

# Ground Control Survey Report



## University of Illinois LiDAR Ground Control Report

### Wabash & Embarrass Basin

Contractor: Woolpert, Inc.  
Woolpert Project # 80713

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**Wabash & Embarrass Basin**

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# Section 1: Survey Report

## Introduction

This report contains a comprehensive outline of the Ground Control Survey that supported the LiDAR collection for Wabash & Embarrass basin in southeastern Illinois. All surveys were performed in such a way as to achieve ground control accuracies that meet or exceed the National Mapping Accuracy Standards.

## Project Area

The project area consists of approximately 1,409 square miles encompassing Crawford, Jasper, and Lawrence counties in southeastern Illinois.

## Purpose

The purpose of this survey was to establish three-dimensional coordinates for 18 LiDAR control points, 67 non-vegetated check points, and 54 vegetated check points. The points were collected per the flight layout and were uniformly dispersed over the project area.

## Date of Survey

Ground control field operations took place January 23<sup>rd</sup> thru February 26<sup>th</sup> of 2020.

## Monumentation

Prior to aerial imagery acquisition, Woolpert field crews performed a field reconnaissance to verify the existence and suitability of pre-selected existing National Geodetic Survey (NGS) control stations. These existing NSRS control stations were utilized as checks to ensure that quality x, y, and z coordinate values were computed for each of the newly established photogrammetric control stations. Recovery information sheets for the existing NGS control stations can be found in Section 4 of this report. A control diagram showing the ground control stations used to support this mapping project can be found in Section 5 of this report.

## Accuracy Standards

The relative vertical accuracy of the LiDAR data will be 10 cm RMSEz with swath overlap (between adjacent swaths) and an absolute vertical accuracy of 15cm RMSE.

## GPS Equipment

The Ground Control was collected utilizing one Spectra Precision Epoch 50 dual frequency GPS receiver and one Spectra Precision Ranger data collector for this project.

## Methodology

### VRS Virtual Reference System or RTN Real Time Network.

The “Virtual Reference Station” (VRS) concept is based on having a network (spaced at 50-60kms) of GNSS (GPS or GPS/GLONASS) reference stations permanently connected to the control center via the Internet. The networked stations collectively and precisely, model ionospheric errors for the individual GNSS rover in the network coverage area. The rover interprets and uses the VRS network-correction data as if it is operating with a single physical base station on a very short baseline which increases the RTK performance. Corrections (vectors) are from the closest base, but because the ionospheric error (which is traditionally baseline dependent) is practically negated, the rover's degradation in accuracy due to baseline length starts when the rover is first initialized, that is, at the work site. Thus, accuracies are increased and more consistent throughout the working region.

### GPS Data Analysis and Processing

The field crew chief processed all session baselines each day using Trimble Navigation’s Trimble Business Center (TBC) Version 5.20 baseline processor with the accompanying broadcast ephemeris. Daily processing ensured the integrity of the network as it was constructed, and allowed the field crews to immediately reschedule observations of poor baselines.

### Datum Reference and Final Coordinates

The spatial reference system for the Wabash & Embarrass basin is Illinois State Plane East zone. The horizontal datum is based on NAD83 2011 2010.00 epoch. Orthometric heights are derived by applying Geoid12B to the GRS80 ellipsoid height. Units for both the horizontal and vertical datums will be expressed in US feet to two (2) decimal places. The coordinates are also provided in Albers Equal Area projection (ESPG 6350) with coordinates expressed in meters to three (3) decimal places.

### Quality Assurance

Existing NGS published bench marks 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 support 1.0 point per 0.3 meters squared (1’ GSD) data at 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 / Geodetic Control Coordinate Listings

Coordinate System: State Plane  
 HORIZONTAL DATUM: NAD83 2011 2010.00 epoch  
 PROJECTION: Illinois East 1201  
 VERTICAL DATUM: NAVD88  
 GEOID MODEL: GEOID12B (Conus)  
 UNITS: US survey foot

## Ground Control

Point No.	NAD83 2011 2010.00 Epoch Illinois East		Ortho Height (US Ft)	Description
	Northing (US Ft)	Easting (US Ft)		
1001_2020_IL	798527.08	974860.93	502.62	LCP
1002_2020_IL	799409.97	1005183.81	478.23	LCP
1003_2020_IL	804768.58	1035562.00	511.42	LCP
1004_2020_IL	811142.55	1066162.15	470.43	LCP
1005_2020_IL	816695.30	1096707.56	455.68	LCP
1006_2020_IL	819590.96	1127259.30	489.73	TARGET
1007_2020_IL	818011.03	1157678.61	553.70	TARGET
1008_2020_IL	812731.38	1188223.83	533.39	TARGET
1009_2020_IL	813858.00	1218977.93	422.37	LCP
1010_2020_IL	865653.90	989940.66	571.49	TARGET
1011_2020_IL	849537.89	1016522.24	552.65	TARGET
1012_2020_IL	853607.68	1047026.94	523.26	TARGET
1013_2020_IL	853571.68	1081387.11	482.81	TARGET
1014_2020_IL	824824.05	1112032.72	440.26	LCP
1015_2020_IL	784384.16	1142581.11	433.96	LCP
1016_2020_IL	766529.89	1172871.90	442.02	TARGET
1017_2020_IL	807526.93	1203525.01	495.00	TARGET
1018_2020_IL	752417.44	1226686.67	501.44	LCP
2001_2020_IL	852602.38	1152466.68	525.34	NVA
2002_2020_IL	848604.00	1153065.28	545.47	NVA

Point No.	NAD83 2011 2010.00 Epoch Illinois East		Ortho Height (US Ft)	Description
	Northing (US Ft)	Easting (US Ft)		
2003_2020_IL	857154.65	1151807.99	534.31	NVA
2004_2020_IL	852114.45	1190756.39	441.60	NVA
2005_2020_IL	850899.76	1186383.98	447.96	NVA
2006_2020_IL	831689.75	1151598.97	531.68	NVA
2007_2020_IL	850640.73	1107500.16	493.34	NVA
2008_2020_IL	849881.18	1103221.50	511.73	NVA
2009_2020_IL	852802.10	1104879.41	502.75	NVA
2010_2020_IL	846341.10	1105103.86	506.81	NVA
2011_2020_IL	848513.28	1127127.09	493.57	NVA
2012_2020_IL	854064.33	1136735.78	534.83	NVA
2013_2020_IL	852276.79	1146251.16	539.16	NVA
2014_2020_IL	852200.92	1142297.09	533.23	NVA
2015_2020_IL	701289.03	1167773.16	424.45	NVA
2016_2020_IL	701931.64	1180106.33	458.40	NVA
2017_2020_IL	701215.27	1137066.09	444.99	NVA
2018_2020_IL	744871.27	1117756.66	459.72	NVA
2019_2020_IL	747264.50	1120381.40	450.69	NVA
2020_2020_IL	747694.31	1148313.72	497.68	NVA
2021_2020_IL	744215.53	1147465.58	452.27	NVA
2022_2020_IL	749344.55	1158664.78	452.46	NVA
2023_2020_IL	751029.21	1165007.94	481.52	NVA
2024_2020_IL	752278.54	1171737.08	425.70	NVA
2025_2020_IL	749384.50	1170175.34	440.74	NVA
2026_2020_IL	774845.65	1179984.03	460.38	NVA
2027_2020_IL	795379.47	1110653.92	491.19	NVA
2028_2020_IL	811174.70	1094664.10	463.04	NVA
2029_2020_IL	907324.85	995045.77	581.62	NVA
2030_2020_IL	902989.42	983617.32	582.04	NVA
2031_2020_IL	891845.58	988979.17	588.41	NVA
2032_2020_IL	880816.53	994259.27	588.11	NVA
2033_2020_IL	901308.65	1011581.62	575.25	NVA
2034_2020_IL	890800.83	1014336.23	561.24	NVA
2035_2020_IL	882675.77	1014411.68	570.12	NVA

