.033	<b>Easting (US ft)</b> 1723876.224	<b>Elevation (US ft)</b> 580.644	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°40'47.10094"	<b>Longitude (Global)</b> W83°23'43.77296"	<b>Ellipsoid Height (US ft)</b> 464.295	
<b>Location Photo</b>    NORTH				
 <p>1144_2019_OH, 3N, 20191112</p>		 <p>1144_2019_OH, 3E, 20191112</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1145_2019_OH	<b>Northing (US ft)</b> 736599.272	<b>Easting (US ft)</b> 1728300.079	<b>Elevation (US ft)</b> 578.924	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°41'06.40696"	<b>Longitude (Global)</b> W83°22'45.73089"	<b>Ellipsoid Height (US ft)</b> 462.533	
<b>Location Photo</b>    NORTH				
 <p>1145_2019_OH, 3N, 20191112</p>		 <p>1145_2019_OH, 3E, 20191112</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1146_2019_OH	<b>Northing (US ft)</b> 753303.527	<b>Easting (US ft)</b> 1701201.671		<b>Elevation (US ft)</b> 577.695
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°43'48.57294"	<b>Longitude (Global)</b> W83°28'45.31950"		<b>Ellipsoid Height (US ft)</b> 461.567
<b>Location Photo</b>    NORTH				
 <p>1146_2019_OH, 3N, 20191112</p>		 <p>1146_2019_OH, 3E, 20191112</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1147_2019_OH	<b>Northing (US ft)</b> 742264.910	<b>Easting (US ft)</b> 1695864.895	<b>Elevation (US ft)</b> 587.343	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°41'58.92767"	<b>Longitude (Global)</b> W83°29'54.03215"	<b>Ellipsoid Height (US ft)</b> 471.245	
<b>Location Photo</b>   NORTH				
 <p>1147_2019_OH, 3N, 20191112</p>	 <p>1147_2019_OH, 3W, 20191112</p>			




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1148_2019_OH	<b>Northing (US ft)</b> 729711.710	<b>Easting (US ft)</b> 1755513.301	<b>Elevation (US ft)</b> 572.413	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°40'00.92118"	<b>Longitude (Global)</b> W83°16'46.28142"	<b>Ellipsoid Height (US ft)</b> 455.790	
<b>Location Photo</b>    NORTH				
 <p>1148_2019_OH, 3S, 20191112</p>	 <p>1148_2019_OH, 3W, 20191112</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1149_2019_OH	<b>Northing (US ft)</b> 720992.527	<b>Easting (US ft)</b> 1757141.644	<b>Elevation (US ft)</b> 575.162	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°38'34.92593"	<b>Longitude (Global)</b> W83°16'23.80917"	<b>Ellipsoid Height (US ft)</b> 458.532	
<b>Location Photo</b>   NORTH				
 <p>1149_2019_OH, 3S, 20191112</p>		 <p>1149_2019_OH, 3W, 20191112</p>		


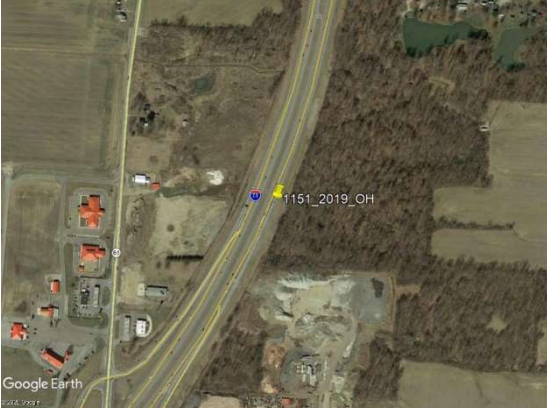




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1150_2019_OH	<b>Northing (US ft)</b> 676017.856	<b>Easting (US ft)</b> 1841104.670	<b>Elevation (US ft)</b> 576.496	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°31'16.48446"	<b>Longitude (Global)</b> W82°57'54.79705"	<b>Ellipsoid Height (US ft)</b> 459.807	
<b>Location Photo</b>    NORTH				
 <p>1150_2019_OH, 3N, 20191112</p>	 <p>1150_2019_OH, 3E, 20191112</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1151_2019_OH	<b>Northing (US ft)</b> 259454.933	<b>Easting (US ft)</b> 1877813.897	<b>Elevation (US ft)</b> 1105.358	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°22'42.05731"	<b>Longitude (Global)</b> W82°49'31.76840"	<b>Ellipsoid Height (US ft)</b> 993.640	
<b>Location Photo</b>    NORTH				
 <p>1151_2019_OH, 3S, 20200129</p>	 <p>1151_2019_OH, 3W, 20200129</p>			




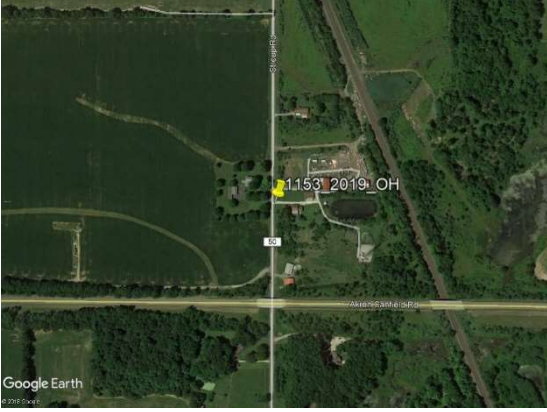



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1152_2019_OH	<b>Northing (US ft)</b> 548939.745	<b>Easting (US ft)</b> 2473158.024		<b>Elevation (US ft)</b> 1046.479
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°09'31.84688"	<b>Longitude (Global)</b> W80°40'01.55963"		<b>Ellipsoid Height (US ft)</b> 935.268
Location Photo    NORTH				
 <p>1152_2019_OH, 3N, 20191108</p>		 <p>1152_2019_OH, 3W, 20191108</p>		


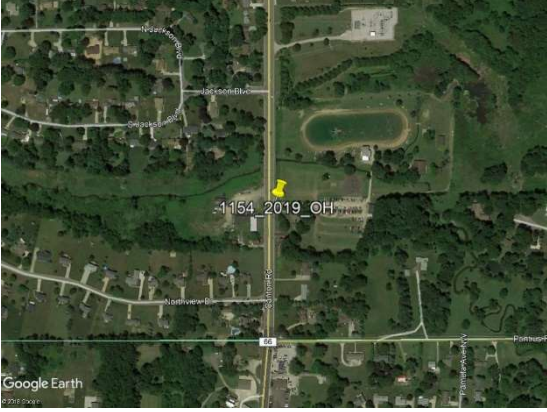




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1153_2019_OH	<b>Northing (US ft)</b> 501126.819	<b>Easting (US ft)</b> 2334886.715	<b>Elevation (US ft)</b> 1135.365	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°02'04.23871"	<b>Longitude (Global)</b> W81°10'18.65366"	<b>Ellipsoid Height (US ft)</b> 1025.331	
<b>Location Photo</b>    NORTH				
 <p>1153_2019_OH, 3N, 20191109</p>		 <p>1153_2019_OH, 3W, 20191109</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1154_2019_OH	<b>Northing (US ft)</b> 484192.058	<b>Easting (US ft)</b> 2270645.784	<b>Elevation (US ft)</b> 1111.168	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°59'25.73518"	<b>Longitude (Global)</b> W81°24'19.67366"	<b>Ellipsoid Height (US ft)</b> 1001.760	
<b>Location Photo</b>   NORTH				
 <p>1154_2019_OH, 3N, 20191110</p>	 <p>1154_2019_OH, 3W, 20191110</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1155_2019_OH	<b>Northing (US ft)</b> 467374.663	<b>Easting (US ft)</b> 2288651.426	<b>Elevation (US ft)</b> 1170.728	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N40°56'37.27334"	<b>Longitude (Global)</b> W81°20'27.80061"	<b>Ellipsoid Height (US ft)</b> 1061.307	
Location Photo    NORTH				
 <p>1155_2019_OH, 3N, 20191109</p>	 <p>1155_2019_OH, 3E, 20191109</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1156_2019_OH	<b>Northing (US ft)</b> 476757.471	<b>Easting (US ft)</b> 2093936.831	<b>Elevation (US ft)</b> 1060.582	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°58'27.77870"	<b>Longitude (Global)</b> W82°02'44.59432"	<b>Ellipsoid Height (US ft)</b> 951.207	
<b>Location Photo</b>   NORTH				
 <p>1156_2019_OH, 3N, 20191118</p>	 <p>1156_2019_OH, 3W, 20191118</p>			




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1157_2019_OH	<b>Northing (US ft)</b> 497295.938	<b>Easting (US ft)</b> 2126483.356	<b>Elevation (US ft)</b> 1110.169	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°01'48.82695"	<b>Longitude (Global)</b> W81°55'38.51583"	<b>Ellipsoid Height (US ft)</b> 1000.672	
<b>Location Photo</b>    NORTH				
 <p>1157_2019_OH, 3N, 20191118</p>	 <p>1157_2019_OH, 3W, 20191118</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1158_2019_OH	<b>Northing (US ft)</b> 517285.517	<b>Easting (US ft)</b> 2070524.129	<b>Elevation (US ft)</b> 942.508	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°05'09.33227"	<b>Longitude (Global)</b> W82°07'47.59532"	<b>Ellipsoid Height (US ft)</b> 831.902	
<b>Location Photo</b>    NORTH				
 <p>1158_2019_OH, 3N, 20191118</p>		 <p>1158_2019_OH, 3W, 20191118</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1159_2019_OH	<b>Northing (US ft)</b> 557543.906	<b>Easting (US ft)</b> 2176684.242	<b>Elevation (US ft)</b> 1182.589	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°11'40.34222"	<b>Longitude (Global)</b> W81°44'36.66741"	<b>Ellipsoid Height (US ft)</b> 1072.138	
<b>Location Photo</b>   NORTH				
 <p>1159_2019_OH, 3N, 20191111</p>		 <p>1159_2019_OH, 3E, 20191111</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1160_2019_OH	<b>Northing (US ft)</b> 577415.383	<b>Easting (US ft)</b> 2139495.451	<b>Elevation (US ft)</b> 989.819	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°14'59.58604"	<b>Longitude (Global)</b> W81°52'41.27557"	<b>Ellipsoid Height (US ft)</b> 878.643	
<b>Location Photo</b>    NORTH				
 <p>1160_2019_OH, 3N, 20191117</p>		 <p>1160_2019_OH, 3W, 20191117</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1161_2019_OH	<b>Northing (US ft)</b> 615719.420	<b>Easting (US ft)</b> 2071947.738	<b>Elevation (US ft)</b> 738.940	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°21'21.86914"	<b>Longitude (Global)</b> W82°07'23.44947"	<b>Ellipsoid Height (US ft)</b> 625.928	
<b>Location Photo</b>   NORTH				
 <p>1161_2019_OH, 3N, 20191119</p>		 <p>1161_2019_OH, 3W, 20191119</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1162_2019_OH	<b>Northing (US ft)</b> 633533.592	<b>Easting (US ft)</b> 2069099.685	<b>Elevation (US ft)</b> 728.195	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°24'17.99910"	<b>Longitude (Global)</b> W82°07'59.81441"	<b>Ellipsoid Height (US ft)</b> 614.790	
<b>Location Photo</b>    NORTH				
 <p>1162_2019_OH, 3S, 20191119</p>		 <p>1162_2019_OH, 3E, 20191119</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1163_2019_OH	<b>Northing (US ft)</b> 651639.898	<b>Easting (US ft)</b> 2060259.529	<b>Elevation (US ft)</b> 615.545	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°27'17.24447"	<b>Longitude (Global)</b> W82°09'54.91199"	<b>Ellipsoid Height (US ft)</b> 501.654	
Location Photo    NORTH				
 <p>1163_2019_OH, 3N, 20191119</p>		 <p>1163_2019_OH, 3W, 20191119</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1164_2019_OH	<b>Northing (US ft)</b> 670328.865	<b>Easting (US ft)</b> 2098985.947	<b>Elevation (US ft)</b> 607.427	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°30'20.11295"	<b>Longitude (Global)</b> W82°01'24.98160"	<b>Ellipsoid Height (US ft)</b> 493.831	
<b>Location Photo</b>    NORTH				
 <p>1164_2019_OH, 3N, 20191114</p>	 <p>1164_2019_OH, 3W, 20191114</p>			


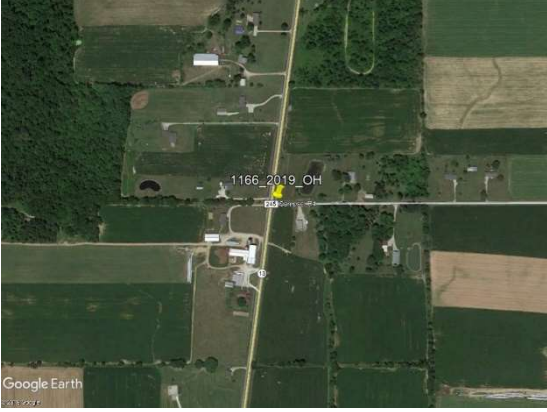




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1165_2019_OH	<b>Northing (US ft)</b> 658883.451	<b>Easting (US ft)</b> 2115413.237	<b>Elevation (US ft)</b> 631.024	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°28'26.09071"	<b>Longitude (Global)</b> W81°57'50.00233"	<b>Ellipsoid Height (US ft)</b> 517.833	
Location Photo    NORTH				
 <p>1165_2019_OH, 3S, 20191114</p>		 <p>1165_2019_OH, 3E, 20191114</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1166_2019_OH	<b>Northing (US ft)</b> 458059.833	<b>Easting (US ft)</b> 1969211.958	<b>Elevation (US ft)</b> 1183.920	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°55'26.24981"	<b>Longitude (Global)</b> W82°29'50.72484"	<b>Ellipsoid Height (US ft)</b> 1072.396	
Location Photo    NORTH				
 <p>1166_2019_OH, 3N, 20191218</p>		 <p>1166_2019_OH, 3W, 20191218</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1167_2019_OH	<b>Northing (US ft)</b> 478053.343	<b>Easting (US ft)</b> 2011147.872	<b>Elevation (US ft)</b> 1171.971	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°58'43.43842"	<b>Longitude (Global)</b> W82°20'43.93618"	<b>Ellipsoid Height (US ft)</b> 1061.104	
<b>Location Photo</b>   NORTH				
 <p>1167_2019_OH, 3S, 20191118</p>		 <p>1167_2019_OH, 3W, 20191118</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1168_2019_OH	<b>Northing (US ft)</b> 739536.582	<b>Easting (US ft)</b> 1565437.239	<b>Elevation (US ft)</b> 741.717	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°41'13.70011"	<b>Longitude (Global)</b> W83°58'32.52064"	<b>Ellipsoid Height (US ft)</b> 626.292	
Location Photo    NORTH				
 <p>1168_2019_OH, 3S, 20191106</p>		 <p>1168_2019_OH, 3W, 20191106</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1169_2019_OH	<b>Northing (US ft)</b> 512421.946	<b>Easting (US ft)</b> 1582479.994	<b>Elevation (US ft)</b> 784.771	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°03'52.79975"	<b>Longitude (Global)</b> W83°53'59.88378"	<b>Ellipsoid Height (US ft)</b> 668.267	
<b>Location Photo</b>   NORTH				
 <p>1169_2019_OH, 3S, 20191217</p>		 <p>1169_2019_OH, 3E, 20191217</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1170_2019_OH	<b>Northing (US ft)</b> 457842.818	<b>Easting (US ft)</b> 1396057.401	<b>Elevation (US ft)</b> 760.732	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°54'16.93799"	<b>Longitude (Global)</b> W84°34'16.13347"	<b>Ellipsoid Height (US ft)</b> 649.500	
<b>Location Photo</b>   NORTH				
 <p>1170_2019_OH, 3S, 20191210</p>		 <p>1170_2019_OH, 3W, 20191210</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1171_2019_OH	<b>Northing (US ft)</b> 473031.988	<b>Easting (US ft)</b> 1676989.512	<b>Elevation (US ft)</b> 811.996	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°57'36.76336"	<b>Longitude (Global)</b> W83°33'19.88239"	<b>Ellipsoid Height (US ft)</b> 696.116	
<b>Location Photo</b>    NORTH				
 <p>1171_2019_OH, 3S, 20191218</p>		 <p>1171_2019_OH, 3E, 20191218</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1172_2019_OH	<b>Northing (US ft)</b> 794756.034	<b>Easting (US ft)</b> 2417309.400	<b>Elevation (US ft)</b> 671.406	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°50'11.04604"	<b>Longitude (Global)</b> W80°51'10.91452"	<b>Ellipsoid Height (US ft)</b> 558.119	
<b>Location Photo</b>    NORTH				
 <p>1172_2019_OH, 3S, 20191115</p>		 <p>1172_2019_OH, 3E, 20191115</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1173_2019_OH	<b>Northing (US ft)</b> 639175.907	<b>Easting (US ft)</b> 2365952.475	<b>Elevation (US ft)</b> 1235.156	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°24'43.21311"	<b>Longitude (Global)</b> W81°03'03.38723"	<b>Ellipsoid Height (US ft)</b> 1124.201	
<b>Location Photo</b>    NORTH				
 <p>1173_2019_OH, 3S, 20191107</p>		 <p>1173_2019_OH, 3W, 20191107</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1174_2019_OH	<b>Northing (US ft)</b> 551559.161	<b>Easting (US ft)</b> 2009376.716	<b>Elevation (US ft)</b> 910.683	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°10'49.78502"	<b>Longitude (Global)</b> W82°21'05.39746"	<b>Ellipsoid Height (US ft)</b> 797.979	
<b>Location Photo</b>    NORTH				
 <p>1174_2019_OH, 3S, 20191120</p>		 <p>1174_2019_OH, 3E, 20191120</p>		




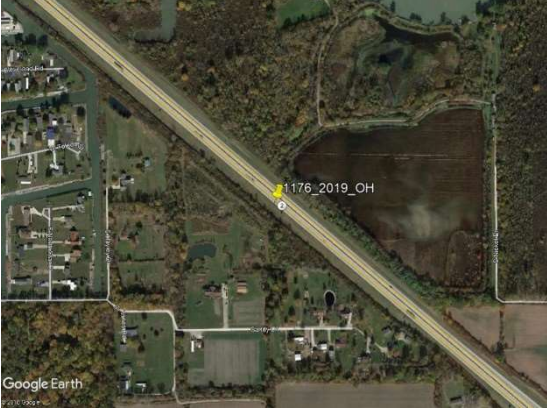


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1175_2019_OH	<b>Northing (US ft)</b> 705884.050	<b>Easting (US ft)</b> 1802586.749	<b>Elevation (US ft)</b> 575.456	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°36'09.21531"	<b>Longitude (Global)</b> W83°06'23.88777"	<b>Ellipsoid Height (US ft)</b> 458.671	
<b>Location Photo</b>   NORTH				
 <p>1175_2019_OH, 3N, 20191112</p>	 <p>1175_2019_OH, 3E, 20191112</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1176_2019_OH	<b>Northing (US ft)</b> 670633.386	<b>Easting (US ft)</b> 1836601.095	<b>Elevation (US ft)</b> 577.985	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°30'23.04493"	<b>Longitude (Global)</b> W82°58'53.61108"	<b>Ellipsoid Height (US ft)</b> 461.318	
Location Photo    NORTH				
 <p>1176_2019_OH, 3N, 20191112</p>		 <p>1176_2019_OH, 3E, 20191112</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1177_2019_OH	<b>Northing (US ft)</b> 670547.790	<b>Easting (US ft)</b> 1868123.394	<b>Elevation (US ft)</b> 586.230	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°30'23.71339"	<b>Longitude (Global)</b> W82°51'59.29918"	<b>Ellipsoid Height (US ft)</b> 469.661	
<b>Location Photo</b>    NORTH				
 <p>1177_2019_OH, 3S, 20200127</p>		 <p>1177_2019_OH, 3W, 20200127</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1178_2019_OH	<b>Northing (US ft)</b> 680940.779	<b>Easting (US ft)</b> 2273551.827	<b>Elevation (US ft)</b> 1081.390	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°31'49.22839"	<b>Longitude (Global)</b> W81°23'09.00303"	<b>Ellipsoid Height (US ft)</b> 969.674	
<b>Location Photo</b>   NORTH				
 <p>1178_2019_OH, 3S, 20191113</p>		 <p>1178_2019_OH, 3E, 20191113</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1179_2019_OH	<b>Northing (US ft)</b> 729617.040	<b>Easting (US ft)</b> 2380262.878	<b>Elevation (US ft)</b> 1062.183	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°39'34.24450"	<b>Longitude (Global)</b> W80°59'35.08989"	<b>Ellipsoid Height (US ft)</b> 950.212	
<b>Location Photo</b>   NORTH				
 <p>1179_2019_OH, 3N, 20191106</p>		 <p>1179_2019_OH, 3W, 20191106</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1180_2019_OH	<b>Northing (US ft)</b> 637341.813	<b>Easting (US ft)</b> 2004404.553	<b>Elevation (US ft)</b> 598.852	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°24'57.44910"	<b>Longitude (Global)</b> W82°22'08.74143"	<b>Ellipsoid Height (US ft)</b> 484.264	
<b>Location Photo</b>   NORTH				
 <p>1180_2019_OH, 3N, 20191119</p>		 <p>1180_2019_OH, 3W, 20191119</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1181_2019_OH	<b>Northing (US ft)</b> 640939.057	<b>Easting (US ft)</b> 2013615.820	<b>Elevation (US ft)</b> 604.701	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°25'32.83681"	<b>Longitude (Global)</b> W82°20'07.75185"	<b>Ellipsoid Height (US ft)</b> 490.210	
<b>Location Photo</b>    NORTH				
 <p>1181_2019_OH, 3S, 20191119</p>	 <p>1181_2019_OH, 3W, 20191119</p>			




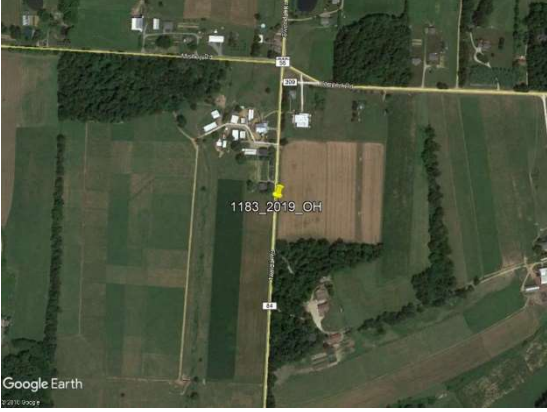




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1182_2019_OH	<b>Northing (US ft)</b> 363987.263	<b>Easting (US ft)</b> 2074901.544	<b>Elevation (US ft)</b> 989.299	
<b>Point Type</b> ASPHALT	<b>Latitude (Global)</b> N40°39'54.36358"	<b>Longitude (Global)</b> W82°06'59.23262"	<b>Ellipsoid Height (US ft)</b> 880.345	
Location Photo    NORTH				
 <p>1182_2019_OH, 3S, 20191113</p>		 <p>1182_2019_OH, 3W, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1183_2019_OH	<b>Northing (US ft)</b> 315674.785	<b>Easting (US ft)</b> 2007216.568	<b>Elevation (US ft)</b> 1237.498	
<b>Point Type</b> ASPHALT	<b>Latitude (Global)</b> N40°31'58.96609"	<b>Longitude (Global)</b> W82°21'38.57554"	<b>Ellipsoid Height (US ft)</b> 1127.593	
Location Photo    NORTH				
 <p>1183_2019_OH, 3S, 20191112</p>		 <p>1183_2019_OH, 3W, 20191112</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1184_2019_OH	<b>Northing (US ft)</b> 294871.512	<b>Easting (US ft)</b> 1552899.309	<b>Elevation (US ft)</b> 1011.923	
<b>Point Type</b> ASPHALT	<b>Latitude (Global)</b> N40°27'58.53271"	<b>Longitude (Global)</b> W83°59'37.37488"	<b>Ellipsoid Height (US ft)</b> 901.030	
<b>Location Photo</b>    NORTH				
 <p>1184_2019_OH, 3N, 20191031</p>		 <p>1184_2019_OH, 3E, 20191031</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1185_2019_OH	<b>Northing (US ft)</b> 259949.700	<b>Easting (US ft)</b> 1326460.656	<b>Elevation (US ft)</b> 1019.080	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°21'24.81486"	<b>Longitude (Global)</b> W84°48'14.16187"	<b>Ellipsoid Height (US ft)</b> 909.564	
<b>Location Photo</b>    NORTH				
 <p>1185_2019_OH, 3S, 20191212</p>		 <p>1185_2019_OH, 3E, 20191212</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1186_2019_OH	<b>Northing (US ft)</b> 750228.700	<b>Easting (US ft)</b> 1336065.638	<b>Elevation (US ft)</b> 1088.462	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°42'10.05025"	<b>Longitude (Global)</b> W84°48'58.30425"	<b>Ellipsoid Height (US ft)</b> 978.155	
<b>Location Photo</b>    NORTH				
 <p>1186_2019_OH, 3N, 20191108</p>		 <p>1186_2019_OH, 3E, 20191108</p>		




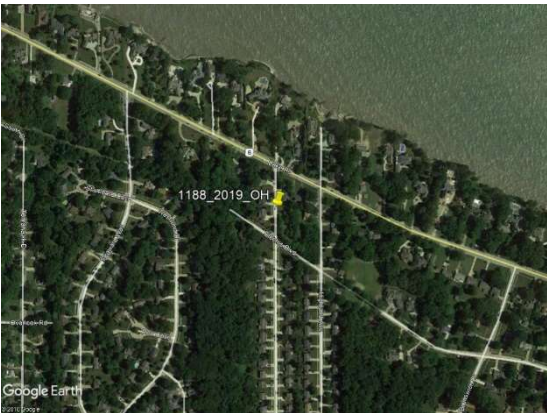


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1187_2019_OH	<b>Northing (US ft)</b> 526796.945	<b>Easting (US ft)</b> 1324601.393	<b>Elevation (US ft)</b> 756.530	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°05'20.23351"	<b>Longitude (Global)</b> W84°50'10.49014"	<b>Ellipsoid Height (US ft)</b> 647.065	
<b>Location Photo</b>    NORTH				
 <p>1187_2019_OH, 3N, 20191210</p>		 <p>1187_2019_OH, 3W, 20191210</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1188_2019_OH	<b>Northing (US ft)</b> 670554.826	<b>Easting (US ft)</b> 2111843.193	<b>Elevation (US ft)</b> 616.708	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°30'21.61736"	<b>Longitude (Global)</b> W81°58'35.98078"	<b>Ellipsoid Height (US ft)</b> 503.262	
Location Photo    NORTH				
 <p>1188_2019_OH, 3N, 20191114</p>		 <p>1188_2019_OH, 3W, 20191114</p>		


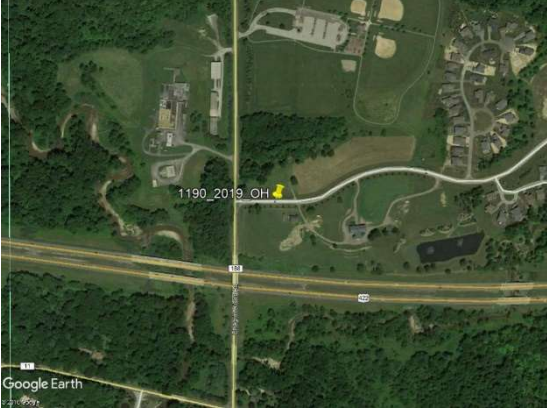




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1189_2019_OH	<b>Northing (US ft)</b> 585997.064	<b>Easting (US ft)</b> 2139448.771		<b>Elevation (US ft)</b> 944.362
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°16'24.38036"	<b>Longitude (Global)</b> W81°52'41.08552"		<b>Ellipsoid Height (US ft)</b> 832.994
Location Photo    NORTH				
 <p>1189_2019_OH, 3S, 20191117</p>		 <p>1189_2019_OH, 3E, 20191117</p>		




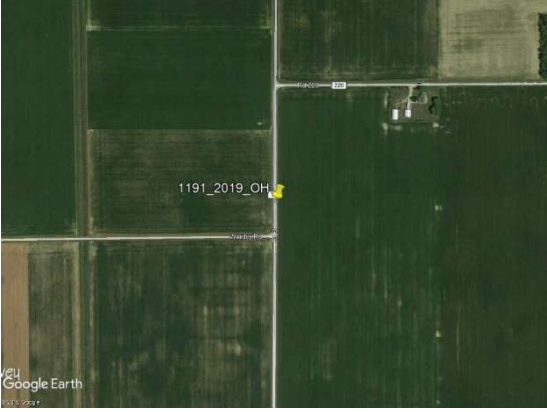


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1190_2019_OH	<b>Northing (US ft)</b> 629574.012	<b>Easting (US ft)</b> 2274174.848	<b>Elevation (US ft)</b> 944.775	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°23'21.67710"	<b>Longitude (Global)</b> W81°23'09.43888"	<b>Ellipsoid Height (US ft)</b> 833.591	
<b>Location Photo</b>   NORTH				
 <p>1190_2019_OH, 3N, 20191116</p>		 <p>1190_2019_OH, 3E, 20191116</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1191_2019_OH	<b>Northing (US ft)</b> 574494.029	<b>Easting (US ft)</b> 1334884.793	<b>Elevation (US ft)</b> 741.377	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°13'14.06168"	<b>Longitude (Global)</b> W84°48'12.68422"	<b>Ellipsoid Height (US ft)</b> 631.630	
<b>Location Photo</b>   NORTH				
 <p>1191_2019_OH, 3S, 20191206</p>		 <p>1191_2019_OH, 3E, 20191206</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1192_2019_OH	<b>Northing (US ft)</b> 418846.711	<b>Easting (US ft)</b> 2038190.242	<b>Elevation (US ft)</b> 1048.953	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°48'57.77567"	<b>Longitude (Global)</b> W82°14'53.57474"	<b>Ellipsoid Height (US ft)</b> 939.512	
Location Photo    NORTH				
 <p>1192_2019_OH, 3S, 20191113</p>		 <p>1192_2019_OH, 3E, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1193_2019_OH	<b>Northing (US ft)</b> 569004.291	<b>Easting (US ft)</b> 2349107.807	<b>Elevation (US ft)</b> 1111.131	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°13'12.67046"	<b>Longitude (Global)</b> W81°06'59.04749"	<b>Ellipsoid Height (US ft)</b> 1000.536	
<b>Location Photo</b>    NORTH				
 <p>1193_2019_OH, 3N, 20191109</p>		 <p>1193_2019_OH, 3E, 20191109</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1194_2019_OH	<b>Northing (US ft)</b> 421678.865	<b>Easting (US ft)</b> 1323483.507	<b>Elevation (US ft)</b> 803.919	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°48'01.60747"	<b>Longitude (Global)</b> W84°49'48.41028"	<b>Ellipsoid Height (US ft)</b> 694.173	
Location Photo    NORTH				
 <p>1194_2019_OH, 3N, 20191211</p>	 <p>1194_2019_OH, 3W, 20191211</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1195_2019_OH	<b>Northing (US ft)</b> 668602.480	<b>Easting (US ft)</b> 1331754.678	<b>Elevation (US ft)</b> 867.319	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°28'42.75252"	<b>Longitude (Global)</b> W84°49'26.44439"	<b>Ellipsoid Height (US ft)</b> 757.499	
<b>Location Photo</b>    NORTH				
 <p>1195_2019_OH, 3N, 20191108</p>		 <p>1195_2019_OH, 3E, 20191108</p>		

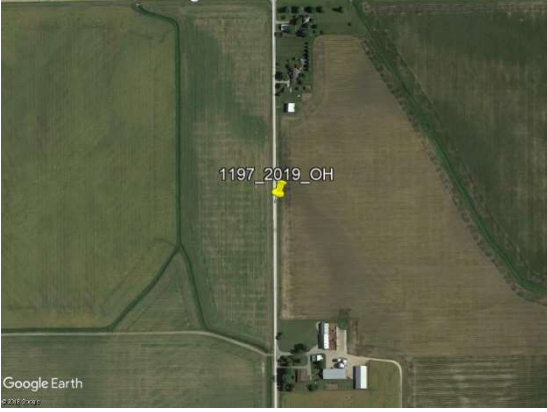




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1196_2019_OH	<b>Northing (US ft)</b> 394580.194	<b>Easting (US ft)</b> 1586162.377	<b>Elevation (US ft)</b> 992.509	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°44'29.09293"	<b>Longitude (Global)</b> W83°52'47.47486"	<b>Ellipsoid Height (US ft)</b> 877.939	
<b>Location Photo</b>    NORTH				
				







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1197_2019_OH	<b>Northing (US ft)</b> 326590.316	<b>Easting (US ft)</b> 1323817.592	<b>Elevation (US ft)</b> 863.478	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°32'22.40706"	<b>Longitude (Global)</b> W84°49'11.18319"	<b>Ellipsoid Height (US ft)</b> 753.698	
<b>Location Photo</b>    NORTH				
 <p>1197_2019_OH, 3S, 20191212</p>		 <p>1197_2019_OH, 3E, 20191212</p>		



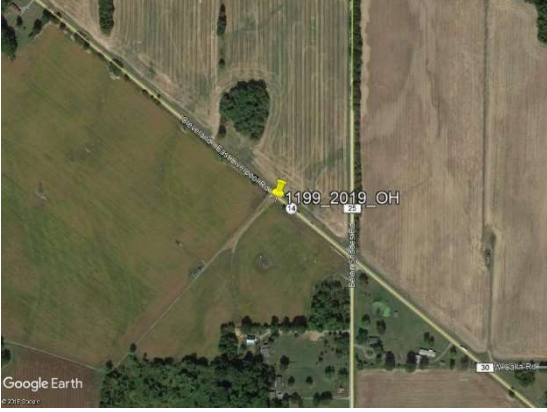




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1198_2019_OH	<b>Northing (US ft)</b> 773905.372	<b>Easting (US ft)</b> 2337568.728	<b>Elevation (US ft)</b> 649.199	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°46'58.64120"	<b>Longitude (Global)</b> W81°08'48.43051"	<b>Ellipsoid Height (US ft)</b> 536.068	
Location Photo    NORTH				
 <p>1198_2019_OH, 3S, 20191115</p>		 <p>1198_2019_OH, 3W, 20191115</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1199_2019_OH	<b>Northing (US ft)</b> 480730.562	<b>Easting (US ft)</b> 2384019.775	<b>Elevation (US ft)</b> 1101.436	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°58'34.84033"	<b>Longitude (Global)</b> W80°59'42.17962"	<b>Ellipsoid Height (US ft)</b> 990.952	
Location Photo    NORTH				
 <p>1199_2019_OH, 3S, 20191109</p>		 <p>1199_2019_OH, 3W, 20191109</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1200_2019_OH	<b>Northing (US ft)</b> 456588.782	<b>Easting (US ft)</b> 2200500.051	<b>Elevation (US ft)</b> 1130.785	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°55'00.68081"	<b>Longitude (Global)</b> W81°39'37.85394"	<b>Ellipsoid Height (US ft)</b> 1022.031	
Location Photo    NORTH				
 <p>1200_2019_OH, 3S, 20191110</p>		 <p>1200_2019_OH, 3W, 20191110</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2001A_2019_OH	<b>Northing (US ft)</b> 556492.463	<b>Easting (US ft)</b> 2445200.707	<b>Elevation (US ft)</b> 884.826	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°10'52.10433"	<b>Longitude (Global)</b> W80°46'05.04392"	<b>Ellipsoid Height (US ft)</b> 773.659	
<b>Location Photo</b>    NORTH				
 <p>2001A_2019_OH, 3N, 20191108</p>		 <p>2001A_2019_OH, 3W, 20191108</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2001B_2019_OH	<b>Northing (US ft)</b> 556445.774	<b>Easting (US ft)</b> 2445200.082	<b>Elevation (US ft)</b> 884.236	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°10'51.64322"	<b>Longitude (Global)</b> W80°46'05.06421"	<b>Ellipsoid Height (US ft)</b> 773.069	
<b>Location Photo</b>    NORTH				
 <p>2001B_2019_OH, 3N, 20191108</p>	 <p>2001B_2019_OH, 3E, 20191108</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2002A_2019_OH	<b>Northing (US ft)</b> 744735.314	<b>Easting (US ft)</b> 2304511.051	<b>Elevation (US ft)</b> 677.492	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°42'15.33154"	<b>Longitude (Global)</b> W81°16'10.15076"	<b>Ellipsoid Height (US ft)</b> 564.872	
<b>Location Photo</b>   NORTH				
 <p>2002A_2019_OH, 3N, 20191115</p>		 <p>2002A_2019_OH, 3W, 20191115</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2002B_2019_OH	<b>Northing (US ft)</b> 744787.912	<b>Easting (US ft)</b> 2304503.097	<b>Elevation (US ft)</b> 677.450	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°42'15.85224"	<b>Longitude (Global)</b> W81°16'10.24584"	<b>Ellipsoid Height (US ft)</b> 564.828	
<b>Location Photo</b>    NORTH				
 <p>2002B_2019_OH, 3N, 20191115</p>		 <p>2002B_2019_OH, 3W, 20191115</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2003A_2019_OH	<b>Northing (US ft)</b> 567317.033	<b>Easting (US ft)</b> 1940380.935	<b>Elevation (US ft)</b> 779.329	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°13'25.66726"	<b>Longitude (Global)</b> W82°36'07.99446"	<b>Ellipsoid Height (US ft)</b> 664.975	
<b>Location Photo</b>    NORTH				
 <p>2003A_2019_OH, 3N, 20191120</p>	 <p>2003A_2019_OH, 3E, 20191120</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2003B_2019_OH	<b>Northing (US ft)</b> 567283.995	<b>Easting (US ft)</b> 1940364.299	<b>Elevation (US ft)</b> 779.609	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°13'25.34063"	<b>Longitude (Global)</b> W82°36'08.21166"	<b>Ellipsoid Height (US ft)</b> 665.255	
<b>Location Photo</b>   NORTH				
 <p>2003B_2019_OH, 3N, 20191120</p>		 <p>2003B_2019_OH, 3E, 20191120</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2004A_2019_OH	<b>Northing (US ft)</b> 398110.642	<b>Easting (US ft)</b> 1952452.413	<b>Elevation (US ft)</b> 1278.145	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°45'33.81409"	<b>Longitude (Global)</b> W82°33'28.54415"	<b>Ellipsoid Height (US ft)</b> 1167.155	
Location Photo    NORTH				
 <p>2004A_2019_OH, 3S, 20191112</p>		 <p>2004A_2019_OH, 3W, 20191112</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2004B_2019_OH	<b>Northing (US ft)</b> 398112.179	<b>Easting (US ft)</b> 1952402.927		<b>Elevation (US ft)</b> 1276.909
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°45'33.82896"	<b>Longitude (Global)</b> W82°33'29.18725"		<b>Ellipsoid Height (US ft)</b> 1165.917
Location Photo    NORTH				
 <p>2004B_2019_OH, 3S, 20191112</p>		 <p>2004B_2019_OH, 3E, 20191112</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2005A_2019_OH	<b>Northing (US ft)</b> 359563.551	<b>Easting (US ft)</b> 1660092.253	<b>Elevation (US ft)</b> 1000.248	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°38'53.54307"	<b>Longitude (Global)</b> W83°36'41.26904"	<b>Ellipsoid Height (US ft)</b> 885.620	
<b>Location Photo</b>    NORTH				
 <p>2005A_2019_OH, 3N, 20200122</p>	 <p>2005A_2019_OH, 3E, 20200122</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2005B_2019_OH	<b>Northing (US ft)</b> 359565.292	<b>Easting (US ft)</b> 1660054.756	<b>Elevation (US ft)</b> 999.167	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°38'53.55555"	<b>Longitude (Global)</b> W83°36'41.75577"	<b>Ellipsoid Height (US ft)</b> 884.538	
<b>Location Photo</b>    NORTH				
 <p>2005B_2019_OH, 3N, 20200122</p>	 <p>2005B_2019_OH, 3E, 20200122</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2006A_2019_OH	<b>Northing (US ft)</b> 508037.339	<b>Easting (US ft)</b> 1667260.468	<b>Elevation (US ft)</b> 813.856	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°03'21.44855"	<b>Longitude (Global)</b> W83°35'32.40359"	<b>Ellipsoid Height (US ft)</b> 697.807	
<b>Location Photo</b>   NORTH				
 <p>2006A_2019_OH, 3S, 20191218</p>	 <p>2006A_2019_OH, 3E, 20191218</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2006B_2019_OH	<b>Northing (US ft)</b> 508044.905	<b>Easting (US ft)</b> 1667310.035	<b>Elevation (US ft)</b> 814.429	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°03'21.52944"	<b>Longitude (Global)</b> W83°35'31.75784"	<b>Ellipsoid Height (US ft)</b> 698.381	
<b>Location Photo</b>   NORTH				
 <p>2006B_2019_OH, 3S, 20191218</p>		 <p>2006B_2019_OH, 3E, 20191218</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2007A_2019_OH	<b>Northing (US ft)</b> 391517.727	<b>Easting (US ft)</b> 1534935.095	<b>Elevation (US ft)</b> 890.883	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°43'50.29115"	<b>Longitude (Global)</b> W84°03'52.19102"	<b>Ellipsoid Height (US ft)</b> 777.361	
Location Photo    NORTH				
 <p>2007A_2019_OH, 3N, 20191101</p>	 <p>2007A_2019_OH, 3E, 20191101</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2007B_2019_OH	<b>Northing (US ft)</b> 391517.980	<b>Easting (US ft)</b> 1534875.531	<b>Elevation (US ft)</b> 890.732	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°43'50.28309"	<b>Longitude (Global)</b> W84°03'52.96468"	<b>Ellipsoid Height (US ft)</b> 777.211	
Location Photo    NORTH				
 <p>2007B_2019_OH, 3N, 20191101</p>		 <p>2007B_2019_OH, 3E, 20191101</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2008A_2019_OH	<b>Northing (US ft)</b> 329151.473	<b>Easting (US ft)</b> 1393497.770	<b>Elevation (US ft)</b> 876.376	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°33'05.03147"	<b>Longitude (Global)</b> W84°34'09.69596"	<b>Ellipsoid Height (US ft)</b> 766.499	
<b>Location Photo</b>    NORTH				
 <p>2008A_2019_OH, 3S, 20191126</p>		 <p>2008A_2019_OH, 3W, 20191126</p>		




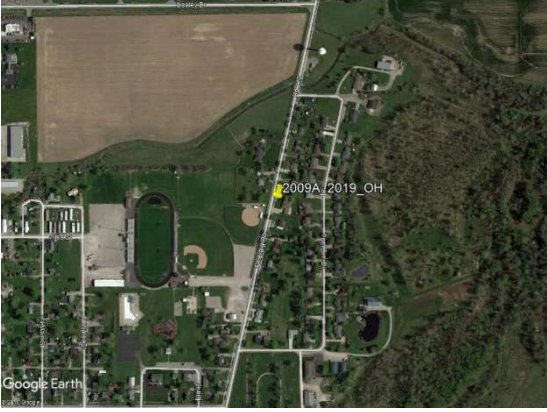


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2008B_2019_OH	<b>Northing (US ft)</b> 329116.593	<b>Easting (US ft)</b> 1393496.932	<b>Elevation (US ft)</b> 876.491	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°33'04.68671"	<b>Longitude (Global)</b> W84°34'09.69610"	<b>Ellipsoid Height (US ft)</b> 766.615	
Location Photo    NORTH				
 <p>2008B_2019_OH, 3S, 20191126</p>		 <p>2008B_2019_OH, 3W, 20191126</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2009A_2019_OH	<b>Northing (US ft)</b> 545994.158	<b>Easting (US ft)</b> 1397277.900	<b>Elevation (US ft)</b> 721.707	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°08'48.01732"	<b>Longitude (Global)</b> W84°34'27.54555"	<b>Ellipsoid Height (US ft)</b> 610.405	
<b>Location Photo</b>    NORTH				
 <p>2009A_2019_OH, 3N, 20191209</p>		 <p>2009A_2019_OH, 3E, 20191209</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2009B_2019_OH	<b>Northing (US ft)</b> 546042.396	<b>Easting (US ft)</b> 1397290.058	<b>Elevation (US ft)</b> 721.320	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°08'48.49669"	<b>Longitude (Global)</b> W84°34'27.40167"	<b>Ellipsoid Height (US ft)</b> 610.017	
<b>Location Photo</b>    NORTH				
 <p>2009B_2019_OH, 3N, 20191209</p>		 <p>2009B_2019_OH, 3E, 20191209</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2010A_2019_OH	<b>Northing (US ft)</b> 702343.750	<b>Easting (US ft)</b> 1910858.974	<b>Elevation (US ft)</b> 590.626	
<b>Point Type</b> BRICK	<b>Latitude (Global)</b> N41°35'39.25079"	<b>Longitude (Global)</b> W82°42'38.61713"	<b>Ellipsoid Height (US ft)</b> 474.140	
<b>Location Photo</b>    NORTH				
 <p>2010A_2019_OH, 3N, 20200325</p>	 <p>2010A_2019_OH, 3E, 20200325</p>			




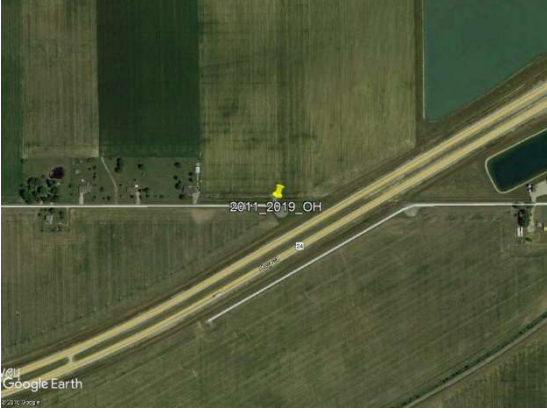


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2010B_2019_OH	<b>Northing (US ft)</b> 702351.578	<b>Easting (US ft)</b> 1910832.099		<b>Elevation (US ft)</b> 590.144
<b>Point Type</b> BRICK	<b>Latitude (Global)</b> N41°35'39.32748"	<b>Longitude (Global)</b> W82°42'38.97108"		<b>Ellipsoid Height (US ft)</b> 473.658
<b>Location Photo</b>    NORTH				
 <p>2010B_2019_OH, 3N, 20200325</p>	 <p>2010B_2019_OH, 3E, 20200325</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2011_2019_OH	<b>Northing (US ft)</b> 551522.082	<b>Easting (US ft)</b> 1337167.076	<b>Elevation (US ft)</b> 740.247	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°09'27.75163"	<b>Longitude (Global)</b> W84°47'34.92483"	<b>Ellipsoid Height (US ft)</b> 630.476	
Location Photo    NORTH				
 <p>2011_2019_OH, 3S, 20191206</p>		 <p>2011_2019_OH, 3E, 20191206</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2012_2019_OH	<b>Northing (US ft)</b> 556494.657	<b>Easting (US ft)</b> 1342478.723	<b>Elevation (US ft)</b> 736.818	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N41°10'18.24253"	<b>Longitude (Global)</b> W84°46'27.19962"	<b>Ellipsoid Height (US ft)</b> 626.896	
Location Photo    NORTH				
 <p>2012_2019_OH, 3S, 20191206</p>	 <p>2012_2019_OH, 3E, 20191206</p>			



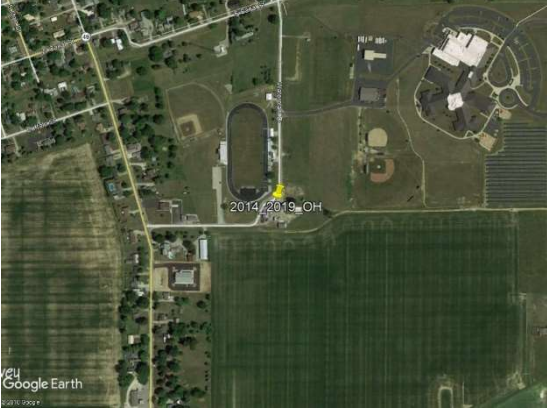


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2013_2019_OH	<b>Northing (US ft)</b> 558974.646	<b>Easting (US ft)</b> 1349874.895	<b>Elevation (US ft)</b> 733.695	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°10'44.63314"	<b>Longitude (Global)</b> W84°44'51.35011"	<b>Ellipsoid Height (US ft)</b> 623.568	
<b>Location Photo</b>   NORTH				
 <p>2013_2019_OH, 3N, 20191206</p>	 <p>2013_2019_OH, 3E, 20191206</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2014_2019_OH	<b>Northing (US ft)</b> 557676.142	<b>Easting (US ft)</b> 1353710.781	<b>Elevation (US ft)</b> 734.558	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°10'32.78059"	<b>Longitude (Global)</b> W84°44'00.76551"	<b>Ellipsoid Height (US ft)</b> 624.331	
<b>Location Photo</b>   NORTH				
 <p>2014_2019_OH, 3N, 20191206</p>		 <p>2014_2019_OH, 3E, 20191206</p>		



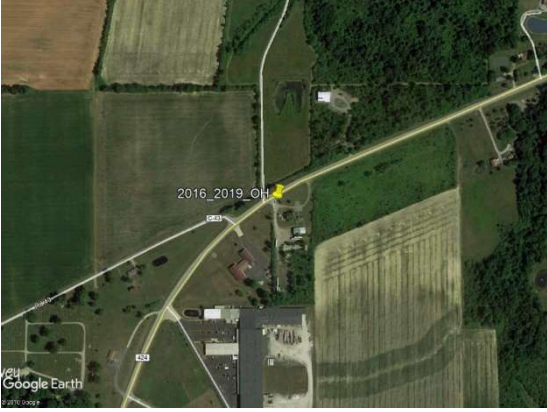


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2015_2019_OH	<b>Northing (US ft)</b> 561164.430	<b>Easting (US ft)</b> 1355775.615	<b>Elevation (US ft)</b> 731.741	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°11'07.75835"	<b>Longitude (Global)</b> W84°43'34.93590"	<b>Ellipsoid Height (US ft)</b> 621.449	
Location Photo    NORTH				
 <p>2015_2019_OH, 3N, 20191206</p>		 <p>2015_2019_OH, 3W, 20191206</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2016_2019_OH	<b>Northing (US ft)</b> 563421.674	<b>Easting (US ft)</b> 1357972.445	<b>Elevation (US ft)</b> 729.735	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°11'30.60775"	<b>Longitude (Global)</b> W84°43'06.96292"	<b>Ellipsoid Height (US ft)</b> 619.377	
<b>Location Photo</b>   NORTH				
 <p>2016_2019_OH, 3N, 20191206</p>		 <p>2016_2019_OH, 3W, 20191206</p>		


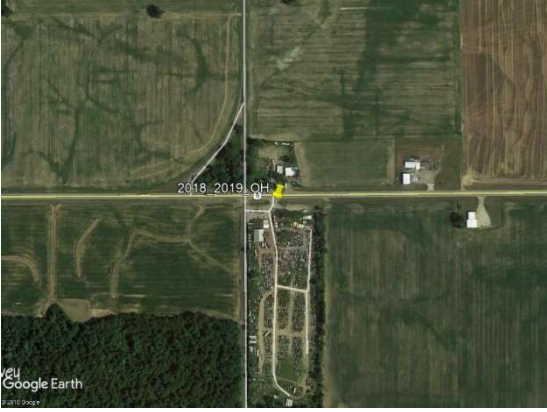




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2017_2019_OH	<b>Northing (US ft)</b> 650824.317	<b>Easting (US ft)</b> 1347449.269	<b>Elevation (US ft)</b> 824.379	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°25'51.24032"	<b>Longitude (Global)</b> W84°45'54.25567"	<b>Ellipsoid Height (US ft)</b> 714.270	
Location Photo    NORTH				
 <p>2017_2019_OH, 3N, 20191206</p>		 <p>2017_2019_OH, 3E, 20191206</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2018_2019_OH	<b>Northing (US ft)</b> 656645.181	<b>Easting (US ft)</b> 1362787.965	<b>Elevation (US ft)</b> 849.406	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°26'52.62047"	<b>Longitude (Global)</b> W84°42'34.88525"	<b>Ellipsoid Height (US ft)</b> 738.926	
Location Photo    NORTH				
 <p>2018_2019_OH, 3N, 20191206</p>		 <p>2018_2019_OH, 3W, 20191206</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2019_2019_OH	<b>Northing (US ft)</b> 663417.313	<b>Easting (US ft)</b> 1349696.842	<b>Elevation (US ft)</b> 844.871	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°27'56.19607"	<b>Longitude (Global)</b> W84°45'29.03867"	<b>Ellipsoid Height (US ft)</b> 734.686	
<b>Location Photo</b>    NORTH				
 <p>2019_2019_OH, 3S, 20191206</p>		 <p>2019_2019_OH, 3W, 20191206</p>		




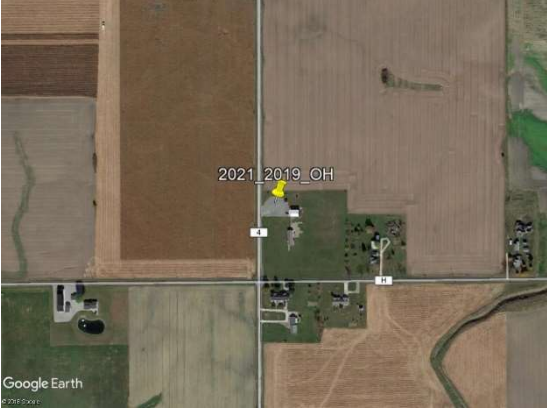


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2020_2019_OH	<b>Northing (US ft)</b> 675162.825	<b>Easting (US ft)</b> 1347007.192	<b>Elevation (US ft)</b> 868.233	
<b>Point Type</b> CORNER OF RR X	<b>Latitude (Global)</b> N41°29'51.51468"	<b>Longitude (Global)</b> W84°46'08.36925"	<b>Ellipsoid Height (US ft)</b> 758.056	
Location Photo    NORTH				
 <p>2020_2019_OH, 3N, 20191108</p>		 <p>2020_2019_OH, 3E, 20191108</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2021_2019_OH	<b>Northing (US ft)</b> 686356.784	<b>Easting (US ft)</b> 1352696.105	<b>Elevation (US ft)</b> 885.340	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°31'43.53018"	<b>Longitude (Global)</b> W84°44'57.42585"	<b>Ellipsoid Height (US ft)</b> 774.979	
Location Photo    NORTH				
 <p>2021_2019_OH, 3N, 20191108</p>		 <p>2021_2019_OH, 3W, 20191108</p>		