Point No.	NAD83 2011 2010.00 Epoch Illinois East		Ortho Height (US Ft)	Description
	Northing (US Ft)	Easting (US Ft)		
2036_2020_IL	856943.36	1004999.43	562.87	NVA
2037_2020_IL	845974.49	1029500.24	538.67	NVA
2038_2020_IL	846241.05	1035146.72	497.38	NVA
2039_2020_IL	840911.78	1034051.49	528.18	NVA
2040_2020_IL	825002.68	1071957.38	482.63	NVA
2041_2020_IL	848000.84	1073040.96	496.77	NVA
2042_2020_IL	893451.77	1071812.36	555.15	NVA
2043_2020_IL	901569.34	1094308.49	545.26	NVA
2044_2020_IL	902827.60	1130739.26	581.51	NVA
2045_2020_IL	873273.35	1110054.42	501.63	NVA
2046_2020_IL	800881.60	1142281.16	466.13	NVA
2047_2020_IL	791058.83	1175806.19	441.98	NVA
2048_2020_IL	762917.94	1143437.19	447.16	NVA
2049_2020_IL	906464.50	1037054.81	583.79	NVA
2050_2020_IL	887453.36	1040437.39	563.47	NVA
2051_2020_IL	842453.91	991840.96	556.97	NVA
2052_2020_IL	842233.99	1014647.39	554.17	NVA
2053_2020_IL	825914.24	1010854.88	543.69	NVA
2054_2020_IL	826144.79	1046719.15	518.27	NVA
2055_2020_IL	866943.22	1072350.77	518.23	NVA
2056_2020_IL	869203.24	1035698.37	549.01	NVA
2057_2020_IL	875290.32	1168432.04	502.11	NVA
2058_2020_IL	799945.00	1057572.71	479.08	NVA
2059_2020_IL	709498.39	1118392.22	460.98	NVA
2060_2020_IL	725471.45	1148104.59	473.44	NVA
2061_2020_IL	725683.39	1166757.98	507.85	NVA
2062_2020_IL	790375.49	1155787.59	490.24	NVA
2063_2020_IL	868332.99	1136494.66	537.74	NVA
2064_2020_IL	887008.01	1144040.16	573.88	NVA
2065_2020_IL	902485.94	1159092.94	514.07	NVA
2066_2020_IL	888118.42	1115068.23	534.51	NVA
2067_2020_IL	811473.07	1125347.46	468.71	NVA
3001_2020_IL	735662.34	1211328.57	412.94	VVA

Point No.	NAD83 2011 2010.00 Epoch Illinois East		Ortho Height (US Ft)	Description
	Northing (US Ft)	Easting (US Ft)		
3002_2020_IL	845332.53	1188596.23	458.53	VVA
3003_2020_IL	852975.69	1195606.92	429.80	VVA
3004_2020_IL	858397.24	1182937.35	445.17	VVA
3005_2020_IL	863288.14	1170684.96	468.70	VVA
3006_2020_IL	879682.80	1163050.62	543.38	VVA
3007_2020_IL	899989.41	1148695.02	537.72	VVA
3008_2020_IL	906815.77	1110301.60	530.38	VVA
3009_2020_IL	784599.87	1122717.64	436.13	VVA
3010_2020_IL	800922.75	1139411.93	453.81	VVA
3011_2020_IL	816151.54	986891.38	530.22	VVA
3012_2020_IL	806368.64	1154003.96	522.15	VVA
3013_2020_IL	800848.38	1181141.33	533.36	VVA
3014_2020_IL	701226.98	1137046.00	443.07	VVA
3015_2020_IL	725440.60	1142708.60	474.86	VVA
3016_2020_IL	730829.82	1121130.77	517.41	VVA
3017_2020_IL	739848.37	1183697.80	417.54	VVA
3018_2020_IL	739104.98	1160044.96	431.46	VVA
3019_2020_IL	763100.25	1126974.29	451.08	VVA
3020_2020_IL	776709.26	1163852.69	437.13	VVA
3021_2020_IL	766702.76	1201988.94	422.90	VVA
3022_2020_IL	907297.00	995118.58	581.71	VVA
3023_2020_IL	897683.82	983610.00	588.19	VVA
3024_2020_IL	884547.14	1004934.14	572.60	VVA
3025_2020_IL	897216.50	1027549.44	570.75	VVA
3026_2020_IL	893421.89	1067581.93	558.92	VVA
3027_2020_IL	874924.42	1072220.83	530.46	VVA
3028_2020_IL	881433.27	1125734.10	553.14	VVA
3029_2020_IL	869010.84	1158024.14	517.31	VVA
3030_2020_IL	862527.98	1118116.25	503.22	VVA
3031_2020_IL	833721.79	1073744.97	487.73	VVA
3032_2020_IL	826541.17	1046553.68	518.57	VVA
3033_2020_IL	825875.10	1010807.93	542.34	VVA
3034_2020_IL	833008.06	1128218.62	489.43	VVA



Point No.	NAD83 2011 2010.00 Epoch Illinois East		Ortho Height (US Ft)	Description
	Northing (US Ft)	Easting (US Ft)		
3035_2020_IL	839554.95	1099768.38	493.72	VVA
3036_2020_IL	853535.09	1057756.01	533.63	VVA
3037_2020_IL	867735.36	1008946.85	568.36	VVA
3038_2020_IL	886435.06	1093441.83	521.31	VVA
3039_2020_IL	906450.80	1056721.79	572.79	VVA
3040_2020_IL	869226.02	1035699.64	547.94	VVA
3041_2020_IL	848810.58	990056.40	561.93	VVA
3042_2020_IL	829108.86	1199887.49	515.71	VVA
3043_2020_IL	839528.97	1167662.48	489.53	VVA
3044_2020_IL	845146.66	1142419.59	529.67	VVA
3045_2020_IL	861164.84	1104711.43	500.03	VVA
3046_2020_IL	882348.25	1054630.93	548.24	VVA
3047_2020_IL	831855.41	1052403.20	517.60	VVA
3048_2020_IL	818535.16	1030893.67	578.53	VVA
3049_2020_IL	799370.53	1022627.97	516.59	VVA
3050_2020_IL	815404.74	1010523.92	537.53	VVA
3051_2020_IL	824789.39	1106667.75	448.88	VVA
3052_2020_IL	784376.33	1197419.23	450.89	VVA
3053_2020_IL	854312.60	1072594.32	498.77	VVA
3054_2020_IL	811091.43	1094650.30	461.94	VVA

## Geodetic Control

Point No.	NAD83 2011 2010.00 Epoch Illinois East		Ortho Height (US Ft)	Description
	Northing (US Ft)	Easting (US Ft)		
A 176	854613.49	1037111.15	500.41	KB0261
CRAW 01	807571.06	1168899.85	521.15	DM6901
IL_CHAR	751996.75	1054681.35	497.99	VRS Station
IL_Flora	733660.50	956754.02	485.85	VRS Station
IL_LAMC	633923.32	1147366.05	448.10	VRS Station
IL_MGEF	894302.98	924760.45	616.90	VRS Station
IL_Robinson	856115.14	1150416.49	570.14	VRS Station
J 294	751812.15	1172194.42	425.51	JA1649
V 173 RESET 1965	816022.30	1051803.94	501.44	JB0100
W 90	850827.56	1186529.68	447.43	KA1352
X 175	869315.35	1037236.90	547.35	KB0257
Z 294	747000.68	1122723.78	470.46	JA1659

**Coordinate System: Albers Equal Area**  
**HORIZONTAL DATUM: NAD83 2011 2010.00 epoch**  
**PROJECTION: Albers Equ Aerea NAD83**  
**VERTICAL DATUM: NAVD88**  
**GEOID MODEL: GEOID12B (Conus)**  
**UNITS: Meter**

### Ground Control

Point No.	NAD83 2011 2010.00 Epoch Albers Equal Area (ESPG 6350)		Ortho Height (m)	Description
	Northing (m)	Easting (m)		
1001_2020_IL	1785515.547	655543.987	153.197	LCP
1002_2020_IL	1786523.964	664646.625	145.764	LCP
1003_2020_IL	1788906.021	673655.012	155.880	LCP
1004_2020_IL	1791604.280	682705.129	143.387	LCP
1005_2020_IL	1794048.640	691759.218	138.892	LCP
1006_2020_IL	1795677.439	700881.079	149.269	TARGET
1007_2020_IL	1795929.534	710073.894	168.768	TARGET
1008_2020_IL	1795049.203	719396.076	162.578	TARGET
1009_2020_IL	1796138.309	728622.459	128.739	LCP
1010_2020_IL	1806472.993	658417.031	174.191	TARGET
1011_2020_IL	1802176.015	666815.757	168.449	TARGET
1012_2020_IL	1804165.496	675894.589	159.490	TARGET
1013_2020_IL	1804988.451	686235.438	147.160	TARGET
1014_2020_IL	1796913.628	696169.510	134.190	LCP
1015_2020_IL	1785249.157	706363.472	132.272	LCP
1016_2020_IL	1780505.826	715920.252	134.727	TARGET
1017_2020_IL	1793822.838	724129.170	150.875	TARGET
1018_2020_IL	1777478.496	732462.406	152.839	LCP
2001_2020_IL	1806413.691	707649.241	160.124	NVA
2002_2020_IL	1805201.762	707928.345	166.261	NVA
2003_2020_IL	1807794.058	707338.347	162.859	NVA
2004_2020_IL	1807190.441	719183.632	134.601	NVA
2005_2020_IL	1806712.127	717897.929	136.540	NVA
2006_2020_IL	1799978.108	707905.795	162.058	NVA

Point No.	NAD83 2011 2010.00 Epoch Albers Equal Area (ESPG 6350)		Ortho Height (m)	Description
	Northing (m)	Easting (m)		
2007_2020_IL	1804722.682	694166.181	150.371	NVA
2008_2020_IL	1804385.977	692897.426	155.977	NVA
2009_2020_IL	1805322.116	693323.999	153.239	NVA
2010_2020_IL	1803345.748	693551.552	154.475	NVA
2011_2020_IL	1804545.768	700125.130	150.442	NVA
2012_2020_IL	1806481.206	702879.204	163.016	NVA
2013_2020_IL	1806163.342	705786.887	164.338	NVA
2014_2020_IL	1806044.323	704598.883	162.529	NVA
2015_2020_IL	1760369.482	716001.760	129.373	NVA
2016_2020_IL	1760865.203	719696.766	139.719	NVA
2017_2020_IL	1759603.009	706764.105	135.632	NVA
2018_2020_IL	1772526.937	699872.384	140.122	NVA
2019_2020_IL	1773324.703	700602.880	137.370	NVA
2020_2020_IL	1774133.374	708997.096	151.692	NVA
2021_2020_IL	1773045.698	708828.055	137.851	NVA
2022_2020_IL	1774890.275	712070.863	137.910	NVA
2023_2020_IL	1775560.634	713937.799	146.768	NVA
2024_2020_IL	1776106.766	715931.659	129.754	NVA
2025_2020_IL	1775181.212	715533.396	134.338	NVA
2026_2020_IL	1783228.775	717854.432	140.324	NVA
2027_2020_IL	1787848.265	696483.909	149.716	NVA
2028_2020_IL	1792305.672	691281.062	141.135	NVA
2029_2020_IL	1819378.728	658920.070	177.278	NVA
2030_2020_IL	1817770.947	655588.279	177.407	NVA
2031_2020_IL	1814483.329	657478.209	179.347	NVA
2032_2020_IL	1811228.873	659340.660	179.255	NVA
2033_2020_IL	1817935.531	664045.559	175.337	NVA
2034_2020_IL	1814779.501	665135.015	171.067	NVA
2035_2020_IL	1812289.169	665359.137	173.772	NVA
2036_2020_IL	1804167.414	663164.634	171.564	NVA
2037_2020_IL	1801398.380	670809.511	164.187	NVA
2038_2020_IL	1801617.325	672502.080	151.602	NVA
2039_2020_IL	1799956.026	672304.587	160.991	NVA

Point No.	NAD83 2011 2010.00 Epoch Albers Equal Area (ESPG 6350)		Ortho Height (m)	Description
	Northing (m)	Easting (m)		
2040_2020_IL	1795996.446	684105.590	147.107	NVA
2041_2020_IL	1803077.175	683861.861	151.415	NVA
2042_2020_IL	1816988.511	682366.165	169.211	NVA
2043_2020_IL	1820024.023	688935.136	166.196	NVA
2044_2020_IL	1821292.822	699867.554	177.243	NVA
2045_2020_IL	1811726.707	694374.372	152.896	NVA
2046_2020_IL	1790302.402	705864.686	142.077	NVA
2047_2020_IL	1788100.966	716195.918	134.715	NVA
2048_2020_IL	1778685.142	707152.694	136.295	NVA
2049_2020_IL	1820135.952	671583.744	177.940	NVA
2050_2020_IL	1814386.965	673072.822	171.745	NVA
2051_2020_IL	1799402.961	659564.181	169.766	NVA
2052_2020_IL	1799890.063	666432.640	168.910	NVA
2053_2020_IL	1794791.934	665695.990	165.716	NVA
2054_2020_IL	1795734.081	676482.575	157.970	NVA
2055_2020_IL	1808870.692	683184.876	157.958	NVA
2056_2020_IL	1808674.020	672098.972	167.338	NVA
2057_2020_IL	1813759.049	711892.192	153.043	NVA
2058_2020_IL	1787960.947	680397.919	146.024	NVA
2059_2020_IL	1761691.337	700940.031	140.506	NVA
2060_2020_IL	1767311.305	709484.613	144.303	NVA
2061_2020_IL	1767828.072	715092.082	154.794	NVA
2062_2020_IL	1787406.795	710189.062	149.426	NVA
2063_2020_IL	1810851.970	702453.416	163.903	NVA
2064_2020_IL	1816762.753	704261.864	174.919	NVA
2065_2020_IL	1821874.458	708408.807	156.689	NVA
2066_2020_IL	1816401.570	695515.641	162.919	NVA
2067_2020_IL	1793141.023	700506.806	142.864	NVA
3001_2020_IL	1771967.637	728255.997	125.865	VVA
3002_2020_IL	1805058.010	718701.392	139.760	VVA
3003_2020_IL	1807571.883	720621.962	131.002	VVA
3004_2020_IL	1808928.438	716675.244	135.688	VVA
3005_2020_IL	1810132.212	712867.154	142.860	VVA