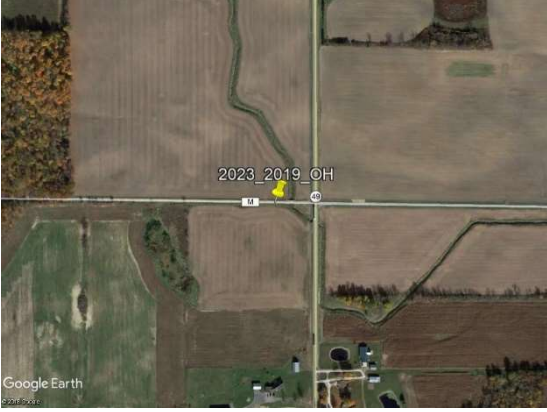




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2022_2019_OH	<b>Northing (US ft)</b> 696918.084	<b>Easting (US ft)</b> 1358163.557	<b>Elevation (US ft)</b> 875.095	
<b>Point Type</b> CORNER OF RR X	<b>Latitude (Global)</b> N41°33'29.22802"	<b>Longitude (Global)</b> W84°43'49.11443"	<b>Ellipsoid Height (US ft)</b> 764.580	
Location Photo    NORTH				
 <p>2022_2019_OH, 3N, 20191108</p>		 <p>2022_2019_OH, 3W, 20191108</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2023_2019_OH	<b>Northing (US ft)</b> 713325.173	<b>Easting (US ft)</b> 1347717.055	<b>Elevation (US ft)</b> 930.750	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°36'08.61084"	<b>Longitude (Global)</b> W84°46'12.09563"	<b>Ellipsoid Height (US ft)</b> 820.366	
<b>Location Photo</b>    NORTH				
 <p>2023_2019_OH, 3N, 20191108</p>		 <p>2023_2019_OH, 3E, 20191108</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2024_2019_OH	<b>Northing (US ft)</b> 735564.121	<b>Easting (US ft)</b> 1354409.463	<b>Elevation (US ft)</b> 1021.506	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°39'49.96258"	<b>Longitude (Global)</b> W84°44'51.57792"	<b>Ellipsoid Height (US ft)</b> 910.917	
Location Photo    NORTH				
 <p>2024_2019_OH, 3N, 20191108</p>	 <p>2024_2019_OH, 3E, 20191108</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2025_2019_OH	<b>Northing (US ft)</b> 735039.883	<b>Easting (US ft)</b> 1407356.926	<b>Elevation (US ft)</b> 874.727	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°39'57.68356"	<b>Longitude (Global)</b> W84°33'14.02191"	<b>Ellipsoid Height (US ft)</b> 763.223	
Location Photo    NORTH				
 <p>2025_2019_OH, 3N, 20191108</p>	 <p>2025_2019_OH, 3E, 20191108</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2026_2019_OH	<b>Northing (US ft)</b> 736911.367	<b>Easting (US ft)</b> 1460446.989	<b>Elevation (US ft)</b> 824.709	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°40'27.93563"	<b>Longitude (Global)</b> W84°21'35.21820"	<b>Ellipsoid Height (US ft)</b> 712.233	
<b>Location Photo</b>    NORTH				
 <p>2026_2019_OH, 3N, 20191107</p>		 <p>2026_2019_OH, 3W, 20191107</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2027_2019_OH	<b>Northing (US ft)</b> 705534.146	<b>Easting (US ft)</b> 1428851.811	<b>Elevation (US ft)</b> 825.823	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°35'11.15592"	<b>Longitude (Global)</b> W84°28'22.09568"	<b>Ellipsoid Height (US ft)</b> 713.907	
<b>Location Photo</b>    NORTH				
 <p>2027_2019_OH, 3N, 20191108</p>	 <p>2027_2019_OH, 3W, 20191108</p>			




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2028_2019_OH	<b>Northing (US ft)</b> 685075.394	<b>Easting (US ft)</b> 1405519.729	<b>Elevation (US ft)</b> 821.546	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°31'43.75503"	<b>Longitude (Global)</b> W84°33'22.70137"	<b>Ellipsoid Height (US ft)</b> 710.092	
Location Photo    NORTH				
 <p>2028_2019_OH, 3N, 20191107</p>	 <p>2028_2019_OH, 3E, 20191107</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2029_2019_OH	<b>Northing (US ft)</b> 675063.006	<b>Easting (US ft)</b> 1381234.526	<b>Elevation (US ft)</b> 874.214	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°29'59.08354"	<b>Longitude (Global)</b> W84°38'38.66874"	<b>Ellipsoid Height (US ft)</b> 763.289	
Location Photo    NORTH				
 <p>2029_2019_OH, 3N, 20191206</p>		 <p>2029_2019_OH, 3E, 20191206</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2030_2019_OH	<b>Northing (US ft)</b> 733709.286	<b>Easting (US ft)</b> 1501212.403	<b>Elevation (US ft)</b> 734.282	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°40'04.54980"	<b>Longitude (Global)</b> W84°12'37.32022"	<b>Ellipsoid Height (US ft)</b> 620.660	
Location Photo    NORTH				
 <p>2030_2019_OH, 3N, 20191106</p>	 <p>2030_2019_OH, 3E, 20191106</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2031_2019_OH	<b>Northing (US ft)</b> 743493.829	<b>Easting (US ft)</b> 1539059.445	<b>Elevation (US ft)</b> 766.028	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°41'48.23577"	<b>Longitude (Global)</b> W84°04'21.05733"	<b>Ellipsoid Height (US ft)</b> 651.212	
<b>Location Photo</b>    NORTH				
 <p>2031_2019_OH, 3N, 20191106</p>		 <p>2031_2019_OH, 3E, 20191106</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2032_2019_OH	<b>Northing (US ft)</b> 740905.437	<b>Easting (US ft)</b> 1582553.746	<b>Elevation (US ft)</b> 727.310	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°41'30.02227"	<b>Longitude (Global)</b> W83°54'47.25123"	<b>Ellipsoid Height (US ft)</b> 611.728	
Location Photo    NORTH				
 <p>2032_2019_OH, 3N 20191106</p>		 <p>2032_2019_OH, 3E, 20191106</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2033_2019_OH	<b>Northing (US ft)</b> 733732.289	<b>Easting (US ft)</b> 1557855.248	<b>Elevation (US ft)</b> 750.775	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°40'15.08585"	<b>Longitude (Global)</b> W84°00'11.11622"	<b>Ellipsoid Height (US ft)</b> 635.419	
<b>Location Photo</b>    NORTH				
 <p>2033_2019_OH, 3N, 20191106</p>		 <p>2033_2019_OH, 3E, 20191106</p>		




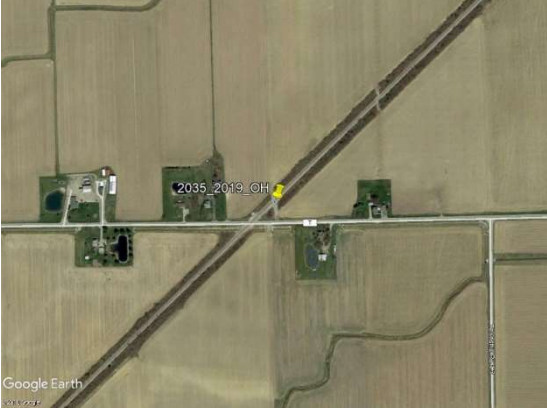


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2034_2019_OH	<b>Northing (US ft)</b> 744744.671	<b>Easting (US ft)</b> 1559388.685	<b>Elevation (US ft)</b> 744.141	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°42'04.12691"	<b>Longitude (Global)</b> W83°59'53.40639"	<b>Ellipsoid Height (US ft)</b> 628.859	
<b>Location Photo</b>    NORTH				
 <p>2034_2019_OH, 3N, 20191106</p>		 <p>2034_2019_OH, 3E, 20191106</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2035_2019_OH	<b>Northing (US ft)</b> 744275.434	<b>Easting (US ft)</b> 1570643.421	<b>Elevation (US ft)</b> 735.002	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°42'01.37543"	<b>Longitude (Global)</b> W83°57'24.95733"	<b>Ellipsoid Height (US ft)</b> 619.558	
Location Photo    NORTH				
 <p>2035_2019_OH, 3N, 20191106</p>		 <p>2035_2019_OH, 3E, 20191106</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2036_2019_OH	<b>Northing (US ft)</b> 738206.129	<b>Easting (US ft)</b> 1526323.705	<b>Elevation (US ft)</b> 786.955	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°40'53.70302"	<b>Longitude (Global)</b> W84°07'07.61331"	<b>Ellipsoid Height (US ft)</b> 672.515	
Location Photo    NORTH				
 <p>2036_2019_OH, 3N, 20191106</p>		 <p>2036_2019_OH, 3E, 20191106</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2037_2019_OH	<b>Northing (US ft)</b> 653260.425	<b>Easting (US ft)</b> 2180465.824	<b>Elevation (US ft)</b> 734.507	
<b>Point Type</b> CORNER STOP BAR	<b>Latitude (Global)</b> N41°27'25.71082"	<b>Longitude (Global)</b> W81°43'36.10004"	<b>Ellipsoid Height (US ft)</b> 622.020	
Location Photo    NORTH				
 <p>2037_2019_OH, 3S, 20191114</p>	 <p>2037_2019_OH, 3E, 20191114</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2038_2019_OH	<b>Northing (US ft)</b> 660507.728	<b>Easting (US ft)</b> 2199835.379	<b>Elevation (US ft)</b> 677.526	
<b>Point Type</b> CORNER CROSSWALK BAR	<b>Latitude (Global)</b> N41°28'35.53780"	<b>Longitude (Global)</b> W81°39'20.79960"	<b>Ellipsoid Height (US ft)</b> 565.013	
Location Photo    NORTH				
 <p>2038_2019_OH, 3S, 20191114</p>		 <p>2038_2019_OH, 3E, 20191114</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2039_2019_OH	<b>Northing (US ft)</b> 688229.272	<b>Easting (US ft)</b> 1495131.883	<b>Elevation (US ft)</b> 748.324	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°32'34.12149"	<b>Longitude (Global)</b> W84°13'45.53959"	<b>Ellipsoid Height (US ft)</b> 634.314	
<b>Location Photo</b>    NORTH				
 <p>2039_2019_OH, 3N, 20191106</p>		 <p>2039_2019_OH, 3E, 20191106</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2040_2019_OH	<b>Northing (US ft)</b> 674328.619	<b>Easting (US ft)</b> 1484337.778	<b>Elevation (US ft)</b> 737.916	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°30'14.67251"	<b>Longitude (Global)</b> W84°16'03.75580"	<b>Ellipsoid Height (US ft)</b> 624.086	
<b>Location Photo</b>    NORTH				
 <p>2040_2019_OH, 3S, 20191206</p>		 <p>2040_2019_OH, 3E, 20191206</p>		




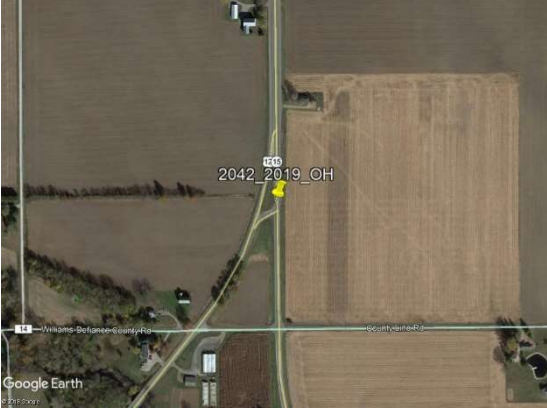




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2041_2019_OH	<b>Northing (US ft)</b> 681249.844	<b>Easting (US ft)</b> 1454182.775	<b>Elevation (US ft)</b> 718.569	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°31'16.81249"	<b>Longitude (Global)</b> W84°22'41.94865"	<b>Ellipsoid Height (US ft)</b> 605.777	
Location Photo    NORTH				
 <p>2041_2019_OH, 3S, 20191205</p>		 <p>2041_2019_OH, 3W, 20191205</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2042_2019_OH	<b>Northing (US ft)</b> 648621.363	<b>Easting (US ft)</b> 1406259.985	<b>Elevation (US ft)</b> 739.189	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°25'43.85579"	<b>Longitude (Global)</b> W84°33'01.70378"	<b>Ellipsoid Height (US ft)</b> 627.545	
Location Photo    NORTH				
 <p>2042_2019_OH, 3N, 20191107</p>		 <p>2042_2019_OH, 3E, 20191107</p>		


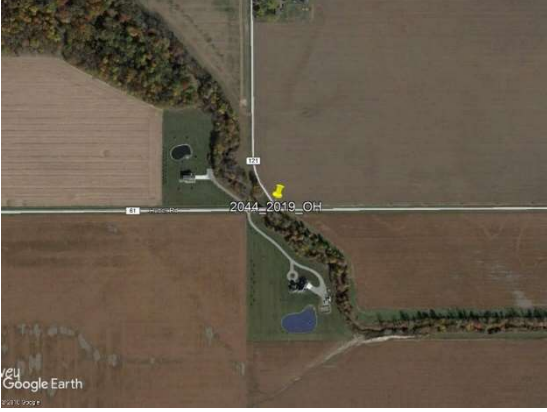




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2043_2019_OH	<b>Northing (US ft)</b> 632316.820	<b>Easting (US ft)</b> 1395626.457	<b>Elevation (US ft)</b> 727.878	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°23'00.31407"	<b>Longitude (Global)</b> W84°35'16.13608"	<b>Ellipsoid Height (US ft)</b> 616.436	
Location Photo    NORTH				
 <p>2043_2019_OH, 3N, 20191107</p>		 <p>2043_2019_OH, 3E, 20191107</p>		




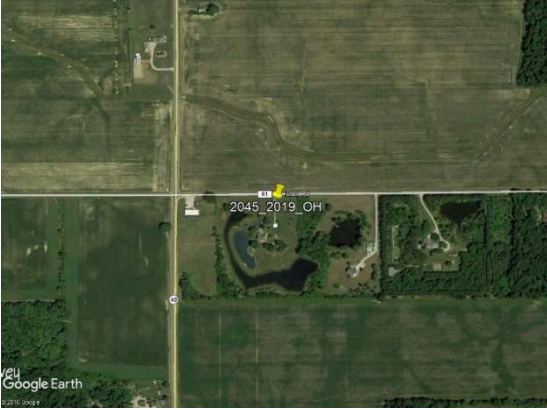


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2044_2019_OH	<b>Northing (US ft)</b> 616883.366	<b>Easting (US ft)</b> 1378388.593	<b>Elevation (US ft)</b> 740.089	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°20'23.73242"	<b>Longitude (Global)</b> W84°38'57.21876"	<b>Ellipsoid Height (US ft)</b> 629.082	
<b>Location Photo</b>    NORTH				
 <p>2044_2019_OH, 3N, 20191206</p>	 <p>2044_2019_OH, 3W, 20191206</p>			





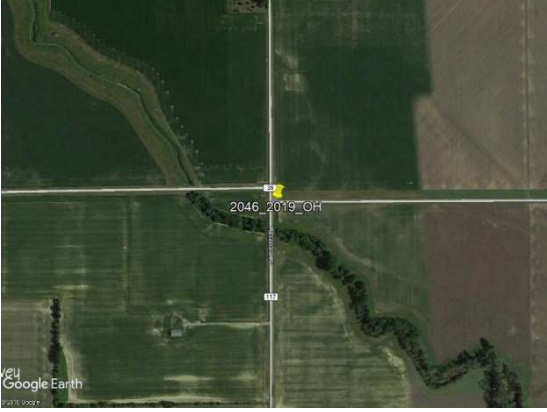


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2045_2019_OH	<b>Northing (US ft)</b> 617236.503	<b>Easting (US ft)</b> 1351935.553	<b>Elevation (US ft)</b> 808.625	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°20'20.63592"	<b>Longitude (Global)</b> W84°44'44.02579"	<b>Ellipsoid Height (US ft)</b> 698.387	
<b>Location Photo</b>    NORTH				
 <p>2045_2019_OH, 3S, 20191206</p>		 <p>2045_2019_OH, 3W, 20191206</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2046_2019_OH	<b>Northing (US ft)</b> 595818.123	<b>Easting (US ft)</b> 1366827.918	<b>Elevation (US ft)</b> 725.083	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°16'52.81858"	<b>Longitude (Global)</b> W84°41'21.80090"	<b>Ellipsoid Height (US ft)</b> 614.420	
<b>Location Photo</b>    NORTH				
 <p>2046_2019_OH, 3N, 20191206</p>	 <p>2046_2019_OH, 3W, 20191206</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2047_2019_OH	<b>Northing (US ft)</b> 637661.397	<b>Easting (US ft)</b> 2238604.350	<b>Elevation (US ft)</b> 1035.672	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°24'45.80635"	<b>Longitude (Global)</b> W81°30'54.89597"	<b>Ellipsoid Height (US ft)</b> 924.010	
Location Photo    NORTH				
 <p>2047_2019_OH, 3N, 20191117</p>	 <p>2047_2019_OH, 3W, 20191117</p>			




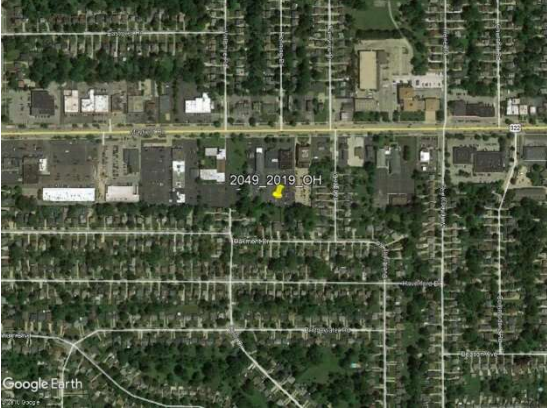


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2048_2019_OH	<b>Northing (US ft)</b> 651312.684	<b>Easting (US ft)</b> 2220509.455	<b>Elevation (US ft)</b> 930.296	
<b>Point Type</b> CORNER CROSSWALK BAR	<b>Latitude (Global)</b> N41°27'02.62848"	<b>Longitude (Global)</b> W81°34'50.48367"	<b>Ellipsoid Height (US ft)</b> 818.214	
Location Photo    NORTH				
 <p>2048_2019_OH, 3N, 20191116</p>	 <p>2048_2019_OH, 3W, 20191116</p>			




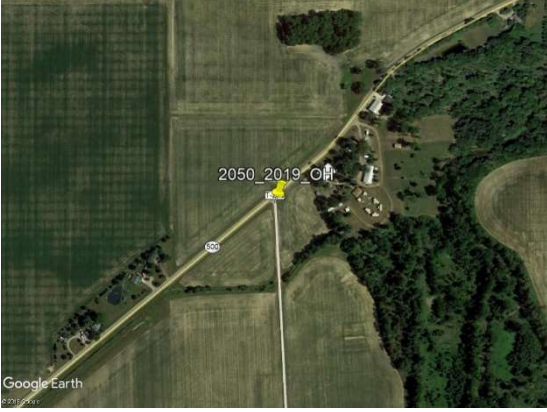




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2049_2019_OH	<b>Northing (US ft)</b> 676346.087	<b>Easting (US ft)</b> 2244813.435	<b>Elevation (US ft)</b> 1037.217	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°31'07.29216"	<b>Longitude (Global)</b> W81°29'27.53538"	<b>Ellipsoid Height (US ft)</b> 925.112	
<b>Location Photo</b>    NORTH				
 <p>2049_2019_OH, 3N, 20191113</p>	 <p>2049_2019_OH, 3E, 20191113</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2050_2019_OH	<b>Northing (US ft)</b> 513461.017	<b>Easting (US ft)</b> 1345746.845	<b>Elevation (US ft)</b> 751.464	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°03'14.00846"	<b>Longitude (Global)</b> W84°45'29.90814"	<b>Ellipsoid Height (US ft)</b> 641.507	
<b>Location Photo</b>    NORTH				
 <p>2050_2019_OH, 3N, 20191210</p>		 <p>2050_2019_OH, 3E, 20191210</p>		




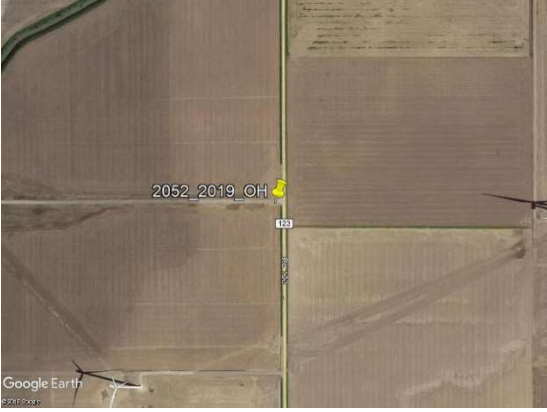




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2051_2019_OH	<b>Northing (US ft)</b> 619628.536	<b>Easting (US ft)</b> 1431086.957	<b>Elevation (US ft)</b> 699.625	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°21'03.10669"	<b>Longitude (Global)</b> W84°27'27.31770"	<b>Ellipsoid Height (US ft)</b> 587.110	
Location Photo    NORTH				
 <p>2051_2019_OH, 3N, 20191209</p>	 <p>2051_2019_OH, 3E, 20191209</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2052_2019_OH	<b>Northing (US ft)</b> 502785.310	<b>Easting (US ft)</b> 1407248.137	<b>Elevation (US ft)</b> 728.798	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°01'43.50630"	<b>Longitude (Global)</b> W84°32'04.07886"	<b>Ellipsoid Height (US ft)</b> 617.237	
Location Photo  NORTH				
 <p>2052_2019_OH, 3N, 20191210</p>		 <p>2052_2019_OH, 3E, 20191210</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2053_2019_OH	<b>Northing (US ft)</b> 462143.952	<b>Easting (US ft)</b> 1360195.673	<b>Elevation (US ft)</b> 782.557	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N40°54'50.74756"	<b>Longitude (Global)</b> W84°42'04.45798"	<b>Ellipsoid Height (US ft)</b> 672.369	
<b>Location Photo</b>   NORTH				
 <p>2053_2019_OH, 3N, 20191210</p>		 <p>2053_2019_OH, 3E, 20191210</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2054_2019_OH	<b>Northing (US ft)</b> 372978.099	<b>Easting (US ft)</b> 1408228.020	<b>Elevation (US ft)</b> 819.943	
<b>Point Type</b> CORNER STOP BAR	<b>Latitude (Global)</b> N40°40'21.40108"	<b>Longitude (Global)</b> W84°31'12.06977"	<b>Ellipsoid Height (US ft)</b> 709.451	
<b>Location Photo</b>   NORTH				
 <p>2054_2019_OH, 3N, 20191126</p>		 <p>2054_2019_OH, 3W, 20191126</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2055_2019_OH	<b>Northing (US ft)</b> 346671.482	<b>Easting (US ft)</b> 1355282.735	<b>Elevation (US ft)</b> 864.104	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°35'48.84497"	<b>Longitude (Global)</b> W84°42'30.34940"	<b>Ellipsoid Height (US ft)</b> 754.424	
Location Photo    NORTH				
 <p>2055_2019_OH, 3S, 20191211</p>		 <p>2055_2019_OH, 3E, 20191211</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2056_2019_OH	<b>Northing (US ft)</b> 298575.451	<b>Easting (US ft)</b> 1359172.543	<b>Elevation (US ft)</b> 929.755	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°27'54.69944"	<b>Longitude (Global)</b> W84°41'24.28421"	<b>Ellipsoid Height (US ft)</b> 820.206	
<b>Location Photo</b>    NORTH				
 <p>2056_2019_OH, 3N, 20191212</p>		 <p>2056_2019_OH, 3E, 20191212</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2057_2019_OH	<b>Northing (US ft)</b> 278319.856	<b>Easting (US ft)</b> 1342692.238	<b>Elevation (US ft)</b> 955.730	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°24'30.46400"	<b>Longitude (Global)</b> W84°44'50.68263"	<b>Ellipsoid Height (US ft)</b> 846.241	
Location Photo    NORTH				
 <p>2057_2019_OH, 3N, 20191212</p>		 <p>2057_2019_OH, 3W, 20191212</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2058_2019_OH	<b>Northing (US ft)</b> 263322.523	<b>Easting (US ft)</b> 1339563.918	<b>Elevation (US ft)</b> 1027.532	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°22'01.51772"	<b>Longitude (Global)</b> W84°45'26.09166"	<b>Ellipsoid Height (US ft)</b> 918.076	
Location Photo    NORTH				
 <p>2058_2019_OH, 3S, 20191212</p>		 <p>2058_2019_OH, 3W, 20191212</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2059_2019_OH	<b>Northing (US ft)</b> 271632.156	<b>Easting (US ft)</b> 1371546.859	<b>Elevation (US ft)</b> 966.939	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°23'31.57619"	<b>Longitude (Global)</b> W84°38'35.66859"	<b>Ellipsoid Height (US ft)</b> 857.547	
<b>Location Photo</b>    NORTH				
 <p>2059_2019_OH, 3N, 20191212</p>		 <p>2059_2019_OH, 3W, 20191212</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2060_2019_OH	<b>Northing (US ft)</b> 274450.271	<b>Easting (US ft)</b> 1413405.869	<b>Elevation (US ft)</b> 980.779	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N40°24'09.22396"	<b>Longitude (Global)</b> W84°29'35.66518"	<b>Ellipsoid Height (US ft)</b> 871.507	
<b>Location Photo</b>    NORTH				
 <p>2060_2019_OH, 3N, 20191212</p>	 <p>2060_2019_OH, 3W, 20191212</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2061_2019_OH	<b>Northing (US ft)</b> 286347.950	<b>Easting (US ft)</b> 1462619.546	<b>Elevation (US ft)</b> 963.478	
<b>Point Type</b> CONER OF STOP BAR	<b>Latitude (Global)</b> N40°26'17.38745"	<b>Longitude (Global)</b> W84°19'02.88084"	<b>Ellipsoid Height (US ft)</b> 853.842	
Location Photo    NORTH				
 <p>2061_2019_OH, 3S, 20191125</p>		 <p>2061_2019_OH, 3E, 20191125</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2062_2019_OH	<b>Northing (US ft)</b> 329936.450	<b>Easting (US ft)</b> 1468973.291	<b>Elevation (US ft)</b> 900.748	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°33'29.32043"	<b>Longitude (Global)</b> W84°17'52.34696"	<b>Ellipsoid Height (US ft)</b> 789.934	
<b>Location Photo</b>    NORTH				
 <p>2062_2019_OH, 3N, 20191105</p>		 <p>2062_2019_OH, 3W, 20191105</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2063_2019_OH	<b>Northing (US ft)</b> 327966.763	<b>Easting (US ft)</b> 1528268.977	<b>Elevation (US ft)</b> 1004.630	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°33'21.22124"	<b>Longitude (Global)</b> W84°05'03.77205"	<b>Ellipsoid Height (US ft)</b> 893.058	
Location Photo    NORTH				
 <p>2063_2019_OH, 3N, 20191101</p>	 <p>2063_2019_OH, 3E, 20191101</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2064_2019_OH	<b>Northing (US ft)</b> 356563.381	<b>Easting (US ft)</b> 1602050.811	<b>Elevation (US ft)</b> 972.622	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°38'15.90344"	<b>Longitude (Global)</b> W83°49'13.60102"	<b>Ellipsoid Height (US ft)</b> 858.724	
Location Photo    NORTH				
				




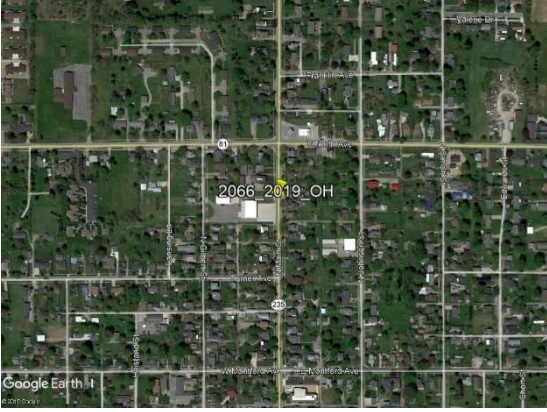


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2065_2019_OH	<b>Northing (US ft)</b> 391379.401	<b>Easting (US ft)</b> 1601784.933	<b>Elevation (US ft)</b> 978.657	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N40°43'59.86031"	<b>Longitude (Global)</b> W83°49'23.90159"	<b>Ellipsoid Height (US ft)</b> 863.896	
Location Photo    NORTH				
 <p>2065_2019_OH_3S, 20200121</p>	 <p>2065_2019_OH_3E, 20200121</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2066_2019_OH	<b>Northing (US ft)</b> 406890.718	<b>Easting (US ft)</b> 1602020.143	<b>Elevation (US ft)</b> 953.555	
<b>Point Type</b> CONCRETE	<b>Latitude (Global)</b> N40°46'33.15305"	<b>Longitude (Global)</b> W83°49'23.90368"	<b>Ellipsoid Height (US ft)</b> 838.441	
<b>Location Photo</b>   NORTH				
 <p>2066_2019_OH_3N, 20200121</p>		 <p>2066_2019_OH_3E, 20200121</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2067_2019_OH	<b>Northing (US ft)</b> 404774.849	<b>Easting (US ft)</b> 1566469.332	<b>Elevation (US ft)</b> 912.422	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°46'06.65958"	<b>Longitude (Global)</b> W83°57'05.49249"	<b>Ellipsoid Height (US ft)</b> 797.933	
<b>Location Photo</b>    NORTH				
 <p>2067_2019_OH_3S, 20200121</p>		 <p>2067_2019_OH_3W, 20200121</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2068_2019_OH	<b>Northing (US ft)</b> 428703.843	<b>Easting (US ft)</b> 1515258.441	<b>Elevation (US ft)</b> 790.057	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°49'54.11353"	<b>Longitude (Global)</b> W84°08'16.81183"	<b>Ellipsoid Height (US ft)</b> 676.027	
<b>Location Photo</b>   NORTH				
 <p>2068_2019_OH, 3N, 20191219</p>	 <p>2068_2019_OH, 3E, 20191219</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2069_2019_OH	<b>Northing (US ft)</b> 466876.038	<b>Easting (US ft)</b> 1441251.116	<b>Elevation (US ft)</b> 743.658	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°55'56.36263"	<b>Longitude (Global)</b> W84°24'30.24993"	<b>Ellipsoid Height (US ft)</b> 630.958	
<b>Location Photo</b>    NORTH				
 <p>2069_2019_OH, 3S, 20191210</p>		 <p>2069_2019_OH, 3W, 20191210</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2070_2019_OH	<b>Northing (US ft)</b> 472145.702	<b>Easting (US ft)</b> 1518313.156	<b>Elevation (US ft)</b> 741.303	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°57'03.86859"	<b>Longitude (Global)</b> W84°07'47.63959"	<b>Ellipsoid Height (US ft)</b> 626.329	
<b>Location Photo</b>   NORTH				
 <p>2070_2019_OH, 3S, 20191219</p>	 <p>2070_2019_OH, 3E, 20191219</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2071_2019_OH	<b>Northing (US ft)</b> 521363.640	<b>Easting (US ft)</b> 1518869.859	<b>Elevation (US ft)</b> 727.257	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°05'10.21823"	<b>Longitude (Global)</b> W84°07'52.38213"	<b>Ellipsoid Height (US ft)</b> 611.890	
Location Photo    NORTH				
 <p>2071_2019_OH, 3S, 20191209</p>		 <p>2071_2019_OH, 3W, 20191209</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2072_2019_OH	<b>Northing (US ft)</b> 491364.781	<b>Easting (US ft)</b> 1576910.889	<b>Elevation (US ft)</b> 750.039	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°00'23.86833"	<b>Longitude (Global)</b> W83°55'08.10897"	<b>Ellipsoid Height (US ft)</b> 633.772	
Location Photo    NORTH				
 <p>2072_2019_OH, 3N, 20191217</p>	 <p>2072_2019_OH, 3W, 20191217</p>			


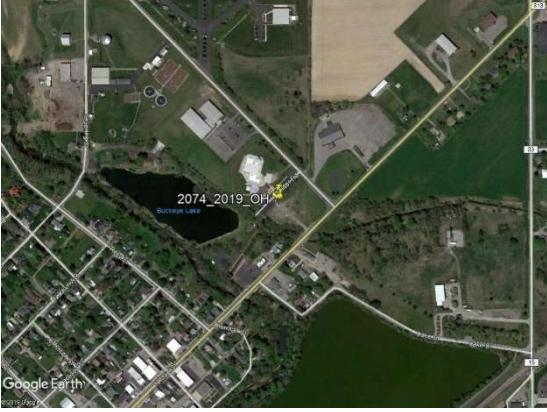




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2073_2019_OH	<b>Northing (US ft)</b> 470312.017	<b>Easting (US ft)</b> 1560698.650	<b>Elevation (US ft)</b> 774.948	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°56'53.21034"	<b>Longitude (Global)</b> W83°58'34.90256"	<b>Ellipsoid Height (US ft)</b> 659.204	
<b>Location Photo</b>   NORTH				
 <p>2073_2019_OH, 3N, 20191217</p>		 <p>2073_2019_OH, 3E, 20191217</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2074_2019_OH	<b>Northing (US ft)</b> 451937.685	<b>Easting (US ft)</b> 1585350.250	<b>Elevation (US ft)</b> 816.443	
<b>Point Type</b> CORNER OF PAINTED X	<b>Latitude (Global)</b> N40°53'55.66917"	<b>Longitude (Global)</b> W83°53'09.86692"	<b>Ellipsoid Height (US ft)</b> 700.599	
Location Photo    NORTH				
 <p>2074_2019_OH, 3NE, 20191217</p>		 <p>2074_2019_OH, 3SE, 20191217</p>		






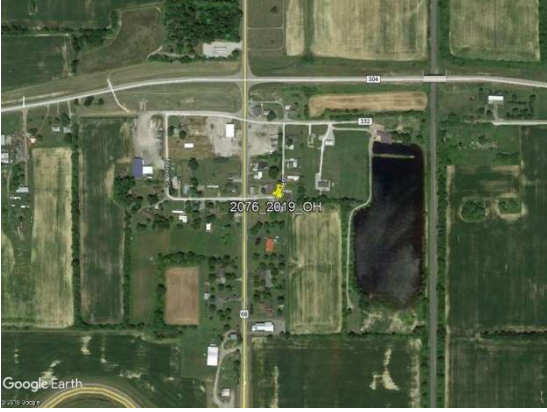


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2075_2019_OH	<b>Northing (US ft)</b> 452286.295	<b>Easting (US ft)</b> 1629556.580	<b>Elevation (US ft)</b> 849.780	
<b>Point Type</b> CORNER OF PAINT	<b>Latitude (Global)</b> N40°54'05.65511"	<b>Longitude (Global)</b> W83°43'34.30008"	<b>Ellipsoid Height (US ft)</b> 733.709	
Location Photo    NORTH				
 <p>2075_2019_OH, 3N, 20191217</p>		 <p>2075_2019_OH, 3E, 20191217</p>		




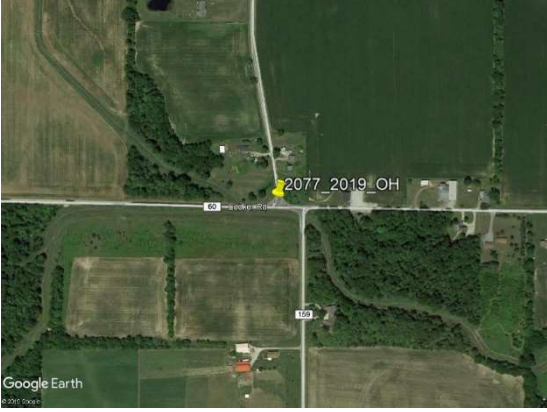




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2076_2019_OH	<b>Northing (US ft)</b> 426863.550	<b>Easting (US ft)</b> 1650088.537	<b>Elevation (US ft)</b> 931.853	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°49'57.23077"	<b>Longitude (Global)</b> W83°39'02.56169"	<b>Ellipsoid Height (US ft)</b> 816.166	
<b>Location Photo</b>   NORTH				
 <p>2076_2019_OH, 3S, 20191218</p>		 <p>2076_2019_OH, 3E, 20191218</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2077_2019_OH	<b>Northing (US ft)</b> 395085.732	<b>Easting (US ft)</b> 1663168.290	<b>Elevation (US ft)</b> 904.538	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°44'44.91443"	<b>Longitude (Global)</b> W83°36'07.18783"	<b>Ellipsoid Height (US ft)</b> 789.288	
<b>Location Photo</b>    NORTH				
 <p>2077_2019_OH, 3S, 20200122</p>		 <p>2077_2019_OH, 3W, 20200122</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2078_2019_OH	<b>Northing (US ft)</b> 378666.667	<b>Easting (US ft)</b> 1692406.834	<b>Elevation (US ft)</b> 923.000	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°42'06.15540"	<b>Longitude (Global)</b> W83°29'44.88928"	<b>Ellipsoid Height (US ft)</b> 808.237	
<b>Location Photo</b>    NORTH				
 <p>2078_2019_OH, 3N, 20200122</p>		 <p>2078_2019_OH, 3W, 20200122</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2079_2019_OH	<b>Northing (US ft)</b> 370700.725	<b>Easting (US ft)</b> 1724087.331	<b>Elevation (US ft)</b> 890.263	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°40'50.81283"	<b>Longitude (Global)</b> W83°22'52.52347"	<b>Ellipsoid Height (US ft)</b> 775.784	
Location Photo    NORTH				
 <p>2079_2019_OH, 3S, 20200122</p>		 <p>2079_2019_OH, 3W, 20200122</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2080_2019_OH	<b>Northing (US ft)</b> 338725.510	<b>Easting (US ft)</b> 1719571.344		<b>Elevation (US ft)</b> 930.855
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°35'34.40905"	<b>Longitude (Global)</b> W83°23'46.87226"		<b>Ellipsoid Height (US ft)</b> 816.863
Location Photo    NORTH				
 <p>2080_2019_OH, 3N, 20200122</p>	 <p>2080_2019_OH, 3W, 20200122</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2081_2019_OH	<b>Northing (US ft)</b> 425519.621	<b>Easting (US ft)</b> 1727453.004	<b>Elevation (US ft)</b> 825.308	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°49'52.81249"	<b>Longitude (Global)</b> W83°22'15.94608"	<b>Ellipsoid Height (US ft)</b> 710.220	
Location Photo    NORTH				
 <p>2081_2019_OH, 3N, 20200129</p>		 <p>2081_2019_OH, 3W, 20200129</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2082_2019_OH	<b>Northing (US ft)</b> 471705.373	<b>Easting (US ft)</b> 1719615.657	<b>Elevation (US ft)</b> 833.626	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°57'28.38026"	<b>Longitude (Global)</b> W83°24'04.10854"	<b>Ellipsoid Height (US ft)</b> 718.048	
Location Photo    NORTH				
 <p>2082_2019_OH, 3N, 20191218</p>		 <p>2082_2019_OH, 3E, 20191218</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2083_2019_OH	<b>Northing (US ft)</b> 482019.671	<b>Easting (US ft)</b> 1683596.046	<b>Elevation (US ft)</b> 800.300	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°59'06.34789"	<b>Longitude (Global)</b> W83°31'55.15957"	<b>Ellipsoid Height (US ft)</b> 684.437	
Location Photo    NORTH				
 <p>2083_2019_OH, 3N, 20191218</p>	 <p>2083_2019_OH, 3W, 20191218</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2084_2019_OH	<b>Northing (US ft)</b> 498836.683	<b>Easting (US ft)</b> 1747243.461	<b>Elevation (US ft)</b> 843.105	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°01'59.12370"	<b>Longitude (Global)</b> W83°18'07.26464"	<b>Ellipsoid Height (US ft)</b> 727.614	
Location Photo    NORTH				
 <p>2084_2019_OH, 3N, 20200129</p>		 <p>2084_2019_OH, 3W, 20200129</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2085_2019_OH	<b>Northing (US ft)</b> 533594.249	<b>Easting (US ft)</b> 1752140.686	<b>Elevation (US ft)</b> 772.563	
<b>Point Type</b> CORNER OF PAINT STRIPE	<b>Latitude (Global)</b> N41°07'42.99240"	<b>Longitude (Global)</b> W83°17'07.44671"	<b>Ellipsoid Height (US ft)</b> 657.389	
Location Photo    NORTH				
 <p>2085_2019_OH, 3S, 20200129</p>	 <p>2085_2019_OH, 3E, 20200129</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2086_2019_OH	<b>Northing (US ft)</b> 547931.451	<b>Easting (US ft)</b> 1816892.916	<b>Elevation (US ft)</b> 799.500	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°10'09.55447"	<b>Longitude (Global)</b> W83°03'02.45594"	<b>Ellipsoid Height (US ft)</b> 684.447	
<b>Location Photo</b>   NORTH				
 <p>2086_2019_OH, 3N, 20200129</p>		 <p>2086_2019_OH, 3W, 20200129</p>		


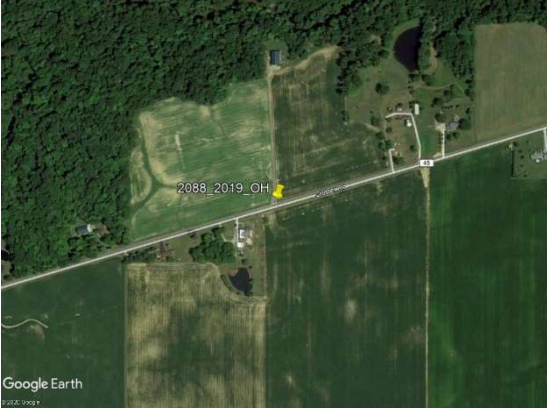




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum	
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)	
<b>Station ID</b> 2087_2019_OH	<b>Northing (US ft)</b> 485501.901	<b>Easting (US ft)</b> 1852447.376	<b>Elevation (US ft)</b> 970.645		
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°59'54.64845"	<b>Longitude (Global)</b> W82°55'13.60894"	<b>Ellipsoid Height (US ft)</b> 856.386		
Location Photo    NORTH					
 <p>2087_2019_OH, 3N, 20200127</p>		 <p>2087_2019_OH, 3E, 20200127</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2088_2019_OH	<b>Northing (US ft)</b> 422107.120	<b>Easting (US ft)</b> 1854224.752	<b>Elevation (US ft)</b> 1029.389	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°49'28.31414"	<b>Longitude (Global)</b> W82°54'46.51339"	<b>Ellipsoid Height (US ft)</b> 916.049	
Location Photo    NORTH				
 <p>2088_2019_OH, 3N, 20200127</p>		 <p>2088_2019_OH, 3E, 20200127</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2089_2019_OH	<b>Northing (US ft)</b> 367756.764	<b>Easting (US ft)</b> 1862464.588	<b>Elevation (US ft)</b> 1039.849	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°40'31.62765"	<b>Longitude (Global)</b> W82°52'56.23058"	<b>Ellipsoid Height (US ft)</b> 927.401	
Location Photo    NORTH				
 <p>2089_2019_OH, 3S, 20200128</p>		 <p>2089_2019_OH, 3W, 20200128</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2090_2019_OH	<b>Northing (US ft)</b> 316543.573	<b>Easting (US ft)</b> 1847857.319	<b>Elevation (US ft)</b> 998.100	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°32'04.89022"	<b>Longitude (Global)</b> W82°56'02.50708"	<b>Ellipsoid Height (US ft)</b> 885.915	
Location Photo    NORTH				
 <p>2090_2019_OH, 3N, 20200123</p>		 <p>2090_2019_OH, 3E, 20200123</p>		



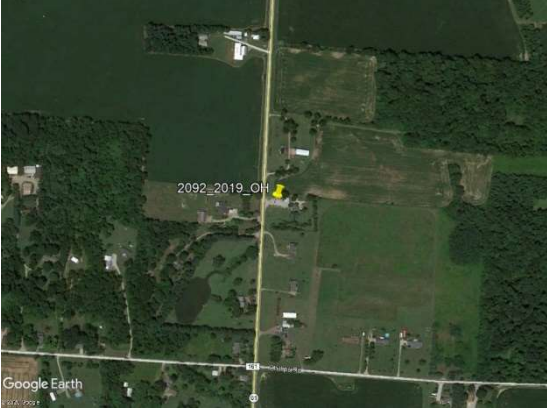


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2091_2019_OH	<b>Northing (US ft)</b> 316850.518	<b>Easting (US ft)</b> 1799709.752	<b>Elevation (US ft)</b> 983.448	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°32'05.08308"	<b>Longitude (Global)</b> W83°06'26.10206"	<b>Ellipsoid Height (US ft)</b> 870.712	
<b>Location Photo</b>    NORTH				
 <p>2091_2019_OH, 3S, 20200122</p>		 <p>2091_2019_OH, 3E, 20200122</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2092_2019_OH	<b>Northing (US ft)</b> 280353.028	<b>Easting (US ft)</b> 1878288.868	<b>Elevation (US ft)</b> 1105.780	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°26'08.57983"	<b>Longitude (Global)</b> W82°49'26.63464"	<b>Ellipsoid Height (US ft)</b> 994.088	
Location Photo    NORTH				
 <p>2092_2019_OH, 3S, 20200129</p>		 <p>2092_2019_OH, 3E, 20200129</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2093_2019_OH	<b>Northing (US ft)</b> 369466.958	<b>Easting (US ft)</b> 1933171.745	<b>Elevation (US ft)</b> 1451.023	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°40'50.56848"	<b>Longitude (Global)</b> W82°37'38.55944"	<b>Ellipsoid Height (US ft)</b> 1339.902	
<b>Location Photo</b>   NORTH				
 <p>2093_2019_OH, 3N, 20191218</p>		 <p>2093_2019_OH, 3E, 20191218</p>		




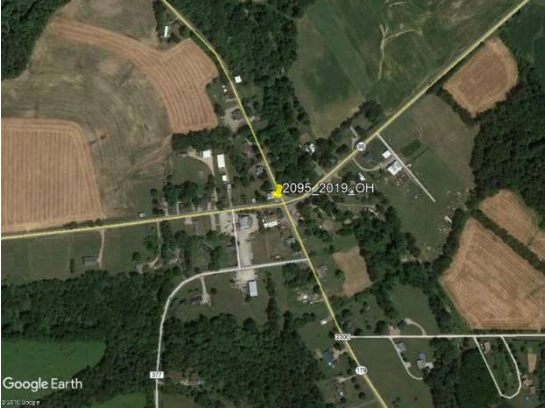

# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2094_2019_OH	<b>Northing (US ft)</b> 359437.248	<b>Easting (US ft)</b> 2021235.581	<b>Elevation (US ft)</b> 965.621	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°39'11.14642"	<b>Longitude (Global)</b> W82°18'35.77842"	<b>Ellipsoid Height (US ft)</b> 856.018	
Location Photo    NORTH				
 <p>2094_2019_OH, 3N, 20191113</p>		 <p>2094_2019_OH, 3W, 20191113</p>		






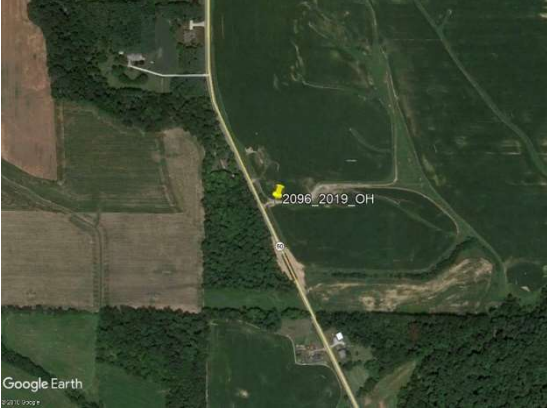


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2095_2019_OH	<b>Northing (US ft)</b> 386961.425	<b>Easting (US ft)</b> 2054240.681	<b>Elevation (US ft)</b> 1090.555	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°43'42.19299"	<b>Longitude (Global)</b> W82°11'26.28754"	<b>Ellipsoid Height (US ft)</b> 981.512	
Location Photo    NORTH				
 <p>2095_2019_OH, 3S, 20191113</p>	 <p>2095_2019_OH, 3W, 20191113</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2096_2019_OH	<b>Northing (US ft)</b> 410465.597	<b>Easting (US ft)</b> 2032984.138	<b>Elevation (US ft)</b> 1126.061	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°47'35.10129"	<b>Longitude (Global)</b> W82°16'01.57862"	<b>Ellipsoid Height (US ft)</b> 1016.620	
<b>Location Photo</b>    NORTH				
 <p>2096_2019_OH, 3N, 20191113</p>	 <p>2096_2019_OH, 3W, 20191113</p>			


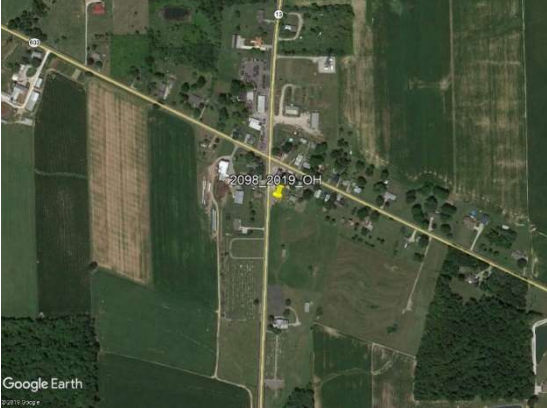




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2097_2019_OH	<b>Northing (US ft)</b> 444617.596	<b>Easting (US ft)</b> 2019052.402	<b>Elevation (US ft)</b> 1039.125	
<b>Point Type</b> CORNER STOP BAR	<b>Latitude (Global)</b> N40°53'12.89885"	<b>Longitude (Global)</b> W82°19'01.78726"	<b>Ellipsoid Height (US ft)</b> 928.967	
<b>Location Photo</b>    NORTH				
 <p>2097_2019_OH, 3N, 20191118</p>	 <p>2097_2019_OH, 3W, 20191118</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2098_2019_OH	<b>Northing (US ft)</b> 453449.332	<b>Easting (US ft)</b> 1968710.685	<b>Elevation (US ft)</b> 1163.638	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°54'40.69199"	<b>Longitude (Global)</b> W82°29'57.25579"	<b>Ellipsoid Height (US ft)</b> 1052.175	
<b>Location Photo</b>    NORTH				
 <p>2098_2019_OH, 3S, 20191218</p>	 <p>2098_2019_OH, 3W, 20191218</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2099_2019_OH	<b>Northing (US ft)</b> 496447.921	<b>Easting (US ft)</b> 1961863.274	<b>Elevation (US ft)</b> 1040.177	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°01'45.56332"	<b>Longitude (Global)</b> W82°31'26.59912"	<b>Ellipsoid Height (US ft)</b> 927.745	
Location Photo    NORTH				
 <p>2099_2019_OH, 3N, 20191218</p>		 <p>2099_2019_OH, 3E, 20191218</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2100_2019_OH	<b>Northing (US ft)</b> 548170.375	<b>Easting (US ft)</b> 2021071.377		<b>Elevation (US ft)</b> 905.756
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°10'16.07591"	<b>Longitude (Global)</b> W82°18'32.54734"		<b>Ellipsoid Height (US ft)</b> 793.358
Location Photo    NORTH				
 <p>2100_2019_OH, 3S, 20191120</p>	 <p>2100_2019_OH, 3E, 20191120</p>			




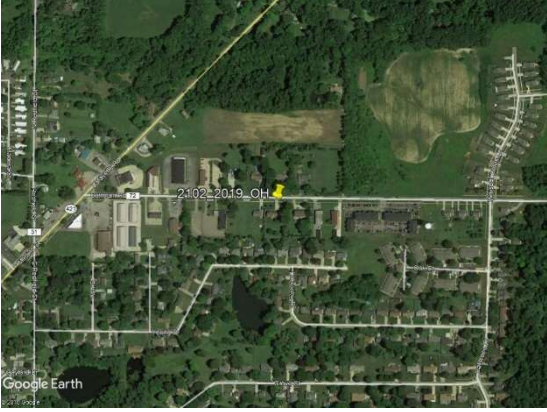



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2101_2019_OH	<b>Northing (US ft)</b> 499659.225	<b>Easting (US ft)</b> 2071652.375	<b>Elevation (US ft)</b> 1056.724	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°02'15.11876"	<b>Longitude (Global)</b> W82°07'33.84788"	<b>Ellipsoid Height (US ft)</b> 946.603	
Location Photo    NORTH				
 <p>2101_2019_OH, 3N, 20191118</p>		 <p>2101_2019_OH, 3E, 20191118</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2102_2019_OH	<b>Northing (US ft)</b> 500704.578	<b>Easting (US ft)</b> 2106380.322	<b>Elevation (US ft)</b> 1062.728	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°02'23.72899"	<b>Longitude (Global)</b> W82°00'00.57408"	<b>Ellipsoid Height (US ft)</b> 952.995	
Location Photo    NORTH				
 <p>2102_2019_OH, 3S, 20191118</p>		 <p>2102_2019_OH, 3W, 20191118</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2103_2019_OH	<b>Northing (US ft)</b> 524515.544	<b>Easting (US ft)</b> 2080596.409	<b>Elevation (US ft)</b> 870.262	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°06'20.32863"	<b>Longitude (Global)</b> W82°05'35.61578"	<b>Ellipsoid Height (US ft)</b> 759.619	
Location Photo    NORTH				
 <p>2103_2019_OH, 3S, 20191118</p>		 <p>2103_2019_OH, 3W, 20191118</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2104_2019_OH	<b>Northing (US ft)</b> 496378.889	<b>Easting (US ft)</b> 2019936.452	<b>Elevation (US ft)</b> 1123.952	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°01'44.34702"	<b>Longitude (Global)</b> W82°18'48.83594"	<b>Ellipsoid Height (US ft)</b> 1012.907	
<b>Location Photo</b>    NORTH				
 <p>2104_2019_OH, 3S, 20191118</p>	 <p>2104_2019_OH, 3E, 20191118</p>			




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2105_2019_OH	<b>Northing (US ft)</b> 579893.578	<b>Easting (US ft)</b> 1993917.977	<b>Elevation (US ft)</b> 860.349	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°15'29.96290"	<b>Longitude (Global)</b> W82°24'27.18021"	<b>Ellipsoid Height (US ft)</b> 746.737	
<b>Location Photo</b>    NORTH				
 <p>2105_2019_OH, 3S, 20191119</p>		 <p>2105_2019_OH, 3W, 20191119</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2106_2019_OH	<b>Northing (US ft)</b> 616011.387	<b>Easting (US ft)</b> 2036904.768	<b>Elevation (US ft)</b> 790.257	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°21'25.99650"	<b>Longitude (Global)</b> W82°15'02.96752"	<b>Ellipsoid Height (US ft)</b> 676.680	
Location Photo    NORTH				
 <p>2106_2019_OH, 3S, 20191119</p>	 <p>2106_2019_OH, 3E, 20191119</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2107_2019_OH	<b>Northing (US ft)</b> 597616.964	<b>Easting (US ft)</b> 2081641.648	<b>Elevation (US ft)</b> 777.688	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°18'22.57564"	<b>Longitude (Global)</b> W82°05'17.45216"	<b>Ellipsoid Height (US ft)</b> 665.213	
Location Photo    NORTH				
 <p>2107_2019_OH, 3N, 20191119</p>		 <p>2107_2019_OH, 3E, 20191119</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2108_2019_OH	<b>Northing (US ft)</b> 638675.017	<b>Easting (US ft)</b> 2094120.603	<b>Elevation (US ft)</b> 709.387	
<b>Point Type</b> CORNEROF STOP BAR	<b>Latitude (Global)</b> N41°25'07.62868"	<b>Longitude (Global)</b> W82°02'31.11204"	<b>Ellipsoid Height (US ft)</b> 596.284	
Location Photo    NORTH				
 <p>2108_2019_OH, 3S, 20191114</p>		 <p>2108_2019_OH, 3E, 20191114</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2109_2019_OH	<b>Northing (US ft)</b> 637268.298	<b>Easting (US ft)</b> 2197017.526	<b>Elevation (US ft)</b> 696.536	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°24'46.20480"	<b>Longitude (Global)</b> W81°40'00.73370"	<b>Ellipsoid Height (US ft)</b> 584.452	
Location Photo    NORTH				
 <p>2109_2019_OH, 3N, 20191114</p>		 <p>2109_2019_OH, 3W, 20191114</p>		