Point No.	NAD83 2011 2010.00 Epoch Albers Equal Area (ESPG 6350)		Ortho Height (m)	Description
	Northing (m)	Easting (m)		
3006_2020_IL	1814976.105	710164.059	165.624	VVA
3007_2020_IL	1820857.076	705341.426	163.897	VVA
3008_2020_IL	1822020.900	693618.253	161.660	VVA
3009_2020_IL	1784834.059	700381.026	132.932	VVA
3010_2020_IL	1790245.527	705000.276	138.320	VVA
3011_2020_IL	1791214.518	658727.014	161.611	VVA
3012_2020_IL	1792269.391	709256.371	159.152	VVA
3013_2020_IL	1791232.912	717558.982	162.568	VVA
3014_2020_IL	1759606.114	706757.768	135.047	VVA
3015_2020_IL	1767171.120	707861.748	144.738	VVA
3016_2020_IL	1768301.392	701235.528	157.707	VVA
3017_2020_IL	1772583.283	719838.409	127.266	VVA
3018_2020_IL	1771782.671	712739.751	131.509	VVA
3019_2020_IL	1778342.188	702194.420	137.489	VVA
3020_2020_IL	1783409.999	712954.292	133.236	VVA
3021_2020_IL	1781263.308	724677.335	128.899	VVA
3022_2020_IL	1819371.959	658942.673	177.304	VVA
3023_2020_IL	1816143.426	655717.645	179.280	VVA
3024_2020_IL	1812632.753	662460.608	174.529	VVA
3025_2020_IL	1817068.464	668952.367	173.966	VVA
3026_2020_IL	1816876.687	681093.800	170.361	VVA
3027_2020_IL	1811315.609	682948.054	161.683	VVA
3028_2020_IL	1814609.509	698890.902	168.598	VVA
3029_2020_IL	1811581.129	708915.526	157.676	VVA
3030_2020_IL	1808626.178	697066.503	153.383	VVA
3031_2020_IL	1798714.334	684427.484	148.659	VVA
3032_2020_IL	1795851.647	676422.957	158.061	VVA
3033_2020_IL	1794778.784	665682.833	165.305	VVA
3034_2020_IL	1799816.223	700837.516	149.179	VVA
3035_2020_IL	1801134.832	692114.048	150.487	VVA
3036_2020_IL	1804403.738	679125.071	162.651	VVA
3037_2020_IL	1807573.654	664084.966	173.238	VVA
3038_2020_IL	1815360.994	689049.114	158.894	VVA

Point No.	NAD83 2011 2010.00 Epoch Albers Equal Area (ESPG 6350)		Ortho Height (m)	Description
	Northing (m)	Easting (m)		
3039_2020_IL	1820609.333	677502.747	174.586	VVA
3040_2020_IL	1808681.039	672098.789	167.013	VVA
3041_2020_IL	1801309.381	658869.534	171.276	VVA
3042_2020_IL	1800354.770	722500.565	157.190	VVA
3043_2020_IL	1802771.477	712545.598	149.208	VVA
3044_2020_IL	1803883.528	704810.380	161.442	VVA
3045_2020_IL	1807883.162	693066.342	152.410	VVA
3046_2020_IL	1813165.762	677470.693	167.103	VVA
3047_2020_IL	1797623.795	678051.505	157.766	VVA
3048_2020_IL	1793015.457	671908.984	176.336	VVA
3049_2020_IL	1786935.902	669896.787	157.457	VVA
3050_2020_IL	1791560.156	665856.962	163.838	VVA
3051_2020_IL	1796772.943	694555.942	136.819	VVA
3052_2020_IL	1786574.027	722864.838	137.433	VVA
3053_2020_IL	1805002.376	683571.081	152.026	VVA
3054_2020_IL	1792279.795	691278.972	140.800	VVA

## Geodetic Control

Point No.	NAD83 2011 2010.00 epoch Albers Equal Area (ESPG 6350)		Ortho Height (m)	Description
	Northing (m)	Easting (m)		
A 176	1804233.177	672885.719	152.525	KB0261
CRAW 01	1792998.804	713708.970	158.847	DM6901
IL_CHAR	1773182.410	680716.272	151.786	VRS Station
IL_Flora	1765176.576	651704.556	148.086	VRS Station
IL_LAMC	1739209.606	711530.657	136.580	VRS Station
IL_MGEF	1813673.291	638091.549	188.033	VRS Station
IL_Robinson	1807441.524	706945.335	173.778	VRS Station
J 294	1775974.772	716080.822	129.697	JA1649
V 173 RESET 1965	1792752.546	678263.557	152.840	JB0100
W 90	1806693.506	717943.557	136.378	KA1352
X 175	1808745.783	672559.187	166.832	KB0257
Z 294	1773300.550	701314.243	143.395	JA1659



## Coordinate System: Geodetic

HORIZONTAL DATUM: NAD 1983 2011 2010.00

ELLIPSOID: GRS80

UNITS: US survey foot

### Ground Control

Point No.	NAD 1983 2011 2010.00 epoch		Ellipsoid Height (US Ft)	Description
	Latitude	Longitude		
1001_2020_IL	N38°51'34.52687"	W88°21'58.69851"	399.39	LCP
1002_2020_IL	N38°51'43.18728"	W88°15'35.34164"	374.86	LCP
1003_2020_IL	N38°52'35.73708"	W88°09'11.14903"	407.88	LCP
1004_2020_IL	N38°53'37.96444"	W88°02'43.95331"	366.75	LCP
1005_2020_IL	N38°54'31.71939"	W87°56'17.30999"	351.90	LCP
1006_2020_IL	N38°54'58.85434"	W87°49'50.61334"	385.81	TARGET
1007_2020_IL	N38°54'41.40544"	W87°43'25.89329"	449.61	TARGET
1008_2020_IL	N38°53'47.02820"	W87°37'00.00566"	428.97	TARGET
1009_2020_IL	N38°53'55.59565"	W87°30'30.91388"	317.43	LCP
1010_2020_IL	N39°02'38.04407"	W88°18'47.87098"	467.23	TARGET
1011_2020_IL	N38°59'58.55654"	W88°13'11.20511"	448.57	TARGET
1012_2020_IL	N39°00'38.22944"	W88°06'44.67661"	419.07	TARGET
1013_2020_IL	N39°00'36.82375"	W87°59'29.37400"	378.62	TARGET
1014_2020_IL	N38°55'51.36404"	W87°53'02.93162"	336.36	LCP
1015_2020_IL	N38°49'09.98930"	W87°46'39.47737"	330.26	LCP
1016_2020_IL	N38°46'11.52350"	W87°40'18.40527"	338.14	TARGET
1017_2020_IL	N38°52'54.35719"	W87°33'47.03759"	390.37	TARGET
1018_2020_IL	N38°43'47.64679"	W87°29'00.64038"	396.88	LCP
2001_2020_IL	N39°00'23.63964"	W87°44'28.98512"	420.99	NVA
2002_2020_IL	N38°59'44.08212"	W87°44'21.73270"	441.15	NVA
2003_2020_IL	N39°01'08.67538"	W87°44'36.95548"	429.93	NVA
2004_2020_IL	N39°00'16.07622"	W87°36'24.00295"	336.77	NVA
2005_2020_IL	N39°00'04.41205"	W87°37'19.50821"	343.21	NVA
2006_2020_IL	N38°56'56.99884"	W87°44'41.68834"	427.52	NVA
2007_2020_IL	N39°00'06.75458"	W87°53'58.73367"	389.19	NVA

Point No.	NAD 1983 2011 2010.00 epoch		Ellipsoid Height (US Ft)	Description
	Latitude	Longitude		
2008_2020_IL	N38°59'59.44516"	W87°54'52.97632"	407.59	NVA
2009_2020_IL	N39°00'28.23975"	W87°54'31.80333"	398.57	NVA
2010_2020_IL	N38°59'24.36871"	W87°54'29.34230"	402.70	NVA
2011_2020_IL	N38°59'44.72943"	W87°49'50.26742"	389.40	NVA
2012_2020_IL	N39°00'39.05319"	W87°47'48.15076"	430.56	NVA
2013_2020_IL	N39°00'20.81375"	W87°45'47.74720"	434.86	NVA
2014_2020_IL	N39°00'20.30556"	W87°46'37.84150"	428.95	NVA
2015_2020_IL	N38°35'27.02849"	W87°41'28.54877"	321.21	NVA
2016_2020_IL	N38°35'32.49946"	W87°38'53.16363"	354.95	NVA
2017_2020_IL	N38°35'28.24362"	W87°47'55.28864"	342.13	NVA
2018_2020_IL	N38°42'40.80453"	W87°51'55.67765"	356.63	NVA
2019_2020_IL	N38°43'04.32646"	W87°51'22.40776"	347.56	NVA
2020_2020_IL	N38°43'06.98925"	W87°45'29.96215"	394.25	NVA
2021_2020_IL	N38°42'32.65648"	W87°45'40.93687"	348.88	NVA
2022_2020_IL	N38°43'22.63797"	W87°43'19.22761"	348.90	NVA
2023_2020_IL	N38°43'38.86337"	W87°41'59.04683"	377.87	NVA
2024_2020_IL	N38°43'50.74307"	W87°40'34.02491"	321.95	NVA
2025_2020_IL	N38°43'22.24836"	W87°40'53.99185"	337.03	NVA
2026_2020_IL	N38°47'33.19826"	W87°38'47.82311"	356.36	NVA
2027_2020_IL	N38°51'00.39519"	W87°53'22.19179"	387.59	NVA
2028_2020_IL	N38°53'37.23918"	W87°56'43.45801"	359.33	NVA
2029_2020_IL	N39°09'29.90863"	W88°17'42.94248"	476.76	NVA
2030_2020_IL	N39°08'47.07943"	W88°20'08.03077"	477.24	NVA
2031_2020_IL	N39°06'56.92869"	W88°18'59.99692"	483.76	NVA
2032_2020_IL	N39°05'07.90134"	W88°17'53.05810"	483.61	NVA
2033_2020_IL	N39°08'30.32330"	W88°14'13.09305"	470.45	NVA
2034_2020_IL	N39°06'46.43301"	W88°13'38.28588"	456.57	NVA
2035_2020_IL	N39°05'26.12323"	W88°13'37.44918"	465.56	NVA
2036_2020_IL	N39°01'11.87098"	W88°15'37.08996"	458.71	NVA
2037_2020_IL	N38°59'23.14288"	W88°10'26.89122"	434.61	NVA
2038_2020_IL	N38°59'25.67394"	W88°09'15.37031"	393.30	NVA
2039_2020_IL	N38°58'33.01899"	W88°09'29.37168"	424.19	NVA
2040_2020_IL	N38°55'54.77514"	W88°01'30.06208"	378.79	NVA

Point No.	NAD 1983 2011 2010.00 epoch		Ellipsoid Height (US Ft)	Description
	Latitude	Longitude		
2041_2020_IL	N38°59'42.05724"	W88°01'15.35163"	392.65	NVA
2042_2020_IL	N39°07'11.33800"	W88°01'28.95938"	450.45	NVA
2043_2020_IL	N39°08'30.71808"	W87°56'43.08097"	440.48	NVA
2044_2020_IL	N39°08'41.36019"	W87°49'00.60733"	476.68	NVA
2045_2020_IL	N39°03'50.33257"	W87°53'24.98240"	397.20	NVA
2046_2020_IL	N38°51'53.06960"	W87°46'42.00073"	362.29	NVA
2047_2020_IL	N38°50'13.75487"	W87°39'39.08064"	337.88	NVA
2048_2020_IL	N38°45'37.76168"	W87°46'30.31670"	343.65	NVA
2049_2020_IL	N39°09'20.89181"	W88°08'49.64111"	478.91	NVA
2050_2020_IL	N39°06'12.91464"	W88°08'07.22577"	458.81	NVA
2051_2020_IL	N38°58'48.72426"	W88°18'23.87100"	453.06	NVA
2052_2020_IL	N38°58'46.38516"	W88°13'35.06248"	450.19	NVA
2053_2020_IL	N38°56'05.11627"	W88°14'23.30105"	439.96	NVA
2054_2020_IL	N38°56'06.78632"	W88°06'49.41471"	414.45	NVA
2055_2020_IL	N39°02'49.30926"	W88°01'23.27584"	413.87	NVA
2056_2020_IL	N39°03'12.62618"	W88°09'07.80453"	444.60	NVA
2057_2020_IL	N39°04'06.80330"	W87°41'04.69361"	397.37	NVA
2058_2020_IL	N38°51'47.53710"	W88°04'32.99332"	375.55	NVA
2059_2020_IL	N38°36'51.12800"	W87°51'49.94403"	358.22	NVA
2060_2020_IL	N38°39'27.34417"	W87°45'34.35588"	370.23	NVA
2061_2020_IL	N38°39'28.21995"	W87°41'39.19487"	404.40	NVA
2062_2020_IL	N38°50'08.38105"	W87°43'52.12225"	386.38	NVA
2063_2020_IL	N39°03'00.09593"	W87°47'50.14029"	433.33	NVA
2064_2020_IL	N39°06'04.22350"	W87°46'13.03105"	469.22	NVA
2065_2020_IL	N39°08'36.23425"	W87°43'00.76054"	409.08	NVA
2066_2020_IL	N39°06'16.81245"	W87°52'20.46170"	429.90	NVA
2067_2020_IL	N38°53'38.71987"	W87°50'15.35968"	364.88	NVA
3001_2020_IL	N38°41'03.40632"	W87°32'16.26526"	308.73	VVA
3002_2020_IL	N38°59'09.21650"	W87°36'52.04383"	353.80	VVA
3003_2020_IL	N39°00'24.20096"	W87°35'22.47263"	324.88	VVA
3004_2020_IL	N39°01'18.77760"	W87°38'02.43506"	340.40	VVA
3005_2020_IL	N39°02'08.01923"	W87°40'37.22803"	364.05	VVA
3006_2020_IL	N39°04'50.59067"	W87°42'12.53660"	438.66	VVA