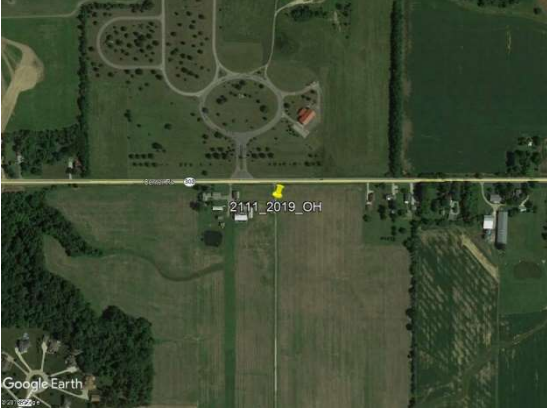


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2110_2019_OH	<b>Northing (US ft)</b> 584064.833	<b>Easting (US ft)</b> 2176138.584	<b>Elevation (US ft)</b> 890.780	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°16'02.42681"	<b>Longitude (Global)</b> W81°44'40.80046"	<b>Ellipsoid Height (US ft)</b> 779.755	
Location Photo    NORTH				
 <p>2110_2019_OH, 3S, 20191111</p>	 <p>2110_2019_OH, 3W, 20191111</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2111_2019_OH	<b>Northing (US ft)</b> 572746.411	<b>Easting (US ft)</b> 2129792.973	<b>Elevation (US ft)</b> 872.009	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°14'14.11825"	<b>Longitude (Global)</b> W81°54'48.71046"	<b>Ellipsoid Height (US ft)</b> 760.817	
Location Photo    NORTH				
 <p>2111_2019_OH, 3S, 20191117</p>		 <p>2111_2019_OH, 3W, 20191117</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2112_2019_OH	<b>Northing (US ft)</b> 539758.580	<b>Easting (US ft)</b> 2136073.271	<b>Elevation (US ft)</b> 1103.685	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°08'47.75220"	<b>Longitude (Global)</b> W81°53'29.51785"	<b>Ellipsoid Height (US ft)</b> 993.338	
<b>Location Photo</b>   NORTH				
 <p>2112_2019_OH, 3N, 20191118</p>	 <p>2112_2019_OH, 3W, 20191118</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2113_2019_OH	<b>Northing (US ft)</b> 536795.701	<b>Easting (US ft)</b> 2175896.573	<b>Elevation (US ft)</b> 1121.060	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°08'15.40574"	<b>Longitude (Global)</b> W81°44'49.31387"	<b>Ellipsoid Height (US ft)</b> 1011.023	
<b>Location Photo</b>    NORTH				
 <p>2113_2019_OH, 3N, 20191111</p>		 <p>2113_2019_OH, 3E, 20191111</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2114_2019_OH	<b>Northing (US ft)</b> 586275.936	<b>Easting (US ft)</b> 2213596.106		<b>Elevation (US ft)</b> 1108.299
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°16'20.77852"	<b>Longitude (Global)</b> W81°36'29.99865"		<b>Ellipsoid Height (US ft)</b> 997.313
<b>Location Photo</b>    NORTH				
 <p>2114_2019_OH, 3N, 20191117</p>	 <p>2114_2019_OH, 3W, 20191117</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2115_2019_OH	<b>Northing (US ft)</b> 485942.324	<b>Easting (US ft)</b> 2265655.846	<b>Elevation (US ft)</b> 1095.751	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°59'43.64232"	<b>Longitude (Global)</b> W81°25'24.45976"	<b>Ellipsoid Height (US ft)</b> 986.351	
<b>Location Photo</b>   NORTH				
 <p>2115_2019_OH, 3N, 20191110</p>		 <p>2115_2019_OH, 3E, 20191110</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2116_2019_OH	<b>Northing (US ft)</b> 497139.469	<b>Easting (US ft)</b> 2293458.422	<b>Elevation (US ft)</b> 1183.188	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°01'30.72395"	<b>Longitude (Global)</b> W81°19'19.92559"	<b>Ellipsoid Height (US ft)</b> 1073.515	
Location Photo    NORTH				
 <p>2116_2019_OH, 3S, 20191110</p>		 <p>2116_2019_OH, 3W, 20191110</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2117_2019_OH	<b>Northing (US ft)</b> 497635.384	<b>Easting (US ft)</b> 2313217.167	<b>Elevation (US ft)</b> 1139.016	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°01'32.90697"	<b>Longitude (Global)</b> W81°15'02.05402"	<b>Ellipsoid Height (US ft)</b> 1029.188	
Location Photo    NORTH				
 <p>2117_2019_OH, 3N, 20191109</p>		 <p>2117_2019_OH, 3E, 20191109</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2118_2019_OH	<b>Northing (US ft)</b> 497223.888	<b>Easting (US ft)</b> 2337139.637	<b>Elevation (US ft)</b> 1127.724	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°01'25.33764"	<b>Longitude (Global)</b> W81°09'50.03784"	<b>Ellipsoid Height (US ft)</b> 1017.691	
<b>Location Photo</b>    NORTH				
 <p>2118_2019_OH, 3S, 20191109</p>		 <p>2118_2019_OH, 3E, 20191109</p>		




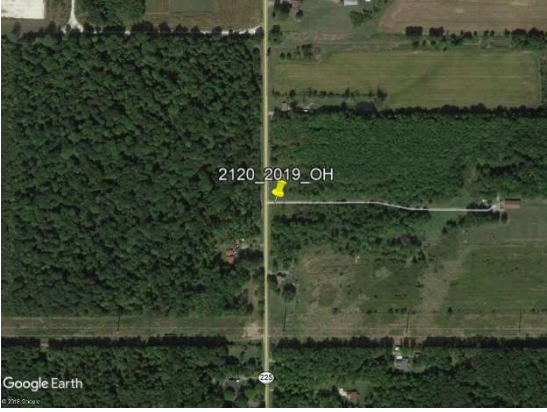




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2119_2019_OH	<b>Northing (US ft)</b> 497909.017	<b>Easting (US ft)</b> 2368641.312	<b>Elevation (US ft)</b> 1069.943	
<b>Point Type</b> END OF STRIPE	<b>Latitude (Global)</b> N41°01'27.13449"	<b>Longitude (Global)</b> W81°02'58.93221"	<b>Ellipsoid Height (US ft)</b> 959.557	
<b>Location Photo</b>    NORTH				
 <p>2119_2019_OH, 3N, 20191109</p>		 <p>2119_2019_OH, 3E, 20191109</p>		




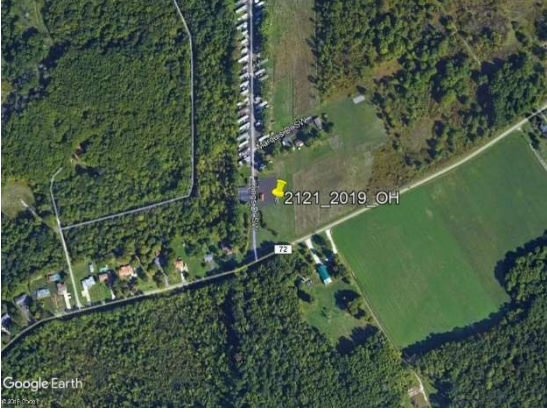


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2120_2019_OH	<b>Northing (US ft)</b> 534397.780	<b>Easting (US ft)</b> 2367699.791	<b>Elevation (US ft)</b> 1023.876	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°07'27.78838"	<b>Longitude (Global)</b> W81°03'03.30512"	<b>Ellipsoid Height (US ft)</b> 913.285	
Location Photo    NORTH				
 <p>2120_2019_OH, 3N, 20191109</p>		 <p>2120_2019_OH, 3W, 20191109</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2121_2019_OH	<b>Northing (US ft)</b> 549386.548	<b>Easting (US ft)</b> 2404269.416	<b>Elevation (US ft)</b> 932.342	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°09'49.58922"	<b>Longitude (Global)</b> W80°55'01.96380"	<b>Ellipsoid Height (US ft)</b> 821.404	
<b>Location Photo</b>    NORTH				
 <p>2121_2019_OH, 3S, 20191109</p>		 <p>2121_2019_OH, 3W, 20191109</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2122_2019_OH	<b>Northing (US ft)</b> 577441.645	<b>Easting (US ft)</b> 2484484.024	<b>Elevation (US ft)</b> 1133.836	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°14'11.02701"	<b>Longitude (Global)</b> W80°37'25.50060"	<b>Ellipsoid Height (US ft)</b> 1022.790	
Location Photo    NORTH				
 <p>2122_2019_OH, 3S, 20191108</p>		 <p>2122_2019_OH, 3W, 20191108</p>		




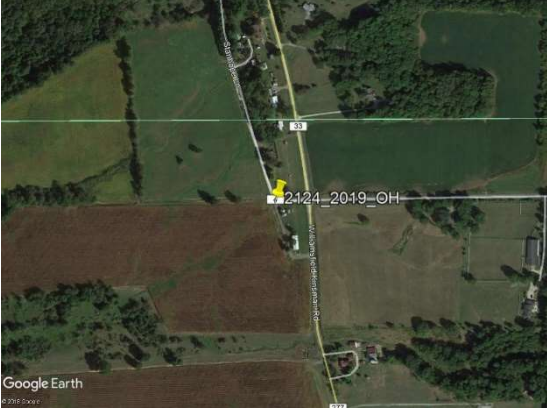


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2123_2019_OH	<b>Northing (US ft)</b> 632420.727	<b>Easting (US ft)</b> 2498481.028	<b>Elevation (US ft)</b> 946.169	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°23'11.10510"	<b>Longitude (Global)</b> W80°34'06.39473"	<b>Ellipsoid Height (US ft)</b> 835.198	
Location Photo    NORTH				
 <p>2123_2019_OH, 3N, 20191107</p>	 <p>2123_2019_OH, 3E, 20191107</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2124_2019_OH	<b>Northing (US ft)</b> 672982.763	<b>Easting (US ft)</b> 2487660.084	<b>Elevation (US ft)</b> 1017.082	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°29'54.11731"	<b>Longitude (Global)</b> W80°36'16.76185"	<b>Ellipsoid Height (US ft)</b> 905.982	
Location Photo    NORTH				
 <p>2124_2019_OH, 3N, 20191107</p>		 <p>2124_2019_OH, 3E, 20191107</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2125_2019_OH	<b>Northing (US ft)</b> 704959.630	<b>Easting (US ft)</b> 2485122.464	<b>Elevation (US ft)</b> 1068.598	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°35'10.51681"	<b>Longitude (Global)</b> W80°36'41.00363"	<b>Ellipsoid Height (US ft)</b> 957.254	
Location Photo    NORTH				
 <p>2125_2019_OH, 3N, 20190130</p>		 <p>2125_2019_OH, 3E, 20190130</p>		




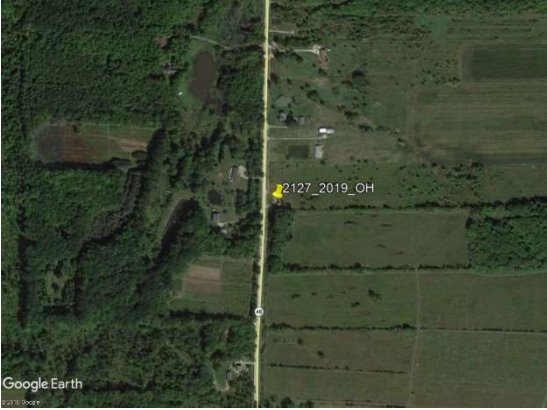




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2126_2019_OH	<b>Northing (US ft)</b> 727972.547	<b>Easting (US ft)</b> 2457519.068	<b>Elevation (US ft)</b> 1017.597	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°39'03.57723"	<b>Longitude (Global)</b> W80°42'37.95950"	<b>Ellipsoid Height (US ft)</b> 905.886	
<b>Location Photo</b>    NORTH				
 <p>2126_2019_OH, 3N, 20190130</p>	 <p>2126_2019_OH, 3E, 20190130</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2127_2019_OH	<b>Northing (US ft)</b> 747101.772	<b>Easting (US ft)</b> 2437897.944	<b>Elevation (US ft)</b> 956.482	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°42'16.42501"	<b>Longitude (Global)</b> W80°46'51.40163"	<b>Ellipsoid Height (US ft)</b> 844.325	
<b>Location Photo</b>    NORTH				
 <p>2127_2019_OH, 3N, 20191105</p>		 <p>2127_2019_OH, 3E, 20191105</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2128_2019_OH	<b>Northing (US ft)</b> 774914.811	<b>Easting (US ft)</b> 2417341.880		<b>Elevation (US ft)</b> 818.774
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°46'55.06334"	<b>Longitude (Global)</b> W80°51'15.43100"		<b>Ellipsoid Height (US ft)</b> 705.917
Location Photo    NORTH				
 <p>2128_2019_OH, 3N, 20191115</p>	 <p>2128_2019_OH, 3W, 20191115</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2129_2019_OH	<b>Northing (US ft)</b> 780000.718	<b>Easting (US ft)</b> 2364246.980	<b>Elevation (US ft)</b> 672.151	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°47'54.61237"	<b>Longitude (Global)</b> W81°02'55.01155"	<b>Ellipsoid Height (US ft)</b> 558.960	
Location Photo    NORTH				
 <p>2129_2019_OH, 3N, 20191107</p>	 <p>2129_2019_OH, 3E, 20191107</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2130_2019_OH	<b>Northing (US ft)</b> 739180.587	<b>Easting (US ft)</b> 2347267.004	<b>Elevation (US ft)</b> 1020.910	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°41'14.12232"	<b>Longitude (Global)</b> W81°06'47.72559"	<b>Ellipsoid Height (US ft)</b> 908.710	
<b>Location Photo</b>   NORTH				
 <p>2130_2019_OH, 3S, 20191107</p>		 <p>2130_2019_OH, 3W, 20191107</p>		




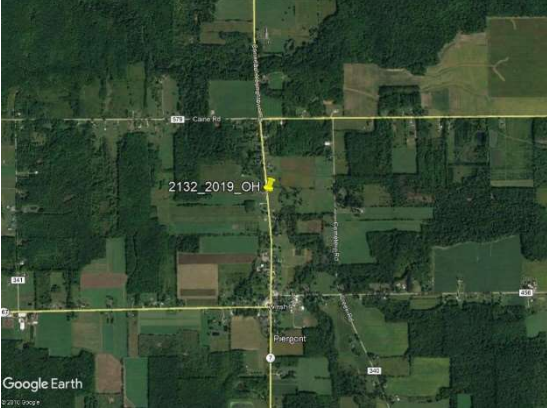




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2131_2019_OH	<b>Northing (US ft)</b> 806191.501	<b>Easting (US ft)</b> 2493511.959	<b>Elevation (US ft)</b> 872.698	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°51'48.56645"	<b>Longitude (Global)</b> W80°34'21.19124"	<b>Ellipsoid Height (US ft)</b> 759.777	
Location Photo    NORTH				
 <p>2131_2019_OH, 3N, 20191105</p>		 <p>2131_2019_OH, 3W, 20191105</p>		


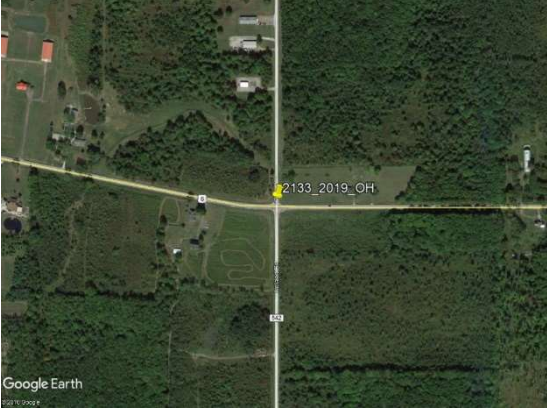




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2132_2019_OH	<b>Northing (US ft)</b> 768314.960	<b>Easting (US ft)</b> 2494813.115	<b>Elevation (US ft)</b> 961.199	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°45'34.19153"	<b>Longitude (Global)</b> W80°34'15.07123"	<b>Ellipsoid Height (US ft)</b> 849.039	
<b>Location Photo</b>   NORTH				
 <p>2132_2019_OH, 3N, 20190131</p>	 <p>2132_2019_OH, 3W, 20190131</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2133_2019_OH	<b>Northing (US ft)</b> 710047.674	<b>Easting (US ft)</b> 2380807.728	<b>Elevation (US ft)</b> 1078.035	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°36'20.84170"	<b>Longitude (Global)</b> W80°59'32.36952"	<b>Ellipsoid Height (US ft)</b> 966.394	
<b>Location Photo</b>    NORTH				
 <p>2133_2019_OH, 3S, 20191106</p>		 <p>2133_2019_OH, 3W, 20191106</p>		




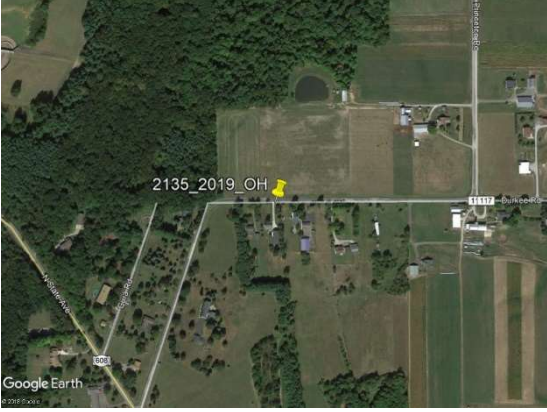




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2134_2019_OH	<b>Northing (US ft)</b> 688853.519	<b>Easting (US ft)</b> 2359529.990	<b>Elevation (US ft)</b> 1270.609	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°32'55.01504"	<b>Longitude (Global)</b> W81°04'16.98849"	<b>Ellipsoid Height (US ft)</b> 1159.265	
Location Photo    NORTH				
 <p>2134_2019_OH, 3N, 20191106</p>		 <p>2134_2019_OH, 3W, 20191106</p>		




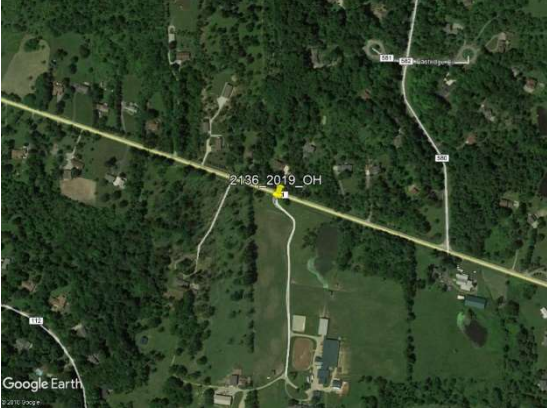


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2135_2019_OH	<b>Northing (US ft)</b> 671508.827	<b>Easting (US ft)</b> 2355066.926	<b>Elevation (US ft)</b> 1254.177	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°30'04.38991"	<b>Longitude (Global)</b> W81°05'19.36966"	<b>Ellipsoid Height (US ft)</b> 1142.974	
Location Photo    NORTH				
 <p>2135_2019_OH, 3N, 20191107</p>		 <p>2135_2019_OH, 3W, 20191107</p>		




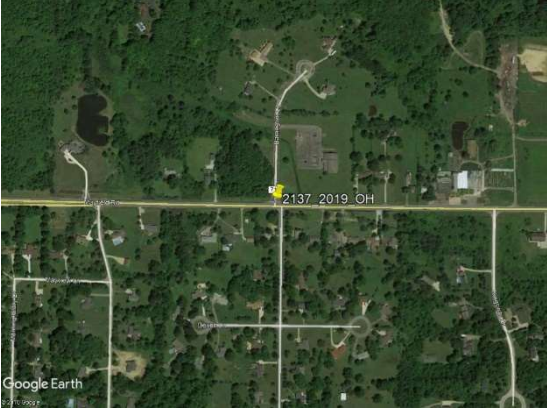




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2136_2019_OH	<b>Northing (US ft)</b> 670131.871	<b>Easting (US ft)</b> 2315169.485	<b>Elevation (US ft)</b> 1272.086	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°29'56.83622"	<b>Longitude (Global)</b> W81°14'03.92452"	<b>Ellipsoid Height (US ft)</b> 1160.879	
Location Photo    NORTH				
 <p>2136_2019_OH, 3S, 20191115</p>		 <p>2136_2019_OH, 3E, 20191115</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2137_2019_OH	<b>Northing (US ft)</b> 678164.695	<b>Easting (US ft)</b> 2276666.132	<b>Elevation (US ft)</b> 1088.083	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°31'21.40787"	<b>Longitude (Global)</b> W81°22'28.52986"	<b>Ellipsoid Height (US ft)</b> 976.462	
Location Photo    NORTH				
 <p>2137_2019_OH, 3S, 20191113</p>	 <p>2137_2019_OH, 3E, 20191113</p>			




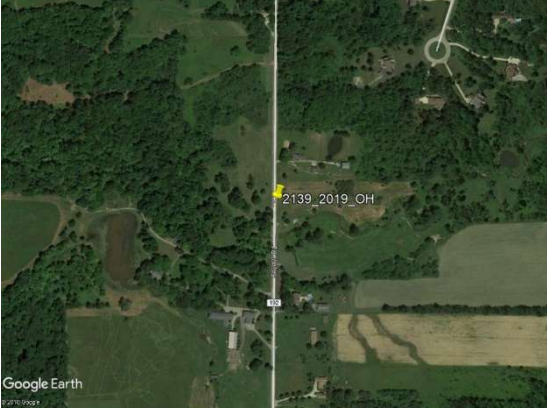


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2138_2019_OH	<b>Northing (US ft)</b> 656448.203	<b>Easting (US ft)</b> 2288263.509	<b>Elevation (US ft)</b> 1064.625	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°27'45.35946"	<b>Longitude (Global)</b> W81°19'59.89572"	<b>Ellipsoid Height (US ft)</b> 953.353	
Location Photo    NORTH				
 <p>2138_2019_OH, 3N, 20191115</p>	 <p>2138_2019_OH, 3W, 20191115</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2139_2019_OH	<b>Northing (US ft)</b> 616553.877	<b>Easting (US ft)</b> 2295471.491	<b>Elevation (US ft)</b> 1076.469	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°21'10.26293"	<b>Longitude (Global)</b> W81°18'32.38577"	<b>Ellipsoid Height (US ft)</b> 965.621	
Location Photo    NORTH				
 <p>2139_2019_OH, 3S, 20191116</p>		 <p>2139_2019_OH, 3E, 20191116</p>		




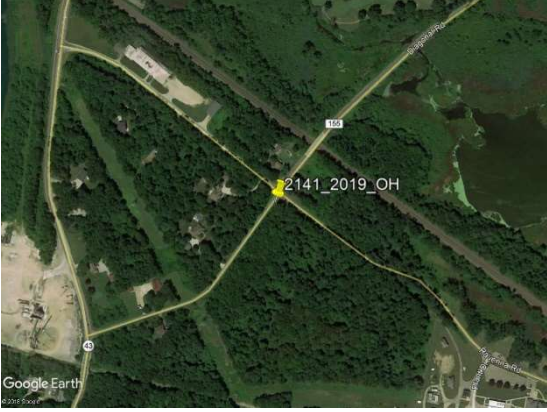


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2140_2019_OH	<b>Northing (US ft)</b> 590325.363	<b>Easting (US ft)</b> 2291241.124	<b>Elevation (US ft)</b> 1172.693	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°16'51.70038"	<b>Longitude (Global)</b> W81°19'32.48298"	<b>Ellipsoid Height (US ft)</b> 1062.075	
Location Photo    NORTH				
 <p>2140_2019_OH, 3N, 20191116</p>		 <p>2140_2019_OH, 3W, 20191116</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2141_2019_OH	<b>Northing (US ft)</b> 554800.853	<b>Easting (US ft)</b> 2286906.956	<b>Elevation (US ft)</b> 1080.061	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°11'01.29396"	<b>Longitude (Global)</b> W81°20'35.42042"	<b>Ellipsoid Height (US ft)</b> 969.762	
Location Photo    NORTH				
 <p>2141_2019_OH, 3N, 20191111</p>	 <p>2141_2019_OH, 3E, 20191111</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2142_2019_OH	<b>Northing (US ft)</b> 534220.642	<b>Easting (US ft)</b> 2236829.341	<b>Elevation (US ft)</b> 924.619	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°07'44.00173"	<b>Longitude (Global)</b> W81°31'33.35339"	<b>Ellipsoid Height (US ft)</b> 814.614	
Location Photo    NORTH				
 <p>2142_2019_OH, 3S, 20191110</p>	 <p>2142_2019_OH, 3E, 20191110</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2143_2019_OH	<b>Northing (US ft)</b> 577942.743	<b>Easting (US ft)</b> 2340271.621	<b>Elevation (US ft)</b> 1171.656	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°14'42.34775"	<b>Longitude (Global)</b> W81°08'52.85328"	<b>Ellipsoid Height (US ft)</b> 1061.086	
Location Photo    NORTH				
 <p>2143_2019_OH, 3S, 20191109</p>		 <p>2143_2019_OH, 3E, 20191109</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2144_2019_OH	<b>Northing (US ft)</b> 623995.029	<b>Easting (US ft)</b> 2357994.592	<b>Elevation (US ft)</b> 1106.769	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°22'14.53313"	<b>Longitude (Global)</b> W81°04'51.05869"	<b>Ellipsoid Height (US ft)</b> 995.896	
Location Photo    NORTH				
 <p>2144_2019_OH, 3S, 20191116</p>	 <p>2144_2019_OH, 3W, 20191116</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2145_2019_OH	<b>Northing (US ft)</b> 601818.441	<b>Easting (US ft)</b> 2388165.050	<b>Elevation (US ft)</b> 916.866	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°18'30.41203"	<b>Longitude (Global)</b> W80°58'20.49010"	<b>Ellipsoid Height (US ft)</b> 805.904	
Location Photo    NORTH				
 <p>2145_2019_OH, 3N, 20191108</p>	 <p>2145_2019_OH, 3W, 20191108</p>			




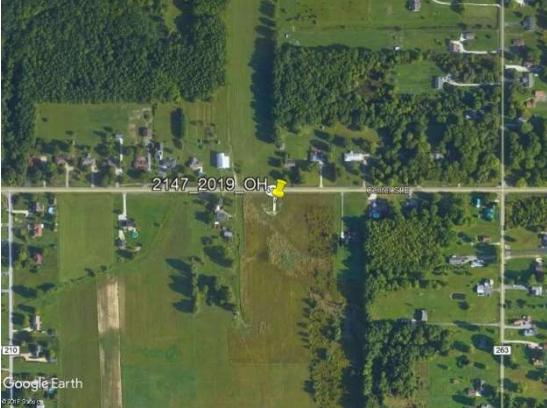




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2146_2019_OH	<b>Northing (US ft)</b> 628358.811	<b>Easting (US ft)</b> 2415687.227	<b>Elevation (US ft)</b> 867.175	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°22'47.67993"	<b>Longitude (Global)</b> W80°52'13.40853"	<b>Ellipsoid Height (US ft)</b> 756.148	
<b>Location Photo</b>    NORTH				
 <p>2146_2019_OH, 3N, 20191107</p>	 <p>2146_2019_OH, 3E, 20191107</p>			


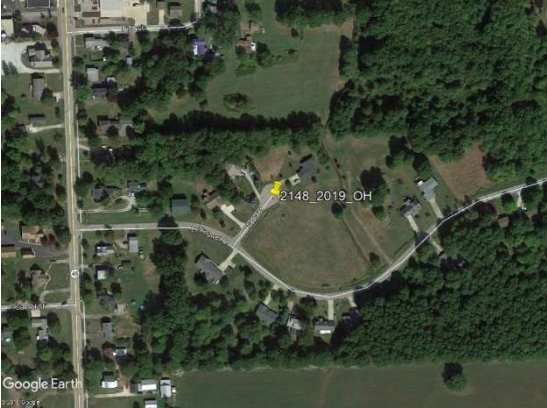




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2147_2019_OH	<b>Northing (US ft)</b> 602452.673	<b>Easting (US ft)</b> 2431285.009	<b>Elevation (US ft)</b> 930.274	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°18'28.83195"	<b>Longitude (Global)</b> W80°48'55.39712"	<b>Ellipsoid Height (US ft)</b> 819.291	
Location Photo    NORTH				
 <p>2147_2019_OH, 3S, 20191107</p>		 <p>2147_2019_OH, 3W, 20191107</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2148_2019_OH	<b>Northing (US ft)</b> 683667.022	<b>Easting (US ft)</b> 2415989.946	<b>Elevation (US ft)</b> 903.639	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°31'53.98526"	<b>Longitude (Global)</b> W80°51'55.84163"	<b>Ellipsoid Height (US ft)</b> 792.286	
Location Photo    NORTH				
 <p>2148_2019_OH, 3SE, 20190130</p>		 <p>2148_2019_OH, 3SW, 20190130</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2149_2019_OH	<b>Northing (US ft)</b> 656696.997	<b>Easting (US ft)</b> 2392085.579	<b>Elevation (US ft)</b> 851.542	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°27'31.86837"	<b>Longitude (Global)</b> W80°57'16.38196"	<b>Ellipsoid Height (US ft)</b> 740.368	
Location Photo    NORTH				
 <p>2149_2019_OH, 3N, 20191106</p>	 <p>2149_2019_OH, 3E, 20191106</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2150_2019_OH	<b>Northing (US ft)</b> 564468.063	<b>Easting (US ft)</b> 1970949.028	<b>Elevation (US ft)</b> 936.851	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°12'57.67870"	<b>Longitude (Global)</b> W82°29'27.95334"	<b>Ellipsoid Height (US ft)</b> 823.155	
Location Photo    NORTH				
 <p>2150_2019_OH, 3S, 20191120</p>		 <p>2150_2019_OH, 3W, 20191120</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2151_2019_OH	<b>Northing (US ft)</b> 543761.046	<b>Easting (US ft)</b> 1971215.612	<b>Elevation (US ft)</b> 945.253	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°09'33.07481"	<b>Longitude (Global)</b> W82°29'24.49561"	<b>Ellipsoid Height (US ft)</b> 831.987	
Location Photo    NORTH				
 <p>2151_2019_OH, 3S, 20191120</p>		 <p>2151_2019_OH, 3E, 20191120</p>		


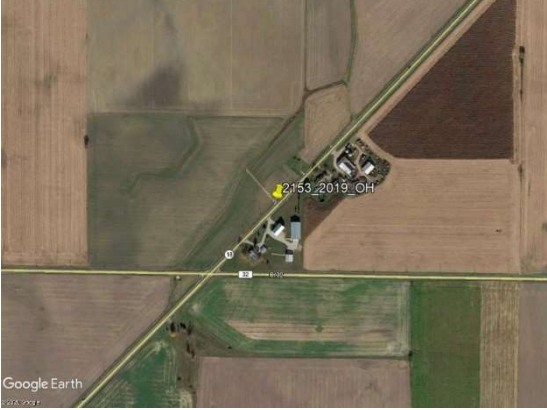




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2152_2019_OH	<b>Northing (US ft)</b> 527335.486	<b>Easting (US ft)</b> 1917163.542	<b>Elevation (US ft)</b> 835.532	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°06'50.23379"	<b>Longitude (Global)</b> W82°41'10.72221"	<b>Ellipsoid Height (US ft)</b> 721.568	
Location Photo    NORTH				
 <p>2152_2019_OH, 3N, 20200127</p>		 <p>2152_2019_OH, 3W, 20200127</p>		


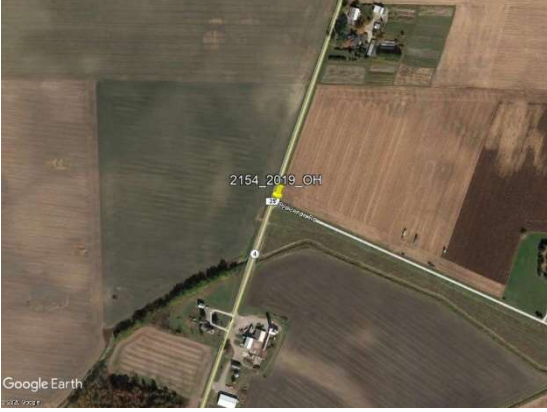




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2153_2019_OH	<b>Northing (US ft)</b> 563779.175	<b>Easting (US ft)</b> 1850673.251	<b>Elevation (US ft)</b> 810.858	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°12'48.01469"	<b>Longitude (Global)</b> W82°55'41.76068"	<b>Ellipsoid Height (US ft)</b> 695.560	
<b>Location Photo</b>    NORTH				
 <p>2153_2019_OH, 3N, 20200129</p>	 <p>2153_2019_OH, 3W, 20200129</p>			




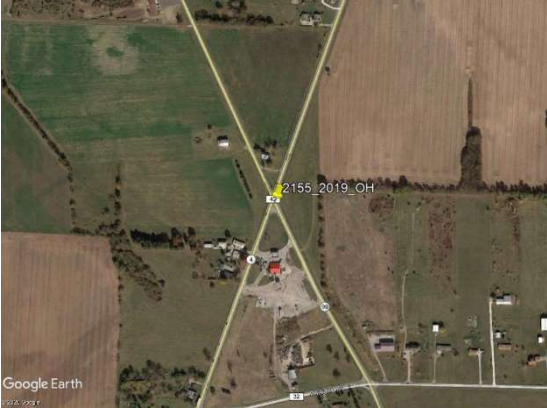

# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2154_2019_OH	<b>Northing (US ft)</b> 572141.734	<b>Easting (US ft)</b> 1883864.664	<b>Elevation (US ft)</b> 789.404	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°14'12.02659"	<b>Longitude (Global)</b> W82°48'27.84211"	<b>Ellipsoid Height (US ft)</b> 674.241	
Location Photo    NORTH				
 <p>2154_2019_OH, 3N, 20200127</p>		 <p>2154_2019_OH, 3W, 20200127</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2155_2019_OH	<b>Northing (US ft)</b> 614157.848	<b>Easting (US ft)</b> 1898868.112	<b>Elevation (US ft)</b> 716.489	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°21'07.64774"	<b>Longitude (Global)</b> W82°45'13.05366"	<b>Ellipsoid Height (US ft)</b> 600.827	
Location Photo    NORTH				
 <p>2155_2019_OH, 3N, 20200128</p>		 <p>2155_2019_OH, 3W, 20200128</p>		




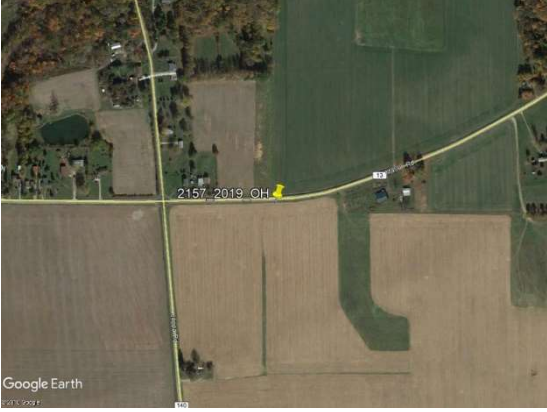




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2156_2019_OH	<b>Northing (US ft)</b> 635447.124	<b>Easting (US ft)</b> 1889313.010	<b>Elevation (US ft)</b> 622.403	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°24'37.70027"	<b>Longitude (Global)</b> W82°47'19.26885"	<b>Ellipsoid Height (US ft)</b> 506.322	
Location Photo    NORTH				
 <p>2156_2019_OH, 3S, 20200128</p>		 <p>2156_2019_OH, 3W, 20200128</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2157_2019_OH	<b>Northing (US ft)</b> 611956.074	<b>Easting (US ft)</b> 1989978.177	<b>Elevation (US ft)</b> 758.799	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°20'46.79829"	<b>Longitude (Global)</b> W82°25'18.39087"	<b>Ellipsoid Height (US ft)</b> 644.445	
Location Photo    NORTH				
 <p>2157_2019_OH, 3N, 20191119</p>		 <p>2157_2019_OH, 3E, 20191119</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2158_2019_OH	<b>Northing (US ft)</b> 632991.094	<b>Easting (US ft)</b> 2019295.165	<b>Elevation (US ft)</b> 658.287	
<b>Point Type</b> CORNER OF PAINT	<b>Latitude (Global)</b> N41°24'14.19596"	<b>Longitude (Global)</b> W82°18'53.41920"	<b>Ellipsoid Height (US ft)</b> 544.047	
Location Photo    NORTH				
 <p>2158_2019_OH, 3N, 20191119</p>		 <p>2158_2019_OH, 3E, 20191119</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2159_2019_OH	<b>Northing (US ft)</b> 368186.808	<b>Easting (US ft)</b> 1344508.095	<b>Elevation (US ft)</b> 824.779	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°39'18.66031"	<b>Longitude (Global)</b> W84°44'57.17330"	<b>Ellipsoid Height (US ft)</b> 714.974	
Location Photo    NORTH				
 <p>2159_2019_OH, 3N, 20191211</p>		 <p>2159_2019_OH, 3W, 20191211</p>		






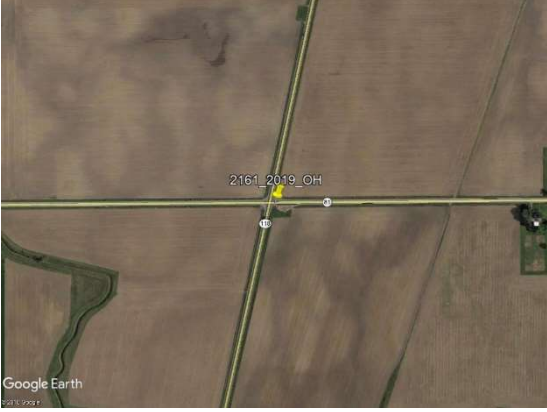


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2160_2019_OH	<b>Northing (US ft)</b> 370109.855	<b>Easting (US ft)</b> 1396758.780	<b>Elevation (US ft)</b> 818.078	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°39'50.41468"	<b>Longitude (Global)</b> W84°33'40.00066"	<b>Ellipsoid Height (US ft)</b> 707.841	
<b>Location Photo</b>    NORTH				
 <p>2160_2019_OH, 3N, 20191126</p>		 <p>2160_2019_OH, 3E, 20191126</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2161_2019_OH	<b>Northing (US ft)</b> 399044.221	<b>Easting (US ft)</b> 1378288.502	<b>Elevation (US ft)</b> 831.289	
<b>Point Type</b> CORNE OF STOP BAR	<b>Latitude (Global)</b> N40°44'31.86304"	<b>Longitude (Global)</b> W84°37'48.78230"	<b>Ellipsoid Height (US ft)</b> 721.153	
<b>Location Photo</b>    NORTH				
 <p>2161_2019_OH, 3S, 20191162</p>		 <p>2161_2019_OH, 3W, 20191162</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2162_2019_OH	<b>Northing (US ft)</b> 402894.915	<b>Easting (US ft)</b> 1337783.020	<b>Elevation (US ft)</b> 797.771	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°44'59.79027"	<b>Longitude (Global)</b> W84°46'36.15575"	<b>Ellipsoid Height (US ft)</b> 687.907	
Location Photo    NORTH				
 <p>2162_2019_OH, 3N, 20191211</p>		 <p>2162_2019_OH, 3W, 20191211</p>		


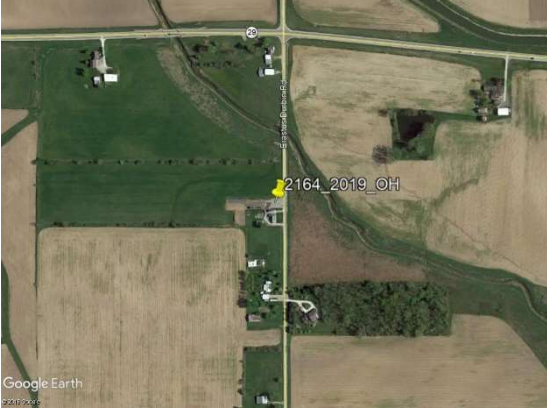




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2163_2019_OH	<b>Northing (US ft)</b> 423699.540	<b>Easting (US ft)</b> 1352026.766	<b>Elevation (US ft)</b> 820.784	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°48'28.93618"	<b>Longitude (Global)</b> W84°43'38.04251"	<b>Ellipsoid Height (US ft)</b> 710.890	
Location Photo    NORTH				
 <p>2163_2019_OH, 3S, 20191211</p>		 <p>2163_2019_OH, 3E, 20191211</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2164_2019_OH	<b>Northing (US ft)</b> 327064.611	<b>Easting (US ft)</b> 1354832.570		<b>Elevation (US ft)</b> 854.718
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°32'35.04727"	<b>Longitude (Global)</b> W84°42'29.74829"		<b>Ellipsoid Height (US ft)</b> 745.100
Location Photo    NORTH				
 <p>2164_2019_OH, 3N, 20191212</p>		 <p>2164_2019_OH, 3W, 20191212</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2165_2019_OH	<b>Northing (US ft)</b> 351079.174	<b>Easting (US ft)</b> 1392980.801	<b>Elevation (US ft)</b> 836.753	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°36'41.52969"	<b>Longitude (Global)</b> W84°34'23.14292"	<b>Ellipsoid Height (US ft)</b> 726.731	
<b>Location Photo</b>    NORTH				
 <p>2165_2019_OH, 3N, 20191126</p>	 <p>2165_2019_OH, 3W, 20191126</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2166_2019_OH	<b>Northing (US ft)</b> 360700.020	<b>Easting (US ft)</b> 1443489.716	<b>Elevation (US ft)</b> 830.907	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°38'27.91886"	<b>Longitude (Global)</b> W84°23'31.08126"	<b>Ellipsoid Height (US ft)</b> 719.883	
Location Photo    NORTH				
 <p>2166_2019_OH, 3N, 20191105</p>	 <p>2166_2019_OH, 3E, 20191105</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2167_2019_OH	<b>Northing (US ft)</b> 412798.769	<b>Easting (US ft)</b> 1426923.488	<b>Elevation (US ft)</b> 805.926	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°46'58.99821"	<b>Longitude (Global)</b> W84°27'21.08279"	<b>Ellipsoid Height (US ft)</b> 694.334	
<b>Location Photo</b>    NORTH				
 <p>2167_2019_OH, 3N, 20191211</p>		 <p>2167_2019_OH, 3E, 20191211</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2168_2019_OH	<b>Northing (US ft)</b> 472910.751	<b>Easting (US ft)</b> 1406551.134	<b>Elevation (US ft)</b> 746.721	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°56'48.22832"	<b>Longitude (Global)</b> W84°32'04.07873"	<b>Ellipsoid Height (US ft)</b> 635.117	
<b>Location Photo</b>    NORTH				
 <p>2168_2019_OH, 3N, 20191211</p>		 <p>2168_2019_OH, 3E, 20191211</p>		




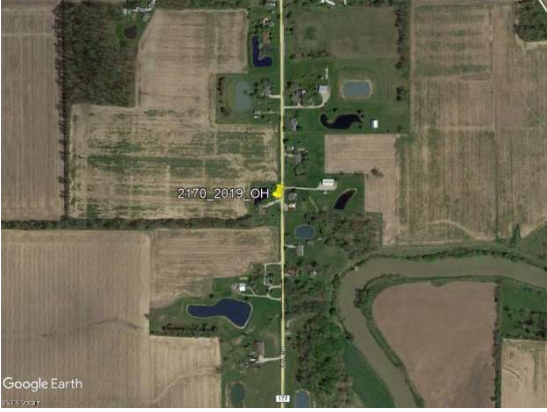


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2169_2019_OH	<b>Northing (US ft)</b> 510286.954	<b>Easting (US ft)</b> 1380872.533	<b>Elevation (US ft)</b> 740.567	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°02'51.38739"	<b>Longitude (Global)</b> W84°37'50.52565"	<b>Ellipsoid Height (US ft)</b> 629.796	
<b>Location Photo</b>    NORTH				
 <p>2169_2019_OH, 3N, 20191210</p>		 <p>2169_2019_OH, 3E, 20191210</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2170_2019_OH	<b>Northing (US ft)</b> 522658.109	<b>Easting (US ft)</b> 1439549.971	<b>Elevation (US ft)</b> 715.049	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°05'07.05520"	<b>Longitude (Global)</b> W84°25'08.40003"	<b>Ellipsoid Height (US ft)</b> 602.491	
<b>Location Photo</b>   NORTH				
 <p>2170_2019_OH, 3N, 20191209</p>		 <p>2170_2019_OH, 3W, 20191209</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2171_2019_OH	<b>Northing (US ft)</b> 562555.202	<b>Easting (US ft)</b> 1432501.639	<b>Elevation (US ft)</b> 698.742	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°11'39.63688"	<b>Longitude (Global)</b> W84°26'52.06055"	<b>Ellipsoid Height (US ft)</b> 586.257	
<b>Location Photo</b>    NORTH				
 <p>2171_2019_OH, 3N, 20191206</p>	 <p>2171_2019_OH, 3E, 20191206</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2172_2019_OH	<b>Northing (US ft)</b> 561407.613	<b>Easting (US ft)</b> 1428906.166	<b>Elevation (US ft)</b> 710.938	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°11'27.50455"	<b>Longitude (Global)</b> W84°27'38.74414"	<b>Ellipsoid Height (US ft)</b> 598.576	
<b>Location Photo</b>    NORTH				
 <p>2172_2019_OH, 3N, 20191206</p>		 <p>2172_2019_OH, 3E, 20191206</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2173_2019_OH	<b>Northing (US ft)</b> 596156.049	<b>Easting (US ft)</b> 1404226.327	<b>Elevation (US ft)</b> 710.405	
<b>Point Type</b> CENTER OF RR X	<b>Latitude (Global)</b> N41°17'05.14378"	<b>Longitude (Global)</b> W84°33'12.17938"	<b>Ellipsoid Height (US ft)</b> 598.700	
<b>Location Photo</b>    NORTH				
 <p>2173_2019_OH, 3N, 20191209</p>	 <p>2173_2019_OH, 3E, 20191209</p>			




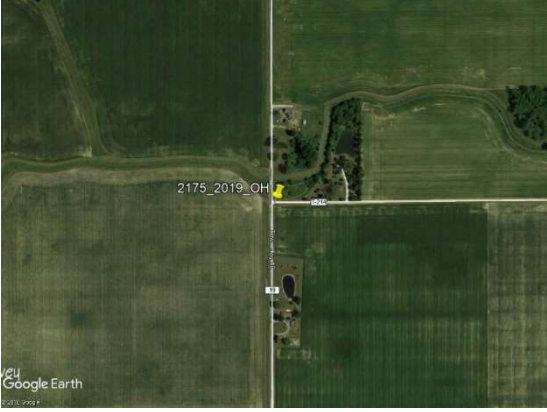




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2174_2019_OH	<b>Northing (US ft)</b> 581604.553	<b>Easting (US ft)</b> 1348192.385	<b>Elevation (US ft)</b> 735.894	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°14'27.73185"	<b>Longitude (Global)</b> W84°45'21.00096"	<b>Ellipsoid Height (US ft)</b> 625.771	
<b>Location Photo</b>    NORTH				
 <p>2174_2019_OH, 3N, 20191206</p>	 <p>2174_2019_OH, 3W, 20191206</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2175_2019_OH	<b>Northing (US ft)</b> 572375.035	<b>Easting (US ft)</b> 1342512.610	<b>Elevation (US ft)</b> 732.417	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°12'55.10986"	<b>Longitude (Global)</b> W84°46'32.17434"	<b>Ellipsoid Height (US ft)</b> 622.468	
<b>Location Photo</b>   NORTH				
 <p>2175_2019_OH, 3N, 20191206</p>	 <p>2175_2019_OH, 3W, 20191206</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2176_2019_OH	<b>Northing (US ft)</b> 306913.857	<b>Easting (US ft)</b> 1504670.671	<b>Elevation (US ft)</b> 1015.600	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°29'48.87338"	<b>Longitude (Global)</b> W84°10'04.23082"	<b>Ellipsoid Height (US ft)</b> 905.058	
<b>Location Photo</b>    NORTH				
 <p>2176_2019_OH, 3N, 20191031</p>		 <p>2176_2019_OH, 3E, 20191031</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2177_2019_OH	<b>Northing (US ft)</b> 302037.154	<b>Easting (US ft)</b> 1479047.312	<b>Elevation (US ft)</b> 927.716	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°28'55.71811"	<b>Longitude (Global)</b> W84°15'34.56186"	<b>Ellipsoid Height (US ft)</b> 817.546	
<b>Location Photo</b>    NORTH				
 <p>2177_2019_OH, 3N, 20191125</p>		 <p>2177_2019_OH, 3W, 20191125</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2178_2019_OH	<b>Northing (US ft)</b> 339142.660	<b>Easting (US ft)</b> 1497374.782	<b>Elevation (US ft)</b> 921.701	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°35'05.89593"	<b>Longitude (Global)</b> W84°11'46.76537"	<b>Ellipsoid Height (US ft)</b> 810.263	
<b>Location Photo</b>   NORTH				
 <p>2178_2019_OH, 3N, 20191101</p>		 <p>2178_2019_OH, 3E, 20191101</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2179_2019_OH	<b>Northing (US ft)</b> 354738.775	<b>Easting (US ft)</b> 1527441.741	<b>Elevation (US ft)</b> 911.644	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°37'45.57879"	<b>Longitude (Global)</b> W84°05'20.80705"	<b>Ellipsoid Height (US ft)</b> 799.238	
Location Photo    NORTH				
 <p>2179_2019_OH, 3N, 20191101</p>		 <p>2179_2019_OH, 3E, 20191101</p>		






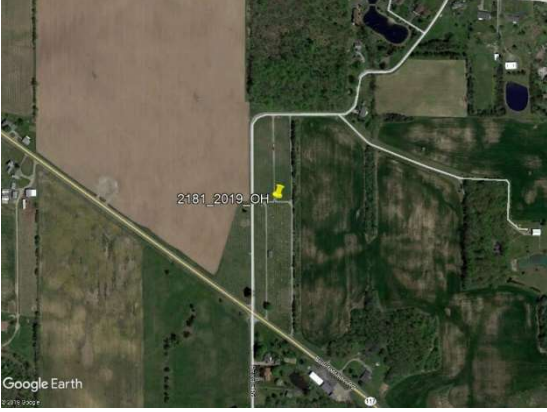


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2180_2019_OH	<b>Northing (US ft)</b> 348562.115	<b>Easting (US ft)</b> 1559587.450	<b>Elevation (US ft)</b> 1067.416	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°36'50.12897"	<b>Longitude (Global)</b> W83°58'22.58621"	<b>Ellipsoid Height (US ft)</b> 954.591	
<b>Location Photo</b>    NORTH				
 <p>2180_2019_OH, 3N, 20191101</p>		 <p>2180_2019_OH, 3E, 20191101</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2181_2019_OH	<b>Northing (US ft)</b> 372281.750	<b>Easting (US ft)</b> 1563327.379	<b>Elevation (US ft)</b> 983.745	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°40'45.10460"	<b>Longitude (Global)</b> W83°57'39.24943"	<b>Ellipsoid Height (US ft)</b> 870.153	
<b>Location Photo</b>    NORTH				
 <p>2181_2019_OH, 3N, 20191220</p>		 <p>2181_2019_OH, 3W, 20191220</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2182_2019_OH	<b>Northing (US ft)</b> 379974.383	<b>Easting (US ft)</b> 1632677.297	<b>Elevation (US ft)</b> 1027.519	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°42'11.60870"	<b>Longitude (Global)</b> W83°42'40.58322"	<b>Ellipsoid Height (US ft)</b> 912.573	
<b>Location Photo</b>    NORTH				
 <p>2182_2019_OH_3S, 20200121</p>	 <p>2182_2019_OH_3E, 20200121</p>			


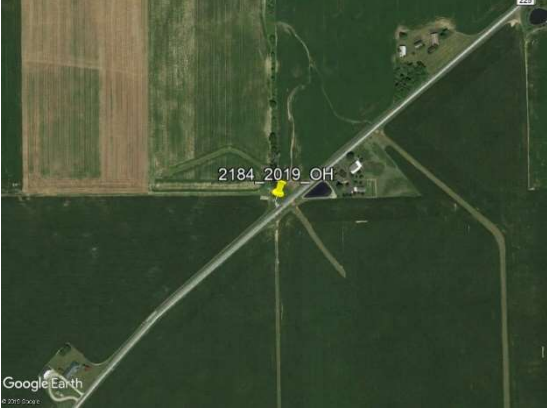




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2183_2019_OH	<b>Northing (US ft)</b> 338165.001	<b>Easting (US ft)</b> 1641980.713	<b>Elevation (US ft)</b> 1088.746	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°35'19.76309"	<b>Longitude (Global)</b> W83°40'32.47745"	<b>Ellipsoid Height (US ft)</b> 974.764	
Location Photo    NORTH				
 <p>2183_2019_OH, 3N, 20200122</p>	 <p>2183_2019_OH, 3W, 20200122</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2184_2019_OH	<b>Northing (US ft)</b> 354502.907	<b>Easting (US ft)</b> 1696039.201	<b>Elevation (US ft)</b> 975.770	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°38'07.80204"	<b>Longitude (Global)</b> W83°28'54.19785"	<b>Ellipsoid Height (US ft)</b> 861.448	
Location Photo    NORTH				
 <p>2184_2019_OH, 3S, 20200122</p>		 <p>2184_2019_OH, 3E, 20200122</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2185_2019_OH	<b>Northing (US ft)</b> 357383.503	<b>Easting (US ft)</b> 1745210.305	<b>Elevation (US ft)</b> 892.164	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°38'41.24140"	<b>Longitude (Global)</b> W83°18'16.76472"	<b>Ellipsoid Height (US ft)</b> 778.008	
Location Photo    NORTH				
 <p>2185_2019_OH, 3N, 20200122</p>		 <p>2185_2019_OH, 3E, 20200122</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2186_2019_OH	<b>Northing (US ft)</b> 345657.115	<b>Easting (US ft)</b> 1773431.377	<b>Elevation (US ft)</b> 931.342	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°36'47.78023"	<b>Longitude (Global)</b> W83°12'09.44072"	<b>Ellipsoid Height (US ft)</b> 817.766	
<b>Location Photo</b>    NORTH				
 <p>2186_2019_OH, 3S, 20200122</p>		 <p>2186_2019_OH, 3W, 20200122</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2187_2019_OH	<b>Northing (US ft)</b> 378008.529	<b>Easting (US ft)</b> 1828703.866	<b>Elevation (US ft)</b> 998.644	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°42'11.23419"	<b>Longitude (Global)</b> W83°00'15.17067"	<b>Ellipsoid Height (US ft)</b> 885.468	
Location Photo    NORTH				
 <p>2187_2019_OH, 3N, 20200123</p>	 <p>2187_2019_OH, 3W, 20200123</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2188_2019_OH	<b>Northing (US ft)</b> 418961.644	<b>Easting (US ft)</b> 1799102.307	<b>Elevation (US ft)</b> 944.517	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°48'54.03226"	<b>Longitude (Global)</b> W83°06'43.24944"	<b>Ellipsoid Height (US ft)</b> 830.256	
Location Photo    NORTH				
 <p>2188_2019_OH, 3S, 20200123</p>		 <p>2188_2019_OH, 3E, 20200123</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2189_2019_OH	<b>Northing (US ft)</b> 452572.948	<b>Easting (US ft)</b> 1825669.467	<b>Elevation (US ft)</b> 993.936	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°54'27.85095"	<b>Longitude (Global)</b> W83°01'00.30606"	<b>Ellipsoid Height (US ft)</b> 879.660	
<b>Location Photo</b>    NORTH				
 <p>2189_2019_OH, 3N, 20200124</p>		 <p>2189_2019_OH, 3E, 20200124</p>		