Point No.	NAD 1983 2011 2010.00 epoch		Ellipsoid Height (US Ft)	Description
	Latitude	Longitude		
3007_2020_IL	N39°08'12.23696"	W87°45'12.93473"	432.85	VVA
3008_2020_IL	N39°09'21.84759"	W87°53'19.76734"	425.53	VVA
3009_2020_IL	N38°49'13.24026"	W87°50'50.42996"	332.57	VVA
3010_2020_IL	N38°51'53.64715"	W87°47'18.27207"	349.98	VVA
3011_2020_IL	N38°54'28.75110"	W88°19'26.58443"	426.71	VVA
3012_2020_IL	N38°52'46.57291"	W87°44'13.34265"	418.19	VVA
3013_2020_IL	N38°51'50.11959"	W87°38'30.72213"	429.13	VVA
3014_2020_IL	N38°35'28.36051"	W87°47'55.54087"	340.21	VVA
3015_2020_IL	N38°39'27.36742"	W87°46'42.38002"	371.71	VVA
3016_2020_IL	N38°40'21.83973"	W87°51'14.03782"	414.44	VVA
3017_2020_IL	N38°41'47.00728"	W87°38'04.29442"	313.72	VVA
3018_2020_IL	N38°41'41.33648"	W87°43'02.68189"	327.97	VVA
3019_2020_IL	N38°45'40.50498"	W87°49'58.13474"	347.72	VVA
3020_2020_IL	N38°47'52.76618"	W87°42'11.39244"	333.28	VVA
3021_2020_IL	N38°46'10.99064"	W87°34'10.77522"	318.63	VVA
3022_2020_IL	N39°09'29.63311"	W88°17'42.01822"	476.84	VVA
3023_2020_IL	N39°07'54.63855"	W88°20'08.12206"	483.45	VVA
3024_2020_IL	N39°05'44.71237"	W88°15'37.63694"	468.04	VVA
3025_2020_IL	N39°07'49.65991"	W88°10'50.50916"	465.98	VVA
3026_2020_IL	N39°07'11.18133"	W88°02'22.63796"	454.22	VVA
3027_2020_IL	N39°04'08.20018"	W88°01'24.57811"	425.99	VVA
3028_2020_IL	N39°05'10.18127"	W87°50'05.62607"	448.61	VVA
3029_2020_IL	N39°03'05.45251"	W87°43'17.18743"	412.75	VVA
3030_2020_IL	N39°02'03.72593"	W87°51'43.47920"	398.92	VVA
3031_2020_IL	N38°57'20.89656"	W88°01'07.05954"	383.78	VVA
3032_2020_IL	N38°56'10.70813"	W88°06'51.49682"	414.74	VVA
3033_2020_IL	N38°56'04.72978"	W88°14'23.89573"	438.61	VVA
3034_2020_IL	N38°57'11.41681"	W87°49'37.53372"	385.40	VVA
3035_2020_IL	N38°58'17.53466"	W87°55'37.29984"	389.70	VVA
3036_2020_IL	N39°00'37.23253"	W88°04'28.75344"	429.43	VVA
3037_2020_IL	N39°02'58.50722"	W88°14'46.94276"	464.03	VVA
3038_2020_IL	N39°06'01.16941"	W87°56'54.89480"	416.71	VVA
3039_2020_IL	N39°09'20.28313"	W88°04'39.97064"	467.91	VVA

Point No.	NAD 1983 2011 2010.00 epoch		Ellipsoid Height (US Ft)	Description
	Latitude	Longitude		
3040_2020_IL	N39°03'12.85137"	W88°09'07.78789"	443.53	VVA
3041_2020_IL	N38°59'51.56008"	W88°18'46.45189"	457.92	VVA
3042_2020_IL	N38°56'27.96475"	W87°34'30.76579"	410.96	VVA
3043_2020_IL	N38°58'13.40545"	W87°41'17.66460"	385.13	VVA
3044_2020_IL	N38°59'10.57507"	W87°46'36.83579"	425.45	VVA
3045_2020_IL	N39°01'50.90468"	W87°54'33.43777"	395.76	VVA
3046_2020_IL	N39°05'22.11114"	W88°05'07.34950"	443.65	VVA
3047_2020_IL	N38°57'03.09032"	W88°05'37.29014"	413.70	VVA
3048_2020_IL	N38°54'51.89890"	W88°10'09.86811"	474.85	VVA
3049_2020_IL	N38°51'42.60071"	W88°11'54.80283"	413.16	VVA
3050_2020_IL	N38°54'21.23932"	W88°14'27.62420"	433.94	VVA
3051_2020_IL	N38°55'51.27726"	W87°54'10.82455"	344.99	VVA
3052_2020_IL	N38°49'06.04574"	W87°35'06.64333"	346.57	VVA
3053_2020_IL	N39°00'44.45867"	W88°01'20.73582"	394.57	VVA
3054_2020_IL	N38°53'36.41671"	W87°56'43.63701"	358.23	VVA

## Geodetic Control

Point No.	NAD 1983 2011 2010.00 epoch		Ellipsoid Height (m)	Description
	Latitude	Longitude		
A 176	N39°00'48.39018"	W88°08'50.27338"	396.16	KB0261
CRAW 01	N38°52'57.45347"	W87°41'04.87655"	417.03	DM6901
IL_CHAR	N38°43'53.66949"	W88°05'11.18469"	395.08	VRS Station
IL_Flora	N38°40'53.21525"	W88°25'46.74624"	383.48	VRS Station
IL_LAMC	N38°24'22.47343"	W87°45'50.80838"	345.47	VRS Station
IL_MGEF	N39°07'20.54330"	W88°32'34.86470"	512.01	VRS Station
IL_Robinson	N39°00'58.48990"	W87°44'54.67035"	465.77	VRS Station
J 294	N38°43'46.10077"	W87°40'28.29621"	321.76	JA1649
V 173 RESET 1965	N38°54'26.60616"	W88°05'45.39761"	397.68	JB0100
W 90	N39°00'03.68725"	W87°37'17.66997"	342.67	KA1352
X 175	N39°03'13.70360"	W88°08'48.29827"	442.93	KB0257
Z 294	N38°43'01.59707"	W87°50'52.87214"	367.31	JA1659


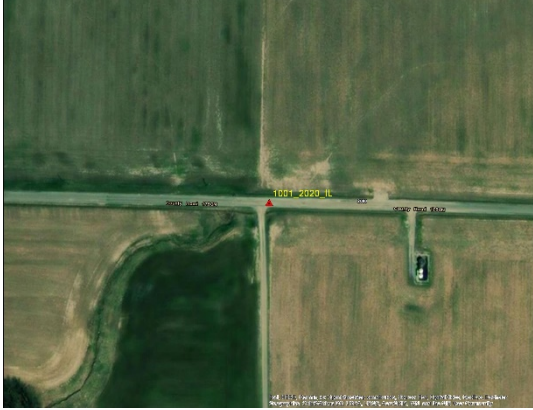


# Section 3: Ground/Geodetic Control Logs and Photos

This section contains the station recovery information sheets and photographs regarding the ground control positions established for the project.

The data is assembled on the following pages.