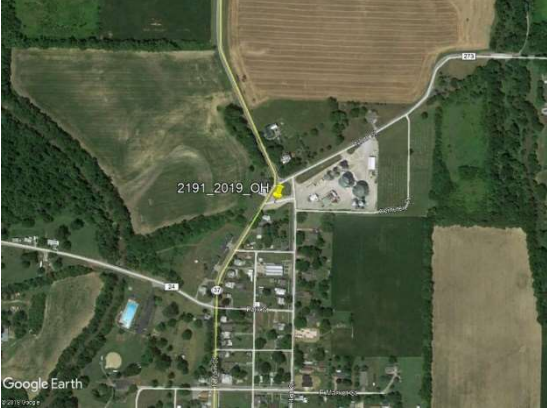


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2190_2019_OH	<b>Northing (US ft)</b> 492073.146	<b>Easting (US ft)</b> 1613487.319	<b>Elevation (US ft)</b> 771.024	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°00'36.47230"	<b>Longitude (Global)</b> W83°47'11.19446"	<b>Ellipsoid Height (US ft)</b> 654.586	
Location Photo    NORTH				
 <p>2190_2019_OH, 3N, 20191217</p>		 <p>2190_2019_OH, 3E, 20191217</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2191_2019_OH	<b>Northing (US ft)</b> 452321.569	<b>Easting (US ft)</b> 1676791.939	<b>Elevation (US ft)</b> 838.619	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°54'12.10850"	<b>Longitude (Global)</b> W83°33'19.19104"	<b>Ellipsoid Height (US ft)</b> 722.897	
<b>Location Photo</b>   NORTH				
 <p>2191_2019_OH, 3N, 20191218</p>		 <p>2191_2019_OH, 3W, 20191218</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2192_2019_OH	<b>Northing (US ft)</b> 412433.184	<b>Easting (US ft)</b> 1685350.232	<b>Elevation (US ft)</b> 930.572	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°47'38.99025"	<b>Longitude (Global)</b> W83°31'21.64723"	<b>Ellipsoid Height (US ft)</b> 815.356	
Location Photo    NORTH				
 <p>2192_2019_OH, 3N, 20200122</p>		 <p>2192_2019_OH, 3E, 20200122</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2193_2019_OH	<b>Northing (US ft)</b> 281539.216	<b>Easting (US ft)</b> 1374621.530	<b>Elevation (US ft)</b> 962.623	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°25'10.18910"	<b>Longitude (Global)</b> W84°37'59.07527"	<b>Ellipsoid Height (US ft)</b> 853.160	
<b>Location Photo</b>    NORTH				
 <p>2193_2019_OH, 3N, 20191212</p>	 <p>2193_2019_OH, 3W, 20191212</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2194_2019_OH	<b>Northing (US ft)</b> 509618.854	<b>Easting (US ft)</b> 1640790.945	<b>Elevation (US ft)</b> 771.163	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°03'33.65464"	<b>Longitude (Global)</b> W83°41'18.17899"	<b>Ellipsoid Height (US ft)</b> 654.830	
Location Photo    NORTH				
 <p>2194_2019_OH, 3S, 20191217</p>		 <p>2194_2019_OH, 3W, 20191217</p>		




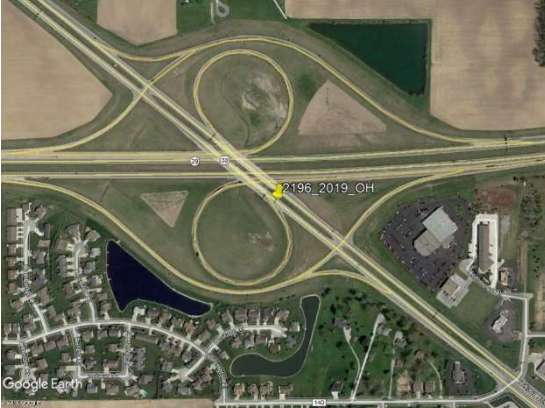


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2195_2019_OH	<b>Northing (US ft)</b> 307486.619	<b>Easting (US ft)</b> 1376581.141	<b>Elevation (US ft)</b> 901.261	
<b>Point Type</b> CENTER OF STRIPE	<b>Latitude (Global)</b> N40°29'26.98753"	<b>Longitude (Global)</b> W84°37'41.93268"	<b>Ellipsoid Height (US ft)</b> 791.607	
<b>Location Photo</b>   NORTH				
 <p>2195_2019_OH, 3N, 20191212</p>		 <p>2195_2019_OH, 3W, 20191212</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2196_2019_OH	<b>Northing (US ft)</b> 330098.063	<b>Easting (US ft)</b> 1436582.882	<b>Elevation (US ft)</b> 912.389	
<b>Point Type</b> END OF STRIPE	<b>Latitude (Global)</b> N40°33'24.10570"	<b>Longitude (Global)</b> W84°24'51.94342"	<b>Ellipsoid Height (US ft)</b> 802.033	
Location Photo    NORTH				
 <p>2196_2019_OH, 3SE, 20191125</p>		 <p>2196_2019_OH, 3NE, 20191125</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2197_2019_OH	<b>Northing (US ft)</b> 336697.210	<b>Easting (US ft)</b> 1502135.466	<b>Elevation (US ft)</b> 888.790	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°34'42.64577"	<b>Longitude (Global)</b> W84°10'44.46214"	<b>Ellipsoid Height (US ft)</b> 777.345	
<b>Location Photo</b>    NORTH				
 <p>2197_2019_OH, 3N, 20191101</p>		 <p>2197_2019_OH, 3E, 20191101</p>		

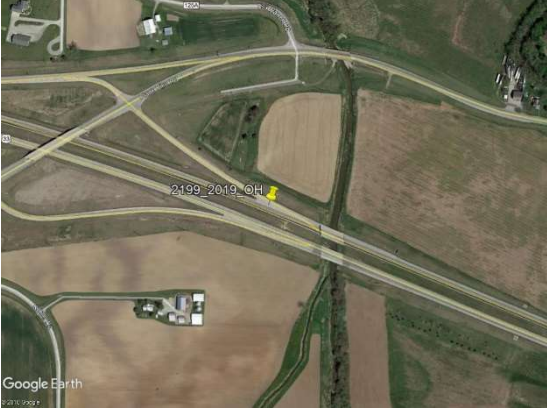




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2198_2019_OH	<b>Northing (US ft)</b> 496941.209	<b>Easting (US ft)</b> 1541537.162	<b>Elevation (US ft)</b> 729.358	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°01'13.01828"	<b>Longitude (Global)</b> W84°02'50.74151"	<b>Ellipsoid Height (US ft)</b> 613.555	
<b>Location Photo</b>   NORTH				
 <p>2198_2019_OH, 3S, 20191219</p>		 <p>2198_2019_OH, 3W, 20191219</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2199_2019_OH	<b>Northing (US ft)</b> 331593.657	<b>Easting (US ft)</b> 1488600.449	<b>Elevation (US ft)</b> 877.884	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°33'49.61239"	<b>Longitude (Global)</b> W84°13'38.53178"	<b>Ellipsoid Height (US ft)</b> 766.771	
<b>Location Photo</b>   NORTH				
 <p>2199_2019_OH, 3N, 20191031</p>		 <p>2199_2019_OH, 3E, 20191031</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2200_2019_OH	<b>Northing (US ft)</b> 330235.603	<b>Easting (US ft)</b> 1500516.006	<b>Elevation (US ft)</b> 904.749	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°33'38.49809"	<b>Longitude (Global)</b> W84°11'03.82920"	<b>Ellipsoid Height (US ft)</b> 793.512	
Location Photo    NORTH				
 <p>2200_2019_OH, 3N, 20191031</p>		 <p>2200_2019_OH, 3E, 20191031</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2201_2019_OH	<b>Northing (US ft)</b> 428493.171	<b>Easting (US ft)</b> 1560156.004	<b>Elevation (US ft)</b> 857.184	
<b>Point Type</b> CENTER OF RR X	<b>Latitude (Global)</b> N40°49'59.95140"	<b>Longitude (Global)</b> W83°58'32.75199"	<b>Ellipsoid Height (US ft)</b> 742.227	
<b>Location Photo</b>   NORTH				
 <p>2201_2019_OH, 3S, 20200121</p>		 <p>2201_2019_OH, 3W, 20200121</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2202_2019_OH	<b>Northing (US ft)</b> 430933.498	<b>Easting (US ft)</b> 1456346.378	<b>Elevation (US ft)</b> 773.226	
<b>Point Type</b> CENTERLINE OF STRIPE	<b>Latitude (Global)</b> N40°50'04.49793"	<b>Longitude (Global)</b> W84°21'03.67453"	<b>Ellipsoid Height (US ft)</b> 660.537	
Location Photo    NORTH				
 <p>2202_2019_OH, 3S, 20191211</p>		 <p>2202_2019_OH, 3E, 20191211</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2203_2019_OH	<b>Northing (US ft)</b> 413050.429	<b>Easting (US ft)</b> 1499288.886	<b>Elevation (US ft)</b> 803.908	
<b>Point Type</b> CORNER OF PAINT STRIPE	<b>Latitude (Global)</b> N40°47'16.44849"	<b>Longitude (Global)</b> W84°11'40.57262"	<b>Ellipsoid Height (US ft)</b> 690.617	
Location Photo    NORTH				
 <p>2203_2019_OH, 3S, 20191220</p>		 <p>2203_2019_OH, 3E, 20191220</p>		




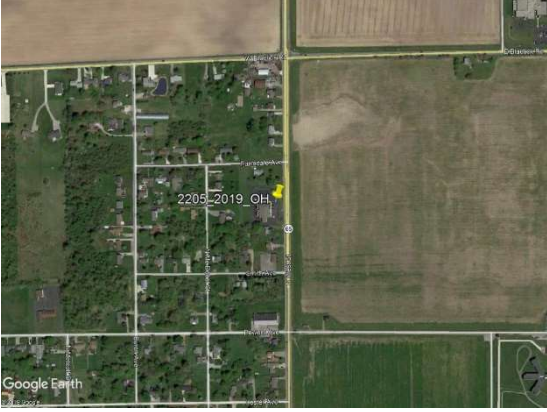




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2204_2019_OH	<b>Northing (US ft)</b> 280908.356	<b>Easting (US ft)</b> 1333888.988	<b>Elevation (US ft)</b> 932.689	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N40°24'53.77666"	<b>Longitude (Global)</b> W84°46'45.31735"	<b>Ellipsoid Height (US ft)</b> 823.164	
Location Photo    NORTH				
 <p>2204_2019_OH, 3N, 20191212</p>		 <p>2204_2019_OH, 3E, 20191212</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2205_2019_OH	<b>Northing (US ft)</b> 411841.428	<b>Easting (US ft)</b> 1522956.093	<b>Elevation (US ft)</b> 842.375	
<b>Point Type</b> CORNER OF PAINT STRIPE	<b>Latitude (Global)</b> N40°47'08.93305"	<b>Longitude (Global)</b> W84°06'32.63886"	<b>Ellipsoid Height (US ft)</b> 728.599	
Location Photo    NORTH				
 <p>2205_2019_OH, 3N, 20191220</p>		 <p>2205_2019_OH, 3W, 20191220</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2206_2019_OH	<b>Northing (US ft)</b> 375824.331	<b>Easting (US ft)</b> 1517205.019	<b>Elevation (US ft)</b> 884.167	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°41'12.03642"	<b>Longitude (Global)</b> W84°07'38.65615"	<b>Ellipsoid Height (US ft)</b> 771.412	
Location Photo    NORTH				
 <p>2206_2019_OH, 3N, 20191101</p>		 <p>2206_2019_OH, 3E, 20191101</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2207_2019_OH	<b>Northing (US ft)</b> 483550.090	<b>Easting (US ft)</b> 1499882.307	<b>Elevation (US ft)</b> 728.606	
<b>Point Type</b> CORNER OF PAINT STRIPE	<b>Latitude (Global)</b> N40°58'53.06413"	<b>Longitude (Global)</b> W84°11'50.69650"	<b>Ellipsoid Height (US ft)</b> 614.039	
Location Photo    NORTH				
 <p>2207_2019_OH, 3N, 20191219</p>	 <p>2207_2019_OH, 3E, 20191219</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2208_2019_OH	<b>Northing (US ft)</b> 683908.656	<b>Easting (US ft)</b> 1471075.772	<b>Elevation (US ft)</b> 723.121	
<b>Point Type</b> END OF STRIPE	<b>Latitude (Global)</b> N41°31'46.61114"	<b>Longitude (Global)</b> W84°19'00.64263"	<b>Ellipsoid Height (US ft)</b> 609.852	
Location Photo    NORTH				
 <p>2208_2019_OH, 3S, 20191206</p>	 <p>2208_2019_OH, 3E, 20191206</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2209_2019_OH	<b>Northing (US ft)</b> 376957.462	<b>Easting (US ft)</b> 1373199.430	<b>Elevation (US ft)</b> 812.592	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°40'52.44471"	<b>Longitude (Global)</b> W84°38'47.81743"	<b>Ellipsoid Height (US ft)</b> 702.690	
Location Photo    NORTH				
 <p>2209_2019_OH, 3N, 20191126</p>		 <p>2209_2019_OH, 3E, 20191126</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2210_2019_OH	<b>Northing (US ft)</b> 706377.222	<b>Easting (US ft)</b> 1395997.160		<b>Elevation (US ft)</b> 868.532
<b>Point Type</b> CORNER OF CROSSWALK BAR	<b>Latitude (Global)</b> N41°35'11.91778"	<b>Longitude (Global)</b> W84°35'34.58770"		<b>Ellipsoid Height (US ft)</b> 757.322
Location Photo    NORTH				
 <p>2210_2019_OH, 3N, 20191108</p>	 <p>2210_2019_OH, 3E, 20191108</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2211_2019_OH	<b>Northing (US ft)</b> 665168.429	<b>Easting (US ft)</b> 1410559.748	<b>Elevation (US ft)</b> 745.652	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°28'28.29495"	<b>Longitude (Global)</b> W84°32'10.34352"	<b>Ellipsoid Height (US ft)</b> 633.984	
<b>Location Photo</b>    NORTH				
 <p>2211_2019_OH, 3N, 20191107</p>	 <p>2211_2019_OH, 3E, 20191107</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2212_2019_OH	<b>Northing (US ft)</b> 649152.081	<b>Easting (US ft)</b> 1909666.894	<b>Elevation (US ft)</b> 596.962	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°26'53.68896"	<b>Longitude (Global)</b> W82°42'52.58350"	<b>Ellipsoid Height (US ft)</b> 480.900	
Location Photo    NORTH				
 <p>2212_2019_OH, 3N, 20200128</p>		 <p>2212_2019_OH, 3E, 20200128</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2213_2019_OH	<b>Northing (US ft)</b> 620236.064	<b>Easting (US ft)</b> 2078568.230	<b>Elevation (US ft)</b> 714.152	
<b>Point Type</b> CENTER OF STRIPE	<b>Latitude (Global)</b> N41°22'06.20359"	<b>Longitude (Global)</b> W82°05'56.36124"	<b>Ellipsoid Height (US ft)</b> 601.150	
Location Photo    NORTH				
 <p>2213_2019_OH, 3S, 20191119</p>		 <p>2213_2019_OH, 3W, 20191119</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2214_2019_OH	<b>Northing (US ft)</b> 635406.923	<b>Easting (US ft)</b> 2048172.772	<b>Elevation (US ft)</b> 649.616	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°24'37.28714"	<b>Longitude (Global)</b> W82°12'34.35744"	<b>Ellipsoid Height (US ft)</b> 535.827	
<b>Location Photo</b>    NORTH				
 <p>2214_2019_OH, 3S, 20191119</p>		 <p>2214_2019_OH, 3W, 20191119</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2215_2019_OH	<b>Northing (US ft)</b> 591748.554	<b>Easting (US ft)</b> 1436183.009	<b>Elevation (US ft)</b> 709.574	
<b>Point Type</b> CENTER OF STRIPE	<b>Latitude (Global)</b> N41°16'28.82850"	<b>Longitude (Global)</b> W84°26'12.39562"	<b>Ellipsoid Height (US ft)</b> 596.824	
Location Photo    NORTH				
 <p>2215_2019_OH, 3N, 20191209</p>		 <p>2215_2019_OH, 3W, 20191209</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2216_2019_OH	<b>Northing (US ft)</b> 647232.981	<b>Easting (US ft)</b> 2060587.521	<b>Elevation (US ft)</b> 635.494	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°26'33.69095"	<b>Longitude (Global)</b> W82°09'50.82737"	<b>Ellipsoid Height (US ft)</b> 521.688	
Location Photo    NORTH				
 <p>2216_2019_OH, 3N, 20191119</p>	 <p>2216_2019_OH, 3W, 20191119</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2217_2019_OH	<b>Northing (US ft)</b> 653889.289	<b>Easting (US ft)</b> 2125993.705	<b>Elevation (US ft)</b> 699.640	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°27'36.08281"	<b>Longitude (Global)</b> W81°55'31.44296"	<b>Ellipsoid Height (US ft)</b> 586.670	
Location Photo    NORTH				
 <p>2217_2019_OH, 3S, 20191114</p>	 <p>2217_2019_OH, 3W, 20191114</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2218_2019_OH	<b>Northing (US ft)</b> 622462.937	<b>Easting (US ft)</b> 2138472.273	<b>Elevation (US ft)</b> 778.737	
<b>Point Type</b> CENTERLINE OF STRIPE	<b>Latitude (Global)</b> N41°22'24.74358"	<b>Longitude (Global)</b> W81°52'50.48295"	<b>Ellipsoid Height (US ft)</b> 666.557	
Location Photo    NORTH				
 <p>2218_2019_OH, 3N, 20191114</p>	 <p>2218_2019_OH, 3W, 20191114</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2219_2019_OH	<b>Northing (US ft)</b> 583872.524	<b>Easting (US ft)</b> 2149714.028	<b>Elevation (US ft)</b> 1195.340	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°16'02.64404"	<b>Longitude (Global)</b> W81°50'26.85684"	<b>Ellipsoid Height (US ft)</b> 1084.152	
Location Photo    NORTH				
 <p>2219_2019_OH, 3N, 20191117</p>		 <p>2219_2019_OH, 3E, 20191117</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2220_2019_OH	<b>Northing (US ft)</b> 568817.980	<b>Easting (US ft)</b> 2149651.197	<b>Elevation (US ft)</b> 1155.494	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°13'33.90272"	<b>Longitude (Global)</b> W81°50'29.16830"	<b>Ellipsoid Height (US ft)</b> 1044.617	
Location Photo    NORTH				
 <p>2220_2019_OH, 3N, 20191117</p>	 <p>2220_2019_OH, 3E, 20191117</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2221_2019_OH	<b>Northing (US ft)</b> 597935.347	<b>Easting (US ft)</b> 2154967.010		<b>Elevation (US ft)</b> 946.518
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°18'21.19186"	<b>Longitude (Global)</b> W81°49'16.63440"		<b>Ellipsoid Height (US ft)</b> 835.049
Location Photo    NORTH				
 <p>2221_2019_OH, 3N, 20191114</p>		 <p>2221_2019_OH, 3E, 20191114</p>		


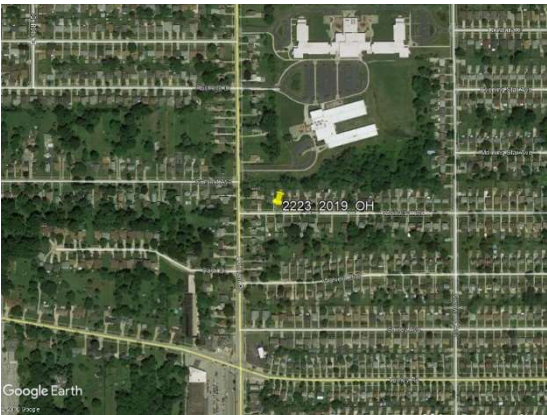




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2222_2019_OH	<b>Northing (US ft)</b> 672725.251	<b>Easting (US ft)</b> 2232142.460	<b>Elevation (US ft)</b> 999.208	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°30'32.93545"	<b>Longitude (Global)</b> W81°32'14.62172"	<b>Ellipsoid Height (US ft)</b> 886.968	
<b>Location Photo</b>    NORTH				
 <p>2222_2019_OH, 3N, 20191113</p>	 <p>2222_2019_OH, 3W, 20191113</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2223_2019_OH	<b>Northing (US ft)</b> 631215.518	<b>Easting (US ft)</b> 2222472.596	<b>Elevation (US ft)</b> 941.870	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°23'43.86822"	<b>Longitude (Global)</b> W81°34'27.50583"	<b>Ellipsoid Height (US ft)</b> 830.105	
Location Photo    NORTH				
 <p>2223_2019_OH, 3N, 20191114</p>		 <p>2223_2019_OH, 3E, 20191114</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2224_2019_OH	<b>Northing (US ft)</b> 625349.488	<b>Easting (US ft)</b> 2262389.823	<b>Elevation (US ft)</b> 1040.667	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°22'41.39885"	<b>Longitude (Global)</b> W81°25'44.72724"	<b>Ellipsoid Height (US ft)</b> 929.414	
Location Photo    NORTH				
 <p>2224_2019_OH, 3W, 20191116</p>	 <p>2224_2019_OH, 3S, 20191116</p>			



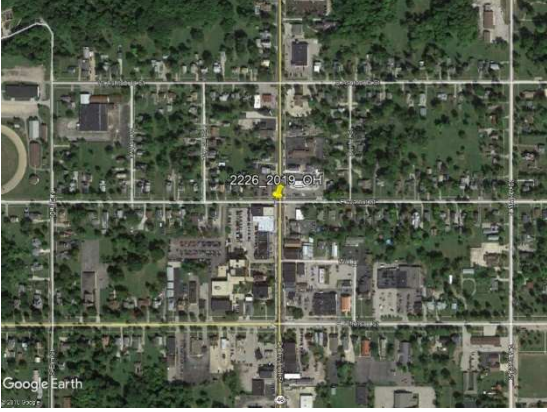
# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2225_2019_OH	<b>Northing (US ft)</b> 706286.595	<b>Easting (US ft)</b> 2235073.104	<b>Elevation (US ft)</b> 610.000	
<b>Point Type</b> CENTERLINE OF STRIPE	<b>Latitude (Global)</b> N41°36'04.17661"	<b>Longitude (Global)</b> W81°31'31.17408"	<b>Ellipsoid Height (US ft)</b> 497.134	
Location Photo    NORTH				
 <p>2225_2019_OH, 3S, 20191113</p>		 <p>2225_2019_OH, 3W, 20191113</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2226_2019_OH	<b>Northing (US ft)</b> 760209.432	<b>Easting (US ft)</b> 2440739.262		<b>Elevation (US ft)</b> 951.212
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°44'25.33964"	<b>Longitude (Global)</b> W80°46'10.52286"		<b>Ellipsoid Height (US ft)</b> 838.823
Location Photo    NORTH				
 <p>2226_2019_OH, 3N, 20191105</p>		 <p>2226_2019_OH, 3E, 20191105</p>		


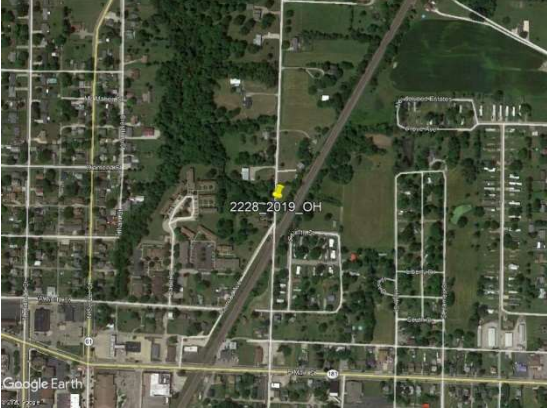




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2227_2019_OH	<b>Northing (US ft)</b> 358350.585	<b>Easting (US ft)</b> 1934881.268	<b>Elevation (US ft)</b> 1296.646	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°39'00.74555"	<b>Longitude (Global)</b> W82°37'16.16947"	<b>Ellipsoid Height (US ft)</b> 1185.611	
Location Photo    NORTH				
 <p>2227_2019_OH, 3N, 20191218</p>	 <p>2227_2019_OH, 3E, 20191218</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2228_2019_OH	<b>Northing (US ft)</b> 409506.446	<b>Easting (US ft)</b> 1904136.311	<b>Elevation (US ft)</b> 1144.687	
<b>Point Type</b> CORNER OF RR X	<b>Latitude (Global)</b> N40°47'25.62667"	<b>Longitude (Global)</b> W82°43'56.82207"	<b>Ellipsoid Height (US ft)</b> 1032.481	
<b>Location Photo</b>   NORTH				
 <p>2228_2019_OH, 3S, 20200127</p>	 <p>2228_2019_OH, 3W, 20200127</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2229_2019_OH	<b>Northing (US ft)</b> 835476.367	<b>Easting (US ft)</b> 2497957.660	<b>Elevation (US ft)</b> 659.852	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°56'36.81393"	<b>Longitude (Global)</b> W80°33'13.81887"	<b>Ellipsoid Height (US ft)</b> 546.253	
Location Photo    NORTH				
 <p>2229_2019_OH, 3S, 20191105</p>		 <p>2229_2019_OH, 3W, 20191105</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2230_2019_OH	<b>Northing (US ft)</b> 497424.268	<b>Easting (US ft)</b> 2236727.424	<b>Elevation (US ft)</b> 976.225	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°01'40.44726"	<b>Longitude (Global)</b> W81°31'40.04537"	<b>Ellipsoid Height (US ft)</b> 866.798	
<b>Location Photo</b>    NORTH				
 <p>2230_2019_OH, 3S, 20191111</p>	 <p>2230_2019_OH, 3W, 20191111</p>			




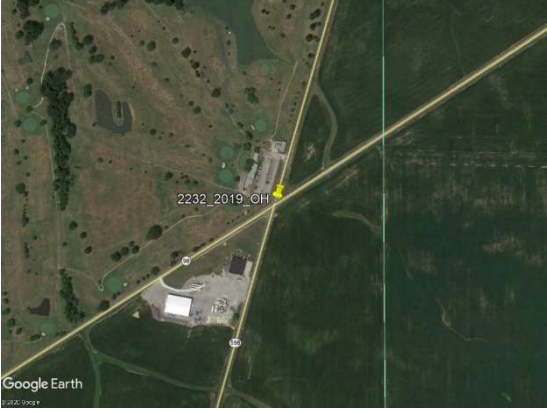




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2231_2019_OH	<b>Northing (US ft)</b> 497593.011	<b>Easting (US ft)</b> 1904974.044	<b>Elevation (US ft)</b> 946.561	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°01'56.05856"	<b>Longitude (Global)</b> W82°43'48.95407"	<b>Ellipsoid Height (US ft)</b> 832.925	
Location Photo    NORTH				
 <p>2231_2019_OH, 3N, 20191218</p>		 <p>2231_2019_OH, 3W, 20191218</p>		


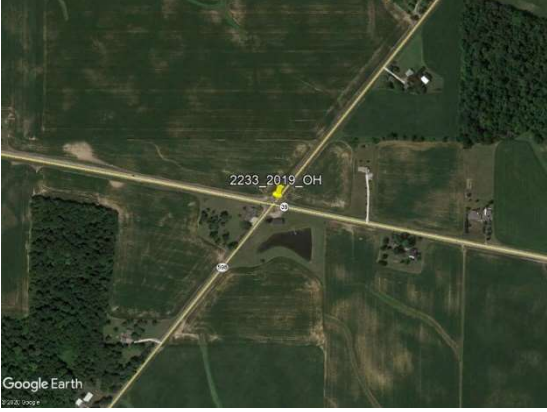



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2232_2019_OH	<b>Northing (US ft)</b> 462542.668	<b>Easting (US ft)</b> 1905879.816	<b>Elevation (US ft)</b> 1056.769	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°56'09.74222"	<b>Longitude (Global)</b> W82°43'35.94604"	<b>Ellipsoid Height (US ft)</b> 943.766	
Location Photo    NORTH				
 <p>2232_2019_OH, 3N, 20200127</p>		 <p>2232_2019_OH, 3E, 20200127</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2233_2019_OH	<b>Northing (US ft)</b> 444131.658	<b>Easting (US ft)</b> 1897310.625	<b>Elevation (US ft)</b> 1156.480	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°53'07.58237"	<b>Longitude (Global)</b> W82°45'26.89447"	<b>Ellipsoid Height (US ft)</b> 1043.611	
Location Photo    NORTH				
 <p>2233_2019_OH, 3S, 20200127</p>	 <p>2233_2019_OH, 3W, 20200127</p>			




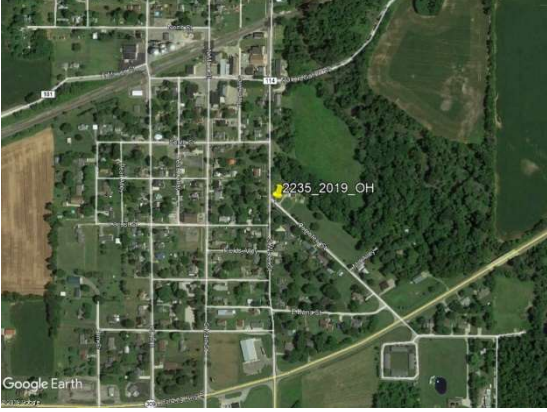


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2234_2019_OH	<b>Northing (US ft)</b> 594734.752	<b>Easting (US ft)</b> 2259756.830	<b>Elevation (US ft)</b> 1091.971	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°17'39.24908"	<b>Longitude (Global)</b> W81°26'24.14431"	<b>Ellipsoid Height (US ft)</b> 981.082	
<b>Location Photo</b>    NORTH				
 <p>2234_2019_OH, 3N, 20191116</p>	 <p>2234_2019_OH, 3W, 20191116</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2235_2019_OH	<b>Northing (US ft)</b> 352952.356	<b>Easting (US ft)</b> 1838783.001	<b>Elevation (US ft)</b> 993.538	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°38'04.19875"	<b>Longitude (Global)</b> W82°58'02.55817"	<b>Ellipsoid Height (US ft)</b> 880.863	
Location Photo    NORTH				
 <p>2235_2019_OH, 3N, 20200123</p>		 <p>2235_2019_OH, 3W, 20200123</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2236_2019_OH	<b>Northing (US ft)</b> 811617.218	<b>Easting (US ft)</b> 2445398.907	<b>Elevation (US ft)</b> 689.643	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°52'52.17709"	<b>Longitude (Global)</b> W80°44'55.45710"	<b>Ellipsoid Height (US ft)</b> 576.252	
Location Photo    NORTH				
 <p>2236_2019_OH, 3S, 20191105</p>	 <p>2236_2019_OH, 3E, 20191105</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2237_2019_OH	<b>Northing (US ft)</b> 335392.190	<b>Easting (US ft)</b> 1989664.658	<b>Elevation (US ft)</b> 1082.239	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°35'14.01969"	<b>Longitude (Global)</b> W82°25'25.66984"	<b>Ellipsoid Height (US ft)</b> 972.112	
Location Photo    NORTH				
 <p>2237_2019_OH, 3S, 20191112</p>		 <p>2237_2019_OH, 3W, 20191112</p>		




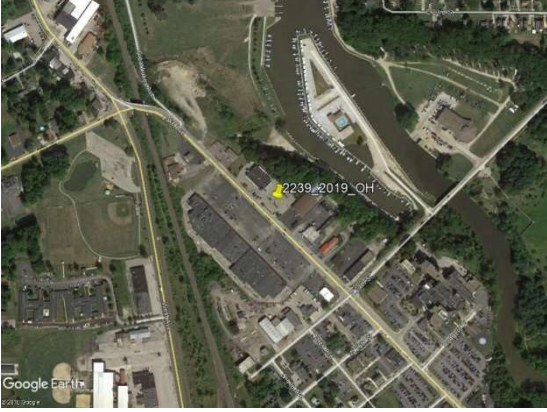


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2238_2019_OH	<b>Northing (US ft)</b> 377740.948	<b>Easting (US ft)</b> 1991462.153	<b>Elevation (US ft)</b> 1086.993	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°42'12.47549"	<b>Longitude (Global)</b> W82°25'01.85000"	<b>Ellipsoid Height (US ft)</b> 976.868	
Location Photo    NORTH				
 <p>2238_2019_OH, 3S, 20191112</p>		 <p>2238_2019_OH, 3E, 20191112</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2239_2019_OH	<b>Northing (US ft)</b> 811829.503	<b>Easting (US ft)</b> 2431853.888	<b>Elevation (US ft)</b> 633.157	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°52'56.92231"	<b>Longitude (Global)</b> W80°47'54.41969"	<b>Ellipsoid Height (US ft)</b> 519.642	
<b>Location Photo</b>   NORTH				
 <p>2239_2019_OH, 3N, 20191105</p>		 <p>2239_2019_OH, 3E, 20191105</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2240_2019_OH	<b>Northing (US ft)</b> 526556.725	<b>Easting (US ft)</b> 2258439.913	<b>Elevation (US ft)</b> 1116.865	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°06'25.79906"	<b>Longitude (Global)</b> W81°26'52.17150"	<b>Ellipsoid Height (US ft)</b> 1007.011	
Location Photo    NORTH				
 <p>2240_2019_OH, 3S, 20191110</p>		 <p>2240_2019_OH, 3W, 20191110</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2241_2019_OH	<b>Northing (US ft)</b> 378814.304	<b>Easting (US ft)</b> 2039718.285	<b>Elevation (US ft)</b> 1169.132	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°42'22.15323"	<b>Longitude (Global)</b> W82°14'35.23397"	<b>Ellipsoid Height (US ft)</b> 1059.895	
Location Photo    NORTH				
 <p>2241_2019_OH, 3S, 20191113</p>	 <p>2241_2019_OH, 3E, 20191113</p>			


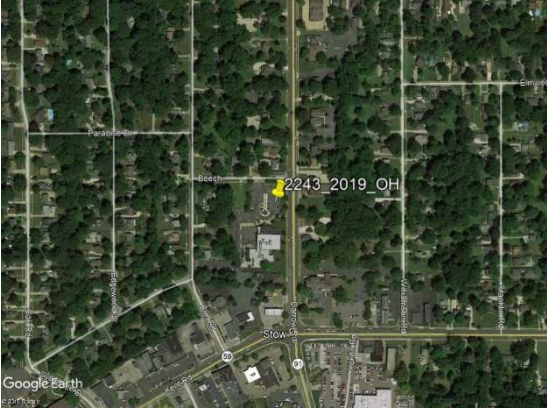




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2242_2019_OH	<b>Northing (US ft)</b> 353128.762	<b>Easting (US ft)</b> 2040800.560	<b>Elevation (US ft)</b> 944.215	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°38'08.30947"	<b>Longitude (Global)</b> W82°14'22.17698"	<b>Ellipsoid Height (US ft)</b> 834.880	
Location Photo    NORTH				
 <p>2242_2019_OH, 3N, 20191113</p>		 <p>2242_2019_OH, 3E, 20191113</p>		




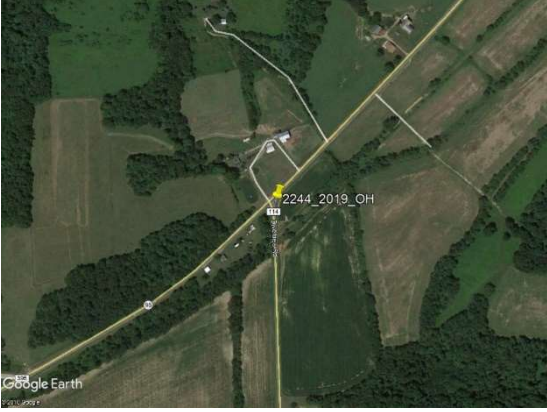


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2243_2019_OH	<b>Northing (US ft)</b> 546331.041	<b>Easting (US ft)</b> 2260156.656	<b>Elevation (US ft)</b> 1101.721	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°09'40.96923"	<b>Longitude (Global)</b> W81°26'26.60837"	<b>Ellipsoid Height (US ft)</b> 991.570	
<b>Location Photo</b>    NORTH				
 <p>2243_2019_OH, 3N, 20191111</p>	 <p>2243_2019_OH, 3W, 20191111</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2244_2019_OH	<b>Northing (US ft)</b> 328471.582	<b>Easting (US ft)</b> 1982210.934	<b>Elevation (US ft)</b> 1131.072	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°34'05.68608"	<b>Longitude (Global)</b> W82°27'02.33359"	<b>Ellipsoid Height (US ft)</b> 1020.829	
Location Photo    NORTH				
 <p>2244_2019_OH, 3N, 20191112</p>	 <p>2244_2019_OH, 3E, 20191112</p>			




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2245_2019_OH	<b>Northing (US ft)</b> 566291.865	<b>Easting (US ft)</b> 2264637.969	<b>Elevation (US ft)</b> 1128.728	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°12'57.64283"	<b>Longitude (Global)</b> W81°25'24.80034"	<b>Ellipsoid Height (US ft)</b> 1018.271	
<b>Location Photo</b>   NORTH				
 <p>2245_2019_OH, 3S, 20191111</p>		 <p>2245_2019_OH, 3W, 20191111</p>		



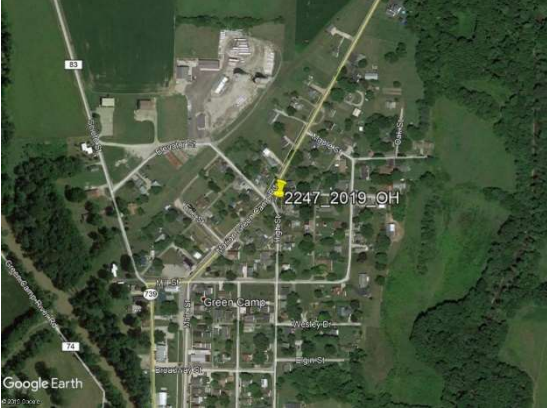




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2246_2019_OH	<b>Northing (US ft)</b> 303969.309	<b>Easting (US ft)</b> 1855969.079	<b>Elevation (US ft)</b> 1005.616	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°30'01.02315"	<b>Longitude (Global)</b> W82°54'16.69339"	<b>Ellipsoid Height (US ft)</b> 893.605	
Location Photo    NORTH				
 <p>2246_2019_OH, 3S, 20200129</p>		 <p>2246_2019_OH, 3E, 20200129</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2247_2019_OH	<b>Northing (US ft)</b> 316580.332	<b>Easting (US ft)</b> 1771397.938	<b>Elevation (US ft)</b> 914.401	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°32'00.30204"	<b>Longitude (Global)</b> W83°12'32.74161"	<b>Ellipsoid Height (US ft)</b> 801.282	
Location Photo    NORTH				
 <p>2247_2019_OH, 3N, 20200122</p>		 <p>2247_2019_OH, 3E, 20200122</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2248_2019_OH	<b>Northing (US ft)</b> 522604.390	<b>Easting (US ft)</b> 2275688.345	<b>Elevation (US ft)</b> 1131.739	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N41°05'44.63179"	<b>Longitude (Global)</b> W81°23'07.51848"	<b>Ellipsoid Height (US ft)</b> 1021.887	
<b>Location Photo</b>    NORTH				
 <p>2248_2019_OH, 3S, 20191110</p>		 <p>2248_2019_OH, 3W, 20191110</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2249_2019_OH	<b>Northing (US ft)</b> 387640.958	<b>Easting (US ft)</b> 1895105.800	<b>Elevation (US ft)</b> 1176.585	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N40°43'49.30938"	<b>Longitude (Global)</b> W82°45'53.36803"	<b>Ellipsoid Height (US ft)</b> 1064.513	
<b>Location Photo</b>    NORTH				
 <p>2249_2019_OH, 3N, 20200128</p>	 <p>2249_2019_OH, 3E, 20200128</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2250_2019_OH	<b>Northing (US ft)</b> 409799.300	<b>Easting (US ft)</b> 1836078.910	<b>Elevation (US ft)</b> 993.495	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N40°47'25.78043"	<b>Longitude (Global)</b> W82°58'41.67552"	<b>Ellipsoid Height (US ft)</b> 880.008	
<b>Location Photo</b>    NORTH				
 <p>2250_2019_OH, 3S, 20200123</p>		 <p>2250_2019_OH, 3E, 20200123</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2251_2019_OH	<b>Northing (US ft)</b> 390966.674	<b>Easting (US ft)</b> 1885122.156	<b>Elevation (US ft)</b> 1138.339	
<b>Point Type</b> CORNER OF STOP BAR	<b>Latitude (Global)</b> N40°44'21.85237"	<b>Longitude (Global)</b> W82°48'03.20056"	<b>Ellipsoid Height (US ft)</b> 1026.021	
Location Photo    NORTH				
 <p>2251_2019_OH, 3N, 20200128</p>		 <p>2251_2019_OH, 3E, 20200128</p>		


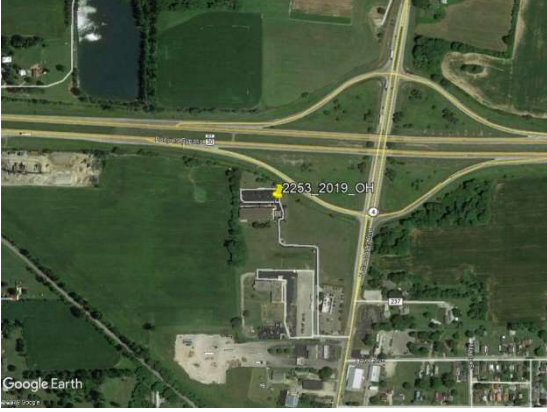




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2252_2019_OH	<b>Northing (US ft)</b> 417487.787	<b>Easting (US ft)</b> 1845161.259	<b>Elevation (US ft)</b> 1025.900	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N40°48'42.22819"	<b>Longitude (Global)</b> W82°56'44.10400"	<b>Ellipsoid Height (US ft)</b> 912.467	
Location Photo    NORTH				
 <p>2252_2019_OH, 3N, 20200127</p>		 <p>2252_2019_OH, 3E, 20200127</p>		




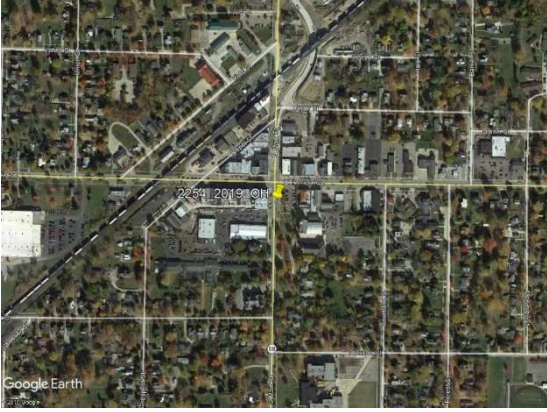


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2253_2019_OH	<b>Northing (US ft)</b> 422495.342	<b>Easting (US ft)</b> 1836894.597	<b>Elevation (US ft)</b> 1003.118	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°49'31.27802"	<b>Longitude (Global)</b> W82°58'31.97059"	<b>Ellipsoid Height (US ft)</b> 889.462	
<b>Location Photo</b>   NORTH				
 <p>2253_2019_OH, 3N, 20200124</p>		 <p>2253_2019_OH, 3W, 20200124</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2254_2019_OH	<b>Northing (US ft)</b> 547181.046	<b>Easting (US ft)</b> 2046271.846	<b>Elevation (US ft)</b> 857.412	
<b>Point Type</b> ARROW	<b>Latitude (Global)</b> N41°10'05.62461"	<b>Longitude (Global)</b> W82°13'03.05577"	<b>Ellipsoid Height (US ft)</b> 745.553	
<b>Location Photo</b>    NORTH				
 <p>2254_2019_OH, 3N, 20191120</p>	 <p>2254_2019_OH, 3E, 20191120</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2255_2019_OH	<b>Northing (US ft)</b> 677771.186	<b>Easting (US ft)</b> 1878238.959	<b>Elevation (US ft)</b> 592.923	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°31'35.47908"	<b>Longitude (Global)</b> W82°49'46.70550"	<b>Ellipsoid Height (US ft)</b> 476.343	
Location Photo    NORTH				
 <p>2255_2019_OH, 3S, 20200128</p>		 <p>2255_2019_OH, 3E, 20200128</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2256_2019_OH	<b>Northing (US ft)</b> 738830.905	<b>Easting (US ft)</b> 1711610.535	<b>Elevation (US ft)</b> 580.407	
<b>Point Type</b> CENTER OF RR X	<b>Latitude (Global)</b> N41°41'26.73281"	<b>Longitude (Global)</b> W83°26'25.99252"	<b>Ellipsoid Height (US ft)</b> 464.173	
<b>Location Photo</b>    NORTH				
 <p>2256_2019_OH, 3N, 20191112</p>	 <p>2256_2019_OH, 3W, 20191112</p>			


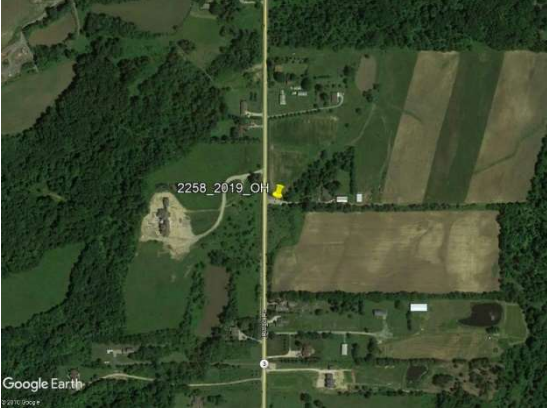




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2257_2019_OH	<b>Northing (US ft)</b> 702737.464	<b>Easting (US ft)</b> 1807429.401	<b>Elevation (US ft)</b> 582.421	
<b>Point Type</b> CORNER OF CONCRETE	<b>Latitude (Global)</b> N41°35'38.45639"	<b>Longitude (Global)</b> W83°05'19.86710"	<b>Ellipsoid Height (US ft)</b> 465.633	
Location Photo    NORTH				
 <p>2257_2019_OH, 3N, 20191112</p>		 <p>2257_2019_OH, 3E, 20191112</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2258_2019_OH	<b>Northing (US ft)</b> 584070.943	<b>Easting (US ft)</b> 2176146.296		<b>Elevation (US ft)</b> 890.929
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N41°16'02.48652"	<b>Longitude (Global)</b> W81°44'40.69877"		<b>Ellipsoid Height (US ft)</b> 779.904
Location Photo    NORTH				
 <p>2258_2019_OH, 3N, 20191114</p>		 <p>2258_2019_OH, 3E, 20191114</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2259_2019_OH	<b>Northing (US ft)</b> 661727.746	<b>Easting (US ft)</b> 2196984.859	<b>Elevation (US ft)</b> 649.471	
<b>Point Type</b> CORNER OF STRIPE	<b>Latitude (Global)</b> N41°28'47.86215"	<b>Longitude (Global)</b> W81°39'58.09317"	<b>Ellipsoid Height (US ft)</b> 536.910	
<b>Location Photo</b>    NORTH				
 <p>2259_2019_OH, 3S, 20191116</p>		 <p>2259_2019_OH, 3E, 20191116</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2260_2019_OH	<b>Northing (US ft)</b> 603133.474	<b>Easting (US ft)</b> 1457209.370	<b>Elevation (US ft)</b> 714.698	
<b>Point Type</b> BARE EARTH	<b>Latitude (Global)</b> N41°18'25.81548"	<b>Longitude (Global)</b> W84°21'40.25518"	<b>Ellipsoid Height (US ft)</b> 601.192	
Location Photo    NORTH				
 <p>2260_2019_OH, 3N, 20191206</p>		 <p>2260_2019_OH, 3E, 20191206</p>		



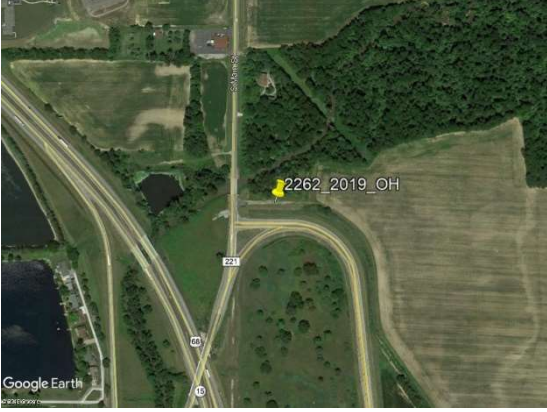


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2261_2019_OH	<b>Northing (US ft)</b> 535400.358	<b>Easting (US ft)</b> 1461091.153	<b>Elevation (US ft)</b> 719.380	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N41°07'17.52158"	<b>Longitude (Global)</b> W84°20'30.65888"	<b>Ellipsoid Height (US ft)</b> 606.061	
Location Photo    NORTH				
 <p>2261_2019_OH, 3S, 20200121</p>		 <p>2261_2019_OH, 3E, 20200121</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2262_2019_OH	<b>Northing (US ft)</b> 486525.164	<b>Easting (US ft)</b> 1651142.511	<b>Elevation (US ft)</b> 791.750	
<b>Point Type</b> GRAVEL	<b>Latitude (Global)</b> N40°59'46.85333"	<b>Longitude (Global)</b> W83°38'59.08300"	<b>Ellipsoid Height (US ft)</b> 675.555	
<b>Location Photo</b>    NORTH				
 <p>2262_2019_OH, 3S, 20200122</p>		 <p>2262_2019_OH, 3E, 20200122</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 2263_2019_OH	<b>Northing (US ft)</b> 338732.956	<b>Easting (US ft)</b> 1719640.592	<b>Elevation (US ft)</b> 929.213	
<b>Point Type</b> LIGHT ASPHALT	<b>Latitude (Global)</b> N40°35'34.48965"	<b>Longitude (Global)</b> W83°23'45.97566"	<b>Ellipsoid Height (US ft)</b> 815.221	
Location Photo    NORTH				
 <p>2263_2019_OH, 3N, 20200122</p>		 <p>2263_2019_OH, 3E, 20200122</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3001_2019_OH	<b>Northing (US ft)</b> 369517.369	<b>Easting (US ft)</b> 1900024.331		<b>Elevation (US ft)</b> 1288.418
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°40'50.36381"	<b>Longitude (Global)</b> W82°44'48.81175"		<b>Ellipsoid Height (US ft)</b> 1176.705
Location Photo    NORTH				
 <p>3001_2019_OH, 3N, 20200128</p>		 <p>3001_2019_OH, 3W, 20200128</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3002_2019_OH	<b>Northing (US ft)</b> 462843.937	<b>Easting (US ft)</b> 1768953.961	<b>Elevation (US ft)</b> 807.677	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°56'05.35876"	<b>Longitude (Global)</b> W83°13'20.07989"	<b>Ellipsoid Height (US ft)</b> 692.434	
Location Photo    NORTH				
 <p>3002_2019_OH, 3N, 20200130</p>		 <p>3002_2019_OH, 3W, 20200130</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3003_2019_OH	<b>Northing (US ft)</b> 519709.456	<b>Easting (US ft)</b> 2366254.384	<b>Elevation (US ft)</b> 1039.132	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°05'02.90910"	<b>Longitude (Global)</b> W81°03'25.36549"	<b>Ellipsoid Height (US ft)</b> 928.655	
Location Photo    NORTH				
 <p>3003_2019_OH, 3N, 20191109</p>		 <p>3003_2019_OH, 3E, 20191109</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3004_2019_OH	<b>Northing (US ft)</b> 732858.997	<b>Easting (US ft)</b> 2390850.819	<b>Elevation (US ft)</b> 974.969	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°40'04.43803"	<b>Longitude (Global)</b> W80°57'14.86730"	<b>Ellipsoid Height (US ft)</b> 862.914	
Location Photo    NORTH				
 <p>3004_2019_OH, 3N, 20191106</p>		 <p>3004_2019_OH, 3W, 20191106</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3005_2019_OH	<b>Northing (US ft)</b> 731785.621	<b>Easting (US ft)</b> 2425896.108	<b>Elevation (US ft)</b> 861.145	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°39'47.44443"	<b>Longitude (Global)</b> W80°49'33.47132"	<b>Ellipsoid Height (US ft)</b> 749.175	
Location Photo    NORTH				
 <p>3005_2019_OH, 3S, 20191107</p>		 <p>3005_2019_OH, 3W, 20191107</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3006_2019_OH	<b>Northing (US ft)</b> 708922.115	<b>Easting (US ft)</b> 2428483.933	<b>Elevation (US ft)</b> 875.702	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°36'01.11068"	<b>Longitude (Global)</b> W80°49'05.19186"	<b>Ellipsoid Height (US ft)</b> 764.102	
Location Photo    NORTH				
 <p>3006_2019_OH, 3S, 20191107</p>		 <p>3006_2019_OH, 3W, 20191107</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3007_2019_OH	<b>Northing (US ft)</b> 755654.410	<b>Easting (US ft)</b> 2479181.740	<b>Elevation (US ft)</b> 1010.155	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°43'32.50827"	<b>Longitude (Global)</b> W80°37'44.85285"	<b>Ellipsoid Height (US ft)</b> 898.133	
Location Photo    NORTH				
 <p>3007_2019_OH, 3N, 20191106</p>		 <p>3007_2019_OH, 3E, 20191106</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3008_2019_OH	<b>Northing (US ft)</b> 724760.345	<b>Easting (US ft)</b> 2437031.620	<b>Elevation (US ft)</b> 925.363	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°38'35.91379"	<b>Longitude (Global)</b> W80°47'08.60931"	<b>Ellipsoid Height (US ft)</b> 813.583	
Location Photo    NORTH				
 <p>3008_2019_OH, 3N, 20191107</p>		 <p>3008_2019_OH, 3W, 20191107</p>		




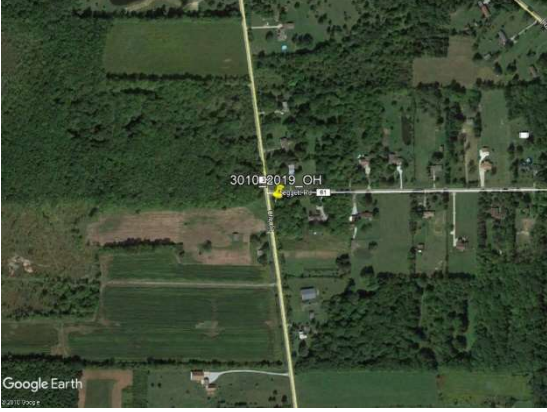


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3009_2019_OH	<b>Northing (US ft)</b> 729601.587	<b>Easting (US ft)</b> 2380306.038	<b>Elevation (US ft)</b> 1060.987	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°39'34.08449"	<b>Longitude (Global)</b> W80°59'34.52488"	<b>Ellipsoid Height (US ft)</b> 949.016	
Location Photo    NORTH				
 <p>3009_2019_OH, 3S, 20191106</p>		 <p>3009_2019_OH, 3E, 20191106</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3010_2019_OH	<b>Northing (US ft)</b> 720320.109	<b>Easting (US ft)</b> 2357359.089	<b>Elevation (US ft)</b> 1249.371	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°38'06.20753"	<b>Longitude (Global)</b> W81°04'38.78621"	<b>Ellipsoid Height (US ft)</b> 1137.613	
Location Photo    NORTH				
 <p>3010_2019_OH, 3N, 20191106</p>		 <p>3010_2019_OH, 3E, 20191106</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3011_2019_OH	<b>Northing (US ft)</b> 712254.851	<b>Easting (US ft)</b> 2339625.836	<b>Elevation (US ft)</b> 1303.864	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°36'49.32736"	<b>Longitude (Global)</b> W81°08'33.94461"	<b>Ellipsoid Height (US ft)</b> 1192.188	
Location Photo    NORTH				
 <p>3011_2019_OH, 3N, 20191106</p>		 <p>3011_2019_OH, 3W, 20191106</p>		