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1001_2020_IL	<b>Northing (US Ft)</b> 798527.084	<b>Easting (US Ft)</b> 974860.931	<b>Elevation (US Ft)</b> 502.615
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°51'34.52687"	<b>Longitude</b> W88°21'58.69851"	<b>Ellipsoid Height (US Ft)</b> 399.388
<b>Location Photo</b>   NORTH			
 <p>1001_2020_IL_3W_20200129</p>		 <p>1001_2020_IL_3S_20200129</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1002_2020_IL	<b>Northing (US Ft)</b> 799409.974	<b>Easting (US Ft)</b> 1005183.811	<b>Elevation (US Ft)</b> 478.227
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°51'43.18728"	<b>Longitude</b> W88°15'35.34164"	<b>Ellipsoid Height (US Ft)</b> 374.858
<b>Location Photo</b>   NORTH			
 <p>1002_2020_IL_3W_20200129</p>		 <p>1002_2020_IL_3N_20200129</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1003_2020_IL	<b>Northing (US Ft)</b> 804768.578	<b>Easting (US Ft)</b> 1035562.000	<b>Elevation (US Ft)</b> 511.417
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°52'35.73708"	<b>Longitude</b> W88°09'11.14903"	<b>Ellipsoid Height (US Ft)</b> 407.882
<b>Location Photo</b>   NORTH			
 <p>1003_2020_IL_3S_20200129</p>		 <p>1003_2020_IL_3E_20200129</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1004_2020_IL	<b>Northing (US Ft)</b> 811142.545	<b>Easting (US Ft)</b> 1066162.149	<b>Elevation (US Ft)</b> 470.428
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°53'37.96444"	<b>Longitude</b> W88°02'43.95331"	<b>Ellipsoid Height (US Ft)</b> 366.755
<b>Location Photo</b>   NORTH			
 <p>1004_2020_IL_3N_20200129</p>		 <p>1004_2020_IL_3E_20200129</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1005_2020_IL	<b>Northing (US Ft)</b> 816695.300	<b>Easting (US Ft)</b> 1096707.561	<b>Elevation (US Ft)</b> 455.681
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°54'31.71939"	<b>Longitude</b> W87°56'17.30999"	<b>Ellipsoid Height (US Ft)</b> 351.905
<b>Location Photo</b>   NORTH			
 <p>1005_2020_IL_3W_20200129</p>		 <p>1005_2020_IL_3S_20200129</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1006_2020_IL	<b>Northing (US Ft)</b> 819590.960	<b>Easting (US Ft)</b> 1127259.300	<b>Elevation (US Ft)</b> 489.726
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N38°54'58.85434"	<b>Longitude</b> W87°49'50.61334"	<b>Ellipsoid Height (US Ft)</b> 385.812
<b>Location Photo</b>   NORTH			
 <p>1006_2020_IL_3W_20200129</p>		 <p>1006_2020_IL_3N_20200129</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1007_2020_IL	<b>Northing (US Ft)</b> 818011.031	<b>Easting (US Ft)</b> 1157678.609	<b>Elevation (US Ft)</b> 553.698
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N38°54'41.40544"	<b>Longitude</b> W87°43'25.89329"	<b>Ellipsoid Height (US Ft)</b> 449.610
<b>Location Photo</b>   NORTH			
 <p>1007_2020_IL_3S_20200129</p>	 <p>1007_2020_IL_3E_20200129</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1008_2020_IL	<b>Northing (US Ft)</b> 812731.383	<b>Easting (US Ft)</b> 1188223.827	<b>Elevation (US Ft)</b> 533.391
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N38°53'47.02820"	<b>Longitude</b> W87°37'00.00566"	<b>Ellipsoid Height (US Ft)</b> 428.968
<b>Location Photo</b>   NORTH			
 1008_2020_IL_3W_20200131		 1008_2020_IL_3E_20200131	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1009_2020_IL	<b>Northing (US Ft)</b> 813858.001	<b>Easting (US Ft)</b> 1218977.933	<b>Elevation (US Ft)</b> 422.371
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°53'55.59565"	<b>Longitude</b> W87°30'30.91388"	<b>Ellipsoid Height (US Ft)</b> 317.432
<b>Location Photo</b>   NORTH			
 <p>1009_2020_IL_3N_3W_20200131</p>		 <p>1009_2020_IL_3N_3E_20200131</p>	



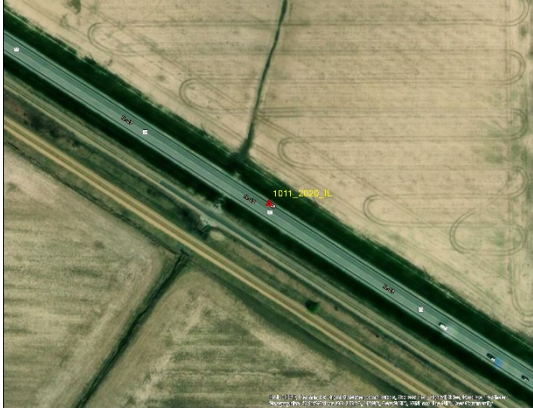




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1010_2020_IL	<b>Northing (US Ft)</b> 865653.897	<b>Easting (US Ft)</b> 989940.658	<b>Elevation (US Ft)</b> 571.493
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N39°02'38.04407"	<b>Longitude</b> W88°18'47.87098"	<b>Ellipsoid Height (US Ft)</b> 467.228
<b>Location Photo</b>   NORTH			
 <p>1010_2020_IL_3SE_20200131</p>	 <p>1010_2020_IL_3NW_20200131</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1011_2020_IL	<b>Northing (US Ft)</b> 849537.886	<b>Easting (US Ft)</b> 1016522.236	<b>Elevation (US Ft)</b> 552.655
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N38°59'58.55654"	<b>Longitude</b> W88°13'11.20511"	<b>Ellipsoid Height (US Ft)</b> 448.570
<b>Location Photo</b>   NORTH			
 <p>1011_2020_IL_3SE_20200131</p>		 <p>1011_2020_IL_3NW_20200131</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1012_2020_IL	<b>Northing (US Ft)</b> 853607.678	<b>Easting (US Ft)</b> 1047026.941	<b>Elevation (US Ft)</b> 523.262
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N39°00'38.22944"	<b>Longitude</b> W88°06'44.67661"	<b>Ellipsoid Height (US Ft)</b> 419.067
<b>Location Photo</b>   NORTH			
 <p>1012_2020_IL_3N_20200131</p>		 <p>1012_2020_IL_3E_20200131</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1013_2020_IL	<b>Northing (US Ft)</b> 853571.681	<b>Easting (US Ft)</b> 1081387.111	<b>Elevation (US Ft)</b> 482.808
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N39°00'36.82375"	<b>Longitude</b> W87°59'29.37400"	<b>Ellipsoid Height (US Ft)</b> 378.618
<b>Location Photo</b>   NORTH			
 <p>1013_2020_IL_3W_20200131</p>		 <p>1013_2020_IL_3E_20200131</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1014_2020_IL	<b>Northing (US Ft)</b> 824824.050	<b>Easting (US Ft)</b> 1112032.716	<b>Elevation (US Ft)</b> 440.256
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°55'51.36404"	<b>Longitude</b> W87°53'02.93162"	<b>Ellipsoid Height (US Ft)</b> 336.355
<b>Location Photo</b>   NORTH			
 1014_2020_IL_3W_20200129		 1014_2020_IL_3N_20200129	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1015_2020_IL	<b>Northing (US Ft)</b> 784384.164	<b>Easting (US Ft)</b> 1142581.113	<b>Elevation (US Ft)</b> 433.964
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°49'09.98930"	<b>Longitude</b> W87°46'39.47737"	<b>Ellipsoid Height (US Ft)</b> 330.260
<b>Location Photo</b>   NORTH			
 <p>1015_2020_IL_3N_20200129</p>		 <p>1015_2020_IL_3E_20200129</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1016_2020_IL	<b>Northing (US Ft)</b> 766529.888	<b>Easting (US Ft)</b> 1172871.902	<b>Elevation (US Ft)</b> 442.017
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N38°46'11.52350"	<b>Longitude</b> W87°40'18.40527"	<b>Ellipsoid Height (US Ft)</b> 338.141
<b>Location Photo</b>   NORTH			
 <p>1016_2020_IL_3W_20200131</p>		 <p>1016_2020_IL_3E_20200131</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1017_2020_IL	<b>Northing (US Ft)</b> 807526.933	<b>Easting (US Ft)</b> 1203525.011	<b>Elevation (US Ft)</b> 494.995
<b>Point Type</b> 103-TARGET	<b>Latitude</b> N38°52'54.35719"	<b>Longitude</b> W87°33'47.03759"	<b>Ellipsoid Height (US Ft)</b> 390.372
<b>Location Photo</b>   NORTH			
 <p>1017_2020_IL_3S_2020131</p>		 <p>1017_2020_IL_3N_20200131</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 1018_2020_IL	<b>Northing (US Ft)</b> 752417.436	<b>Easting (US Ft)</b> 1226686.674	<b>Elevation (US Ft)</b> 501.439
<b>Point Type</b> 103-CP	<b>Latitude</b> N38°43'47.64679"	<b>Longitude</b> W87°29'00.64038"	<b>Ellipsoid Height (US Ft)</b> 396.881
<b>Location Photo</b>   NORTH			
 <p>1018_2020_IL_3NE_20200131</p>	 <p>1018_2020_IL_3N_20200131</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2001_2020_IL	<b>Northing (US Ft)</b> 852602.376	<b>Easting (US Ft)</b> 1152466.679	<b>Elevation (US Ft)</b> 525.339
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'23.63964"	<b>Longitude</b> W87°44'28.98512"	<b>Ellipsoid Height (US Ft)</b> 420.989
<b>Location Photo</b>   NORTH			
 <p>2001_2020_IL_3W_20200221</p>		 <p>2001_2020_IL_3N_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2002_2020_IL	<b>Northing (US Ft)</b> 848604.002	<b>Easting (US Ft)</b> 1153065.281	<b>Elevation (US Ft)</b> 545.474
<b>Point Type</b> NVA	<b>Latitude</b> N38°59'44.08212"	<b>Longitude</b> W87°44'21.73270"	<b>Ellipsoid Height (US Ft)</b> 441.153
<b>Location Photo</b>   NORTH			
 <p>2002_2020_IL_3W_20200221</p>		 <p>2002_2020_IL_3N_20200221</p>	