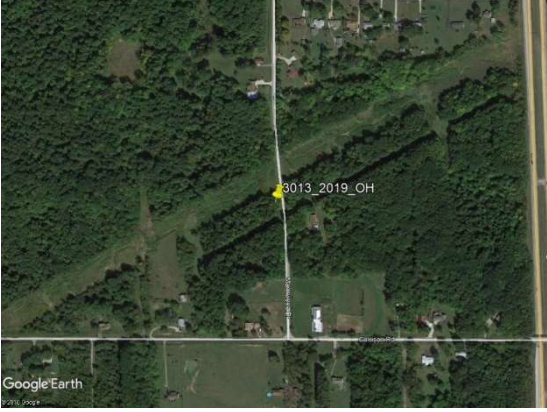


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3012_2019_OH	<b>Northing (US ft)</b> 766562.235	<b>Easting (US ft)</b> 2386888.683	<b>Elevation (US ft)</b> 842.056	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°45'38.04384"	<b>Longitude (Global)</b> W80°57'59.25595"	<b>Ellipsoid Height (US ft)</b> 729.261	
Location Photo    NORTH				
 <p>3012_2019_OH, 3S, 20191115</p>		 <p>3012_2019_OH, 3W, 20191115</p>		




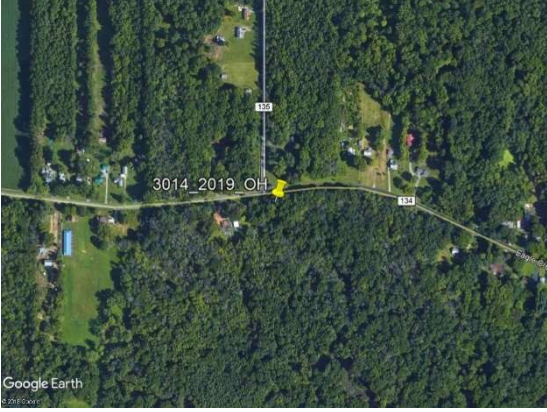




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3013_2019_OH	<b>Northing (US ft)</b> 794848.398	<b>Easting (US ft)</b> 2439474.226		<b>Elevation (US ft)</b> 825.747
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°50'07.72158"	<b>Longitude (Global)</b> W80°46'18.15237"		<b>Ellipsoid Height (US ft)</b> 712.672
Location Photo    NORTH				
 <p>3013_2019_OH, 3N, 20191105</p>		 <p>3013_2019_OH, 3W, 20191105</p>		




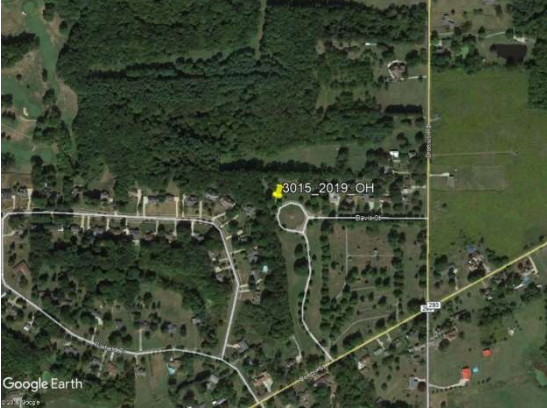


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3014_2019_OH	<b>Northing (US ft)</b> 584181.185	<b>Easting (US ft)</b> 2406806.235	<b>Elevation (US ft)</b> 891.525	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°15'32.87562"	<b>Longitude (Global)</b> W80°54'20.48420"	<b>Ellipsoid Height (US ft)</b> 780.553	
Location Photo    NORTH				
 <p>3014_2019_OH, 3N, 20191108</p>		 <p>3014_2019_OH, 3W, 20191108</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3015_2019_OH	<b>Northing (US ft)</b> 595983.909	<b>Easting (US ft)</b> 2357902.042	<b>Elevation (US ft)</b> 984.950	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°17'37.81930"	<b>Longitude (Global)</b> W81°04'58.24210"	<b>Ellipsoid Height (US ft)</b> 874.167	
Location Photo    NORTH				
 <p>3015_2019_OH, 3N, 20191116</p>		 <p>3015_2019_OH, 3W, 20191116</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3016_2019_OH	<b>Northing (US ft)</b> 469854.347	<b>Easting (US ft)</b> 2214668.109	<b>Elevation (US ft)</b> 1008.054	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°57'10.36649"	<b>Longitude (Global)</b> W81°36'31.54055"	<b>Ellipsoid Height (US ft)</b> 899.081	
Location Photo    NORTH				
 <p>3016_2019_OH, 3N, 20191110</p>		 <p>3016_2019_OH, 3E, 20191110</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3017_2019_OH	<b>Northing (US ft)</b> 514117.493	<b>Easting (US ft)</b> 2307860.976	<b>Elevation (US ft)</b> 1084.416	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°04'16.50514"	<b>Longitude (Global)</b> W81°16'08.89847"	<b>Ellipsoid Height (US ft)</b> 974.476	
Location Photo    NORTH				
 <p>3017_2019_OH, 3S, 20191109</p>		 <p>3017_2019_OH, 3W, 20191109</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3018_2019_OH	<b>Northing (US ft)</b> 527648.700	<b>Easting (US ft)</b> 2180571.723	<b>Elevation (US ft)</b> 1047.851	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°06'44.62436"	<b>Longitude (Global)</b> W81°43'49.26749"	<b>Ellipsoid Height (US ft)</b> 938.014	
Location Photo    NORTH				
 <p>3018_2019_OH, 3N, 20191111</p>		 <p>3018_2019_OH, 3E, 20191111</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3019_2019_OH	<b>Northing (US ft)</b> 573673.019	<b>Easting (US ft)</b> 2178818.885	<b>Elevation (US ft)</b> 991.306	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°14'19.52110"	<b>Longitude (Global)</b> W81°44'06.89475"	<b>Ellipsoid Height (US ft)</b> 880.522	
Location Photo    NORTH				
 <p>3019_2019_OH, 3N, 2019111</p>		 <p>3019_2019_OH, 3W, 2019111</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3020_2019_OH	<b>Northing (US ft)</b> 550804.208	<b>Easting (US ft)</b> 2102787.104	<b>Elevation (US ft)</b> 1005.328	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°10'38.95834"	<b>Longitude (Global)</b> W82°00'43.80974"	<b>Ellipsoid Height (US ft)</b> 894.404	
Location Photo    NORTH				
 <p>3020_2019_OH, 3N, 20191120</p>		 <p>3020_2019_OH, 3E, 20191120</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3021_2019_OH	<b>Northing (US ft)</b> 485638.774	<b>Easting (US ft)</b> 2049053.288	<b>Elevation (US ft)</b> 1198.601	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°59'57.43331"	<b>Longitude (Global)</b> W82°12'29.37869"	<b>Ellipsoid Height (US ft)</b> 1088.470	
Location Photo    NORTH				
 <p>3021_2019_OH, 3N, 20191118</p>		 <p>3021_2019_OH, 3E, 20191118</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3022_2019_OH	<b>Northing (US ft)</b> 456088.387	<b>Easting (US ft)</b> 2049923.222	<b>Elevation (US ft)</b> 1240.283	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°55'05.41040"	<b>Longitude (Global)</b> W82°12'19.33461"	<b>Ellipsoid Height (US ft)</b> 1130.675	
Location Photo    NORTH				
 <p>3022_2019_OH, 3S, 20191118</p>		 <p>3022_2019_OH, 3W, 20191118</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3023_2019_OH	<b>Northing (US ft)</b> 339813.122	<b>Easting (US ft)</b> 1969699.912	<b>Elevation (US ft)</b> 1146.323	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°35'57.79660"	<b>Longitude (Global)</b> W82°29'44.44424"	<b>Ellipsoid Height (US ft)</b> 1035.884	
Location Photo    NORTH				
 <p>3023_2019_OH, 3N, 20191218</p>	 <p>3023_2019_OH, 3E, 20191218</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3024_2019_OH	<b>Northing (US ft)</b> 306483.563	<b>Easting (US ft)</b> 1889110.505	<b>Elevation (US ft)</b> 1192.597	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°30'27.16355"	<b>Longitude (Global)</b> W82°47'07.79358"	<b>Ellipsoid Height (US ft)</b> 1081.044	
Location Photo    NORTH				
 <p>3024_2019_OH, 3N, 20191216</p>		 <p>3024_2019_OH, 3W, 20191216</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3025_2019_OH	<b>Northing (US ft)</b> 430977.244	<b>Easting (US ft)</b> 1974084.192		<b>Elevation (US ft)</b> 1042.604
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°50'58.63036"	<b>Longitude (Global)</b> W82°28'47.33256"		<b>Ellipsoid Height (US ft)</b> 931.597
<b>Location Photo</b>    NORTH				
 <p>3025_2019_OH, 3S, 20191218</p>	 <p>3025_2019_OH, 3W, 20191218</p>			








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3026_2019_OH	<b>Northing (US ft)</b> 439051.943	<b>Easting (US ft)</b> 1814957.175	<b>Elevation (US ft)</b> 947.263	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°52'13.59690"	<b>Longitude (Global)</b> W83°03'18.70436"	<b>Ellipsoid Height (US ft)</b> 832.971	
Location Photo    NORTH				
 <p>3026_2019_OH, 3N, 20200124</p>		 <p>3026_2019_OH, 3E, 20200124</p>		




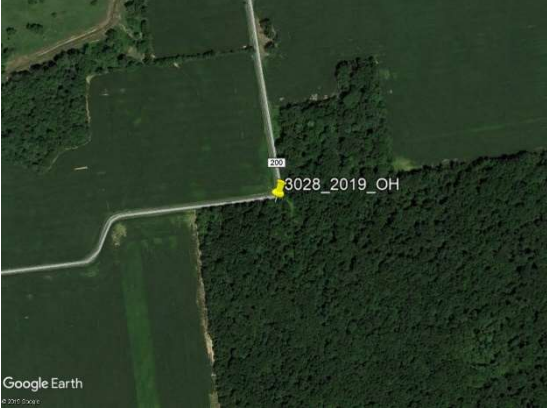


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3027_2019_OH	<b>Northing (US ft)</b> 542369.858	<b>Easting (US ft)</b> 1734312.884	<b>Elevation (US ft)</b> 752.652	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°09'08.04820"	<b>Longitude (Global)</b> W83°21'01.52964"	<b>Ellipsoid Height (US ft)</b> 637.176	
Location Photo    NORTH				
 <p>3027_2019_OH, 3S, 20200129</p>	 <p>3027_2019_OH, 3W, 20200129</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3028_2019_OH	<b>Northing (US ft)</b> 328798.853	<b>Easting (US ft)</b> 1699678.197		<b>Elevation (US ft)</b> 976.423
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°33'54.22290"	<b>Longitude (Global)</b> W83°28'03.30001"		<b>Ellipsoid Height (US ft)</b> 862.709
Location Photo    NORTH				
 <p>3028_2019_OH, 3N, 20200122</p>		 <p>3028_2019_OH, 3E, 20200122</p>		




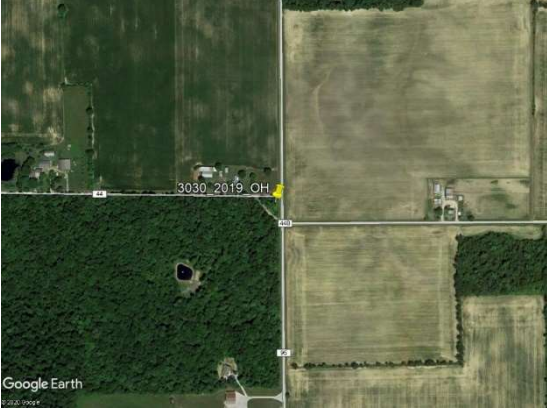


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3029_2019_OH	<b>Northing (US ft)</b> 396212.857	<b>Easting (US ft)</b> 1723219.808	<b>Elevation (US ft)</b> 871.255	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°45'02.81201"	<b>Longitude (Global)</b> W83°23'07.14473"	<b>Ellipsoid Height (US ft)</b> 756.500	
<b>Location Photo</b>    NORTH				
 <p>3029_2019_OH, 3S, 20200123</p>		 <p>3029_2019_OH, 3W, 20200123</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3030_2019_OH	<b>Northing (US ft)</b> 441849.171	<b>Easting (US ft)</b> 1714253.709	<b>Elevation (US ft)</b> 867.331	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°52'32.82417"	<b>Longitude (Global)</b> W83°25'09.89188"	<b>Ellipsoid Height (US ft)</b> 752.018	
Location Photo    NORTH				
 <p>3030_2019_OH, 3N, 20200129</p>		 <p>3030_2019_OH, 3E, 20200129</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3031_2019_OH	<b>Northing (US ft)</b> 469958.159	<b>Easting (US ft)</b> 1646809.969	<b>Elevation (US ft)</b> 812.129	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°57'02.59685"	<b>Longitude (Global)</b> W83°39'52.69761"	<b>Ellipsoid Height (US ft)</b> 695.975	
Location Photo    NORTH				
 <p>3031_2019_OH, 3N, 20191218</p>		 <p>3031_2019_OH, 3E, 20191218</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3032_2019_OH	<b>Northing (US ft)</b> 438493.491	<b>Easting (US ft)</b> 1610683.281	<b>Elevation (US ft)</b> 870.903	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°51'46.68328"	<b>Longitude (Global)</b> W83°47'37.40085"	<b>Ellipsoid Height (US ft)</b> 755.072	
Location Photo    NORTH				
 <p>3032_2019_OH_3N, 20200121</p>		 <p>3032_2019_OH_3E, 20200121</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3033_2019_OH	<b>Northing (US ft)</b> 341593.196	<b>Easting (US ft)</b> 1612178.991	<b>Elevation (US ft)</b> 1030.724	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°35'49.48463"	<b>Longitude (Global)</b> W83°46'59.37999"	<b>Ellipsoid Height (US ft)</b> 917.102	
<b>Location Photo</b>   NORTH				
 <p>3033_2019_OH, 3S, 20200122</p>	 <p>3033_2019_OH, 3E, 20200122</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3034_2019_OH	<b>Northing (US ft)</b> 344037.805	<b>Easting (US ft)</b> 1541592.224		<b>Elevation (US ft)</b> 1005.761
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°36'02.35948"	<b>Longitude (Global)</b> W84°02'14.85839"		<b>Ellipsoid Height (US ft)</b> 893.427
Location Photo    NORTH				
 <p>3034_2019_OH, 3N, 20191105</p>		 <p>3034_2019_OH, 3E, 20191105</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3035_2019_OH	<b>Northing (US ft)</b> 294202.003	<b>Easting (US ft)</b> 1392101.758	<b>Elevation (US ft)</b> 899.553	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°27'19.44452"	<b>Longitude (Global)</b> W84°34'17.02352"	<b>Ellipsoid Height (US ft)</b> 789.956	
<b>Location Photo</b>    NORTH				
 <p>3035_2019_OH, 3N, 20191212</p>		 <p>3035_2019_OH, 3E, 20191212</p>		




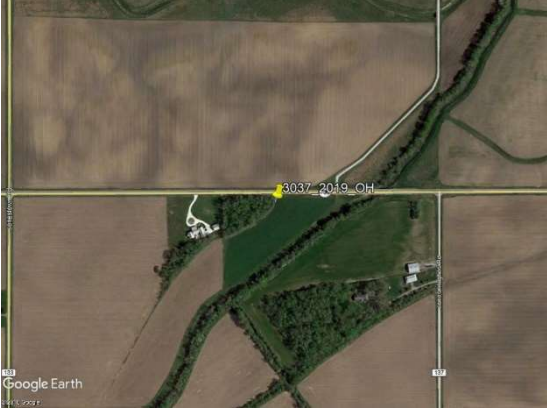




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3036_2019_OH	<b>Northing (US ft)</b> 353743.147	<b>Easting (US ft)</b> 1420230.903	<b>Elevation (US ft)</b> 838.974	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°37'14.09581"	<b>Longitude (Global)</b> W84°28'30.67863"	<b>Ellipsoid Height (US ft)</b> 728.505	
<b>Location Photo</b>    NORTH				
 <p>3036_2019_OH, 3S, 20191126</p>	 <p>3036_2019_OH, 3E, 20191126</p>			




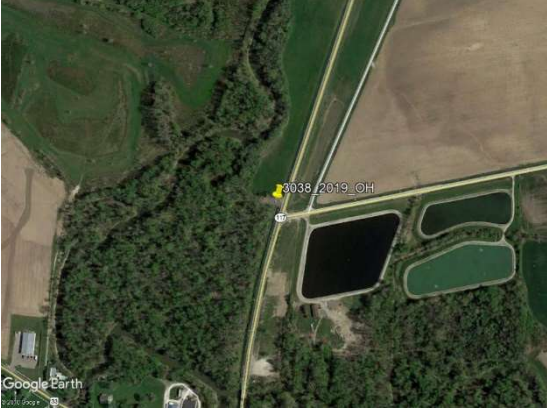


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3037_2019_OH	<b>Northing (US ft)</b> 411508.558	<b>Easting (US ft)</b> 1412465.605	<b>Elevation (US ft)</b> 792.225	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°46'43.00606"	<b>Longitude (Global)</b> W84°30'28.59930"	<b>Ellipsoid Height (US ft)</b> 681.039	
<b>Location Photo</b>    NORTH				
 <p>3037_2019_OH, 3N, 20191211</p>		 <p>3037_2019_OH, 3W, 20191211</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3038_2019_OH	<b>Northing (US ft)</b> 383273.461	<b>Easting (US ft)</b> 1373629.747	<b>Elevation (US ft)</b> 802.961	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N40°41'54.94228"	<b>Longitude (Global)</b> W84°38'44.25026"	<b>Ellipsoid Height (US ft)</b> 693.021	
Location Photo    NORTH				
 <p>3038_2019_OH, 3S, 20191126</p>	 <p>3038_2019_OH, 3W, 20191126</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3039_2019_OH	<b>Northing (US ft)</b> 696538.856	<b>Easting (US ft)</b> 1378891.423	<b>Elevation (US ft)</b> 839.294	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°33'30.62999"	<b>Longitude (Global)</b> W84°39'16.42430"	<b>Ellipsoid Height (US ft)</b> 728.402	
<b>Location Photo</b>    NORTH				
 <p>3039_2019_OH, 3N, 20191108</p>		 <p>3039_2019_OH, 3E, 20191108</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3040_2019_OH	<b>Northing (US ft)</b> 699260.893	<b>Easting (US ft)</b> 1486412.704	<b>Elevation (US ft)</b> 741.642	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°34'21.36694"	<b>Longitude (Global)</b> W84°15'43.11037"	<b>Ellipsoid Height (US ft)</b> 628.082	
Location Photo    NORTH				
 <p>3040_2019_OH, 3S, 20191107</p>		 <p>3040_2019_OH, 3W, 20191107</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3041_2019_OH	<b>Northing (US ft)</b> 721609.550	<b>Easting (US ft)</b> 1459182.046	<b>Elevation (US ft)</b> 756.229	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°37'56.52772"	<b>Longitude (Global)</b> W84°21'47.57549"	<b>Ellipsoid Height (US ft)</b> 643.715	
<b>Location Photo</b>    NORTH				
 <p>3041_2019_OH 3N, 20191107</p>		 <p>3041_2019_OH 3W, 20191107</p>		




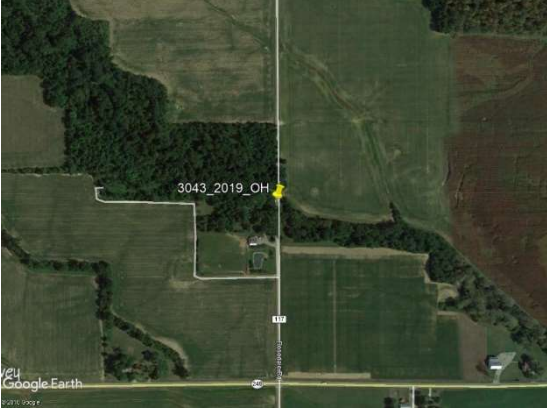




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3042_2019_OH	<b>Northing (US ft)</b> 647692.571	<b>Easting (US ft)</b> 1463480.608	<b>Elevation (US ft)</b> 716.429	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°25'47.29579"	<b>Longitude (Global)</b> W84°20'30.42716"	<b>Ellipsoid Height (US ft)</b> 602.965	
<b>Location Photo</b>    NORTH				
 <p>3042_2019_OH, 3S, 20191205</p>	 <p>3042_2019_OH, 3W, 20191205</p>			




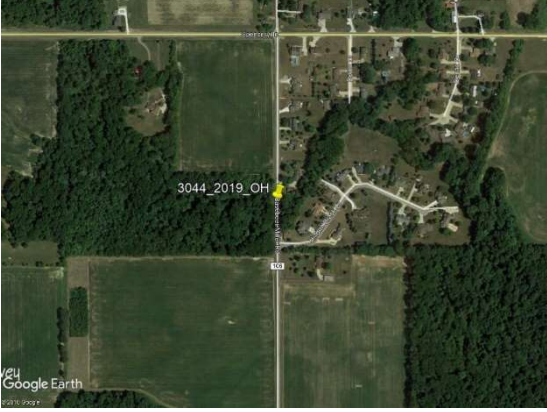


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3043_2019_OH	<b>Northing (US ft)</b> 633978.085	<b>Easting (US ft)</b> 1367491.279	<b>Elevation (US ft)</b> 796.458	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°23'09.90554"	<b>Longitude (Global)</b> W84°41'25.66707"	<b>Ellipsoid Height (US ft)</b> 685.818	
<b>Location Photo</b>    NORTH				
 <p>3043_2019_OH, 3S, 20191206</p>	 <p>3043_2019_OH, 3W, 20191206</p>			








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3044_2019_OH	<b>Northing (US ft)</b> 600812.576	<b>Easting (US ft)</b> 1340407.369	<b>Elevation (US ft)</b> 772.498	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°17'35.45373"	<b>Longitude (Global)</b> W84°47'09.46491"	<b>Ellipsoid Height (US ft)</b> 662.556	
<b>Location Photo</b>    NORTH				
 <p>3044_2019_OH, 3S, 20191206</p>		 <p>3044_2019_OH, 3W, 20191206</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3045_2019_OH	<b>Northing (US ft)</b> 585102.565	<b>Easting (US ft)</b> 1378669.635	<b>Elevation (US ft)</b> 719.599	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°15'09.88135"	<b>Longitude (Global)</b> W84°38'43.28741"	<b>Ellipsoid Height (US ft)</b> 608.618	
Location Photo    NORTH				
 <p>3045_2019_OH, 3N, 20191206</p>		 <p>3045_2019_OH, 3W, 20191206</p>		




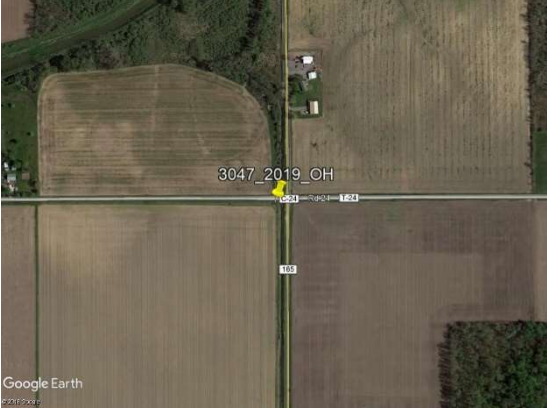




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3046_2019_OH	<b>Northing (US ft)</b> 532016.932	<b>Easting (US ft)</b> 1372851.145	<b>Elevation (US ft)</b> 725.897	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°06'24.08809"	<b>Longitude (Global)</b> W84°39'42.21851"	<b>Ellipsoid Height (US ft)</b> 615.286	
Location Photo    NORTH				
 <p>3046_2019_OH, 3S, 20191210</p>		 <p>3046_2019_OH, 3E, 20191210</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3047_2019_OH	<b>Northing (US ft)</b> 493420.318	<b>Easting (US ft)</b> 1433596.890	<b>Elevation (US ft)</b> 724.971	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N41°00'16.92219"	<b>Longitude (Global)</b> W84°26'17.64030"	<b>Ellipsoid Height (US ft)</b> 612.498	
<b>Location Photo</b>    NORTH				
 <p>3047_2019_OH, 3N, 201912310</p>		 <p>3047_2019_OH, 3E, 201912310</p>		




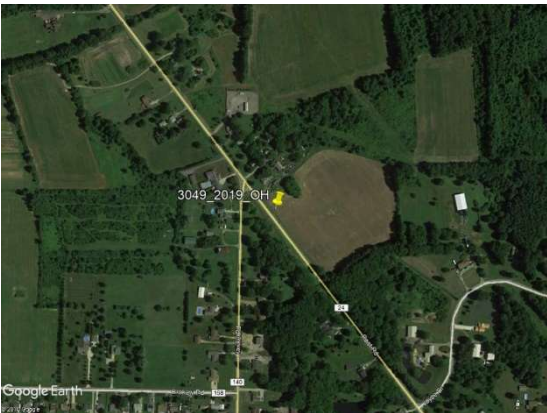


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3048_2019_OH	<b>Northing (US ft)</b> 591864.320	<b>Easting (US ft)</b> 2137449.597	<b>Elevation (US ft)</b> 895.929	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°17'22.49142"	<b>Longitude (Global)</b> W81°53'06.72613"	<b>Ellipsoid Height (US ft)</b> 784.397	
Location Photo    NORTH				
 <p>3048_2019_OH, 3N, 20191117</p>		 <p>3048_2019_OH, 3E, 20191117</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3049_2019_OH	<b>Northing (US ft)</b> 611201.472	<b>Easting (US ft)</b> 2113897.200	<b>Elevation (US ft)</b> 795.497	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°20'35.07645"	<b>Longitude (Global)</b> W81°58'13.72110"	<b>Ellipsoid Height (US ft)</b> 683.232	
Location Photo    NORTH				
 <p>3049_2019_OH, 3N, 20191119</p>		 <p>3049_2019_OH, 3W, 20191119</p>		




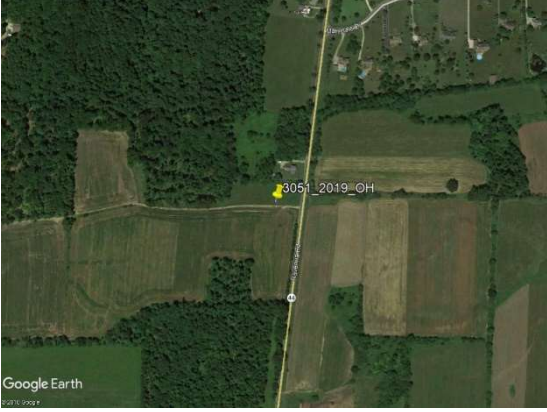




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3050_2019_OH	<b>Northing (US ft)</b> 591361.843	<b>Easting (US ft)</b> 2100162.357	<b>Elevation (US ft)</b> 811.145	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°17'19.83718"	<b>Longitude (Global)</b> W82°01'15.22146"	<b>Ellipsoid Height (US ft)</b> 699.124	
Location Photo    NORTH				
 <p>3050_2019_OH, 3N, 20191119</p>		 <p>3050_2019_OH, 3W, 20191119</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3051_2019_OH	<b>Northing (US ft)</b> 641419.266	<b>Easting (US ft)</b> 2321871.733	<b>Elevation (US ft)</b> 1247.146	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°25'12.21062"	<b>Longitude (Global)</b> W81°12'41.42801"	<b>Ellipsoid Height (US ft)</b> 1136.197	
Location Photo    NORTH				
 <p>3051_2019_OH, 3N, 20191115</p>	 <p>3051_2019_OH, 3E, 20191115</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3052_2019_OH	<b>Northing (US ft)</b> 486638.932	<b>Easting (US ft)</b> 2285975.908	<b>Elevation (US ft)</b> 1161.056	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°59'47.96198"	<b>Longitude (Global)</b> W81°20'59.35315"	<b>Ellipsoid Height (US ft)</b> 1051.531	
Location Photo    NORTH				
 <p>3052_2019_OH, 3S, 20191110</p>		 <p>3052_2019_OH, 3E, 20191110</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3053_2019_OH	<b>Northing (US ft)</b> 518025.859	<b>Easting (US ft)</b> 2337251.394	<b>Elevation (US ft)</b> 1185.347	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°04'50.84371"	<b>Longitude (Global)</b> W81°09'44.41726"	<b>Ellipsoid Height (US ft)</b> 1075.173	
Location Photo    NORTH				
 <p>3053_2019_OH, 3N, 20191109</p>		 <p>3053_2019_OH, 3E, 20191109</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3054_2019_OH	<b>Northing (US ft)</b> 560595.112	<b>Easting (US ft)</b> 2381638.279	<b>Elevation (US ft)</b> 941.394	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N41°11'44.27617"	<b>Longitude (Global)</b> W80°59'55.30149"	<b>Ellipsoid Height (US ft)</b> 830.574	
<b>Location Photo</b>    NORTH				
 <p>3054_2019_OH, 3N, 20191108</p>		 <p>3054_2019_OH, 3W, 20191108</p>		


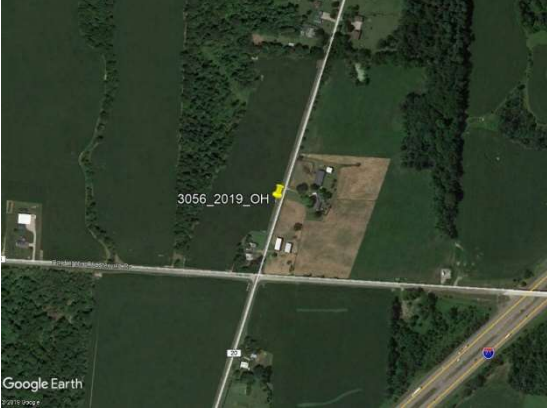




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3055_2019_OH	<b>Northing (US ft)</b> 279588.424	<b>Easting (US ft)</b> 1846635.063	<b>Elevation (US ft)</b> 981.800	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°25'59.65828"	<b>Longitude (Global)</b> W82°56'15.93454"	<b>Ellipsoid Height (US ft)</b> 869.842	
<b>Location Photo</b>    NORTH				
 <p>3055_2019_3N_20200129</p>		 <p>3055_2019_3E_20200129</p>		




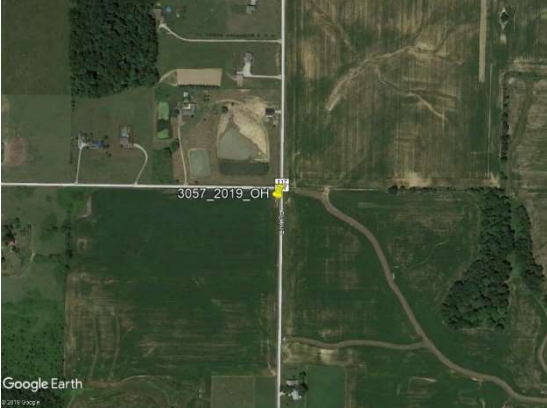


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3056_2019_OH	<b>Northing (US ft)</b> 295025.026	<b>Easting (US ft)</b> 1897097.130	<b>Elevation (US ft)</b> 1204.504	
<b>Point Type</b> BARE EARTH	<b>Latitude (Global)</b> N40°28'34.18065"	<b>Longitude (Global)</b> W82°45'23.96109"	<b>Ellipsoid Height (US ft)</b> 1093.048	
<b>Location Photo</b>   NORTH				
 <p>3056_2019_OH, 3N, 20191216</p>		 <p>3056_2019_OH, 3W, 20191216</p>		






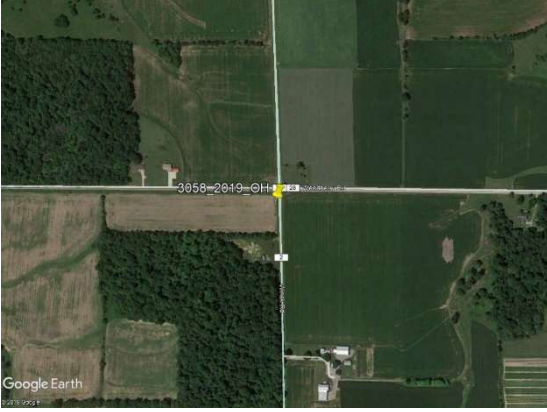


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3057_2019_OH	<b>Northing (US ft)</b> 319467.745	<b>Easting (US ft)</b> 1907199.175	<b>Elevation (US ft)</b> 1357.214	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°32'35.98614"	<b>Longitude (Global)</b> W82°43'14.04001"	<b>Ellipsoid Height (US ft)</b> 1245.946	
Location Photo    NORTH				
 <p>3057_2019_OH, 3N, 20191216</p>		 <p>3057_2019_OH, 3W, 20191216</p>		




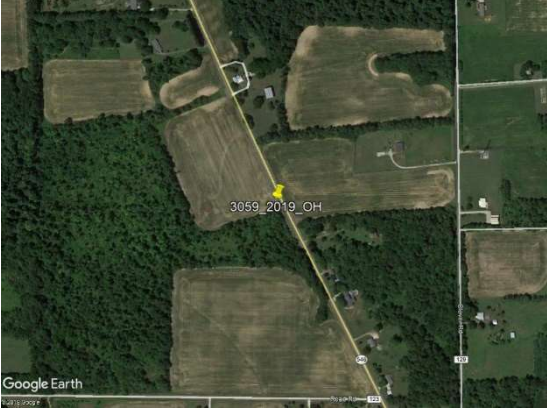




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3058_2019_OH	<b>Northing (US ft)</b> 340388.079	<b>Easting (US ft)</b> 1933943.448	<b>Elevation (US ft)</b> 1368.572	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°36'03.23476"	<b>Longitude (Global)</b> W82°37'28.00421"	<b>Ellipsoid Height (US ft)</b> 1257.614	
Location Photo    NORTH				
 <p>3058_2019_OH, 3N, 20191216</p>		 <p>3058_2019_OH, 3W, 20191216</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3059_2019_OH	<b>Northing (US ft)</b> 330989.246	<b>Easting (US ft)</b> 1948689.573	<b>Elevation (US ft)</b> 1390.939	
<b>Point Type</b> BARE EARTH	<b>Latitude (Global)</b> N40°34'30.52292"	<b>Longitude (Global)</b> W82°34'16.73035"	<b>Ellipsoid Height (US ft)</b> 1280.217	
<b>Location Photo</b>    NORTH				
 <p>3059_2019_OH, 3N, 20191216</p>		 <p>3059_2019_OH, 3E, 20191216</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3060_2019_OH	<b>Northing (US ft)</b> 334352.159	<b>Easting (US ft)</b> 2013980.620	<b>Elevation (US ft)</b> 1168.713	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N40°35'03.41200"	<b>Longitude (Global)</b> W82°20'10.51925"	<b>Ellipsoid Height (US ft)</b> 1058.991	
<b>Location Photo</b>    NORTH				
 <p>3060_2019_OH, 3S, 20191112</p>	 <p>3060_2019_OH, 3E, 20191112</p>			






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3061_2019_OH	<b>Northing (US ft)</b> 352002.271	<b>Easting (US ft)</b> 1983463.850	<b>Elevation (US ft)</b> 1150.941	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°37'58.19927"	<b>Longitude (Global)</b> W82°26'45.90980"	<b>Ellipsoid Height (US ft)</b> 1040.740	
Location Photo    NORTH				
 <p>3061_2019_OH, 3S, 20191112</p>	 <p>3061_2019_OH, 3E, 20191112</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3062_2019_OH	<b>Northing (US ft)</b> 369264.054	<b>Easting (US ft)</b> 1981244.920	<b>Elevation (US ft)</b> 1229.658	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°40'48.78523"	<b>Longitude (Global)</b> W82°27'14.57270"	<b>Ellipsoid Height (US ft)</b> 1119.407	
<b>Location Photo</b>    NORTH				
 <p>3062_2019_OH, 3N, 20191112</p>	 <p>3062_2019_OH, 3E, 20191112</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3063_2019_OH	<b>Northing (US ft)</b> 393689.823	<b>Easting (US ft)</b> 1927748.357	<b>Elevation (US ft)</b> 1360.851	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°44'49.84287"	<b>Longitude (Global)</b> W82°38'49.48492"	<b>Ellipsoid Height (US ft)</b> 1249.388	
Location Photo    NORTH				
 <p>3063_2019_OH, 3N, 20200128</p>		 <p>3063_2019_OH, 3W, 20200128</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3064_2019_OH	<b>Northing (US ft)</b> 375048.111	<b>Easting (US ft)</b> 1951710.659	<b>Elevation (US ft)</b> 1249.983	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°41'45.91626"	<b>Longitude (Global)</b> W82°33'37.97544"	<b>Ellipsoid Height (US ft)</b> 1139.149	
Location Photo    NORTH				
 <p>3064_2019_OH, 3N, 20191218</p>		 <p>3064_2019_OH, 3E, 20191218</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3065_2019_OH	<b>Northing (US ft)</b> 427335.208	<b>Easting (US ft)</b> 1889575.088	<b>Elevation (US ft)</b> 1115.198	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°50'21.37289"	<b>Longitude (Global)</b> W82°47'06.89618"	<b>Ellipsoid Height (US ft)</b> 1002.430	
Location Photo    NORTH				
 <p>3065_2019_OH, 3N, 20200127</p>		 <p>3065_2019_OH, 3E, 20200127</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3066_2019_OH	<b>Northing (US ft)</b> 393954.660	<b>Easting (US ft)</b> 1816376.054	<b>Elevation (US ft)</b> 978.394	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°44'48.06784"	<b>Longitude (Global)</b> W83°02'56.53943"	<b>Ellipsoid Height (US ft)</b> 864.784	
<b>Location Photo</b>    NORTH				
 <p>3066_2019_OH, 3N, 20200123</p>		 <p>3066_2019_OH, 3E, 20200123</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3067_2019_OH	<b>Northing (US ft)</b> 367557.627	<b>Easting (US ft)</b> 1769317.782	<b>Elevation (US ft)</b> 898.908	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°40'23.85344"	<b>Longitude (Global)</b> W83°13'05.11715"	<b>Ellipsoid Height (US ft)</b> 784.939	
Location Photo    NORTH				
 <p>3067_2019_OH, 3S, 20200123</p>		 <p>3067_2019_OH, 3W, 20200123</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3068_2019_OH	<b>Northing (US ft)</b> 364307.309	<b>Easting (US ft)</b> 1634067.374	<b>Elevation (US ft)</b> 986.384	
<b>Point Type</b> LONG GRASS	<b>Latitude (Global)</b> N40°39'36.99886"	<b>Longitude (Global)</b> W83°42'19.72402"	<b>Ellipsoid Height (US ft)</b> 871.765	
Location Photo    NORTH				
 <p>3068_2019_OH, 3S, 20200122</p>		 <p>3068_2019_OH, 3E, 20200122</p>		




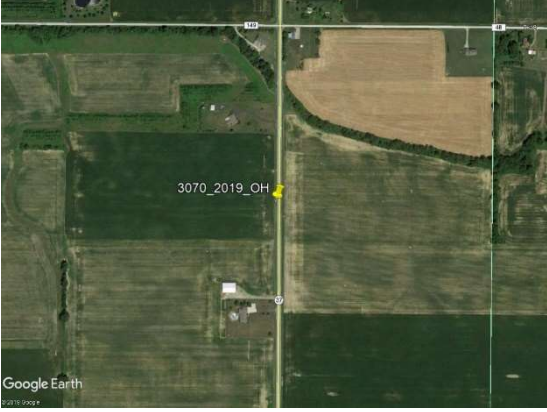


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3069_2019_OH	<b>Northing (US ft)</b> 406588.924	<b>Easting (US ft)</b> 1633535.585	<b>Elevation (US ft)</b> 938.923	
<b>Point Type</b> LONG GRASS	<b>Latitude (Global)</b> N40°46'34.69301"	<b>Longitude (Global)</b> W83°42'34.23229"	<b>Ellipsoid Height (US ft)</b> 823.491	
<b>Location Photo</b>    NORTH				
 <p>3069_2019_OH_3N, 20200121</p>		 <p>3069_2019_OH_3E, 20200121</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3070_2019_OH	<b>Northing (US ft)</b> 433332.527	<b>Easting (US ft)</b> 1686257.527	<b>Elevation (US ft)</b> 877.069	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°51'05.59674"	<b>Longitude (Global)</b> W83°31'13.03007"	<b>Ellipsoid Height (US ft)</b> 761.647	
<b>Location Photo</b>    NORTH				
 <p>3070_2019_OH, 3N, 20191218</p>		 <p>3070_2019_OH, 3E, 20191218</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3071_2019_OH	<b>Northing (US ft)</b> 448412.141	<b>Easting (US ft)</b> 1658514.531	<b>Elevation (US ft)</b> 868.767	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°53'31.22743"	<b>Longitude (Global)</b> W83°37'16.55505"	<b>Ellipsoid Height (US ft)</b> 752.889	
Location Photo    NORTH				
 <p>3071_2019_OH, 3N, 20191218</p>		 <p>3071_2019_OH, 3E, 20191218</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3072_2019_OH	<b>Northing (US ft)</b> 468173.211	<b>Easting (US ft)</b> 1602800.614	<b>Elevation (US ft)</b> 802.143	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°56'38.75721"	<b>Longitude (Global)</b> W83°49'25.85087"	<b>Ellipsoid Height (US ft)</b> 685.915	
<b>Location Photo</b>    NORTH				
 <p>3072_2019_OH, 3N, 20191217</p>	 <p>3072_2019_OH, 3W, 20191217</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3073_2019_OH	<b>Northing (US ft)</b> 512590.911	<b>Easting (US ft)</b> 1529524.893		<b>Elevation (US ft)</b> 733.862
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°03'45.49420"	<b>Longitude (Global)</b> W84°05'31.16244"		<b>Ellipsoid Height (US ft)</b> 618.213
Location Photo    NORTH				
 <p>3073_2019_OH, 3S, 20191209</p>		 <p>3073_2019_OH, 3E, 20191209</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3074_2019_OH	<b>Northing (US ft)</b> 528615.496	<b>Easting (US ft)</b> 1497737.493	<b>Elevation (US ft)</b> 715.125	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°06'17.86355"	<b>Longitude (Global)</b> W84°12'30.16683"	<b>Ellipsoid Height (US ft)</b> 600.477	
Location Photo    NORTH				
 <p>3074_2019_OH, 3N, 20191209</p>		 <p>3074_2019_OH, 3W, 20191209</p>		

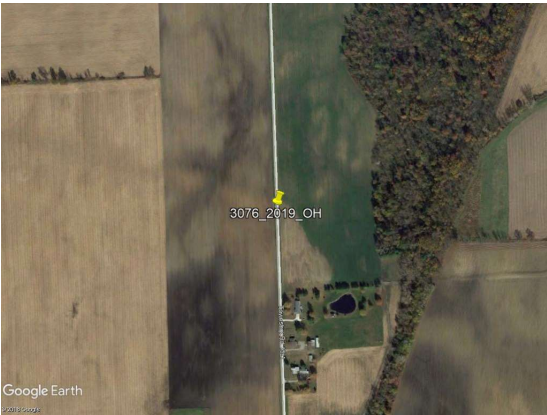



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3075_2019_OH	<b>Northing (US ft)</b> 732933.283	<b>Easting (US ft)</b> 1586484.257	<b>Elevation (US ft)</b> 719.451	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°40'11.89753"	<b>Longitude (Global)</b> W83°53'53.76655"	<b>Ellipsoid Height (US ft)</b> 603.771	
Location Photo    NORTH				
 <p>3075_2019_OH, 3N, 20191106</p>		 <p>3075_2019_OH, 3E, 20191106</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3076_2019_OH	<b>Northing (US ft)</b> 735589.729	<b>Easting (US ft)</b> 1516408.168	<b>Elevation (US ft)</b> 807.061	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°40'26.02044"	<b>Longitude (Global)</b> W84°09'17.60877"	<b>Ellipsoid Height (US ft)</b> 692.956	
<b>Location Photo</b>    NORTH				
 <p>3076_2019_OH, 3N, 20191106</p>		 <p>3076_2019_OH, 3E, 20191106</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3077_2019_OH	<b>Northing (US ft)</b> 727780.688	<b>Easting (US ft)</b> 1479951.769	<b>Elevation (US ft)</b> 729.072	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°39'01.77753"	<b>Longitude (Global)</b> W84°17'15.78792"	<b>Ellipsoid Height (US ft)</b> 616.038	
Location Photo    NORTH				
 <p>3077_2019_OH 3N, 20191107</p>		 <p>3077_2019_OH 3E, 20191107</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3078_2019_OH	<b>Northing (US ft)</b> 718694.254	<b>Easting (US ft)</b> 1423046.824	<b>Elevation (US ft)</b> 877.053	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°37'19.83638"	<b>Longitude (Global)</b> W84°29'42.42762"	<b>Ellipsoid Height (US ft)</b> 765.304	
Location Photo    NORTH				
				






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3079_2019_OH	<b>Northing (US ft)</b> 711083.856	<b>Easting (US ft)</b> 1367722.343	<b>Elevation (US ft)</b> 890.927	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°35'51.53514"	<b>Longitude (Global)</b> W84°41'48.11274"	<b>Ellipsoid Height (US ft)</b> 780.194	
<b>Location Photo</b>    NORTH				
 <p>3079_2019_OH, 3N, 20191108</p>		 <p>3079_2019_OH, 3E, 20191108</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3080_2019_OH	<b>Northing (US ft)</b> 659994.203	<b>Easting (US ft)</b> 1397430.277	<b>Elevation (US ft)</b> 786.702	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°27'34.12329"	<b>Longitude (Global)</b> W84°35'01.15274"	<b>Ellipsoid Height (US ft)</b> 675.340	
<b>Location Photo</b>    NORTH				
 <p>3080_2019_OH, 3N, 20191206</p>		 <p>3080_2019_OH, 3E, 20191206</p>		






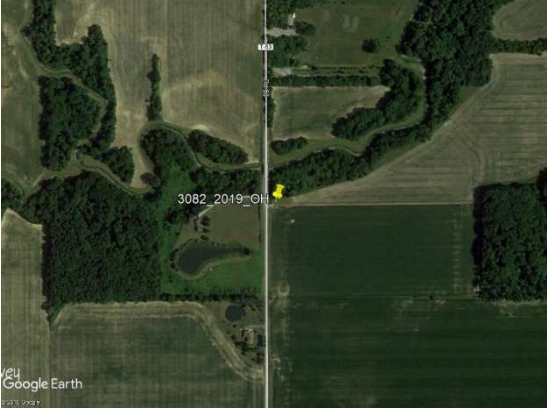


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3081_2019_OH	<b>Northing (US ft)</b> 600899.126	<b>Easting (US ft)</b> 1383078.504	<b>Elevation (US ft)</b> 722.619	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°17'46.98321"	<b>Longitude (Global)</b> W84°37'50.63266"	<b>Ellipsoid Height (US ft)</b> 611.480	
Location Photo    NORTH				
 <p>3081_2019_OH, 3S, 20191206</p>		 <p>3081_2019_OH, 3E, 20191206</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3082_2019_OH	<b>Northing (US ft)</b> 577914.800	<b>Easting (US ft)</b> 1361203.464	<b>Elevation (US ft)</b> 726.187	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°13'54.57592"	<b>Longitude (Global)</b> W84°42'29.51209"	<b>Ellipsoid Height (US ft)</b> 615.709	
<b>Location Photo</b>    NORTH				
 <p>3082_2019_OH, 3N, 20191206</p>	 <p>3082_2019_OH, 3W, 20191206</p>			

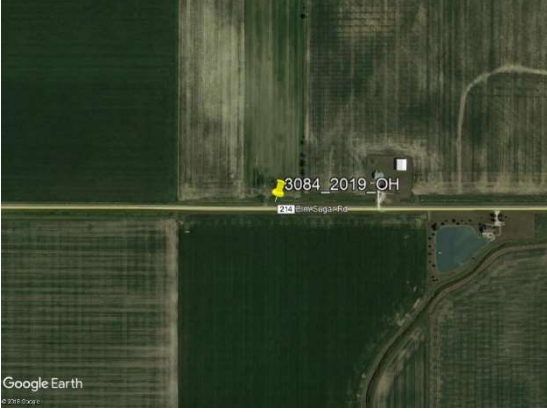


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3083_2019_OH	<b>Northing (US ft)</b> 542431.339	<b>Easting (US ft)</b> 1352413.328	<b>Elevation (US ft)</b> 738.554	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°08'01.86839"	<b>Longitude (Global)</b> W84°44'12.61473"	<b>Ellipsoid Height (US ft)</b> 628.402	
Location Photo    NORTH				
 <p>3083_2019_OH, 3N, 20191210</p>		 <p>3083_2019_OH, 3E, 20191210</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3084_2019_OH	<b>Northing (US ft)</b> 484373.846	<b>Easting (US ft)</b> 1360909.553	<b>Elevation (US ft)</b> 762.043	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°58'30.51587"	<b>Longitude (Global)</b> W84°42'02.46783"	<b>Ellipsoid Height (US ft)</b> 651.774	
Location Photo    NORTH				
 <p>3084_2019_OH, 3N, 20191210</p>		 <p>3084_2019_OH, 3E, 20191210</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3085_2019_OH	<b>Northing (US ft)</b> 459964.912	<b>Easting (US ft)</b> 1385224.341	<b>Elevation (US ft)</b> 762.748	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°54'35.33514"	<b>Longitude (Global)</b> W84°36'37.84956"	<b>Ellipsoid Height (US ft)</b> 651.840	
<b>Location Photo</b>    NORTH				
 <p>3085_2019_OH, 3N, 20191210</p>		 <p>3085_2019_OH, 3W, 20191210</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3086_2019_OH	<b>Northing (US ft)</b> 284790.816	<b>Easting (US ft)</b> 1362509.483	<b>Elevation (US ft)</b> 1002.735	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°25'39.35330"	<b>Longitude (Global)</b> W84°40'36.67347"	<b>Ellipsoid Height (US ft)</b> 893.244	
<b>Location Photo</b>   NORTH				
 <p>3086_2019_OH, 3N, 20191212</p>		 <p>3086_2019_OH, 3E, 20191212</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3087_2019_OH	<b>Northing (US ft)</b> 271116.359	<b>Easting (US ft)</b> 1358232.802	<b>Elevation (US ft)</b> 972.522	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°23'23.21210"	<b>Longitude (Global)</b> W84°41'27.51482"	<b>Ellipsoid Height (US ft)</b> 863.084	
Location Photo    NORTH				
 <p>3087_2019_OH, 3N, 20191212</p>		 <p>3087_2019_OH, 3W, 20191212</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3088_2019_OH	<b>Northing (US ft)</b> 270581.188	<b>Easting (US ft)</b> 1432563.360	<b>Elevation (US ft)</b> 967.780	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°23'35.25206"	<b>Longitude (Global)</b> W84°25'26.99609"	<b>Ellipsoid Height (US ft)</b> 858.572	
Location Photo    NORTH				
 <p>3088_2019_OH, 3N, 20191125</p>		 <p>3088_2019_OH, 3E, 20191125</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3089_2019_OH	<b>Northing (US ft)</b> 298279.739	<b>Easting (US ft)</b> 1419310.049	<b>Elevation (US ft)</b> 903.450	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°28'05.96316"	<b>Longitude (Global)</b> W84°28'26.33932"	<b>Ellipsoid Height (US ft)</b> 793.767	
<b>Location Photo</b>   NORTH				
 <p>3089_2019_OH, 3S, 20191212</p>		 <p>3089_2019_OH, 3E, 20191212</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3090_2019_OH	<b>Northing (US ft)</b> 291757.228	<b>Easting (US ft)</b> 1474821.448	<b>Elevation (US ft)</b> 972.096	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°27'13.31090"	<b>Longitude (Global)</b> W84°16'26.53266"	<b>Ellipsoid Height (US ft)</b> 862.253	
Location Photo    NORTH				
 <p>3090_2019_OH, 3N, 20191125</p>		 <p>3090_2019_OH, 3E, 20191125</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3091_2019_OH	<b>Northing (US ft)</b> 311731.220	<b>Easting (US ft)</b> 1463308.978	<b>Elevation (US ft)</b> 896.932	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°30'28.30236"	<b>Longitude (Global)</b> W84°19'00.80479"	<b>Ellipsoid Height (US ft)</b> 786.635	
<b>Location Photo</b>   NORTH				
 <p>3091_2019_OH, 3S, 20191125</p>		 <p>3091_2019_OH, 3W, 20191125</p>		




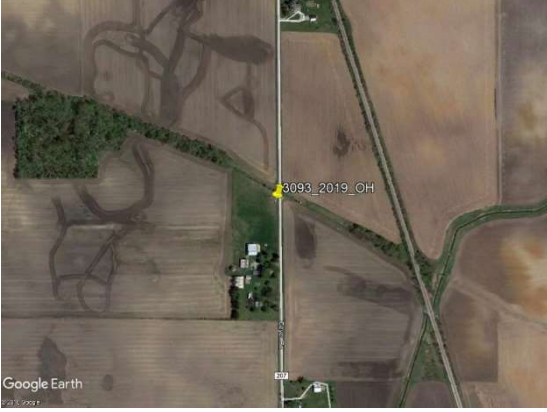


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3092_2019_OH	<b>Northing (US ft)</b> 315080.370	<b>Easting (US ft)</b> 1485018.728	<b>Elevation (US ft)</b> 914.747	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°31'05.76357"	<b>Longitude (Global)</b> W84°14'20.66520"	<b>Ellipsoid Height (US ft)</b> 804.143	
Location Photo    NORTH				
 <p>3092_2019_OH, 3N, 20191105</p>		 <p>3092_2019_OH, 3E, 20191105</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3093_2019_OH	<b>Northing (US ft)</b> 318018.544	<b>Easting (US ft)</b> 1530945.575	<b>Elevation (US ft)</b> 1015.311	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°31'43.41192"	<b>Longitude (Global)</b> W84°04'26.77469"	<b>Ellipsoid Height (US ft)</b> 904.031	
Location Photo    NORTH				
 <p>3093_2019_OH, 3N, 20191105</p>		 <p>3093_2019_OH, 3E, 20191105</p>		




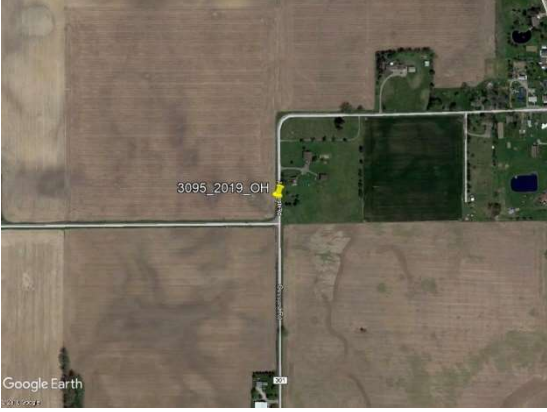


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3094_2019_OH	<b>Northing (US ft)</b> 338284.765	<b>Easting (US ft)</b> 1575921.807	<b>Elevation (US ft)</b> 1029.376	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N40°35'11.25721"	<b>Longitude (Global)</b> W83°54'48.64802"	<b>Ellipsoid Height (US ft)</b> 916.538	
<b>Location Photo</b>    NORTH				
 <p>3094_2019_OH, 3N, 20191101</p>		 <p>3094_2019_OH, 3E, 20191101</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3095_2019_OH	<b>Northing (US ft)</b> 362240.857	<b>Easting (US ft)</b> 1580232.310	<b>Elevation (US ft)</b> 1044.445	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°39'08.63734"	<b>Longitude (Global)</b> W83°53'57.76633"	<b>Ellipsoid Height (US ft)</b> 930.806	
Location Photo    NORTH				
 <p>3095_2019_OH, 3N, 20191105</p>		 <p>3095_2019_OH, 3E, 20191105</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3096_2019_OH	<b>Northing (US ft)</b> 367873.220	<b>Easting (US ft)</b> 1539374.999	<b>Elevation (US ft)</b> 916.317	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°39'57.46670"	<b>Longitude (Global)</b> W84°02'49.07946"	<b>Ellipsoid Height (US ft)</b> 803.311	
Location Photo    NORTH				
 <p>3096_2019_OH, 3N, 20191220</p>		 <p>3096_2019_OH, 3W, 20191220</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3097_2019_OH	<b>Northing (US ft)</b> 364171.855	<b>Easting (US ft)</b> 1490887.182	<b>Elevation (US ft)</b> 843.647	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°39'11.92042"	<b>Longitude (Global)</b> W84°13'17.23934"	<b>Ellipsoid Height (US ft)</b> 731.688	
Location Photo    NORTH				
 <p>3097_2019_OH, 3N, 20191105</p>	 <p>3097_2019_OH, 3E, 20191105</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3098_2019_OH	<b>Northing (US ft)</b> 476669.635	<b>Easting (US ft)</b> 1997412.843	<b>Elevation (US ft)</b> 1108.074	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°58'29.96732"	<b>Longitude (Global)</b> W82°23'43.04166"	<b>Ellipsoid Height (US ft)</b> 996.881	
Location Photo    NORTH				
 <p>3098_2019_OH, 3N, 20191218</p>	 <p>3098_2019_OH, 3E, 20191218</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3099_2019_OH	<b>Northing (US ft)</b> 457821.418	<b>Easting (US ft)</b> 1942218.442	<b>Elevation (US ft)</b> 1042.453	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°55'23.75246"	<b>Longitude (Global)</b> W82°35'42.38437"	<b>Ellipsoid Height (US ft)</b> 930.286	
Location Photo    NORTH				
 <p>3099_2019_OH, 3N, 20200128</p>		 <p>3099_2019_OH, 3E, 20200128</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3100_2019_OH	<b>Northing (US ft)</b> 434009.718	<b>Easting (US ft)</b> 1953653.058	<b>Elevation (US ft)</b> 1182.837	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°51'28.55672"	<b>Longitude (Global)</b> W82°33'13.22845"	<b>Ellipsoid Height (US ft)</b> 1071.352	
Location Photo    NORTH				
 <p>3100_2019_OH, 3N, 20200128</p>		 <p>3100_2019_OH, 3W, 20200128</p>		






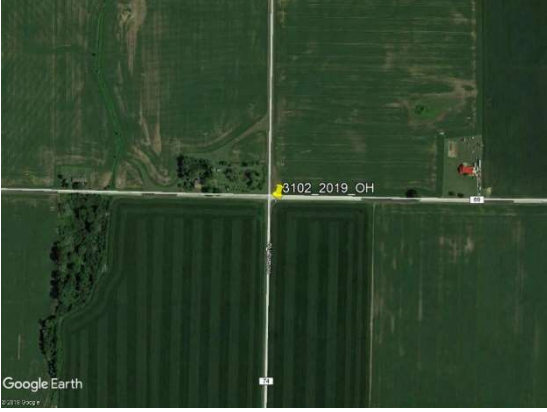


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3101_2019_OH	<b>Northing (US ft)</b> 354419.161	<b>Easting (US ft)</b> 1897757.540	<b>Elevation (US ft)</b> 1296.363	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°38'21.10609"	<b>Longitude (Global)</b> W82°45'17.66168"	<b>Ellipsoid Height (US ft)</b> 1184.779	
Location Photo    NORTH				
 <p>3101_2019_OH, 3N, 20200128</p>		 <p>3101_2019_OH, 3E, 20200128</p>		








# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3102_2019_OH	<b>Northing (US ft)</b> 335363.877	<b>Easting (US ft)</b> 1858808.273	<b>Elevation (US ft)</b> 1022.757	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°35'11.37707"	<b>Longitude (Global)</b> W82°53'41.78132"	<b>Ellipsoid Height (US ft)</b> 910.566	
Location Photo    NORTH				
 <p>3102_2019_OH, 3N, 20200123</p>		 <p>3102_2019_OH, 3W, 20200123</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3103_2019_OH	<b>Northing (US ft)</b> 356604.166	<b>Easting (US ft)</b> 1815535.363	<b>Elevation (US ft)</b> 983.710	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°38'38.94228"	<b>Longitude (Global)</b> W83°03'04.39506"	<b>Ellipsoid Height (US ft)</b> 870.606	
Location Photo    NORTH				
 <p>3103_2019_OH, 3S, 20200123</p>		 <p>3103_2019_OH, 3W, 20200123</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3104_2019_OH	<b>Northing (US ft)</b> 476669.589	<b>Easting (US ft)</b> 1879866.056	<b>Elevation (US ft)</b> 961.921	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°58'28.52665"	<b>Longitude (Global)</b> W82°49'15.58231"	<b>Ellipsoid Height (US ft)</b> 848.189	
Location Photo    NORTH				
 <p>3104_2019_OH, 3S, 20200127</p>		 <p>3104_2019_OH, 3E, 20200127</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3105_2019_OH	<b>Northing (US ft)</b> 489167.193	<b>Easting (US ft)</b> 1932208.550	<b>Elevation (US ft)</b> 1035.616	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°00'33.35976"	<b>Longitude (Global)</b> W82°37'53.40431"	<b>Ellipsoid Height (US ft)</b> 922.684	
Location Photo    NORTH				
 <p>3105_2019_OH, 3S, 20191218</p>	 <p>3105_2019_OH, 3W, 20191218</p>			




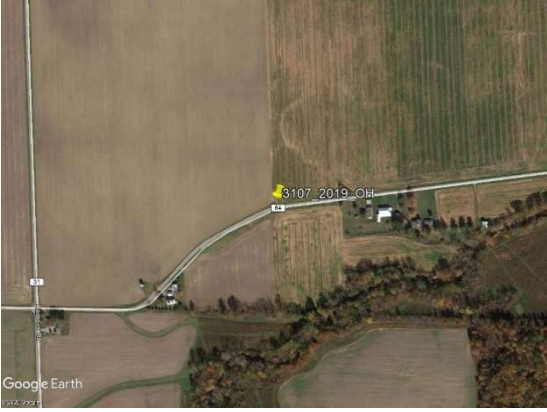




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3106_2019_OH	<b>Northing (US ft)</b> 530911.038	<b>Easting (US ft)</b> 1950774.888	<b>Elevation (US ft)</b> 958.964	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°07'26.04110"	<b>Longitude (Global)</b> W82°33'51.61730"	<b>Ellipsoid Height (US ft)</b> 845.569	
<b>Location Photo</b>    NORTH				
 <p>3106_2019_OH, 3S, 20200127</p>		 <p>3106_2019_OH, 3E, 20200127</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3107_2019_OH	<b>Northing (US ft)</b> 551757.679	<b>Easting (US ft)</b> 1896376.601	<b>Elevation (US ft)</b> 790.873	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°10'51.01991"	<b>Longitude (Global)</b> W82°45'43.26541"	<b>Ellipsoid Height (US ft)</b> 676.174	
Location Photo    NORTH				
 <p>3107_2019_OH, 3N, 20200127</p>		 <p>3107_2019_OH, 3E, 20200127</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3108_2019_OH	<b>Northing (US ft)</b> 523047.476	<b>Easting (US ft)</b> 1993887.308	<b>Elevation (US ft)</b> 952.288	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°06'08.27313"	<b>Longitude (Global)</b> W82°24'28.36798"	<b>Ellipsoid Height (US ft)</b> 839.953	
Location Photo    NORTH				
 <p>3108_2019_OH, 3N, 20191120</p>		 <p>3108_2019_OH, 3E, 20191120</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3109_2019_OH	<b>Northing (US ft)</b> 552717.684	<b>Easting (US ft)</b> 1997008.489	<b>Elevation (US ft)</b> 916.372	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°11'01.40886"	<b>Longitude (Global)</b> W82°23'47.13605"	<b>Ellipsoid Height (US ft)</b> 803.407	
Location Photo    NORTH				
 <p>3109_2019_OH, 3S, 20191120</p>		 <p>3109_2019_OH, 3W, 20191120</p>		




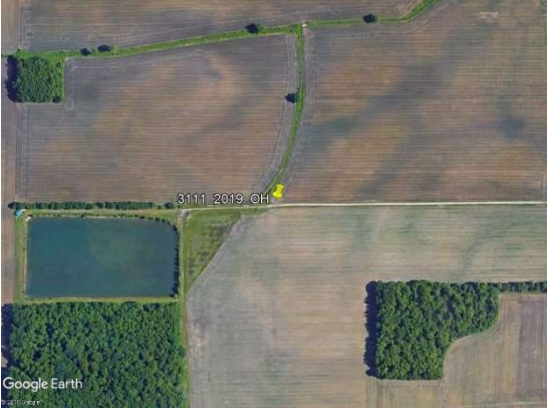




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3110_2019_OH	<b>Northing (US ft)</b> 579265.762	<b>Easting (US ft)</b> 2048610.381	<b>Elevation (US ft)</b> 802.771	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°15'22.57051"	<b>Longitude (Global)</b> W82°12'31.07572"	<b>Ellipsoid Height (US ft)</b> 690.156	
Location Photo    NORTH				
 <p>3110_2019_OH, 3N, 20191120</p>		 <p>3110_2019_OH, 3E, 20191120</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3111_2019_OH	<b>Northing (US ft)</b> 603711.898	<b>Easting (US ft)</b> 2061790.971	<b>Elevation (US ft)</b> 781.870	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°19'23.64164"	<b>Longitude (Global)</b> W82°09'37.25091"	<b>Ellipsoid Height (US ft)</b> 668.949	
<b>Location Photo</b>    NORTH				
 <p>3111_2019_OH, 3N, 20191119</p>		 <p>3111_2019_OH, 3E, 20191119</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3112_2019_OH	<b>Northing (US ft)</b> 635256.490	<b>Easting (US ft)</b> 2166350.071	<b>Elevation (US ft)</b> 806.172	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°24'29.02837"	<b>Longitude (Global)</b> W81°46'43.43911"	<b>Ellipsoid Height (US ft)</b> 694.008	
Location Photo    NORTH				
 <p>3112_2019_OH, 3S, 20191114</p>		 <p>3112_2019_OH, 3W, 20191114</p>		






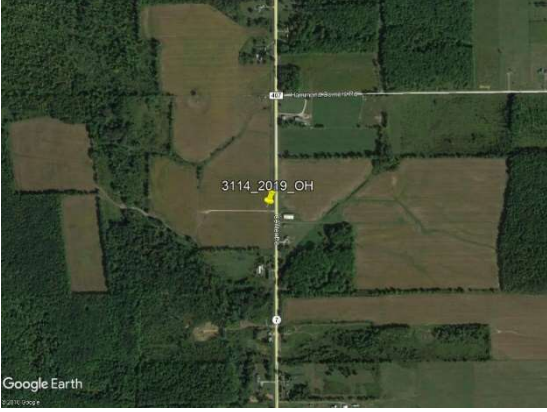


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3113_2019_OH	<b>Northing (US ft)</b> 568304.989	<b>Easting (US ft)</b> 2322978.561	<b>Elevation (US ft)</b> 1152.810	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N41°13'09.71663"	<b>Longitude (Global)</b> W81°12'41.08029"	<b>Ellipsoid Height (US ft)</b> 1042.360	
<b>Location Photo</b>    NORTH				
 <p>3113_2019_OH, 3N, 20191109</p>	 <p>3113_2019_OH, 3W, 20191109</p>			



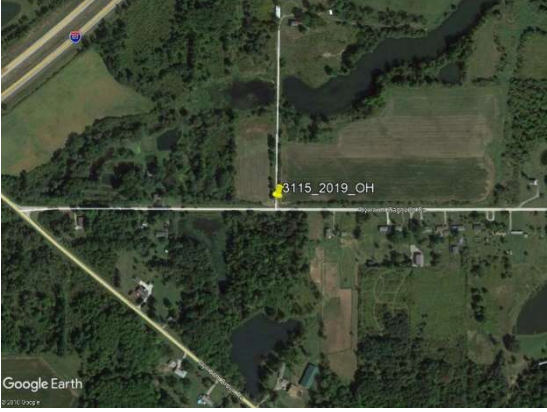



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3114_2019_OH	<b>Northing (US ft)</b> 783385.091	<b>Easting (US ft)</b> 2494025.941	<b>Elevation (US ft)</b> 947.233	
<b>Point Type</b> LONG GRASS	<b>Latitude (Global)</b> N41°48'03.20670"	<b>Longitude (Global)</b> W80°34'21.06085"	<b>Ellipsoid Height (US ft)</b> 834.788	
<b>Location Photo</b>    NORTH				
 <p>3114_2019_OH, 3N, 20190131</p>	 <p>3114_2019_OH, 3E, 20190131</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3115_2019_OH	<b>Northing (US ft)</b> 794242.568	<b>Easting (US ft)</b> 2451369.471	<b>Elevation (US ft)</b> 851.021	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°49'59.37995"	<b>Longitude (Global)</b> W80°43'41.21444"	<b>Ellipsoid Height (US ft)</b> 738.061	
Location Photo    NORTH				
 <p>3115_2019_OH, 3N, 20191105</p>		 <p>3115_2019_OH, 3W, 20191105</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3116_2019_OH	<b>Northing (US ft)</b> 795082.406	<b>Easting (US ft)</b> 2484195.030	<b>Elevation (US ft)</b> 886.415	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°50'00.86312"	<b>Longitude (Global)</b> W80°36'27.47445"	<b>Ellipsoid Height (US ft)</b> 773.674	
Location Photo    NORTH				
 <p>3116_2019_OH, 3S, 20190131</p>	 <p>3116_2019_OH, 3W, 20190131</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3117_2019_OH	<b>Northing (US ft)</b> 750814.729	<b>Easting (US ft)</b> 2404246.119	<b>Elevation (US ft)</b> 824.094	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°42'59.41834"	<b>Longitude (Global)</b> W80°54'14.07268"	<b>Ellipsoid Height (US ft)</b> 711.692	
Location Photo    NORTH				
 <p>3117_2019_OH, 3N, 20191106</p>		 <p>3117_2019_OH, 3W, 20191106</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3118_2019_OH	<b>Northing (US ft)</b> 670109.747	<b>Easting (US ft)</b> 2431372.097	<b>Elevation (US ft)</b> 887.128	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°29'37.16695"	<b>Longitude (Global)</b> W80°48'37.08097"	<b>Ellipsoid Height (US ft)</b> 775.964	
Location Photo    NORTH				
 <p>3118_2019_OH, 3N, 20191106</p>		 <p>3118_2019_OH, 3E, 20191106</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3119_2019_OH	<b>Northing (US ft)</b> 558321.568	<b>Easting (US ft)</b> 2492119.394	<b>Elevation (US ft)</b> 1043.521	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°11'00.51475"	<b>Longitude (Global)</b> W80°35'51.04009"	<b>Ellipsoid Height (US ft)</b> 932.330	
Location Photo    NORTH				
 <p>3119_2019_OH, 3N, 20191108</p>		 <p>3119_2019_OH, 3E, 20191108</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3120_2019_OH	<b>Northing (US ft)</b> 605701.856	<b>Easting (US ft)</b> 2490921.432	<b>Elevation (US ft)</b> 1051.615	
<b>Point Type</b> LONG GRASS	<b>Latitude (Global)</b> N41°18'48.81429"	<b>Longitude (Global)</b> W80°35'53.19209"	<b>Ellipsoid Height (US ft)</b> 940.630	
Location Photo    NORTH				
 <p>3120_2019_OH, 3N, 20191107</p>		 <p>3120_2019_OH, 3E, 20191107</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3121_2019_OH	<b>Northing (US ft)</b> 487684.333	<b>Easting (US ft)</b> 1497174.375		<b>Elevation (US ft)</b> 726.286
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°59'33.38551"	<b>Longitude (Global)</b> W84°12'27.05381"		<b>Ellipsoid Height (US ft)</b> 611.784
Location Photo    NORTH				
 <p>3121_2019_OH, 3N, 20191219</p>		 <p>3121_2019_OH, 3W, 20191219</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3122_2019_OH	<b>Northing (US ft)</b> 492339.707	<b>Easting (US ft)</b> 1520955.575	<b>Elevation (US ft)</b> 730.221	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°00'23.86267"	<b>Longitude (Global)</b> W84°07'18.10034"	<b>Ellipsoid Height (US ft)</b> 614.928	
<b>Location Photo</b>    NORTH				
 <p>3122_2019_OH, 3N, 20191219</p>		 <p>3122_2019_OH, 3E, 20191219</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3123_2019_OH	<b>Northing (US ft)</b> 452269.540	<b>Easting (US ft)</b> 1535877.011	<b>Elevation (US ft)</b> 776.413	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°53'50.67738"	<b>Longitude (Global)</b> W84°03'54.11796"	<b>Ellipsoid Height (US ft)</b> 661.436	
<b>Location Photo</b>    NORTH				
 <p>3123_2019_OH, 3N, 20191219</p>		 <p>3123_2019_OH, 3E, 20191219</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3124_2019_OH	<b>Northing (US ft)</b> 419751.753	<b>Easting (US ft)</b> 1485981.840	<b>Elevation (US ft)</b> 791.482	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°48'20.06319"	<b>Longitude (Global)</b> W84°14'35.28348"	<b>Ellipsoid Height (US ft)</b> 678.318	
<b>Location Photo</b>   NORTH				
 <p>3124_2019_OH, 3S, 20191211</p>		 <p>3124_2019_OH, 3W, 20191211</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3125_2019_OH	<b>Northing (US ft)</b> 395191.163	<b>Easting (US ft)</b> 1442858.618	<b>Elevation (US ft)</b> 816.040	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°44'08.52886"	<b>Longitude (Global)</b> W84°23'48.99694"	<b>Ellipsoid Height (US ft)</b> 704.387	
<b>Location Photo</b>   NORTH				
 <p>3125_2019_OH, 3N, 20191211</p>		 <p>3125_2019_OH, 3E, 20191211</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3126_2019_OH	<b>Northing (US ft)</b> 525936.083	<b>Easting (US ft)</b> 1418489.822	<b>Elevation (US ft)</b> 707.293	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°05'34.76712"	<b>Longitude (Global)</b> W84°29'44.34333"	<b>Ellipsoid Height (US ft)</b> 595.432	
<b>Location Photo</b>    NORTH				
 <p>3126_2019_OH, 3N, 20191209</p>		 <p>3126_2019_OH, 3E, 20191209</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3127_2019_OH	<b>Northing (US ft)</b> 539956.267	<b>Easting (US ft)</b> 1433053.077	<b>Elevation (US ft)</b> 713.245	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°07'56.51546"	<b>Longitude (Global)</b> W84°26'38.26026"	<b>Ellipsoid Height (US ft)</b> 600.880	
Location Photo    NORTH				
 <p>3127_2019_OH, 3N, 20191209</p>		 <p>3127_2019_OH, 3E, 20191209</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3128_2019_OH	<b>Northing (US ft)</b> 548192.567	<b>Easting (US ft)</b> 1450733.685	<b>Elevation (US ft)</b> 717.868	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°09'21.70860"	<b>Longitude (Global)</b> W84°22'49.56918"	<b>Ellipsoid Height (US ft)</b> 604.866	
<b>Location Photo</b>    NORTH				
 <p>3128_2019_OH, 3S, 20191206</p>		 <p>3128_2019_OH, 3W, 20191206</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3129_2019_OH	<b>Northing (US ft)</b> 556431.928	<b>Easting (US ft)</b> 1487588.871		<b>Elevation (US ft)</b> 721.366
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°10'50.67657"	<b>Longitude (Global)</b> W84°14'49.99532"		<b>Ellipsoid Height (US ft)</b> 607.003
<b>Location Photo</b>    NORTH				
 <p>3129_2019_OH, 3N, 20191209</p>		 <p>3129_2019_OH, 3W, 20191209</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3130_2019_OH	<b>Northing (US ft)</b> 563211.904	<b>Easting (US ft)</b> 1403392.546	<b>Elevation (US ft)</b> 719.699	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°11'39.52651"	<b>Longitude (Global)</b> W84°33'12.93789"	<b>Ellipsoid Height (US ft)</b> 608.128	
<b>Location Photo</b>    NORTH				
 <p>3130_2019_OH, 3N, 20191206</p>		 <p>3130_2019_OH, 3E, 20191206</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3131_2019_OH	<b>Northing (US ft)</b> 558387.165	<b>Easting (US ft)</b> 1376422.878	<b>Elevation (US ft)</b> 726.035	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°10'45.44453"	<b>Longitude (Global)</b> W84°39'04.06840"	<b>Ellipsoid Height (US ft)</b> 615.209	
<b>Location Photo</b>    NORTH				
 <p>3131_2019_OH, 3S, 20191206</p>		 <p>3131_2019_OH, 3E, 20191206</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3132_2019_OH	<b>Northing (US ft)</b> 632407.220	<b>Easting (US ft)</b> 1425801.851	<b>Elevation (US ft)</b> 707.669	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°23'08.15573"	<b>Longitude (Global)</b> W84°28'40.39944"	<b>Ellipsoid Height (US ft)</b> 595.394	
<b>Location Photo</b>    NORTH				
 <p>3132_2019_OH, 3S, 20191205</p>		 <p>3132_2019_OH, 3E, 20191205</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3133_2019_OH	<b>Northing (US ft)</b> 462053.131	<b>Easting (US ft)</b> 1417188.562	<b>Elevation (US ft)</b> 752.823	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°55'03.39736"	<b>Longitude (Global)</b> W84°29'42.24966"	<b>Ellipsoid Height (US ft)</b> 640.911	
Location Photo    NORTH				
 <p>3133_2019_OH, 3N, 20191210</p>		 <p>3133_2019_OH, 3E, 20191210</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3134_2019_OH	<b>Northing (US ft)</b> 450665.434	<b>Easting (US ft)</b> 1450241.083	<b>Elevation (US ft)</b> 758.234	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°53'18.14419"	<b>Longitude (Global)</b> W84°22'28.60419"	<b>Ellipsoid Height (US ft)</b> 645.422	
<b>Location Photo</b>    NORTH				
 <p>3134_2019_OH, 3S, 20191211</p>		 <p>3134_2019_OH, 3E, 20191211</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3135_2019_OH	<b>Northing (US ft)</b> 319636.447	<b>Easting (US ft)</b> 1366207.087	<b>Elevation (US ft)</b> 872.090	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°31'24.48701"	<b>Longitude (Global)</b> W84°40'00.06833"	<b>Ellipsoid Height (US ft)</b> 762.451	
Location Photo    NORTH				
 <p>3135_2019_OH, 3S, 20191212</p>		 <p>3135_2019_OH, 3E, 20191212</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3136_2019_OH	<b>Northing (US ft)</b> 304340.240	<b>Easting (US ft)</b> 1343729.937	<b>Elevation (US ft)</b> 915.246	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°28'47.76587"	<b>Longitude (Global)</b> W84°44'45.93442"	<b>Ellipsoid Height (US ft)</b> 805.681	
<b>Location Photo</b>    NORTH				
 <p>3136_2019_OH, 3S, 20191212</p>		 <p>3136_2019_OH, 3W, 20191212</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3137_2019_OH	<b>Northing (US ft)</b> 357202.195	<b>Easting (US ft)</b> 1355513.449	<b>Elevation (US ft)</b> 841.736	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°37'32.92945"	<b>Longitude (Global)</b> W84°42'30.81613"	<b>Ellipsoid Height (US ft)</b> 732.011	
<b>Location Photo</b>    NORTH				
 <p>3137_2019_OH, 3S, 20191211</p>		 <p>3137_2019_OH, 3E, 20191211</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3138_2019_OH	<b>Northing (US ft)</b> 412596.267	<b>Easting (US ft)</b> 1365710.346	<b>Elevation (US ft)</b> 814.195	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°46'42.66804"	<b>Longitude (Global)</b> W84°40'36.54071"	<b>Ellipsoid Height (US ft)</b> 704.159	
Location Photo    NORTH				
 <p>3138_2019_OH, 3S, 20191211</p>		 <p>3138_2019_OH, 3W, 20191211</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3139_2019_OH	<b>Northing (US ft)</b> 390559.300	<b>Easting (US ft)</b> 1404940.931	<b>Elevation (US ft)</b> 820.062	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°43'14.32884"	<b>Longitude (Global)</b> W84°32'00.03849"	<b>Ellipsoid Height (US ft)</b> 709.411	
<b>Location Photo</b>    NORTH				
 <p>3139_2019_OH, 3S, 20191126</p>		 <p>3139_2019_OH, 3E, 20191126</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3140_2019_OH	<b>Northing (US ft)</b> 384580.675	<b>Easting (US ft)</b> 1345631.574	<b>Elevation (US ft)</b> 806.921	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N40°42'00.88950"	<b>Longitude (Global)</b> W84°44'48.07992"	<b>Ellipsoid Height (US ft)</b> 697.079	
<b>Location Photo</b>    NORTH				
 <p>3140_2019_OH, 3N, 20191211</p>		 <p>3140_2019_OH, 3E, 20191211</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3141_2019_OH	<b>Northing (US ft)</b> 500329.573	<b>Easting (US ft)</b> 1354214.088	<b>Elevation (US ft)</b> 755.691	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°01'06.44826"	<b>Longitude (Global)</b> W84°43'35.04324"	<b>Ellipsoid Height (US ft)</b> 645.555	
Location Photo    NORTH				
 <p>3141_2019_OH, 3N, 20191210</p>		 <p>3141_2019_OH, 3W, 20191210</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jason Stowers
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3142_2019_OH	<b>Northing (US ft)</b> 679197.574	<b>Easting (US ft)</b> 1427194.528	<b>Elevation (US ft)</b> 747.124	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°30'50.64842"	<b>Longitude (Global)</b> W84°28'36.04477"	<b>Ellipsoid Height (US ft)</b> 635.094	
Location Photo    NORTH				
 <p>3142_2019_OH, 3N, 20191206</p>	 <p>3142_2019_OH, 3W, 20191206</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3143_2019_OH	<b>Northing (US ft)</b> 464498.936	<b>Easting (US ft)</b> 1844910.347	<b>Elevation (US ft)</b> 991.844	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°56'26.74462"	<b>Longitude (Global)</b> W82°56'50.50340"	<b>Ellipsoid Height (US ft)</b> 877.738	
Location Photo    NORTH				
 <p>3143_2019_OH, 3S, 20200124</p>		 <p>3143_2019_OH, 3W, 20200124</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3144_2019_OH	<b>Northing (US ft)</b> 507538.286	<b>Easting (US ft)</b> 1843544.679	<b>Elevation (US ft)</b> 926.874	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°03'31.95056"	<b>Longitude (Global)</b> W82°57'11.21296"	<b>Ellipsoid Height (US ft)</b> 812.219	
<b>Location Photo</b>    NORTH				
 <p>3144_2019_OH, 3N, 20200127</p>		 <p>3144_2019_OH, 3W, 20200127</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3145_2019_OH	<b>Northing (US ft)</b> 561457.371	<b>Easting (US ft)</b> 1826809.116	<b>Elevation (US ft)</b> 790.769	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°12'23.79860"	<b>Longitude (Global)</b> W83°00'53.83640"	<b>Ellipsoid Height (US ft)</b> 675.533	
Location Photo    NORTH				
 <p>3145_2019_OH, 3N, 20200129</p>		 <p>3145_2019_OH, 3E, 20200129</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3146_2019_OH	<b>Northing (US ft)</b> 563436.264	<b>Easting (US ft)</b> 1783939.224	<b>Elevation (US ft)</b> 697.829	
<b>Point Type</b> CULTIVATED FIELD	<b>Latitude (Global)</b> N41°12'40.47175"	<b>Longitude (Global)</b> W83°10'14.91138"	<b>Ellipsoid Height (US ft)</b> 583.035	
Location Photo    NORTH				
 <p>3146_2019_OH, 3N, 20200129</p>		 <p>3146_2019_OH, 3E, 20200129</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3147_2019_OH	<b>Northing (US ft)</b> 513484.961	<b>Easting (US ft)</b> 1757178.363	<b>Elevation (US ft)</b> 796.932	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N41°04'24.74220"	<b>Longitude (Global)</b> W83°15'59.30684"	<b>Ellipsoid Height (US ft)</b> 681.646	
<b>Location Photo</b>    NORTH				
 <p>3147_2019_OH, 3N, 20200129</p>		 <p>3147_2019_OH, 3E, 20200129</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3148_2019_OH	<b>Northing (US ft)</b> 481441.022	<b>Easting (US ft)</b> 1747904.421	<b>Elevation (US ft)</b> 797.031	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°59'07.30076"	<b>Longitude (Global)</b> W83°17'56.56029"	<b>Ellipsoid Height (US ft)</b> 681.519	
Location Photo    NORTH				
 <p>3148_2019_OH, 3N, 20200130</p>		 <p>3148_2019_OH, 3W, 20200130</p>		






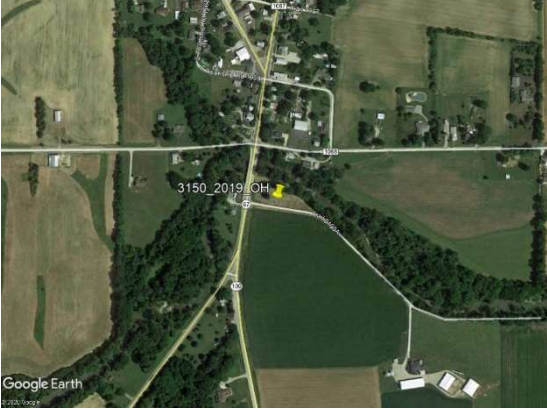


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3149_2019_OH	<b>Northing (US ft)</b> 442939.713	<b>Easting (US ft)</b> 1753585.974	<b>Elevation (US ft)</b> 828.237	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°52'47.38005"	<b>Longitude (Global)</b> W83°16'38.00297"	<b>Ellipsoid Height (US ft)</b> 713.073	
Location Photo    NORTH				
 <p>3149_2019_OH, 3N, 20200124</p>		 <p>3149_2019_OH, 3E, 20200124</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3150_2019_OH	<b>Northing (US ft)</b> 494222.908	<b>Easting (US ft)</b> 1800408.398	<b>Elevation (US ft)</b> 825.040	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N41°01'17.78576"	<b>Longitude (Global)</b> W83°06'33.09981"	<b>Ellipsoid Height (US ft)</b> 709.986	
<b>Location Photo</b>    NORTH				
 <p>3150_2019_OH, 3N, 20200129</p>		 <p>3150_2019_OH, 3E, 20200129</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3151_2019_OH	<b>Northing (US ft)</b> 531310.430	<b>Easting (US ft)</b> 1842508.577	<b>Elevation (US ft)</b> 893.225	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N41°07'26.78812"	<b>Longitude (Global)</b> W82°57'26.36563"	<b>Ellipsoid Height (US ft)</b> 778.281	
<b>Location Photo</b>    NORTH				
 <p>3151_2019_OH, 3N, 20200129</p>		 <p>3151_2019_OH, 3W, 20200129</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3152_2019_OH	<b>Northing (US ft)</b> 592489.498	<b>Easting (US ft)</b> 1915708.918	<b>Elevation (US ft)</b> 700.562	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N41°17'33.97787"	<b>Longitude (Global)</b> W82°41'31.60222"	<b>Ellipsoid Height (US ft)</b> 585.413	
Location Photo    NORTH				
 <p>3152_2019_OH, 3N, 20200128</p>		 <p>3152_2019_OH, 3E, 20200128</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3153_2019_OH	<b>Northing (US ft)</b> 594600.880	<b>Easting (US ft)</b> 1888196.834	<b>Elevation (US ft)</b> 730.553	
<b>Point Type</b> SHORT GRASS	<b>Latitude (Global)</b> N41°17'54.08475"	<b>Longitude (Global)</b> W82°47'32.12132"	<b>Ellipsoid Height (US ft)</b> 615.082	
<b>Location Photo</b>    NORTH				
 <p>3153_2019_OH, 3S, 20200128</p>		 <p>3153_2019_OH, 3W, 20200128</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3154_2019_OH	<b>Northing (US ft)</b> 601640.738	<b>Easting (US ft)</b> 1978139.570	<b>Elevation (US ft)</b> 788.494	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°19'04.95310"	<b>Longitude (Global)</b> W82°27'53.66607"	<b>Ellipsoid Height (US ft)</b> 674.136	
Location Photo    NORTH				
 <p>3154_2019_OH, 3N, 20191119</p>		 <p>3154_2019_OH, 3W, 20191119</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3155_2019_OH	<b>Northing (US ft)</b> 597455.330	<b>Easting (US ft)</b> 2015228.621	<b>Elevation (US ft)</b> 825.537	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°18'23.16771"	<b>Longitude (Global)</b> W82°19'47.69342"	<b>Ellipsoid Height (US ft)</b> 711.928	
<b>Location Photo</b>    NORTH				
 <p>3155_2019_OH, 3N, 20191119</p>		 <p>3155_2019_OH, 3W, 20191119</p>		




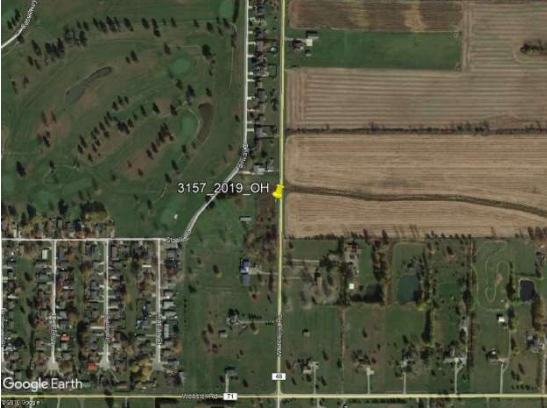
# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3156_2019_OH	<b>Northing (US ft)</b> 600420.650	<b>Easting (US ft)</b> 2040643.472	<b>Elevation (US ft)</b> 801.808	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°18'51.84384"	<b>Longitude (Global)</b> W82°14'14.55561"	<b>Ellipsoid Height (US ft)</b> 688.605	
<b>Location Photo</b>    NORTH				
 <p>3156_2019_OH, 3N, 20191119</p>		 <p>3156_2019_OH, 3E, 20191119</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3157_2019_OH	<b>Northing (US ft)</b> 559937.472	<b>Easting (US ft)</b> 2067654.210		<b>Elevation (US ft)</b> 840.296
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°12'10.88996"	<b>Longitude (Global)</b> W82°08'22.77376"		<b>Ellipsoid Height (US ft)</b> 728.505
Location Photo    NORTH				
 <p>3157_2019_OH, 3N, 20191120</p>		 <p>3157_2019_OH, 3E, 20191120</p>		




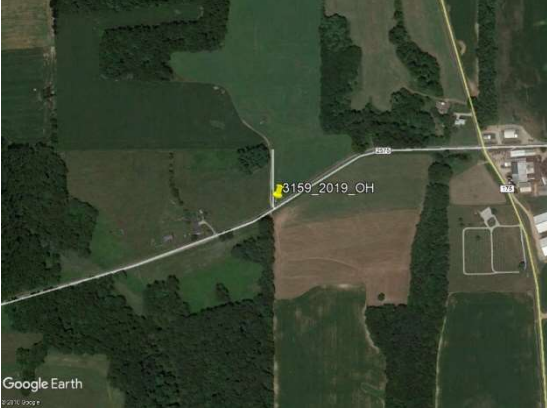




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3158_2019_OH	<b>Northing (US ft)</b> 521030.969	<b>Easting (US ft)</b> 2045589.874	<b>Elevation (US ft)</b> 982.640	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°05'47.25894"	<b>Longitude (Global)</b> W82°13'13.06979"	<b>Ellipsoid Height (US ft)</b> 871.496	
<b>Location Photo</b>    NORTH				
 <p>3158_2019_OH, 3S, 20191118</p>		 <p>3158_2019_OH, 3W, 20191118</p>		


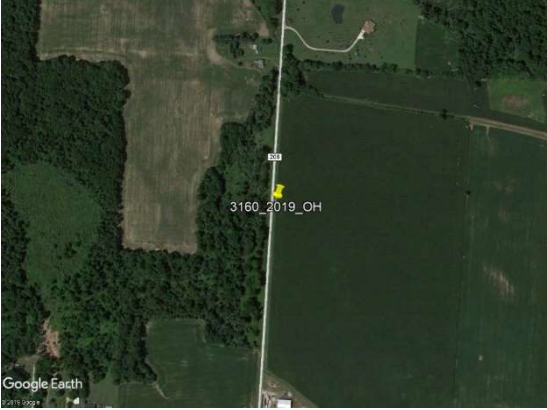




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3159_2019_OH	<b>Northing (US ft)</b> 375083.216	<b>Easting (US ft)</b> 2060242.566	<b>Elevation (US ft)</b> 1082.745	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°41'44.60118"	<b>Longitude (Global)</b> W82°10'08.91321"	<b>Ellipsoid Height (US ft)</b> 973.705	
Location Photo    NORTH				
 <p>3159_2019_OH, 3N, 20191113</p>	 <p>3159_2019_OH, 3E, 20191113</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3160_2019_OH	<b>Northing (US ft)</b> 272299.017	<b>Easting (US ft)</b> 1901896.137	<b>Elevation (US ft)</b> 1251.272	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°24'49.74700"	<b>Longitude (Global)</b> W82°44'21.05524"	<b>Ellipsoid Height (US ft)</b> 1139.848	
Location Photo    NORTH				
 <p>3160_2019_OH, 3N, 20191216</p>	 <p>3160_2019_OH, 3E, 20191216</p>			






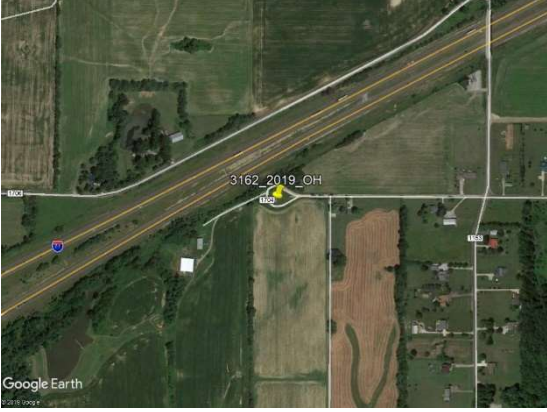


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3161_2019_OH	<b>Northing (US ft)</b> 371727.191	<b>Easting (US ft)</b> 2037222.818	<b>Elevation (US ft)</b> 1301.941	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°41'12.19327"	<b>Longitude (Global)</b> W82°15'07.89878"	<b>Ellipsoid Height (US ft)</b> 1192.639	
Location Photo    NORTH				
 <p>3161_2019_OH, 3N, 20191113</p>	 <p>3161_2019_OH, 3E, 20191113</p>			




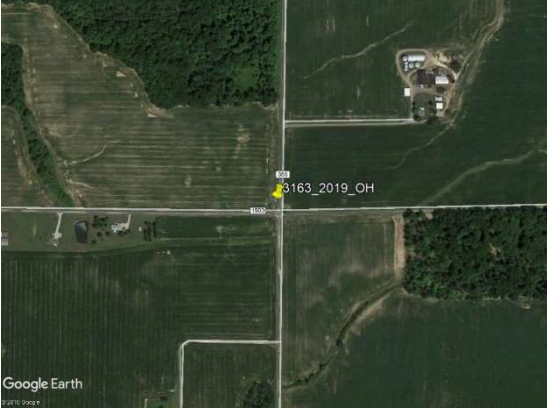




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3162_2019_OH	<b>Northing (US ft)</b> 418192.451	<b>Easting (US ft)</b> 2008860.416	<b>Elevation (US ft)</b> 1309.277	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°48'51.97127"	<b>Longitude (Global)</b> W82°21'15.06601"	<b>Ellipsoid Height (US ft)</b> 1199.258	
<b>Location Photo</b>   NORTH				
 <p>3162_2019_OH, 3N, 20191218</p>	 <p>3162_2019_OH, 3E, 20191218</p>			


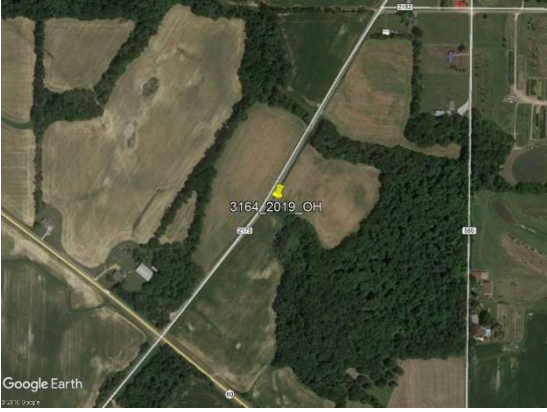




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3163_2019_OH	<b>Northing (US ft)</b> 428559.496	<b>Easting (US ft)</b> 2053208.297	<b>Elevation (US ft)</b> 1178.635	
<b>Point Type</b> CULTIVATED FIELD	<b>Latitude (Global)</b> N40°50'33.27676"	<b>Longitude (Global)</b> W82°11'37.80057"	<b>Ellipsoid Height (US ft)</b> 1069.393	
Location Photo    NORTH				
 <p>3163_2019_OH, 3N, 20191113</p>		 <p>3163_2019_OH, 3W, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3164_2019_OH	<b>Northing (US ft)</b> 392835.222	<b>Easting (US ft)</b> 2039112.194		<b>Elevation (US ft)</b> 1170.654
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N40°44'40.71825"	<b>Longitude (Global)</b> W82°14'42.57200"		<b>Ellipsoid Height (US ft)</b> 1061.428
Location Photo    NORTH				
 <p>3164_2019_OH, 3S, 20191113</p>		 <p>3164_2019_OH, 3E, 20191113</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3165_2019_OH	<b>Northing (US ft)</b> 508908.478	<b>Easting (US ft)</b> 2085433.835	<b>Elevation (US ft)</b> 913.739	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°03'45.88801"	<b>Longitude (Global)</b> W82°04'33.41381"	<b>Ellipsoid Height (US ft)</b> 803.556	
<b>Location Photo</b>    NORTH				
 <p>3165_2019_OH, 3S, 20191118</p>		 <p>3165_2019_OH, 3E, 20191118</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3166_2019_OH	<b>Northing (US ft)</b> 492779.021	<b>Easting (US ft)</b> 2115611.149	<b>Elevation (US ft)</b> 1058.593	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°01'04.87639"	<b>Longitude (Global)</b> W81°58'00.74109"	<b>Ellipsoid Height (US ft)</b> 949.077	
Location Photo    NORTH				
 <p>3166_2019_OH, 3S, 20191118</p>		 <p>3166_2019_OH, 3E, 20191118</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3167_2019_OH	<b>Northing (US ft)</b> 607616.265	<b>Easting (US ft)</b> 2420052.862	<b>Elevation (US ft)</b> 938.979	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°19'21.95976"	<b>Longitude (Global)</b> W80°51'21.27895"	<b>Ellipsoid Height (US ft)</b> 828.003	
Location Photo    NORTH				
 <p>3167_2019_OH, 3S, 20191107</p>		 <p>3167_2019_OH, 3W, 20191107</p>		




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3168_2019_OH	<b>Northing (US ft)</b> 651828.975	<b>Easting (US ft)</b> 2373647.465	<b>Elevation (US ft)</b> 1161.452	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°26'46.93582"	<b>Longitude (Global)</b> W81°01'19.59477"	<b>Ellipsoid Height (US ft)</b> 1050.402	
Location Photo    NORTH				
 <p>3168_2019_OH, 3N, 20191107</p>		 <p>3168_2019_OH, 3W, 20191107</p>		






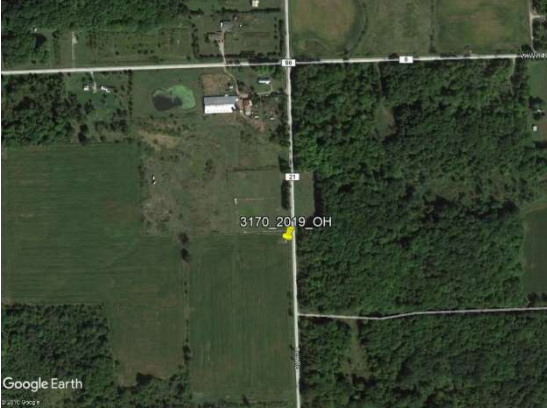


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3169_2019_OH	<b>Northing (US ft)</b> 673680.765	<b>Easting (US ft)</b> 2386803.917	<b>Elevation (US ft)</b> 1003.890	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°30'20.56353"	<b>Longitude (Global)</b> W80°58'21.83412"	<b>Ellipsoid Height (US ft)</b> 892.638	
Location Photo    NORTH				
 <p>3169_2019_OH, 3N, 20191106</p>		 <p>3169_2019_OH, 3W, 20191106</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3170_2019_OH	<b>Northing (US ft)</b> 692479.206	<b>Easting (US ft)</b> 2436345.457	<b>Elevation (US ft)</b> 916.024	
<b>Point Type</b> LONG GRASS	<b>Latitude (Global)</b> N41°33'17.17801"	<b>Longitude (Global)</b> W80°47'25.97802"	<b>Ellipsoid Height (US ft)</b> 804.673	
<b>Location Photo</b>    NORTH				
 <p>3170_2019_OH, 3N, 20190130</p>	 <p>3170_2019_OH, 3E, 20190130</p>			


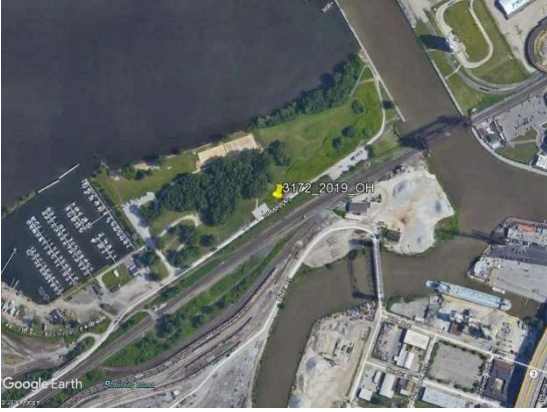




# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3171_2019_OH	<b>Northing (US ft)</b> 628147.681	<b>Easting (US ft)</b> 2392509.222	<b>Elevation (US ft)</b> 846.933	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°22'49.76214"	<b>Longitude (Global)</b> W80°57'17.46149"	<b>Ellipsoid Height (US ft)</b> 735.877	
<b>Location Photo</b>    NORTH				
 <p>3171_2019_OH, 3N, 20191107</p>		 <p>3171_2019_OH, 3E, 20191107</p>		




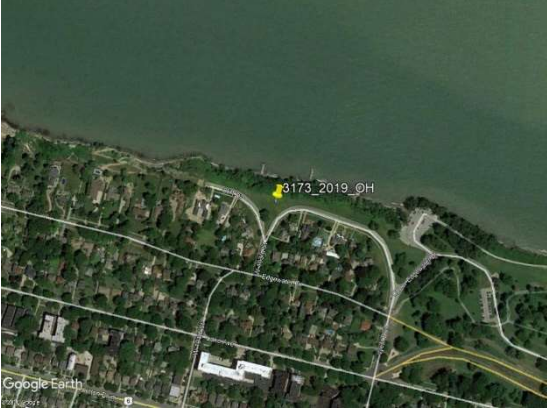


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3172_2019_OH	<b>Northing (US ft)</b> 668492.923	<b>Easting (US ft)</b> 2184103.694	<b>Elevation (US ft)</b> 580.862	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°29'55.88267"	<b>Longitude (Global)</b> W81°42'46.51844"	<b>Ellipsoid Height (US ft)</b> 468.079	
<b>Location Photo</b>    NORTH				
 <p>3172_2019_OH, 3N, 20191114</p>		 <p>3172_2019_OH, 3E, 20191114</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3173_2019_OH	<b>Northing (US ft)</b> 664719.009	<b>Easting (US ft)</b> 2172822.134	<b>Elevation (US ft)</b> 634.375	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°29'19.57694"	<b>Longitude (Global)</b> W81°45'15.19830"	<b>Ellipsoid Height (US ft)</b> 521.601	
<b>Location Photo</b>    NORTH				
 <p>3173_2019_OH, 3S, 20191114</p>	 <p>3173_2019_OH, 3E, 20191114</p>			





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3174_2019_OH	<b>Northing (US ft)</b> 705237.523	<b>Easting (US ft)</b> 2294488.327	<b>Elevation (US ft)</b> 1103.980	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°35'46.52202"	<b>Longitude (Global)</b> W81°18'29.38558"	<b>Ellipsoid Height (US ft)</b> 992.219	
<b>Location Photo</b>    NORTH				
 <p>3174_2019_OH, 3N, 20191113</p>		 <p>3174_2019_OH, 3E, 20191113</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3175_2019_OH	<b>Northing (US ft)</b> 681433.818	<b>Easting (US ft)</b> 2339784.650	<b>Elevation (US ft)</b> 1322.797	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N41°31'44.83225"	<b>Longitude (Global)</b> W81°08'38.16279"	<b>Ellipsoid Height (US ft)</b> 1211.486	
<b>Location Photo</b>    NORTH				
 <p>3175_2019_OH, 3S, 20191106</p>		 <p>3175_2019_OH, 3E, 20191106</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3176_2019_OH	<b>Northing (US ft)</b> 679060.011	<b>Easting (US ft)</b> 2363956.595	<b>Elevation (US ft)</b> 1156.161	
<b>Point Type</b> TALL GRASS	<b>Latitude (Global)</b> N41°31'17.54824"	<b>Longitude (Global)</b> W81°03'20.91103"	<b>Ellipsoid Height (US ft)</b> 1044.900	
Location Photo    NORTH				
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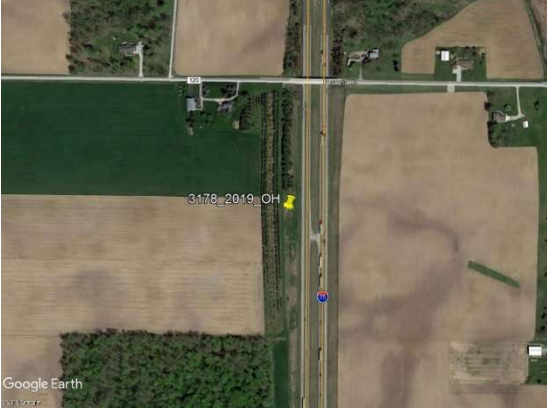
# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3177_2019_OH	<b>Northing (US ft)</b> 639400.973	<b>Easting (US ft)</b> 1931285.537	<b>Elevation (US ft)</b> 586.241	
<b>Point Type</b> BRUSH	<b>Latitude (Global)</b> N41°25'17.77445"	<b>Longitude (Global)</b> W82°38'08.49357"	<b>Ellipsoid Height (US ft)</b> 470.552	
Location Photo    NORTH				
 <p>3177_2019_OH, 3N, 20200128</p>		 <p>3177_2019_OH, 3E, 20200128</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3178_2019_OH	<b>Northing (US ft)</b> 316885.139	<b>Easting (US ft)</b> 1504263.890	<b>Elevation (US ft)</b> 957.288	
<b>Point Type</b> BRUSH	<b>Latitude (Global)</b> N40°31'27.31069"	<b>Longitude (Global)</b> W84°10'11.96656"	<b>Ellipsoid Height (US ft)</b> 846.422	
<b>Location Photo</b>   NORTH				
 <p>3178_2019_OH, 3N, 20191031</p>		 <p>3178_2019_OH, 3E, 20191031</p>		




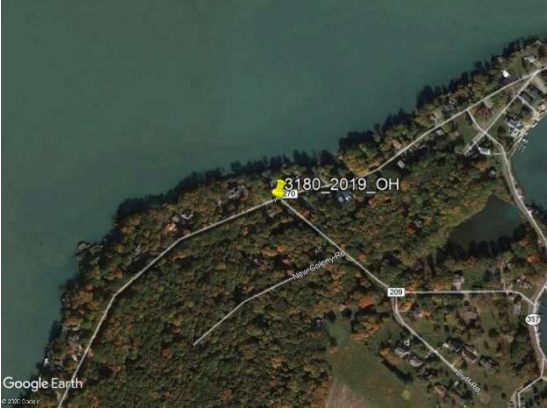


# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3179_2019_OH	<b>Northing (US ft)</b> 586758.509	<b>Easting (US ft)</b> 2413130.539	<b>Elevation (US ft)</b> 897.056	
<b>Point Type</b> BRUSH	<b>Latitude (Global)</b> N41°15'57.18657"	<b>Longitude (Global)</b> W80°52'57.06194"	<b>Ellipsoid Height (US ft)</b> 786.071	
Location Photo    NORTH				
 <p>3179_2019_OH, 3S, 20191108</p>	 <p>3179_2019_OH, 3E, 20191108</p>			









# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3180_2019_OH	<b>Northing (US ft)</b> 725365.054	<b>Easting (US ft)</b> 1877857.763	<b>Elevation (US ft)</b> 595.882	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°39'25.67902"	<b>Longitude (Global)</b> W82°49'54.09702"	<b>Ellipsoid Height (US ft)</b> 479.103	
<b>Location Photo</b>    NORTH				
 <p>3180_2019_OH, 3NE, 20200326</p>	 <p>3180_2019_OH, 3SE, 20200326</p>			







# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leesemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3181_2019_OH	<b>Northing (US ft)</b> 710537.729	<b>Easting (US ft)</b> 1918696.824	<b>Elevation (US ft)</b> 582.809	
<b>Point Type</b> FOREST	<b>Latitude (Global)</b> N41°37'00.37946"	<b>Longitude (Global)</b> W82°40'55.68824"	<b>Ellipsoid Height (US ft)</b> 466.376	
Location Photo    NORTH				
 <p>3181_2019_OH, 3NE, 20200325</p>		 <p>3181_2019_OH, 3NW, 20200325</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3182_2019_OH	<b>Northing (US ft)</b> 719359.894	<b>Easting (US ft)</b> 1762413.054	<b>Elevation (US ft)</b> 572.167	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°38'19.25271"	<b>Longitude (Global)</b> W83°15'14.19684"	<b>Ellipsoid Height (US ft)</b> 455.507	
Location Photo    NORTH				
 <p>3182_2019_OH, 3N, 20191112</p>	 <p>3182_2019_OH, 3W, 20191112</p>			



# GCP OBSERVATION LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 3183_2019_OH	<b>Northing (US ft)</b> 563040.330	<b>Easting (US ft)</b> 1403452.451	<b>Elevation (US ft)</b> 720.125	
<b>Point Type</b> TALL WEEDS	<b>Latitude (Global)</b> N41°11'37.84561"	<b>Longitude (Global)</b> W84°33'12.10165"	<b>Ellipsoid Height (US ft)</b> 608.553	
Location Photo    NORTH				
 <p>3183_2019_OH, 3N, 20191209</p>		 <p>3183_2019_OH, 3E, 20191209</p>		



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 4 1	<b>Northing (US ft)</b> 274865.072	<b>Easting (US ft)</b> 1748524.672	<b>Elevation (US ft)</b> 941.315	
<b>PID</b> AE3417	<b>Latitude (Global)</b> N40°25'06.16106"	<b>Longitude (Global)</b> W83°17'24.07253"	<b>Ellipsoid Height (US ft)</b> 828.928	



4 1, AE3417, 1, 20200122



4 1, AE3417, 2, 20200122



4 1, AE3417, 3N, 20200122



4 1, AE3417, 3E, 20200122



4 1, AE3417, 3S, 20200122



4 1, AE3417, 3W, 20200122





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 12 0028	<b>Northing (US ft)</b> 271990.245	<b>Easting (US ft)</b> 1836628.244	<b>Elevation (US ft)</b> 973.669	
<b>PID</b> KZ2305	<b>Latitude (Global)</b> N40°24'44.06053"	<b>Longitude (Global)</b> W82°58'24.80490"	<b>Ellipsoid Height (US ft)</b> 861.716	



12 0028, KZ2305, 1, 20191216



12 0028, KZ2305, 2, 20191216



12 0028, KZ2305, 3N, 20191216



12 0028, KZ2305, 3E, 20191216



12 0028, KZ2305, 3S, 20191216



12 0028, KZ2305, 3W, 20191216





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 14 DWP	<b>Northing (US ft)</b> 558870.421	<b>Easting (US ft)</b> 2521165.551	<b>Elevation (US ft)</b> 997.783	
<b>PID</b> MB0416	<b>Latitude (Global)</b> N41°10'59.50281"	<b>Longitude (Global)</b> W80°29'31.08081"	<b>Ellipsoid Height (US ft)</b> 886.567	



14 DWP, MB0416, 1, 20191108



14 DWP, MB0416, 2, 20191108



14 DWP, MB0416, 3N, 20191108



14 DWP, MB0416, 3E, 20191108



14 DWP, MB0416, 3S, 20191108



14 DWP, MB0416, 3W, 20191108





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 17G B	<b>Northing (US ft)</b> 406518.925	<b>Easting (US ft)</b> 1838456.606	<b>Elevation (US ft)</b> 1009.026	
<b>PID</b> AF7792	<b>Latitude (Global)</b> N40°46'53.49363"	<b>Longitude (Global)</b> W82°58'10.53282"	<b>Ellipsoid Height (US ft)</b> 895.629	



17G B, AF7792, 1, 20200123



17G B, AF7792, 2, 20200123



17G B, AF7792, 3N, 20200123



17G B, AF7792, 3E, 20200123



17G B, AF7792, 3S, 20200123



17G B, AF7792, 3W, 20200123



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 85 027 1 P CO	<b>Northing (US ft)</b> 598587.777	<b>Easting (US ft)</b> 2311363.899	<b>Elevation (US ft)</b> 1212.558	
<b>PID</b> MB2770	<b>Latitude (Global)</b> N41°18'10.56959"	<b>Longitude (Global)</b> W81°15'07.38545"	<b>Ellipsoid Height (US ft)</b> 1101.914	



85 027 1 P CO, MB2770, 1, 20191116



85 027 1 P CO, MB2770, 2, 20191116



85 027 1 P CO, MB2770, 3N, 20191116



85 027 1 P CO, MB2770, 3E, 20191116



85 027 1 P CO, MB2770, 3S, 20191116



85 027 1 P CO, MB2770, 3W, 20191116





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 792	<b>Northing (US ft)</b> 704126.160	<b>Easting (US ft)</b> 1439435.450	<b>Elevation (US ft)</b> 790.406	
<b>PID</b> MD0026	<b>Latitude (Global)</b> N41°34'59.59056"	<b>Longitude (Global)</b> W84°26'02.44388"	<b>Ellipsoid Height (US ft)</b> 678.223	



792, MD0026, 1, 20191107



792, MD0026, 2, 20191107



792, MD0026, 3N, 20191107



792, MD0026, 3E, 20191107



792, MD0026, 3S, 20191107



792, MD0026, 3W, 20191107





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 906 3097 E	<b>Northing (US ft)</b> 725728.590	<b>Easting (US ft)</b> 1879015.438	<b>Elevation (US ft)</b> 589.094	
<b>PID</b> MC1582	<b>Latitude (Global)</b> N41°39'29.31379"	<b>Longitude (Global)</b> W82°49'38.86423"	<b>Ellipsoid Height (US ft)</b> 472.322	



906 3097 E, MC1582, 1, 20200326



906 3097 E, MC1582, 2, 20200326



906 3097 E, MC1582, 3NE, 20200326



906 3097 E, MC1582, 3NW, 20200326



906 3097 E, MC1582, 3SE, 20200326



906 3097 E, MC1582, 3SW, 20200326





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1001	<b>Northing (US ft)</b> 329332.426	<b>Easting (US ft)</b> 1496101.564	<b>Elevation (US ft)</b> 902.216	
<b>PID</b> TSM	<b>Latitude (Global)</b> N40°33'28.72857"	<b>Longitude (Global)</b> W84°12'00.78610"	<b>Ellipsoid Height (US ft)</b> 791.068	



1001\_2019\_OH, 1, 20191105



1001\_2019\_OH, 2, 20191105



1001\_2019\_OH, 3N, 20191105



1001\_2019\_OH, 3E, 20191105



1001\_2019\_OH, 3S, 20191105



1001\_2019\_OH, 3W, 20191105



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1001_3T7	<b>Northing (US ft)</b> 736916.728	<b>Easting (US ft)</b> 1883502.465	<b>Elevation (US ft)</b> 577.478	
<b>PID</b> TSM	<b>Latitude (Global)</b> N41°41'20.00875"	<b>Longitude (Global)</b> W82°48'40.27883"	<b>Ellipsoid Height (US ft)</b> 460.763	



1001\_3T7, 1, 20200327



1001\_3T7, 2, 20200327



1001\_3T7, 3N, 20200327



1001\_3T7, 3E, 20200327



1001\_3T7, 3S, 20200327



1001\_3T7, 3W, 20200327





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1001_89D	<b>Northing (US ft)</b> 705699.712	<b>Easting (US ft)</b> 1917214.805	<b>Elevation (US ft)</b> 595.402	
<b>PID</b> TSM	<b>Latitude (Global)</b> N41°36'12.55021"	<b>Longitude (Global)</b> W82°41'15.06289"	<b>Ellipsoid Height (US ft)</b> 478.972	



1001\_89D, 1, 20200325



1001\_89D, 2, 20200325



1001\_89D, 3N, 20200325



1001\_89D, 3E, 20200325



1001\_89D, 3S, 20200325



1001\_89D, 3W, 20200325





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1002	<b>Northing (US ft)</b> 682952.467	<b>Easting (US ft)</b> 1908046.664	<b>Elevation (US ft)</b> 584.509	
<b>PID</b> TSM	<b>Latitude (Global)</b> N41°32'27.59919"	<b>Longitude (Global)</b> W82°43'14.98378"	<b>Ellipsoid Height (US ft)</b> 468.099	



1002, 1, 20200325



1002, 2, 20200325



1002, 3N, 20200325



1002, 3E, 20200325



1002, 3S, 20200325



1002, 3W, 20200325



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1002_3T7	<b>Northing (US ft)</b> 736766.881	<b>Easting (US ft)</b> 1885123.502	<b>Elevation (US ft)</b> 576.062	
<b>PID</b> TSM	<b>Latitude (Global)</b> N41°41'18.58494"	<b>Longitude (Global)</b> W82°48'18.90660"	<b>Ellipsoid Height (US ft)</b> 459.357	



1002\_3T7, 1, 20200327



1002\_3T7, 2, 20200327



1002\_3T7, 3N, 20200327



1002\_3T7, 3E, 20200327



1002\_3T7, 3S, 20200327



1002\_3T7, 3W, 20200327





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1002_89D	<b>Northing (US ft)</b> 705622.844	<b>Easting (US ft)</b> 1918858.923	<b>Elevation (US ft)</b> 580.756	
<b>PID</b> TSM	<b>Latitude (Global)</b> N41°36'11.82514"	<b>Longitude (Global)</b> W82°40'53.41945"	<b>Ellipsoid Height (US ft)</b> 464.343	



1002\_89D, 1, 20200325



1002\_89D, 2, 20200325



1002\_89D, 3N, 20200325



1002\_89D, 3E, 20200325



1002\_89D, 3S, 20200325



1002\_89D, 3W, 20200325



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1061	<b>Northing (US ft)</b> 610174.877	<b>Easting (US ft)</b> 1874151.435	<b>Elevation (US ft)</b> 769.085	
<b>PID</b> DG7164	<b>Latitude (Global)</b> N41°20'27.45802"	<b>Longitude (Global)</b> W82°50'36.94438"	<b>Ellipsoid Height (US ft)</b> 653.252	



1061, DG7164, 1, 20200127



1061, DG7164, 2, 20200127



1061, DG7164, 3N, 20200127



1061, DG7164, 3E, 20200127



1061, DG7164, 3S, 20200127



1061, DG7164, 3W, 20200127





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1519	<b>Northing (US ft)</b> 657062.574	<b>Easting (US ft)</b> 2316107.772	<b>Elevation (US ft)</b> 1213.446	
<b>PID</b> MB3100	<b>Latitude (Global)</b> N41°27'47.58867"	<b>Longitude (Global)</b> W81°13'54.09255"	<b>Ellipsoid Height (US ft)</b> 1102.353	



1519, MB3100, 1, 20191115



1519, MB3100, 2, 20191115

Photo Not Available



1519, MB3100, 3E, 20191115



1519, MB3100, 3S, 20191115



1519, MB3100, 3W, 20191115



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> 1523	<b>Northing (US ft)</b> 614987.349	<b>Easting (US ft)</b> 2235695.993	<b>Elevation (US ft)</b> 1043.860	
<b>PID</b> MB1812	<b>Latitude (Global)</b> N41°21'02.11385"	<b>Longitude (Global)</b> W81°31'36.38552"	<b>Ellipsoid Height (US ft)</b> 932.477	



1523, MB1812, 1, 20191114



1523, MB1812, 2, 20191114



1523, MB1812, 3N, 20191114



1523, MB1812, 3E, 20191114



1523, MB1812, 3S, 20191114



1523, MB1812, 3W, 20191114





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> A 290	<b>Northing (US ft)</b> 381809.016	<b>Easting (US ft)</b> 1545227.978	<b>Elevation (US ft)</b> 966.882	
<b>PID</b> LA0005	<b>Latitude (Global)</b> N40°42'16.17170"	<b>Longitude (Global)</b> W84°01'36.30221"	<b>Ellipsoid Height (US ft)</b> 853.403	



A 290, LA0005, 1, 20191105



A 290, LA0005, 2, 20191105



A 290, LA0005, 3N, 20191105



A 290, LA0005, 3E, 20191105



A 290, LA0005, 3S, 20191105



A 290, LA0005, 3W, 20191105





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> A 314	<b>Northing (US ft)</b> 526341.458	<b>Easting (US ft)</b> 1552790.496	<b>Elevation (US ft)</b> 770.477	
<b>PID</b> MD0088	<b>Latitude (Global)</b> N41°06'05.42915"	<b>Longitude (Global)</b> W84°00'30.57888"	<b>Ellipsoid Height (US ft)</b> 654.273	



A 314, MD0088, 1, 20200124



A 314, MD0088, 2, 20200124



A 314, MD0088, 3N, 20200124



A 314, MD0088, 3E, 20200124



A 314, MD0088, 3S, 20200124



A 314, MD0088, 3W, 20200124





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> A 319	<b>Northing (US ft)</b> 636586.954	<b>Easting (US ft)</b> 1998393.396	<b>Elevation (US ft)</b> 594.789	
<b>PID</b> MC0927	<b>Latitude (Global)</b> N41°24'50.07252"	<b>Longitude (Global)</b> W82°23'27.65205"	<b>Ellipsoid Height (US ft)</b> 480.106	



A 319, MC0927, 1, 20191119



A 319, MC0927, 2, 20191119

Photo Not Available



A 319, MC0927, 3E, 20191119



A 319, MC0927, 3S, 20191119



A 319, MC0927, 3W, 20191119



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> A 320	<b>Northing (US ft)</b> 673015.823	<b>Easting (US ft)</b> 2100312.407	<b>Elevation (US ft)</b> 591.707	
<b>PID</b> MC0891	<b>Latitude (Global)</b> N41°30'46.58790"	<b>Longitude (Global)</b> W82°01'07.35299"	<b>Ellipsoid Height (US ft)</b> 478.082	



A 320, MC0891, 1, 20191114



A 320, MC0891, 2, 20191114

Photo Not Available



A 320, MC0891, 3E, 20191114



A 320, MC0891, 3S, 20191114



A 320, MC0891, 3W, 20191114





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> ASHCOPORT	<b>Northing (US ft)</b> 775017.300	<b>Easting (US ft)</b> 2459272.880	<b>Elevation (US ft)</b> 908.061	
<b>PID</b> MB2962	<b>Latitude (Global)</b> N41°46'47.89455"	<b>Longitude (Global)</b> W80°42'02.07768"	<b>Ellipsoid Height (US ft)</b> 795.541	



ASHCOPORT, MB2962, 1, 20191105



ASHCOPORT, MB2962, 2, 20191105



ASHCOPORT, MB2962, 3N, 20191105



ASHCOPORT, MB2962, 3E, 20191105



ASHCOPORT, MB2962, 3S, 20191105



ASHCOPORT, MB2962, 3W, 20191105





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> AUG 75 12.45	<b>Northing (US ft)</b> 364807.549	<b>Easting (US ft)</b> 1515992.369	<b>Elevation (US ft)</b> 897.910	
<b>PID</b> LA2478	<b>Latitude (Global)</b> N40°39'22.96862"	<b>Longitude (Global)</b> W84°07'51.72064"	<b>Ellipsoid Height (US ft)</b> 785.455	



AUG 75 12.45, LA2478, 1, 20191105



AUG 75 12.45, LA2478, 2, 20191105



AUG 75 12.45, LA2478, 3N, 20191105



AUG 75 12.45, LA2478, 3E, 20191105



AUG 75 12.45, LA2478, 3S, 20191105



AUG 75 12.45, LA2478, 3W, 20191105





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> B 161	<b>Northing (US ft)</b> 658152.493	<b>Easting (US ft)</b> 2415742.061	<b>Elevation (US ft)</b> 897.239	
<b>PID</b> MB0637	<b>Latitude (Global)</b> N41°27'41.98933"	<b>Longitude (Global)</b> W80°52'05.37698"	<b>Ellipsoid Height (US ft)</b> 786.084	



B 161, MB0637, 1, 20191106



B 161, MB0637, 2, 20191106



B 161, MB0637, 3N, 20191106



B 161, MB0637, 3E, 20191106



B 161, MB0637, 3S, 20191106



B 161, MB0637, 3W, 20191106





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> B 315	<b>Northing (US ft)</b> 526127.779	<b>Easting (US ft)</b> 1397100.280	<b>Elevation (US ft)</b> 728.007	
<b>PID</b> MD0227	<b>Latitude (Global)</b> N41°05'31.73103"	<b>Longitude (Global)</b> W84°34'23.69405"	<b>Ellipsoid Height (US ft)</b> 616.788	



B 315, MD0227, 1, 20191206



B 315, MD0227, 2, 20191206



B 315, MD0227, 3N, 20191206



B 315, MD0227, 3E, 20191206



B 315, MD0227, 3S, 20191206



B 315, MD0227, 3W, 20191206





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> BAXTER	<b>Northing (US ft)</b> 453253.244	<b>Easting (US ft)</b> 1331942.214	<b>Elevation (US ft)</b> 814.006	
<b>PID</b> LA0691	<b>Latitude (Global)</b> N40°53'15.71680"	<b>Longitude (Global)</b> W84°48'09.29503"	<b>Ellipsoid Height (US ft)</b> 704.388	



BAXTER, LA0691, 1, 20191210



BAXTER, LA0691, 2, 20191210



BAXTER, LA0691, 3N, 20191210



BAXTER, LA0691, 3E, 20191210



BAXTER, LA0691, 3S, 20191210



BAXTER, LA0691, 3W, 20191210



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> BERLIN M5	<b>Northing (US ft)</b> 505005.533	<b>Easting (US ft)</b> 2379729.080	<b>Elevation (US ft)</b> 1048.421	
<b>PID</b> DL1914	<b>Latitude (Global)</b> N41°02'35.39908"	<b>Longitude (Global)</b> W81°00'32.70339"	<b>Ellipsoid Height (US ft)</b> 937.882	



BERLIN M5, DL1914, 3W, 20191108



BERLIN M5, DL1914, 3S, 20191108



BERLIN M5, DL1914, 3E, 20191108



BERLIN M5, DL1914, 3N, 20191108



BERLIN M5, DL1914, 2, 20191108



BERLIN M5, DL1914, 1, 20191108





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> CAUSEWAY	<b>Northing (US ft)</b> 310380.830	<b>Easting (US ft)</b> 1973068.643	<b>Elevation (US ft)</b> 1102.938	
<b>PID</b> AB5587	<b>Latitude (Global)</b> N40°31'06.95457"	<b>Longitude (Global)</b> W82°29'00.84364"	<b>Ellipsoid Height (US ft)</b> 992.484	



CAUSEWAY, AB5587, 1, 20191112



CAUSEWAY, AB5587, 2, 20191112



CAUSEWAY, AB5587, 3N, 20191112



CAUSEWAY, AB5587, 3E, 20191112



CAUSEWAY, AB5587, 3S, 20191112

**Photo Not Available**



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> CELINA	<b>Northing (US ft)</b> 329996.610	<b>Easting (US ft)</b> 1380069.360	<b>Elevation (US ft)</b> 902.790	
<b>PID</b> LA0562	<b>Latitude (Global)</b> N40°33'10.19542"	<b>Longitude (Global)</b> W84°37'03.87190"	<b>Ellipsoid Height (US ft)</b> 793.034	



CELINA, LA0562, 1, 20191126



CELINA, LA0562, 2, 20191126



CELINA, LA0562, 3N, 20191126



CELINA, LA0562, 3E, 20191126



CELINA, LA0562, 3S, 20191126



CELINA, LA0562, 3W, 20191126





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> D 248	<b>Northing (US ft)</b> 417404.517	<b>Easting (US ft)</b> 1968348.758	<b>Elevation (US ft)</b> 1279.371	
<b>PID</b> KZ1209	<b>Latitude (Global)</b> N40°48'44.51874"	<b>Longitude (Global)</b> W82°30'01.96702"	<b>Ellipsoid Height (US ft)</b> 1168.458	



D 248, KZ1209, 1, 20191112



D 248, KZ1209, 2, 20191112



D 248, KZ1209, 3N, 20191112



D 248, KZ1209, 3E, 20191112



D 248, KZ1209, 3S, 20191112



D 248, KZ1209, 3W, 20191112



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> DEF 66	<b>Northing (US ft)</b> 586368.251	<b>Easting (US ft)</b> 1456840.465	<b>Elevation (US ft)</b> 711.842	
<b>PID</b> AB6017	<b>Latitude (Global)</b> N41°15'40.12381"	<b>Longitude (Global)</b> W84°21'40.40020"	<b>Ellipsoid Height (US ft)</b> 598.410	



DEF 66, AB6017, 1, 20191209



DEF 66, AB6017, 2, 20191209



DEF 66, AB6017, 3N, 20191209



DEF 66, AB6017, 3E, 20191209



DEF 66, AB6017, 3S, 20191209



DEF 66, AB6017, 3W, 20191209





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> E 182	<b>Northing (US ft)</b> 740193.842	<b>Easting (US ft)</b> 1688030.609	<b>Elevation (US ft)</b> 594.135	
<b>PID</b> MC0734	<b>Latitude (Global)</b> N41°41'37.56943"	<b>Longitude (Global)</b> W83°31'36.97733"	<b>Ellipsoid Height (US ft)</b> 478.092	



E 182, MC0734, 1, 20191112



E 182, MC0734, 2, 20191112



E 182, MC0734, 3N, 20191112



E 182, MC0734, 3E, 20191112



E 182, MC0734, 3S, 20191112



E 182, MC0734, 3W, 20191112





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> E 281	<b>Northing (US ft)</b> 471404.650	<b>Easting (US ft)</b> 2167257.356	<b>Elevation (US ft)</b> 963.295	
<b>PID</b> KY1826	<b>Latitude (Global)</b> N40°57'30.01126"	<b>Longitude (Global)</b> W81°46'49.27577"	<b>Ellipsoid Height (US ft)</b> 854.378	



E 281, KY1826, 1, 20191110



E 281, KY1826, 2, 20191110



Y 337, KY2913, 3N, 20191109



Y 337, KY2913, 3E, 20191109



E 281, KY1826, 3S, 20191110



E 281, KY1826, 3W, 20191110





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> E 348	<b>Northing (US ft)</b> 284745.101	<b>Easting (US ft)</b> 1504006.972	<b>Elevation (US ft)</b> 1018.316	
<b>PID</b> LA2517	<b>Latitude (Global)</b> N40°26'09.72515"	<b>Longitude (Global)</b> W84°10'07.33021"	<b>Ellipsoid Height (US ft)</b> 908.485	



E 348, LA2517, 1, 20191105



E 348, LA2517, 2, 20191105



E 348, LA2517, 3N, 20191105



E 348, LA2517, 3E, 20191105



E 348, LA2517, 3S, 20191105

**Photo Not Available**



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> EXECPORT	<b>Northing (US ft)</b> 511918.890	<b>Easting (US ft)</b> 2428889.120	<b>Elevation (US ft)</b> 982.258	
<b>PID</b> MB2974	<b>Latitude (Global)</b> N41°03'34.89876"	<b>Longitude (Global)</b> W80°49'49.49557"	<b>Ellipsoid Height (US ft)</b> 871.241	



EXECPORT, MB2974, 1, 20191108



EXECPORT, MB2974, 2, 20191108



EXECPORT, MB2974, 3N, 20191108



EXECPORT, MB2974, 3E, 20191108



EXECPORT, MB2974, 3S, 20191108



EXECPORT, MB2974, 3W, 20191108





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> F 152	<b>Northing (US ft)</b> 577081.146	<b>Easting (US ft)</b> 2512358.353	<b>Elevation (US ft)</b> 1087.490	
<b>PID</b> MB0924	<b>Latitude (Global)</b> N41°14'01.38132"	<b>Longitude (Global)</b> W80°31'20.83997"	<b>Ellipsoid Height (US ft)</b> 976.388	



F 152, MB0924, 1, 20191106



F 152, MB0924, 2, 20191106



F 152, MB0924, 3N, 20191106



F 152, MB0924, 3E, 20191106



F 152, MB0924, 3S, 20191106



F 152, MB0924, 3W, 20191106



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> <b>FULTON NO 04</b>	<b>Northing (US ft)</b> 667279.116	<b>Easting (US ft)</b> 1510156.316	<b>Elevation (US ft)</b> 726.452	
<b>PID</b> AB5533	<b>Latitude (Global)</b> N41°29'10.06766"	<b>Longitude (Global)</b> W84°10'22.70926"	<b>Ellipsoid Height (US ft)</b> 611.674	



FULTON NO 04, AB5533, 1, 20191106



FULTON NO 04, AB5533, 2, 20191106



FULTON NO 04, AB5533, 3N, 20191106



FULTON NO 04, AB5533, 3E, 20191106



FULTON NO 04, AB5533, 3S, 20191106



FULTON NO 04, AB5533, 3W, 20191106





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> G 18	<b>Northing (US ft)</b> 705708.011	<b>Easting (US ft)</b> 1600721.536	<b>Elevation (US ft)</b> 670.996	
<b>PID</b> MC0747	<b>Latitude (Global)</b> N41°35'45.16620"	<b>Longitude (Global)</b> W83°50'40.66383"	<b>Ellipsoid Height (US ft)</b> 555.085	



G 18, MC0747, 1, 20191106



G 18, MC0747, 2, 20191106



G 18, MC0747, 3N, 20191106



G 18, MC0747, 3E, 20191106



G 18, MC0747, 3S, 20191106



G 18, MC0747, 3W, 20191106





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> G 249	<b>Northing (US ft)</b> 441189.674	<b>Easting (US ft)</b> 1914294.803	<b>Elevation (US ft)</b> 1120.857	
<b>PID</b> KZ1049	<b>Latitude (Global)</b> N40°52'38.94793"	<b>Longitude (Global)</b> W82°41'45.67314"	<b>Ellipsoid Height (US ft)</b> 1008.380	



G 249, KZ1049, 1, 20200124



G 249, KZ1049, 2, 20200124



G 249, KZ1049, 3N, 20200124



G 249, KZ1049, 3E, 20200124



G 249, KZ1049, 3S, 20200124



G 249, KZ1049, 3W, 20200124





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> G 321	<b>Northing (US ft)</b> 683681.527	<b>Easting (US ft)</b> 2205531.855	<b>Elevation (US ft)</b> 583.335	
<b>PID</b> MB1563	<b>Latitude (Global)</b> N41°32'23.93358"	<b>Longitude (Global)</b> W81°38'02.94382"	<b>Ellipsoid Height (US ft)</b> 470.484	



G 321, MB1563, 1, 20191113



G 321, MB1563, 2, 20191113



G 321, MB1563, 3N, 20191113



G 321, MB1563, 3E, 20191113



G 321, MB1563, 3S, 20191113



G 321, MB1563, 3W, 20191113



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> H 294	<b>Northing (US ft)</b> 327554.588	<b>Easting (US ft)</b> 1671536.816	<b>Elevation (US ft)</b> 1054.268	
<b>PID</b> KZ0652	<b>Latitude (Global)</b> N40°33'38.68199"	<b>Longitude (Global)</b> W83°34'07.71394"	<b>Ellipsoid Height (US ft)</b> 940.555	



H 294, KZ0652, 1, 20200122



H 294, KZ0652, 2, 20200122



H 294, KZ0652, 3N, 20200122



H 294, KZ0652, 3E, 20200122



H 294, KZ0652, 3S, 20200122



H 294, KZ0652, 3W, 20200122





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> H 348	<b>Northing (US ft)</b> 407283.560	<b>Easting (US ft)</b> 1527351.420	<b>Elevation (US ft)</b> 869.600	
<b>PID</b> LA2545	<b>Latitude (Global)</b> N40°46'24.69938"	<b>Longitude (Global)</b> W84°05'34.42461"	<b>Ellipsoid Height (US ft)</b> 755.846	



H 348, LA2545, 1, 20200121



H 348, LA2545, 2, 20200121



H 348, LA2545, 3N, 20200121



H 348, LA2545, 3E, 20200121



H 348, LA2545, 3S, 20200121



H 348, LA2545, 3W, 20200121



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> HEISLER	<b>Northing (US ft)</b> 500106.354	<b>Easting (US ft)</b> 1904578.061	<b>Elevation (US ft)</b> 963.619	
<b>PID</b> MC0215	<b>Latitude (Global)</b> N41°02'20.88286"	<b>Longitude (Global)</b> W82°43'54.20839"	<b>Ellipsoid Height (US ft)</b> 849.934	



HEISLER, MC0215, 1, 20191218



HEISLER, MC0215, 2, 20191218



HEISLER, MC0215, 3N, 20191218



HEISLER, MC0215, 3E, 20191218



HEISLER, MC0215, 3S, 20191218



HEISLER, MC0215, 3W, 20191218





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brandon Murphy
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> HI 14	<b>Northing (US ft)</b> 573649.140	<b>Easting (US ft)</b> 2165194.830	<b>Elevation (US ft)</b> 1195.879	
<b>PID</b> DF7205	<b>Latitude (Global)</b> N41°14'20.42732"	<b>Longitude (Global)</b> W81°47'05.22995"	<b>Ellipsoid Height (US ft)</b> 1085.045	



HI 14, DF7205, 1, 20191111



HI 14, DF7205, 2, 20191111



HI 14, DF7205, 3N, 20191111



HI 14, DF7205, 3E, 20191111



HI 14, DF7205, 3S, 20191111



HI 14, DF7205, 3W, 20191111



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> HOMER AZ MK	<b>Northing (US ft)</b> 505591.906	<b>Easting (US ft)</b> 2071796.161	<b>Elevation (US ft)</b> 1046.966	
<b>PID</b> MC0069	<b>Latitude (Global)</b> N41°03'13.73384"	<b>Longitude (Global)</b> W82°07'31.63900"	<b>Ellipsoid Height (US ft)</b> 936.693	



HOMER AZ MK, MC0069, 1, 20191118



HOMER AZ MK, MC0069, 2, 20191118



HOMER AZ MK, MC0069, 3N, 20191118



HOMER AZ MK, MC0069, 3E, 20191118



HOMER AZ MK, MC0069, 3S, 20191118



HOMER AZ MK, MC0069, 3W, 20191118





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> HUDSON	<b>Northing (US ft)</b> 574970.771	<b>Easting (US ft)</b> 2258711.821	<b>Elevation (US ft)</b> 1061.638	
<b>PID</b> MB1083	<b>Latitude (Global)</b> N41°14'24.10653"	<b>Longitude (Global)</b> W81°26'40.96692"	<b>Ellipsoid Height (US ft)</b> 951.020	



HUDSON, MB1083, 1, 20191117



HUDSON, MB1083, 2, 20191117

Photo Not Available



HUDSON, MB1083, 3E, 20191117



HUDSON, MB1083, 3S, 20191117



HUDSON, MB1083, 3W, 20191117



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> J 272	<b>Northing (US ft)</b> 238095.116	<b>Easting (US ft)</b> 1914989.397	<b>Elevation (US ft)</b> 1241.650	
<b>PID</b> KZ0966	<b>Latitude (Global)</b> N40°19'12.07918"	<b>Longitude (Global)</b> W82°41'30.81318"	<b>Ellipsoid Height (US ft)</b> 1130.202	



J 272, KZ0966, 1, 20191216



J 272, KZ0966, 2, 20191216



J 272, KZ0966, 3N, 20191216



J 272, KZ0966, 3E, 20191216



J 272, KZ0966, 3S, 20191216



J 272, KZ0966, 3W, 20191216





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> J 318	<b>Northing (US ft)</b> 643572.655	<b>Easting (US ft)</b> 1913980.505	<b>Elevation (US ft)</b> 599.792	
<b>PID</b> MC0957	<b>Latitude (Global)</b> N41°25'58.66394"	<b>Longitude (Global)</b> W82°41'55.77127"	<b>Ellipsoid Height (US ft)</b> 483.848	



J 318, MC0957, 1, 20200326



J 318, MC0957, 2, 20200326



J 318, MC0957, 3N, 20200326



J 318, MC0957, 3E, 20200326



J 318, MC0957, 3S, 20200326



J 318, MC0957, 3W, 20200326



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> J 337	<b>Northing (US ft)</b> 604387.500	<b>Easting (US ft)</b> 2240743.497	<b>Elevation (US ft)</b> 1016.717	
<b>PID</b> MB1815	<b>Latitude (Global)</b> N41°19'16.82660"	<b>Longitude (Global)</b> W81°30'31.78517"	<b>Ellipsoid Height (US ft)</b> 905.536	



J 337, MB1815, 1, 2019114



J 337, MB1815, 2, 2019114



J 337, MB1815, 3N, 2019114



J 337, MB1815, 3E, 2019114



J 337, MB1815, 3S, 2019114



J 337, MB1815, 3W, 2019114





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> KILLDEER	<b>Northing (US ft)</b> 380959.572	<b>Easting (US ft)</b> 1724209.089	<b>Elevation (US ft)</b> 879.442	
<b>PID</b> AB6140	<b>Latitude (Global)</b> N40°42'32.19307"	<b>Longitude (Global)</b> W83°22'52.28851"	<b>Ellipsoid Height (US ft)</b> 764.857	



KILLDEER, AB6140, 1, 20200122



KILLDEER, AB6140, 2, 20200122



KILLDEER, AB6140, 3N, 20200122



KILLDEER, AB6140, 3E, 20200122



KILLDEER, AB6140, 3S, 20200122



KILLDEER, AB6140, 3W, 20200122





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> L 227 RESET	<b>Northing (US ft)</b> 328092.532	<b>Easting (US ft)</b> 1293172.279	<b>Elevation (US ft)</b> 854.815	
<b>PID</b> LA0533	<b>Latitude (Global)</b> N40°32'29.00062"	<b>Longitude (Global)</b> W84°55'48.50233"	<b>Ellipsoid Height (US ft)</b> 744.711	



L 227 RESET, LA0533, 1, 20191212



L 227 RESET, LA0533, 2, 20191212



L 227 RESET, LA0533, 3N, 20191212



L 227 RESET, LA0533, 3E, 20191212



L 227 RESET, LA0533, 3S, 20191212



L 227 RESET, LA0533, 3W, 20191212





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> L 321	<b>Northing (US ft)</b> 757013.363	<b>Easting (US ft)</b> 2301666.455	<b>Elevation (US ft)</b> 610.371	
<b>PID</b> MB1618	<b>Latitude (Global)</b> N41°44'17.01354"	<b>Longitude (Global)</b> W81°16'45.38248"	<b>Ellipsoid Height (US ft)</b> 497.419	



L 321, MB1618, 1, 20191115



L 321, MB1618, 2, 20191115



L 321, MB1618, 3N, 20191115



L 321, MB1618, 3E, 20191115



L 321, MB1618, 3S, 20191115



L 321, MB1618, 3W, 20191115





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> LAKE	<b>Northing (US ft)</b> 330406.654	<b>Easting (US ft)</b> 1425117.982	<b>Elevation (US ft)</b> 896.787	
<b>PID</b> AE2615	<b>Latitude (Global)</b> N40°33'24.64089"	<b>Longitude (Global)</b> W84°27'20.53220"	<b>Ellipsoid Height (US ft)</b> 786.578	



LAKE, AE2615, 1, 20191125



LAKE, AE2615, 2, 20191125



LAKE, AE2615, 3N, 20191125



LAKE, AE2615, 3E, 20191125



LAKE, AE2615, 3S, 20191125



LAKE, AE2615, 3W, 20191125





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> <b>LANDO</b>	<b>Northing (US ft)</b> 257112.207	<b>Easting (US ft)</b> 1391138.137	<b>Elevation (US ft)</b> 961.764	
<b>PID</b> AE2641	<b>Latitude (Global)</b> N40°21'12.81552"	<b>Longitude (Global)</b> W84°34'18.08952"	<b>Ellipsoid Height (US ft)</b> 852.653	



LANDO, AE2641, 1, 20191212



LANDO, AE2641, 2, 20191212



LANDO, AE2641, 3N, 20191212



LANDO, AE2641, 3E, 20191212



LANDO, AE2641, 3S, 20191212



LANDO, AE2641, 3W, 20191212



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> LCB 528	<b>Northing (US ft)</b> 727476.124	<b>Easting (US ft)</b> 1746468.972	<b>Elevation (US ft)</b> 575.705	
<b>PID</b> MC1778	<b>Latitude (Global)</b> N41°39'38.01996"	<b>Longitude (Global)</b> W83°18'45.16699"	<b>Ellipsoid Height (US ft)</b> 459.151	



LCB 528, MC1778, 1, 20191112



LCB 528, MC1778, 2, 20191112



LCB 528, MC1778, 3N, 20191112



LCB 528, MC1778, 3E, 20191112



LCB 528, MC1778, 3S, 20191112



LCB 528, MC1778, 3W, 20191112





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> LIMA	<b>Northing (US ft)</b> 392816.046	<b>Easting (US ft)</b> 1530656.129	<b>Elevation (US ft)</b> 888.323	
<b>PID</b> LA0048	<b>Latitude (Global)</b> N40°44'02.35622"	<b>Longitude (Global)</b> W84°04'48.07002"	<b>Ellipsoid Height (US ft)</b> 774.859	



LIMA, LA0048, 1, 20200121



LIMA, LA0048, 2, 20200121



LIMA, LA0048, 3N, 20200121



LIMA, LA0048, 3E, 20200121



LIMA, LA0048, 3S, 20200121



LIMA, LA0048, 3W, 20200121





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> M 163	<b>Northing (US ft)</b> 593964.545	<b>Easting (US ft)</b> 2401191.724	<b>Elevation (US ft)</b> 941.786	
<b>PID</b> MB0664	<b>Latitude (Global)</b> N41°17'10.53383"	<b>Longitude (Global)</b> W80°55'31.67621"	<b>Ellipsoid Height (US ft)</b> 830.827	



M 163, MB0664, 1, 20191108



M 163, MB0664, 2, 20191108



M 163, MB0664, 3N, 20191108



M 163, MB0664, 3E, 20191108



M 163, MB0664, 3S, 20191108



M 163, MB0664, 3W, 20191108





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> M 176	<b>Northing (US ft)</b> 505734.138	<b>Easting (US ft)</b> 2110123.671	<b>Elevation (US ft)</b> 1131.625	
<b>PID</b> MB1317	<b>Latitude (Global)</b> N41°03'13.21109"	<b>Longitude (Global)</b> W81°59'11.33563"	<b>Ellipsoid Height (US ft)</b> 1021.852	



M 176, MB1317, 1, 20191110



M 176, MB1317, 2, 20191110



M 176, MB1317, 3N, 20191110



M 176, MB1317, 3E, 20191110



M 176, MB1317, 3S, 20191110



M 176, MB1317, 3W, 20191110





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> M 323	<b>Northing (US ft)</b> 741298.962	<b>Easting (US ft)</b> 2285577.577	<b>Elevation (US ft)</b> 626.729	
<b>PID</b> MB1605	<b>Latitude (Global)</b> N41°41'43.95007"	<b>Longitude (Global)</b> W81°20'20.33558"	<b>Ellipsoid Height (US ft)</b> 513.984	



M 323, MB1605, 1, 20191113



M 323, MB1605, 2, 20191113



M 323, MB1605, 3N, 20191113



M 323, MB1605, 3E, 20191113



M 323, MB1605, 3S, 20191113



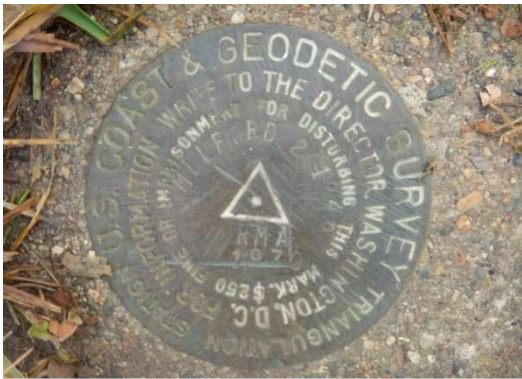
M 323, MB1605, 3W, 20191113





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> MILFORD 2 RM A	<b>Northing (US ft)</b> 633020.499	<b>Easting (US ft)</b> 1351519.159	<b>Elevation (US ft)</b> 869.766	
<b>PID</b> MD1780	<b>Latitude (Global)</b> N41°22'56.43159"	<b>Longitude (Global)</b> W84°44'54.81727"	<b>Ellipsoid Height (US ft)</b> 759.562	



MILFORD 2 RM A, MD1780, 1, 20191206



MILFORD 2 RM A, MD1780, 2, 20191206



MILFORD 2 RM A, MD1780, 3N, 20191206



MILFORD 2 RM A, MD1780, 3E, 20191206



MILFORD 2 RM A, MD1780, 3S, 20191206



MILFORD 2 RM A, MD1780, 3W, 20191206





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> NEW LYME	<b>Northing (US ft)</b> 703998.740	<b>Easting (US ft)</b> 2441741.150	<b>Elevation (US ft)</b> 989.870	
<b>PID</b> DG7215	<b>Latitude (Global)</b> N41°35'09.91626"	<b>Longitude (Global)</b> W80°46'12.01646"	<b>Ellipsoid Height (US ft)</b> 878.413	



NEW LYME, DG7215, 1, 20191105



NEW LYME, DG7215, 2, 20191105



NEW LYME, DG7215, 3N, 20191105



NEW LYME, DG7215, 3E, 20191105



NEW LYME, DG7215, 3S, 20191105



NEW LYME, DG7215, 3W, 20191105





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> OH21 A	<b>Northing (US ft)</b> 575490.771	<b>Easting (US ft)</b> 1954123.931	<b>Elevation (US ft)</b> 841.006	
<b>PID</b> AB6039	<b>Latitude (Global)</b> N41°14'46.55043"	<b>Longitude (Global)</b> W82°33'08.20393"	<b>Ellipsoid Height (US ft)</b> 726.754	



OH21 A, AB6039, 1, 20191119



OH21 A, AB6039, 2, 20191119



OH21 A, AB6039, 3N, 20191119



OH21 A, AB6039, 3E, 20191119



OH21 A, AB6039, 3S, 20191119



OH21 A, AB6039, 3W, 20191119





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> OHIO 722	<b>Northing (US ft)</b> 632225.283	<b>Easting (US ft)</b> 1399669.324	<b>Elevation (US ft)</b> 720.525	
<b>PID</b> MD0420	<b>Latitude (Global)</b> N41°23'00.36268"	<b>Longitude (Global)</b> W84°34'23.08491"	<b>Ellipsoid Height (US ft)</b> 608.979	



OHIO 722, MD0420, 1, 20191107



OHIO 722, MD0420, 2, 20191107



OHIO 722, MD0420, 3N, 20191107



OHIO 722, MD0420, 3E, 20191107



OHIO 722, MD0420, 3S, 20191107









OHIO 722, MD0420, 3W, 20191107





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> <b>PATMOS</b>	<b>Northing (US ft)</b> 709640.201	<b>Easting (US ft)</b> 1917706.504	<b>Elevation (US ft)</b> 581.852	
<b>PID</b> MC1586	<b>Latitude (Global)</b> N41°36'51.49151"	<b>Longitude (Global)</b> W82°41'08.70118"	<b>Ellipsoid Height (US ft)</b> 465.410	
 <p>PATMOS, MC1586, 1, 20200325</p>		 <p>PATMOS, MC1586, 2, 20200325</p>		
 <p>PATMOS, MC1586, 3N, 20200325</p>		 <p>PATMOS, MC1586, 3E, 20200325</p>		
 <p>PATMOS, MC1586, 3S, 20200325</p>		 <p>PATMOS, MC1586, 3W, 20200325</p>		



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> Q 62	<b>Northing (US ft)</b> 668913.808	<b>Easting (US ft)</b> 2531769.227	<b>Elevation (US ft)</b> 988.250	
<b>PID</b> MB0284	<b>Latitude (Global)</b> N41°29'04.05457"	<b>Longitude (Global)</b> W80°26'38.50924"	<b>Ellipsoid Height (US ft)</b> 877.381	



Q 62, MB0284, 1, 20191107



Q 62, MB0284, 2, 20191107



Q 62, MB0284, 3N, 20191107



Q 62, MB0284, 3E, 20191107



Q 62, MB0284, 3S, 20191107



Q 62, MB0284, 3W, 20191107





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> R 176	<b>Northing (US ft)</b> 490818.661	<b>Easting (US ft)</b> 2127739.767	<b>Elevation (US ft)</b> 1014.795	
<b>PID</b> MB1307	<b>Latitude (Global)</b> N41°00'44.74333"	<b>Longitude (Global)</b> W81°55'22.68093"	<b>Ellipsoid Height (US ft)</b> 905.404	



R 176, MB1307, 1, 20191118



R 176, MB1307, 2, 20191118



R 176, MB1307, 3N, 20191118



R 176, MB1307, 3E, 20191118



R 176, MB1307, 3S, 20191118



R 176, MB1307, 3W, 20191118





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> R 344	<b>Northing (US ft)</b> 532987.552	<b>Easting (US ft)</b> 1765323.079	<b>Elevation (US ft)</b> 766.029	
<b>PID</b> MC1637	<b>Latitude (Global)</b> N41°07'38.13509"	<b>Longitude (Global)</b> W83°14'15.11678"	<b>Ellipsoid Height (US ft)</b> 651.025	



R 344, MC1637, 1, 20200129



R 344, MC1637, 2, 20200129



R 344, MC1637, 3N, 20200129



R 344, MC1637, 3E, 20200129



R 344, MC1637, 3S, 20200129



R 344, MC1637, 3W, 20200129





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Jessica Johnson
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> REINHART	<b>Northing (US ft)</b> 258600.887	<b>Easting (US ft)</b> 1429425.870	<b>Elevation (US ft)</b> 949.435	
<b>PID</b> AE2644	<b>Latitude (Global)</b> N40°21'36.21089"	<b>Longitude (Global)</b> W84°26'04.10097"	<b>Ellipsoid Height (US ft)</b> 840.444	



REINHART, AE2644, 1, 20191125



REINHART, AE2644, 2, 20191125



REINHART, AE2644, 3N, 20191125



REINHART, AE2644, 3E, 20191125



REINHART, AE2644, 3S, 20191125



REINHART, AE2644, 3W, 20191125



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> J Henninger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> <b>RICHMOND</b>	<b>Northing (US ft)</b> 739495.802	<b>Easting (US ft)</b> 2495547.361	<b>Elevation (US ft)</b> 1030.861	
<b>PID</b> DG7224	<b>Latitude (Global)</b> N41°40'49.38627"	<b>Longitude (Global)</b> W80°34'13.79750"	<b>Ellipsoid Height (US ft)</b> 919.148	



RICHMOND, DG7224, 1, 20190130



RICHMOND, DG7224, 2, 20190130



RICHMOND, DG7224, 3N, 20190130



RICHMOND, DG7224, 3E, 20190130



RICHMOND, DG7224, 3S, 20190130



RICHMOND, DG7224, 3W, 20190130





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> RIDG31	<b>Northing (US ft)</b> 646905.225	<b>Easting (US ft)</b> 1463549.034	<b>Elevation (US ft)</b> 715.187	
<b>PID</b> DG7225	<b>Latitude (Global)</b> N41°25'39.53259"	<b>Longitude (Global)</b> W84°20'29.31084"	<b>Ellipsoid Height (US ft)</b> 601.712	



RIDG31, DG7225, 1, 20191205



RIDG31, DG7225, 2, 20191205



RIDG31, DG7225, 3N, 20191205



RIDG31, DG7225, 3E, 20191205



RIDG31, DG7225, 3S, 20191205



RIDG31, DG7225, 3W, 20191205





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> RND HEAD	<b>Northing (US ft)</b> 332611.032	<b>Easting (US ft)</b> 1596864.194	<b>Elevation (US ft)</b> 1028.464	
<b>PID</b> AB6088	<b>Latitude (Global)</b> N40°34'18.46270"	<b>Longitude (Global)</b> W83°50'16.10594"	<b>Ellipsoid Height (US ft)</b> 915.418	



RND HEAD, AB6088, 1, 20191105



RND HEAD, AB6088, 2, 20191105



RND HEAD, AB6088, 3N, 20191105



RND HEAD, AB6088, 3E, 20191105



RND HEAD, AB6088, 3S, 20191105



RND HEAD, AB6088, 3W, 20191105





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> S 238	<b>Northing (US ft)</b> 441727.718	<b>Easting (US ft)</b> 2076854.105	<b>Elevation (US ft)</b> 1156.365	
<b>PID</b> KZ0175	<b>Latitude (Global)</b> N40°52'42.46124"	<b>Longitude (Global)</b> W82°06'29.36216"	<b>Ellipsoid Height (US ft)</b> 1047.370	



S 238, KZ0175, 1, 20191113



S 238, KZ0175, 2, 20191113



S 238, KZ0175, 3N, 20191113



S 238, KZ0175, 3E, 20191113



S 238, KZ0175, 3S, 20191113



S 238, KZ0175, 3W, 20191113





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> S 321	<b>Northing (US ft)</b> 835567.068	<b>Easting (US ft)</b> 2506736.000	<b>Elevation (US ft)</b> 676.732	
<b>PID</b> MB1708	<b>Latitude (Global)</b> N41°56'35.75876"	<b>Longitude (Global)</b> W80°31'17.66957"	<b>Ellipsoid Height (US ft)</b> 563.167	



S 321, MB1708, 1, 20191105



S 321, MB1708, 2, 20191105



S 321, MB1708, 3N, 20191105



S 321, MB1708, 3E, 20191105



S 321, MB1708, 3S, 20191105



S 321, MB1708, 3W, 20191105



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> SHINDEL	<b>Northing (US ft)</b> 388159.943	<b>Easting (US ft)</b> 1391868.075	<b>Elevation (US ft)</b> 837.001	
<b>PID</b> AE2618	<b>Latitude (Global)</b> N40°42'47.57991"	<b>Longitude (Global)</b> W84°34'49.03423"	<b>Ellipsoid Height (US ft)</b> 726.690	



SHINDEL, AE2618, 1, 20191126



SHINDEL, AE2618, 2, 20191126



SHINDEL, AE2618, 3N, 20191126



SHINDEL, AE2618, 3E, 20191126



SHINDEL, AE2618, 3S, 20191126



SHINDEL, AE2618, 3W, 20191126





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> T 23	<b>Northing (US ft)</b> 338920.669	<b>Easting (US ft)</b> 1769283.021	<b>Elevation (US ft)</b> 916.977	
<b>PID</b> KZ1449	<b>Latitude (Global)</b> N40°35'40.88196"	<b>Longitude (Global)</b> W83°13'02.51128"	<b>Ellipsoid Height (US ft)</b> 803.449	



T 23, KZ1449, 1, 20200122



T 23, KZ1449, 2, 20200122



T 23, KZ1449, 3N, 20200122



T 23, KZ1449, 3E, 20200122



T 23, KZ1449, 3S, 20200122



T 23, KZ1449, 3W, 20200122





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> T 161	<b>Northing (US ft)</b> 592259.001	<b>Easting (US ft)</b> 2432113.376	<b>Elevation (US ft)</b> 920.065	
<b>PID</b> MB0615	<b>Latitude (Global)</b> N41°16'47.97252"	<b>Longitude (Global)</b> W80°48'47.12789"	<b>Ellipsoid Height (US ft)</b> 809.051	



T 161, MB0615, 1, 20191107



T 161, MB0615, 2, 20191107



T 161, MB0615, 3N, 20191107



T 161, MB0615, 3E, 20191107



T 161, MB0615, 3S, 20191107



T 161, MB0615, 3W, 20191107





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> T 322	<b>Northing (US ft)</b> 713333.124	<b>Easting (US ft)</b> 2241008.388	<b>Elevation (US ft)</b> 609.615	
<b>PID</b> MB1585	<b>Latitude (Global)</b> N41°37'13.12729"	<b>Longitude (Global)</b> W81°30'11.99644"	<b>Ellipsoid Height (US ft)</b> 496.714	



T 322, MB1585, 1, 20191113



T 322, MB1585, 2, 20191113



T 322, MB1585, 3N, 20191113



T 322, MB1585, 3E, 20191113



T 322, MB1585, 3S, 20191113



T 322, MB1585, 3W, 20191113



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> T 344	<b>Northing (US ft)</b> 531603.164	<b>Easting (US ft)</b> 1821267.293	<b>Elevation (US ft)</b> 846.230	
<b>PID</b> MC1639	<b>Latitude (Global)</b> N41°07'28.48724"	<b>Longitude (Global)</b> W83°02'03.94849"	<b>Ellipsoid Height (US ft)</b> 731.199	



T 344, MC1639, 1, 20200129



T 344, MC1639, 2, 20200129



T 344, MC1639, 3N, 20200129



T 344, MC1639, 3E, 20200129

Photo Not Available



T 344, MC1639, 3W, 20200129





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> T 348	<b>Northing (US ft)</b> 418345.126	<b>Easting (US ft)</b> 1548256.993	<b>Elevation (US ft)</b> 862.046	
<b>PID</b> LA2550	<b>Latitude (Global)</b> N40°48'17.67079"	<b>Longitude (Global)</b> W84°01'05.23503"	<b>Ellipsoid Height (US ft)</b> 747.566	



T 348, LA2550, 1, 20200121



T 348, LA2550, 2, 20200121



T 348, LA2550, 3NE, 20200121



T 348, LA2550, 3SE, 20200121



T 348, LA2550, 3SW, 20200121

**Photo Not Available**





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> T 350	<b>Northing (US ft)</b> 479146.719	<b>Easting (US ft)</b> 1628578.828	<b>Elevation (US ft)</b> 809.430	
<b>PID</b> KZ2428	<b>Latitude (Global)</b> N40°58'30.90879"	<b>Longitude (Global)</b> W83°43'51.97003"	<b>Ellipsoid Height (US ft)</b> 693.134	



T 350, KZ2428, 1, 20200123



T 350, KZ2428, 2, 20200123

Photo Not Available



T 350, KZ2428, 3E, 20200123



T 350, KZ2428, 3S, 20200123



T 350, KZ2428, 3W, 20200123



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> V 198	<b>Northing (US ft)</b> 648828.968	<b>Easting (US ft)</b> 1318325.978	<b>Elevation (US ft)</b> 875.630	
<b>PID</b> MD0373	<b>Latitude (Global)</b> N41°25'23.88559"	<b>Longitude (Global)</b> W84°52'15.74165"	<b>Ellipsoid Height (US ft)</b> 766.101	



V 198, MD0373, 1, 20191108



V 198, MD0373, 2, 20191108



V 198, MD0373, 3N, 20191108



V 198, MD0373, 3E, 20191108



V 198, MD0373, 3S, 20191108



V 198, MD0373, 3W, 20191108





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> V 314	<b>Northing (US ft)</b> 525384.710	<b>Easting (US ft)</b> 1439606.076	<b>Elevation (US ft)</b> 713.454	
<b>PID</b> MD0125	<b>Latitude (Global)</b> N41°05'34.00263"	<b>Longitude (Global)</b> W84°25'08.45092"	<b>Ellipsoid Height (US ft)</b> 600.898	



V 314, MD0125, 1, 20200121



V 314, MD0125, 2, 20200121



V 314, MD0125, 3N, 20200121



V 314, MD0125, 3E, 20200121



V 314, MD0125, 3S, 20200121



V 314, MD0125, 3W, 20200121



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> V 349	<b>Northing (US ft)</b> 446839.005	<b>Easting (US ft)</b> 1587491.462	<b>Elevation (US ft)</b> 849.559	
<b>PID</b> KZ2418	<b>Latitude (Global)</b> N40°53'05.62883"	<b>Longitude (Global)</b> W83°52'40.93687"	<b>Ellipsoid Height (US ft)</b> 733.776	



V 349, KZ2418, 1, 20200123



V 349, KZ2418, 2, 20200123

Photo Not Available



V 349, KZ2418, 3E, 20200123



V 349, KZ2418, 3S, 20200123



V 349, KZ2418, 3W, 20200123





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Zach Leeseemann
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> VICTORY	<b>Northing (US ft)</b> 719907.268	<b>Easting (US ft)</b> 1876325.922	<b>Elevation (US ft)</b> 574.798	
<b>PID</b> MC1588	<b>Latitude (Global)</b> N41°38'31.70063"	<b>Longitude (Global)</b> W82°50'13.99887"	<b>Ellipsoid Height (US ft)</b> 458.009	



VICTORY, MC1588, 1, 20200326



VICTORY, MC1588, 2, 20200326



VICTORY, MC1588, 3N, 20200326



VICTORY, MC1588, 3E, 20200326



VICTORY, MC1588, 3S, 20200326



VICTORY, MC1588, 3W, 20200326



# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> VNW A	<b>Northing (US ft)</b> 443786.320	<b>Easting (US ft)</b> 1382763.740	<b>Elevation (US ft)</b> 779.800	
<b>PID</b> AB6047	<b>Latitude (Global)</b> N40°51'54.92605"	<b>Longitude (Global)</b> W84°37'04.77230"	<b>Ellipsoid Height (US ft)</b> 669.065	



VNW A, AB6047, 1, 20191210



VNW A, AB6047, 2, 20191210



VNW A, AB6047, 3N, 20191210



VNW A, AB6047, 3E, 20191210



VNW A, AB6047, 3S, 20191210



VNW A, AB6047, 3W, 20191210





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> W 350	<b>Northing (US ft)</b> 492591.492	<b>Easting (US ft)</b> 1641715.997	<b>Elevation (US ft)</b> 790.051	
<b>PID</b> MC1644	<b>Latitude (Global)</b> N41°00'45.54437"	<b>Longitude (Global)</b> W83°41'03.08608"	<b>Ellipsoid Height (US ft)</b> 673.761	



W 350, MC1644, 1, 20200122



W 350, MC1644, 2, 20200122



W 350, MC1644, 3N, 20200122



W 350, MC1644, 3E, 20200122



W 350, MC1644, 3S, 20200122



W 350, MC1644, 3W, 20200122





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> WYA 30 0050	<b>Northing (US ft)</b> 427477.688	<b>Easting (US ft)</b> 1690029.285	<b>Elevation (US ft)</b> 899.744	
<b>PID</b> KZ2273	<b>Latitude (Global)</b> N40°50'08.17954"	<b>Longitude (Global)</b> W83°30'23.07060"	<b>Ellipsoid Height (US ft)</b> 784.419	



WYA 30 0050, KZ2273, 1, 20200122



WYA 30 0050, KZ2273, 2, 20200122



WYA 30 0050, KZ2273, 3N, 20200122



WYA 30 0050, KZ2273, 3E, 20200122



WYA 30 0050, KZ2273, 3S, 20200122



WYA 30 0050, KZ2273, 3W, 20200122





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Bill Welbaum
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> WYA 30 0880	<b>Northing (US ft)</b> 425844.249	<b>Easting (US ft)</b> 1733646.382	<b>Elevation (US ft)</b> 848.053	
<b>PID</b> KZ2277	<b>Latitude (Global)</b> N40°49'56.62351"	<b>Longitude (Global)</b> W83°20'55.41842"	<b>Ellipsoid Height (US ft)</b> 732.989	



WYA 30 0880, KZ2277, 1, 20200124



WYA 30 0880, KZ2277, 2, 20200124



WYA 30 0880, KZ2277, 3N, 20200124



WYA 30 0880, KZ2277, 3E, 20200124



WYA 30 0880, KZ2277, 3S, 20200124



WYA 30 0880, KZ2277, 3W, 20200124





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Rick Webb
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> X 150	<b>Northing (US ft)</b> 567676.140	<b>Easting (US ft)</b> 2386761.268	<b>Elevation (US ft)</b> 934.701	
<b>PID</b> MB1449	<b>Latitude (Global)</b> N41°12'53.35537"	<b>Longitude (Global)</b> W80°58'46.68107"	<b>Ellipsoid Height (US ft)</b> 823.831	



X 150, MB1449, 1, 20191109



X 150, MB1449, 2, 20191109



X 150, MB1449, 3N, 20191109



X 150, MB1449, 3E, 20191109



X 150, MB1449, 3S, 20191109



X 150, MB1449, 3W, 20191109





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> X 323	<b>Northing (US ft)</b> 762364.733	<b>Easting (US ft)</b> 2299123.807	<b>Elevation (US ft)</b> 576.654	
<b>PID</b> MB1620	<b>Latitude (Global)</b> N41°45'10.22622"	<b>Longitude (Global)</b> W81°17'17.93623"	<b>Ellipsoid Height (US ft)</b> 463.555	



X 323, MB1620, 1, 20191115



X 323, MB1620, 2, 20191115



X 323, MB1620, 3N, 20191115



X 323, MB1620, 3E, 20191115



X 323, MB1620, 3S, 20191115



X 323, MB1620, 3W, 20191115





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> Y 316	<b>Northing (US ft)</b> 676468.942	<b>Easting (US ft)</b> 1797173.916	<b>Elevation (US ft)</b> 584.126	
<b>PID</b> MC1011	<b>Latitude (Global)</b> N41°31'18.22668"	<b>Longitude (Global)</b> W83°07'32.35604"	<b>Ellipsoid Height (US ft)</b> 467.431	



Y 316, MC1011, 3W, 20200325



Y 316, MC1011, 3S, 20200325



Y 316, MC1011, 3E, 20200325



Y 316, MC1011, 3N, 20200325



Y 316, MC1011, 2, 20200325



Y 316, MC1011, 1, 20200325





# CONTROL RECOVERY LOG

<b>Project Number</b> 79574	<b>Project Name</b> Ohio Statewide LiDAR 2019		<b>Company</b> Woolpert, Inc.	<b>Field Operator</b> Brett Bolanger
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (2011)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Ohio North 3401	<b>Geoid</b> GEOID12B (Conus)
<b>Station ID</b> ZOB B	<b>Northing (US ft)</b> 594300.050	<b>Easting (US ft)</b> 2049395.037	<b>Elevation (US ft)</b> 805.336	
<b>PID</b> AA3881	<b>Latitude (Global)</b> N41°17'51.09272"	<b>Longitude (Global)</b> W82°12'20.13743"	<b>Ellipsoid Height (US ft)</b> 692.410	



ZOB B, AA3881, 1, 20191119



ZOB B, AA3881, 2, 20191119



ZOB B, AA3881, 3N, 20191119



ZOB B, AA3881, 3E, 20191119



ZOB B, AA3881, 3S, 20191119



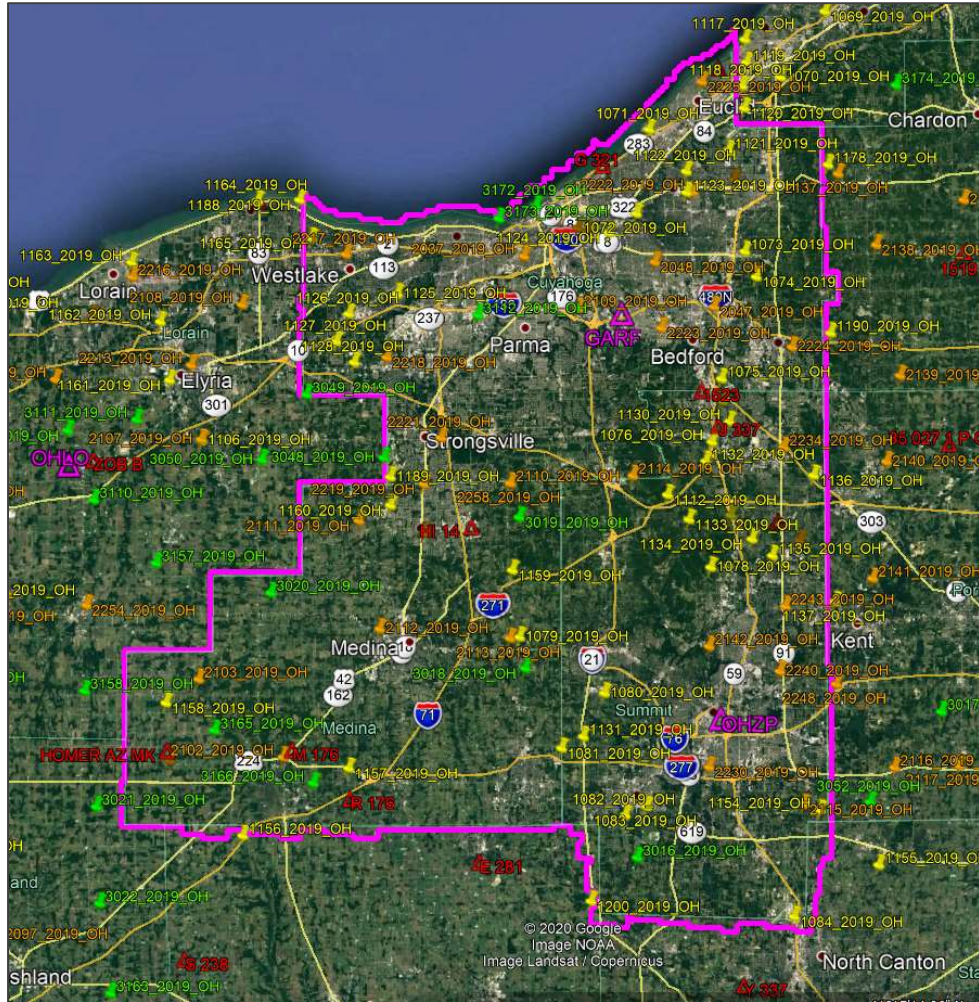
ZOB B, AA3881, 3W, 20191119



## Section 5: GNSS Control Diagram

This section contains a graphical representation of the control stations used for the USGS Ohio Statewide Phase 1 2019 B19 Project. The diagrams on the following pages depict the control stations used in the NAD83 (2011) adjustment.





**BLOCK 1**

**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

Horizontal Datum: NAD 83 (2011)

Vertical Datum: NAVD 88

Units: US Survey Feet

State Plane Zone: Ohio North 3401

Geoid Model: GEOID12B

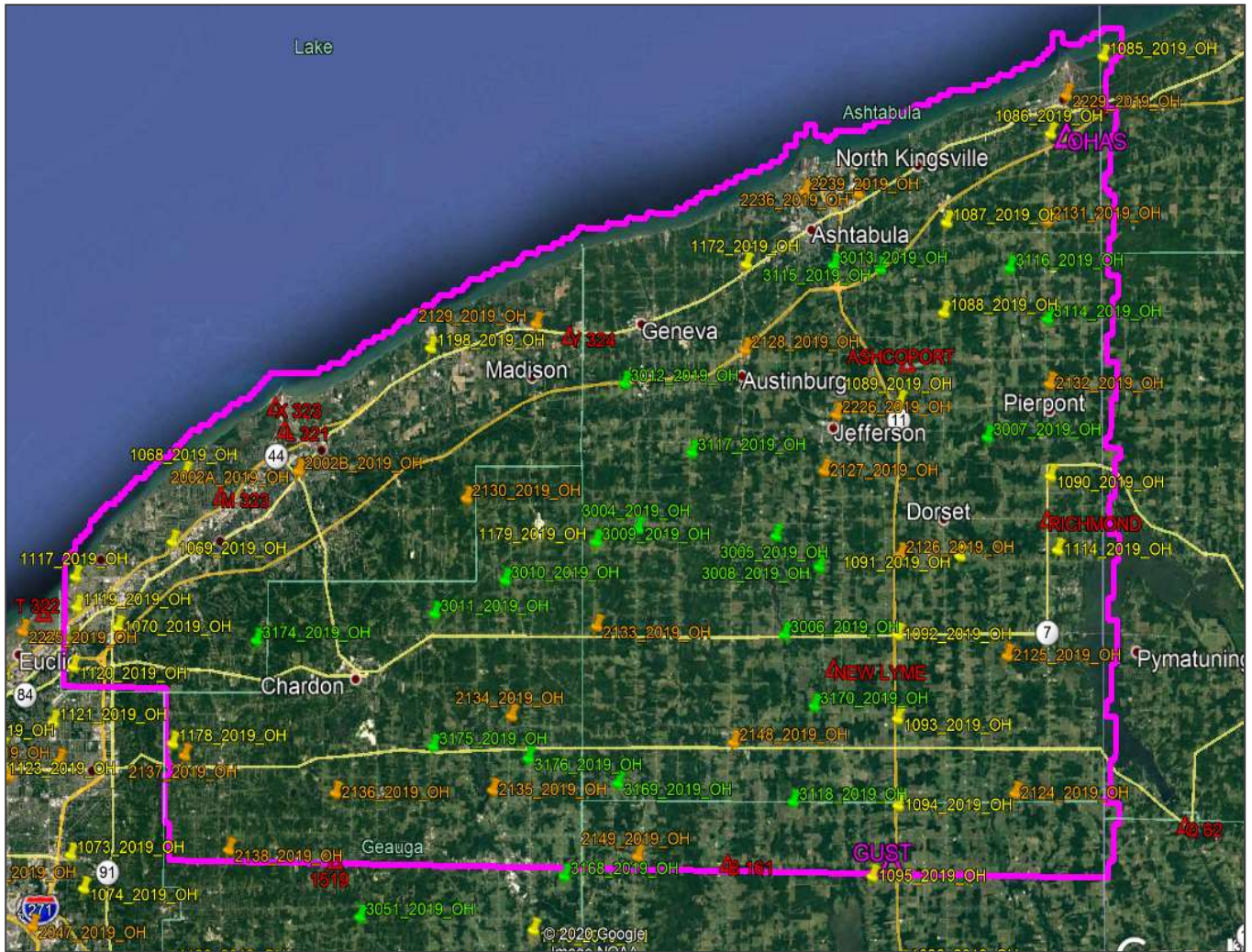
Coordinate System: Grid

Field Survey: March 2020



- LiDAR Control Station – Calibration**
- LiDAR NVA Control Station – Validation**
- LiDAR VVA Control Station – Validation**
- NGS Geodetic Control and Geodetic Control Checks**
- CORS Control Station**





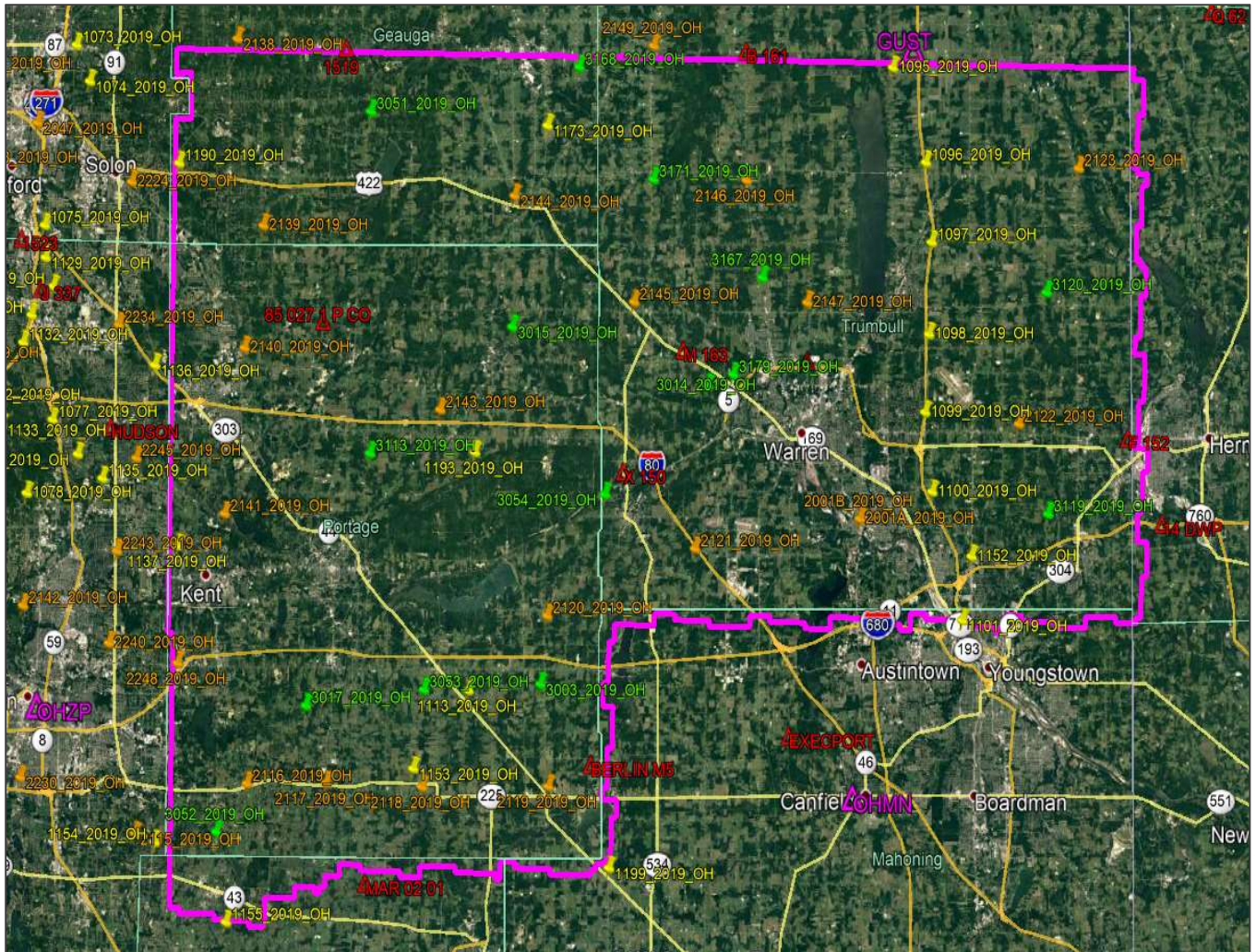
**BLOCK 2**

**LiDAR Ground Control Survey Report**  
**USGS Ohio Statewide Phase 1 2019 B19 Project**  
**WOOLPERT PROJECT #79574**  
 Horizontal Datum: NAD 83 (2011)  
 Vertical Datum: NAVD 88  
 Units: US Survey Feet  
 State Plane Zone: Ohio North 3401  
 Geoid Model: GEOID12B  
 Coordinate System: Grid  
 Field Survey: March 2020



**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**





### BLOCK 3

**LiDAR Ground Control Survey Report**  
**USGS Ohio Statewide Phase 1 2019 B19 Project**  
**WOOLPERT PROJECT #79574**

Horizontal Datum: NAD 83 (2011)

Vertical Datum: NAVD 88

Units: US Survey Feet

State Plane Zone: Ohio North 3401

Geoid Model: GEOID12B

Coordinate System: Grid

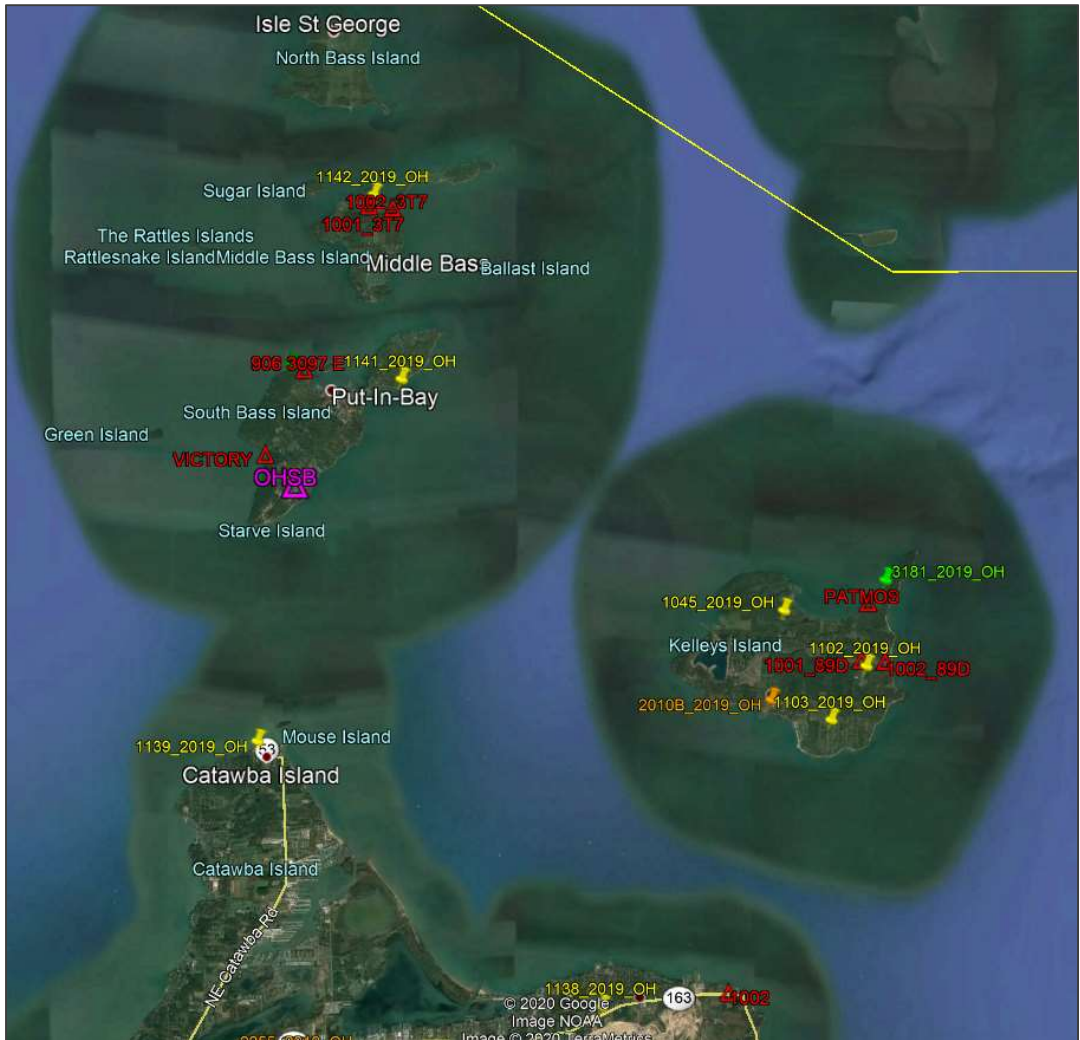
Field Survey: March 2020



- LiDAR Control Station – Calibration**
- LiDAR NVA Control Station – Validation**
- LiDAR VVA Control Station – Validation**
- NGS Geodetic Control and Geodetic Control Checks**
- CORS Control Station**







**BLOCK 4 (ISLANDS)**

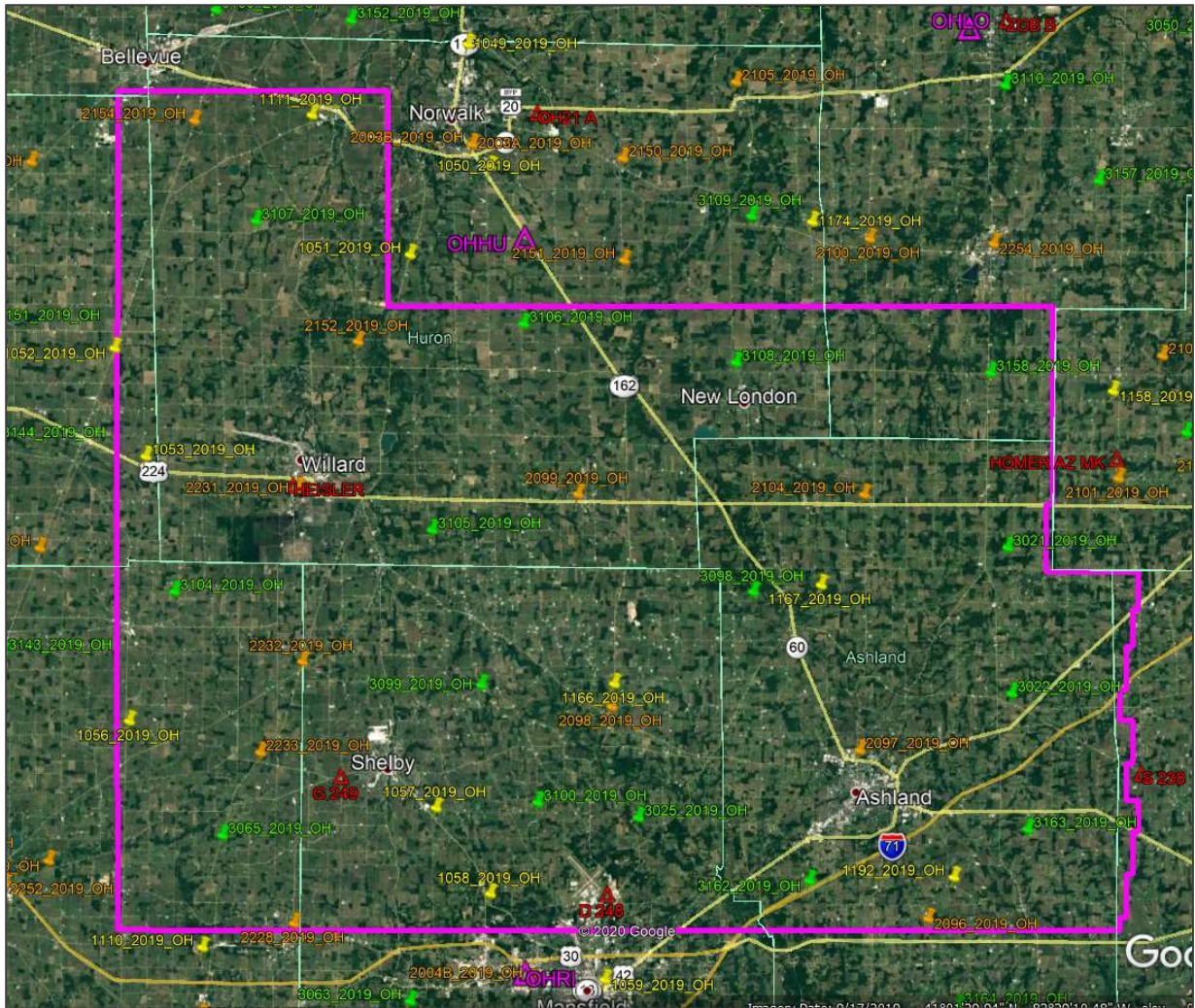
**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

Horizontal Datum: NAD 83 (2011)  
Vertical Datum: NAVD 88  
Units: US Survey Feet  
State Plane Zone: Ohio North 3401  
Geoid Model: GEOID12B  
Coordinate System: Grid  
Field Survey: March 2020



**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**





**BLOCK 5**

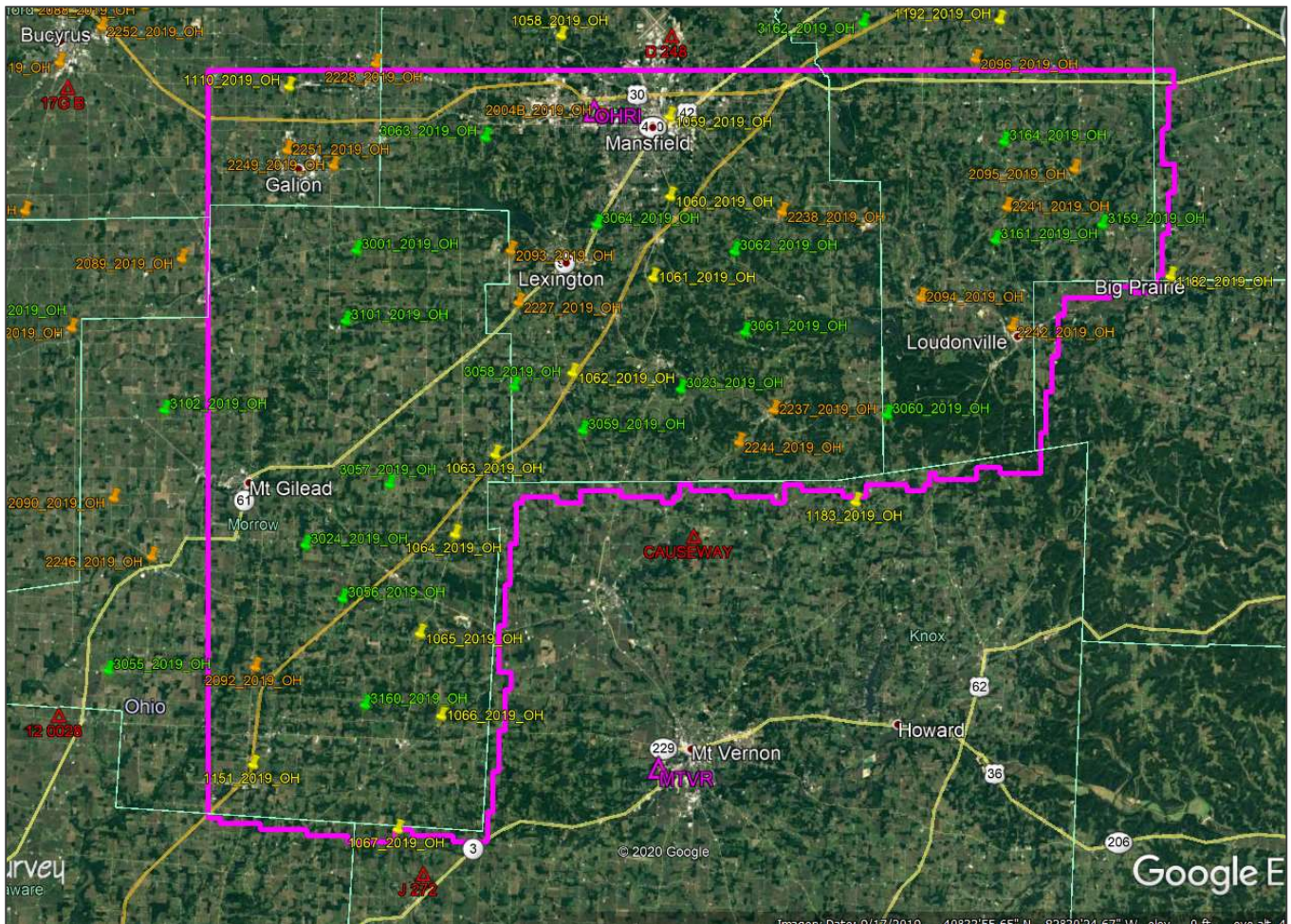
**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

Horizontal Datum: NAD 83 (2011)  
Vertical Datum: NAVD 88  
Units: US Survey Feet  
State Plane Zone: Ohio North 3401  
Geoid Model: GEOID12B  
Coordinate System: Grid  
Field Survey: March 2020



**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**





**BLOCK 6**

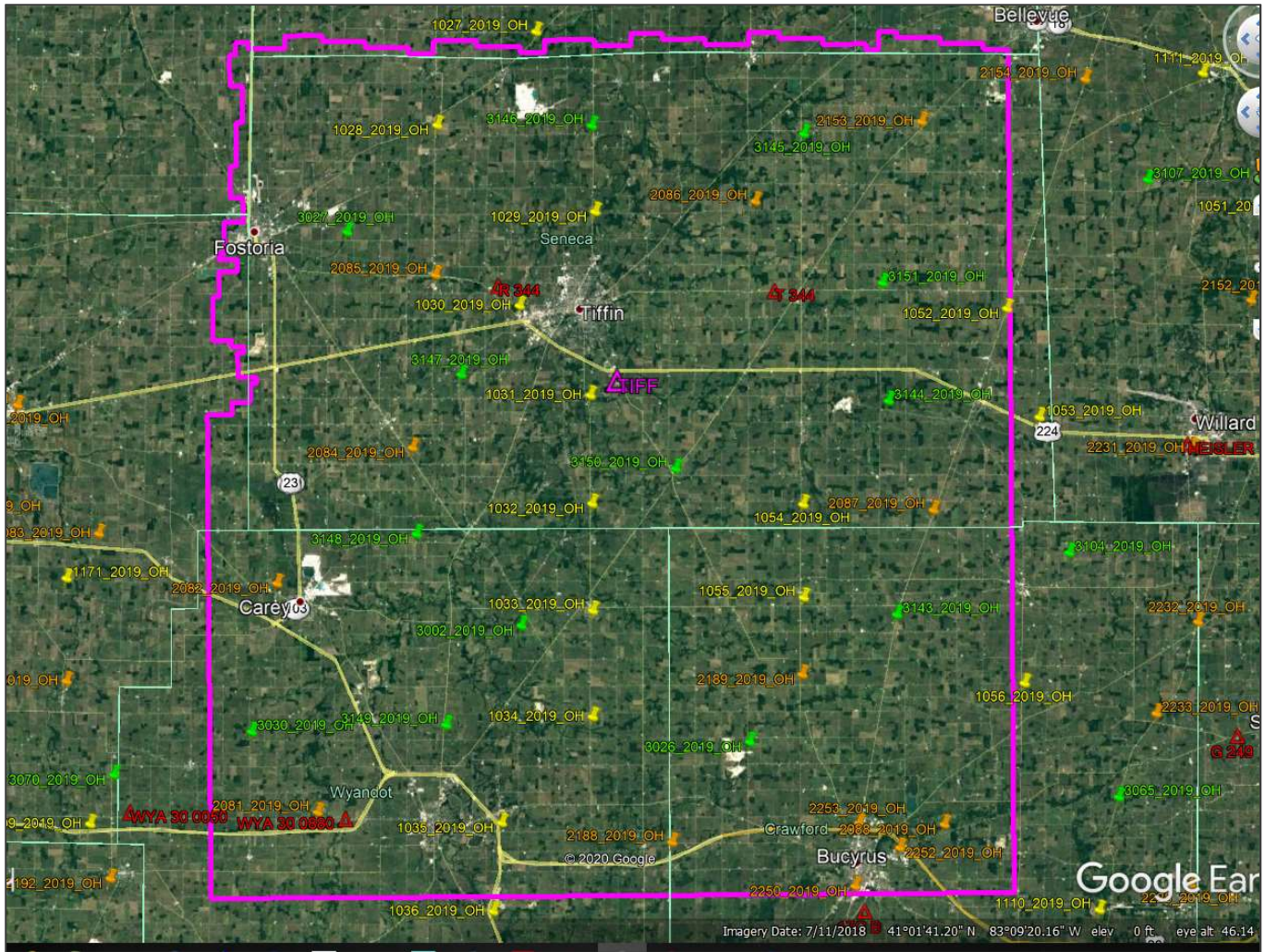
**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

Horizontal Datum: NAD 83 (2011)  
Vertical Datum: NAVD 88  
Units: US Survey Feet  
State Plane Zone: Ohio North 3401  
Geoid Model: GEOID12B  
Coordinate System: Grid  
Field Survey: March 2020



**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**





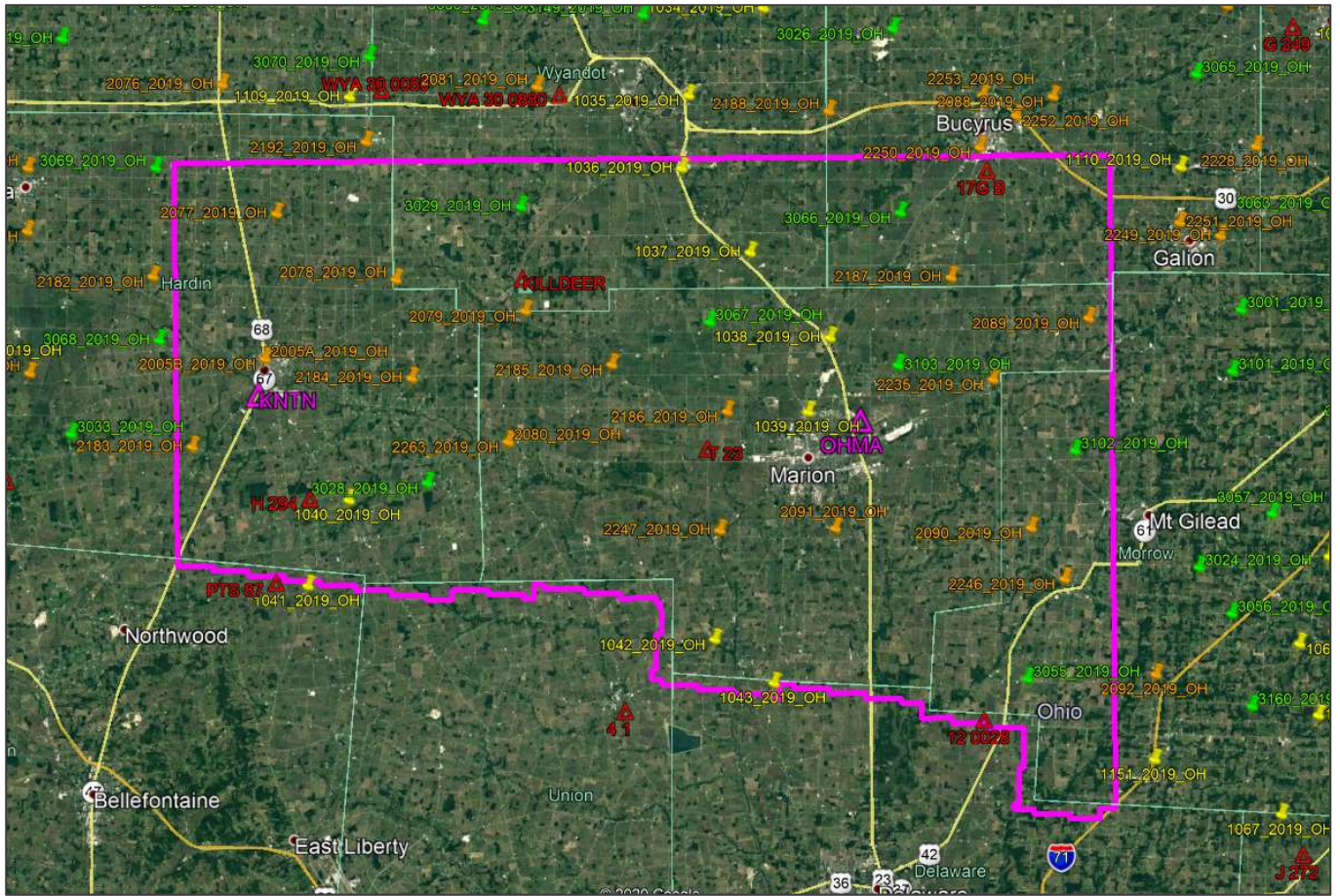
**BLOCK 7**

**LiDAR Ground Control Survey Report**  
**USGS Ohio Statewide Phase 1 2019 B19 Project**  
**WOOLPERT PROJECT #79574**  
*Horizontal Datum: NAD 83 (2011)*  
*Vertical Datum: NAVD 88*  
*Units: US Survey Feet*  
*State Plane Zone: Ohio North 3401*  
*Geoid Model: GEOID12B*  
*Coordinate System: Grid*  
*Field Survey: March 2020*



**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**





**BLOCK 8**

**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

Horizontal Datum: NAD 83 (2011)  
Vertical Datum: NAVD 88  
Units: US Survey Feet  
State Plane Zone: Ohio North 3401  
Geoid Model: GEOID12B  
Coordinate System: Grid  
Field Survey: March 2020

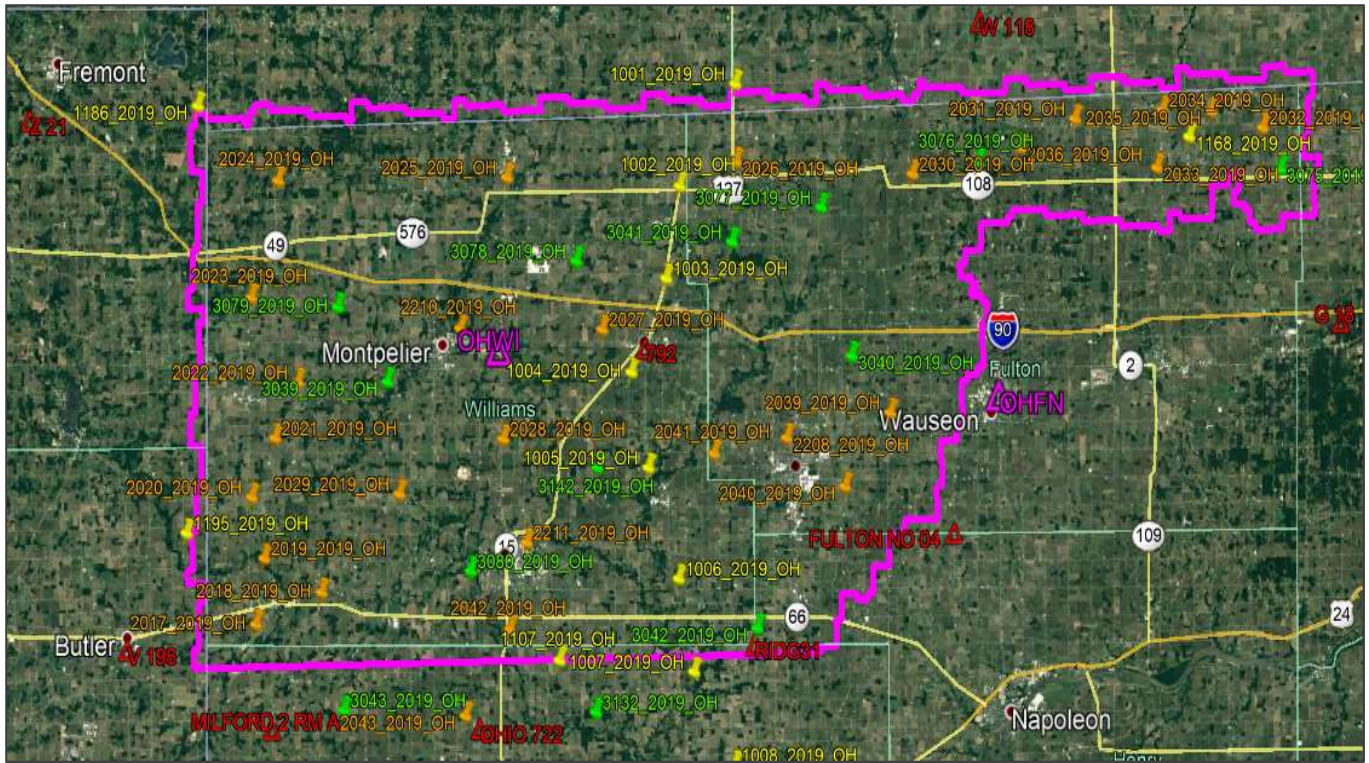


**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**









**BLOCK 10**

**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

*Horizontal Datum: NAD 83 (2011)*

*Vertical Datum: NAVD 88*

*Units: US Survey Feet*

*State Plane Zone: Ohio North 3401*

*Geoid Model: GEOID12B*

*Coordinate System: Grid*

*Field Survey: March 2020*



**LiDAR Control Station – Calibration**

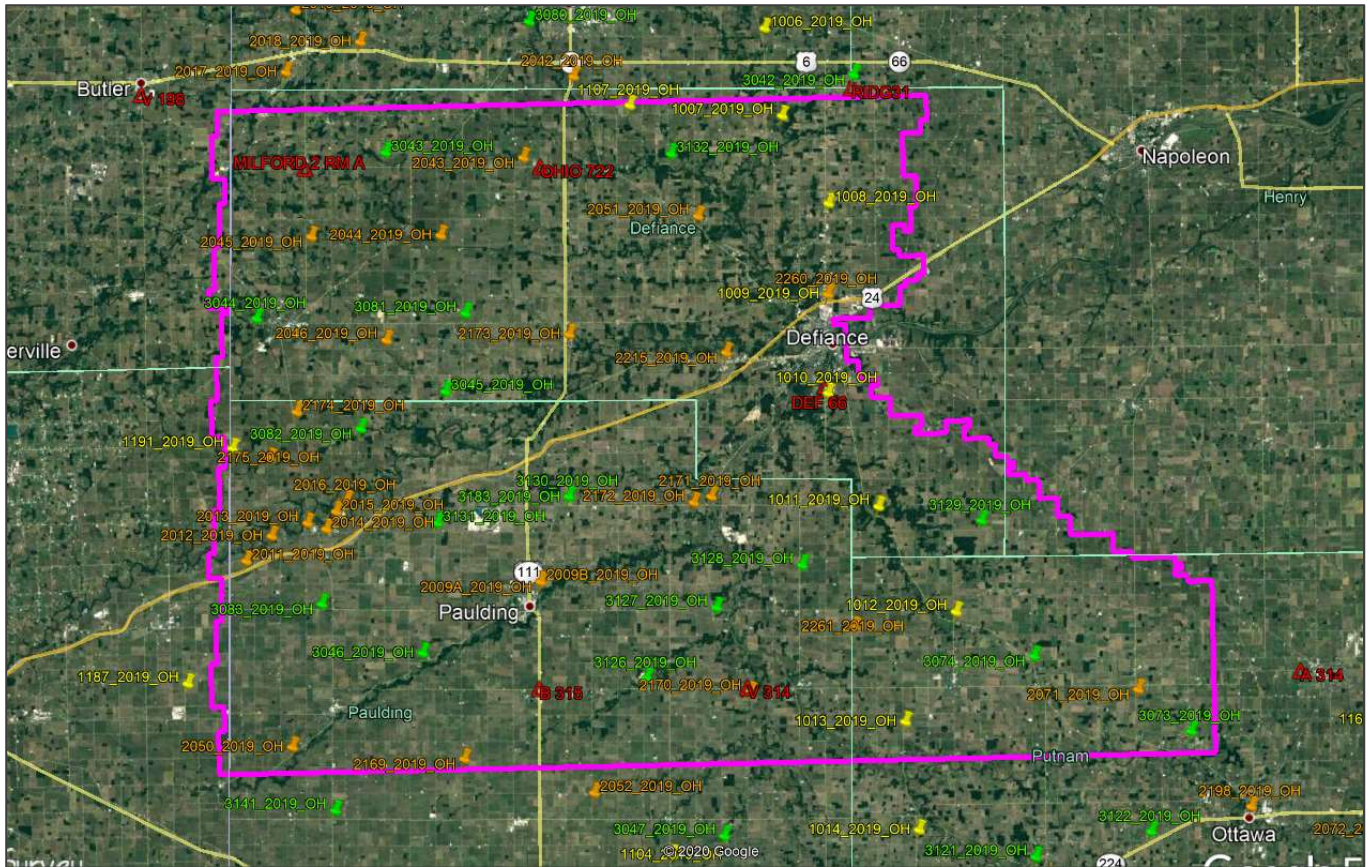
**LiDAR NVA Control Station – Validation**

**LiDAR VVA Control Station – Validation**

**NGS Geodetic Control and Geodetic Control Checks**

**CORS Control Station**





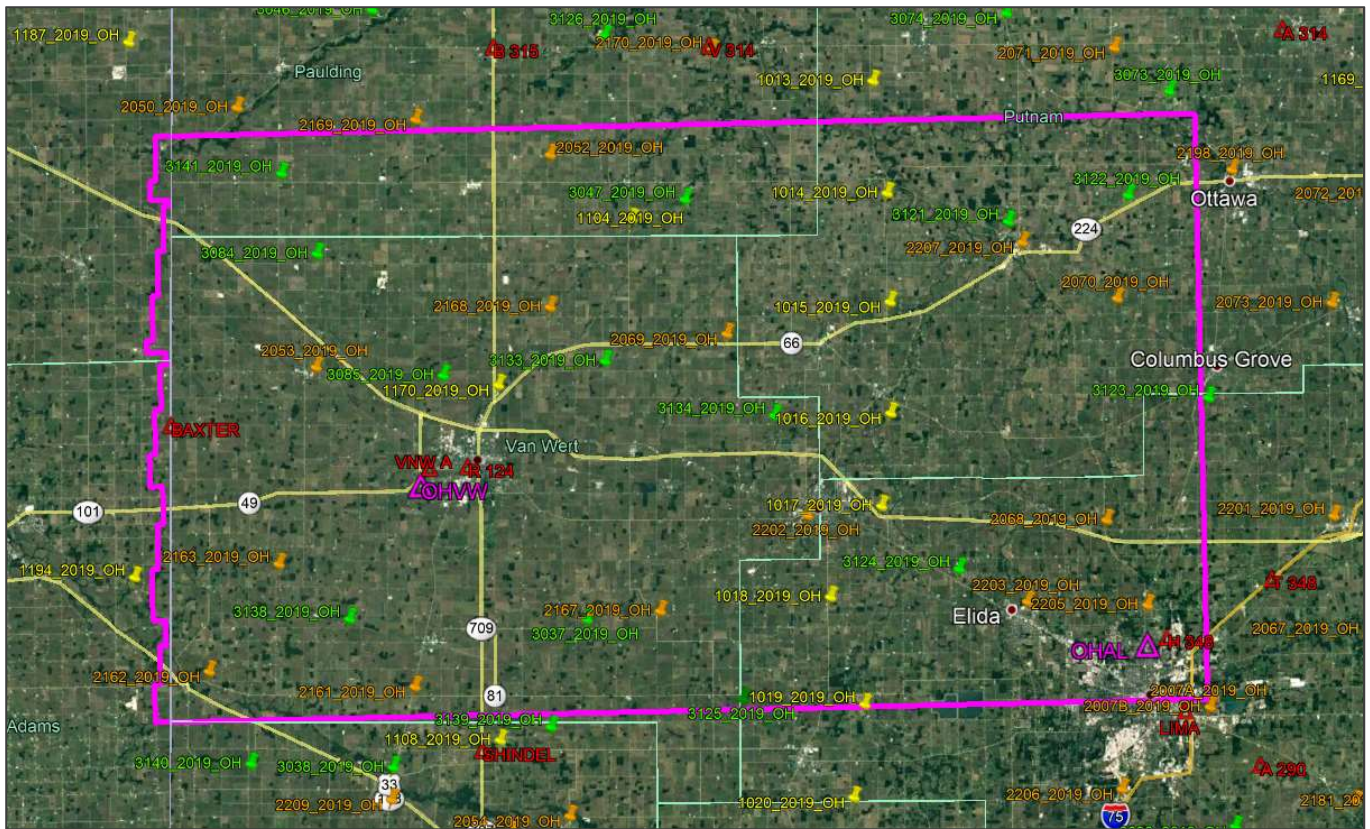
**BLOCK 11**

**LiDAR Ground Control Survey Report**  
**USGS Ohio Statewide Phase 1 2019 B19 Project**  
**WOOLPERT PROJECT #79574**  
*Horizontal Datum: NAD 83 (2011)*  
*Vertical Datum: NAVD 88*  
*Units: US Survey Feet*  
*State Plane Zone: Ohio North 3401*  
*Geoid Model: GEOID12B*  
*Coordinate System: Grid*  
*Field Survey: March 2020*



**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**





**BLOCK 12**

**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

*Horizontal Datum: NAD 83 (2011)*

*Vertical Datum: NAVD 88*

*Units: US Survey Feet*

*State Plane Zone: Ohio North 3401*

*Geoid Model: GEOID12B*

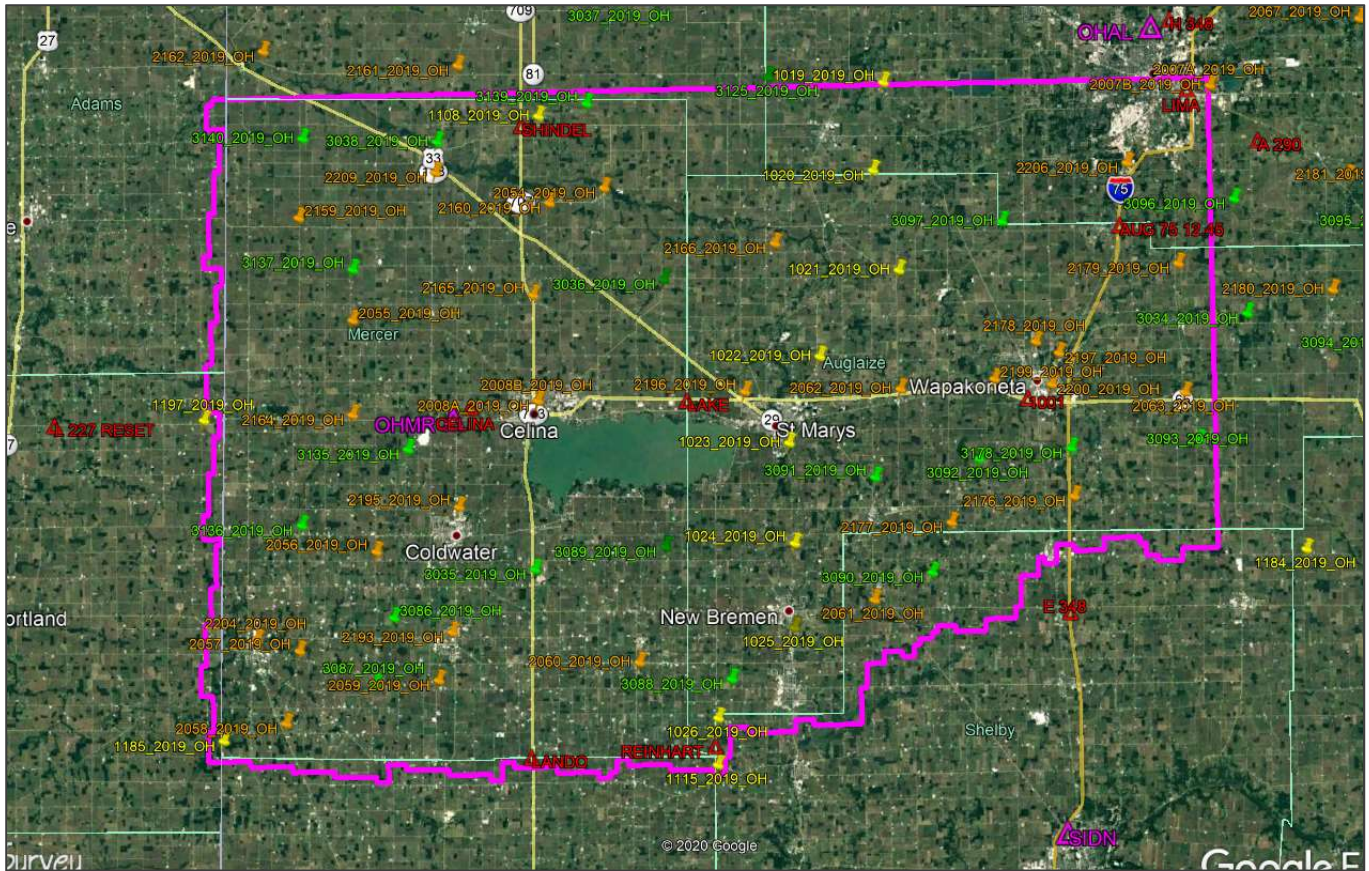
*Coordinate System: Grid*

*Field Survey: March 2020*



- LiDAR Control Station – Calibration**
- LiDAR NVA Control Station – Validation**
- LiDAR VVA Control Station – Validation**
- NGS Geodetic Control and Geodetic Control Checks**
- CORS Control Station**





**BLOCK 13**

**LiDAR Ground Control Survey Report  
USGS Ohio Statewide Phase 1 2019 B19 Project  
WOOLPERT PROJECT #79574**

Horizontal Datum: NAD 83 (2011)  
Vertical Datum: NAVD 88  
Units: US Survey Feet  
State Plane Zone: Ohio North 3401  
Geoid Model: GEOID12B  
Coordinate System: Grid  
Field Survey: March 2020



**LiDAR Control Station – Calibration**  
**LiDAR NVA Control Station – Validation**  
**LiDAR VVA Control Station – Validation**  
**NGS Geodetic Control and Geodetic Control Checks**  
**CORS Control Station**