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2003_2020_IL	<b>Northing (US Ft)</b> 857154.647	<b>Easting (US Ft)</b> 1151807.992	<b>Elevation (US Ft)</b> 534.313
<b>Point Type</b> NVA	<b>Latitude</b> N39°01'08.67538"	<b>Longitude</b> W87°44'36.95548"	<b>Ellipsoid Height (US Ft)</b> 429.929
Location Photo   NORTH			
 <p>2003_2020_IL_3S_20200221</p>	 <p>2003_2020_IL_3N_20200221</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2004_2020_IL	<b>Northing (US Ft)</b> 852114.455	<b>Easting (US Ft)</b> 1190756.389	<b>Elevation (US Ft)</b> 441.603
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'16.07622"	<b>Longitude</b> W87°36'24.00295"	<b>Ellipsoid Height (US Ft)</b> 336.773
<b>Location Photo</b>   NORTH			
 <p>2004_2020_IL_3W_20200220</p>		 <p>2004_2020_IL_3N_20200220</p>	



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2005_2020_IL	<b>Northing (US Ft)</b> 850899.759	<b>Easting (US Ft)</b> 1186383.985	<b>Elevation (US Ft)</b> 447.965
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'04.41205"	<b>Longitude</b> W87°37'19.50821"	<b>Ellipsoid Height (US Ft)</b> 343.213
<b>Location Photo</b>   NORTH			
 <p>2005_2020_IL_3W_20200220</p>		 <p>2005_2020_IL_3N_20200220</p>	






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2006_2020_IL	<b>Northing (US Ft)</b> 831689.747	<b>Easting (US Ft)</b> 1151598.970	<b>Elevation (US Ft)</b> 531.684
<b>Point Type</b> NVA	<b>Latitude</b> N38°56'56.99884"	<b>Longitude</b> W87°44'41.68834"	<b>Ellipsoid Height (US Ft)</b> 427.519
<b>Location Photo</b>   NORTH			
 <p>2006_2020_IL_3W_20200220</p>		 <p>2006_2020_IL_3N_20200220</p>	





# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2007_2020_IL	<b>Northing (US Ft)</b> 850640.725	<b>Easting (US Ft)</b> 1107500.160	<b>Elevation (US Ft)</b> 493.341
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'06.75458"	<b>Longitude</b> W87°53'58.73367"	<b>Ellipsoid Height (US Ft)</b> 389.187
<b>Location Photo</b>   NORTH			
 <p>2007_2020_IL_3W_20200221</p>		 <p>2007_2020_IL_3N_20200221</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2008_2020_IL	<b>Northing (US Ft)</b> 849881.178	<b>Easting (US Ft)</b> 1103221.498	<b>Elevation (US Ft)</b> 511.735
<b>Point Type</b> NVA	<b>Latitude</b> N38°59'59.44516"	<b>Longitude</b> W87°54'52.97632"	<b>Ellipsoid Height (US Ft)</b> 407.592
Location Photo   NORTH			
 2008_2020_IL_3W_20200221	 2008_2020_IL_3N_20200221		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2009_2020_IL	<b>Northing (US Ft)</b> 852802.103	<b>Easting (US Ft)</b> 1104879.414	<b>Elevation (US Ft)</b> 502.750
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'28.23975"	<b>Longitude</b> W87°54'31.80333"	<b>Ellipsoid Height (US Ft)</b> 398.573
<b>Location Photo</b>   NORTH			
 <p>2009_2020_IL_3W_20200221</p>		 <p>2009_2020_IL_3S_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2010_2020_IL	<b>Northing (US Ft)</b> 846341.101	<b>Easting (US Ft)</b> 1105103.856	<b>Elevation (US Ft)</b> 506.806
<b>Point Type</b> NVA	<b>Latitude</b> N38°59'24.36871"	<b>Longitude</b> W87°54'29.34230"	<b>Ellipsoid Height (US Ft)</b> 402.701
<b>Location Photo</b>   NORTH			
 2010_2020_IL_3W_20200221		 2010_2020_IL_3S_20200221	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2011_2020_IL	<b>Northing (US Ft)</b> 848513.284	<b>Easting (US Ft)</b> 1127127.092	<b>Elevation (US Ft)</b> 493.574
<b>Point Type</b> NVA	<b>Latitude</b> N38°59'44.72943"	<b>Longitude</b> W87°49'50.26742"	<b>Ellipsoid Height (US Ft)</b> 389.398
<b>Location Photo</b>   NORTH			
 <p>2011_2020_IL_3W_20200221</p>	 <p>2011_2020_IL_3S_20200221</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2012_2020_IL	<b>Northing (US Ft)</b> 854064.332	<b>Easting (US Ft)</b> 1136735.775	<b>Elevation (US Ft)</b> 534.828
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'39.05319"	<b>Longitude</b> W87°47'48.15076"	<b>Ellipsoid Height (US Ft)</b> 430.564
<b>Location Photo</b>   NORTH			
 <p>2012_2020_IL_3W_20200221</p>		 <p>2012_2020_IL_3E_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2013_2020_IL	<b>Northing (US Ft)</b> 852276.793	<b>Easting (US Ft)</b> 1146251.156	<b>Elevation (US Ft)</b> 539.165
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'20.81375"	<b>Longitude</b> W87°45'47.74720"	<b>Ellipsoid Height (US Ft)</b> 434.862
<b>Location Photo</b>   NORTH			
 <p>2013_2020_IL_3N_20200221</p>	 <p>2013_2020_IL_3E_20200221</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2014_2020_IL	<b>Northing (US Ft)</b> 852200.916	<b>Easting (US Ft)</b> 1142297.089	<b>Elevation (US Ft)</b> 533.231
<b>Point Type</b> NVA	<b>Latitude</b> N39°00'20.30556"	<b>Longitude</b> W87°46'37.84150"	<b>Ellipsoid Height (US Ft)</b> 428.954
<b>Location Photo</b>   NORTH			
 <p>2014_2020_IL_3W_20200221</p>	 <p>2014_2020_IL_3S_20200221</p>		




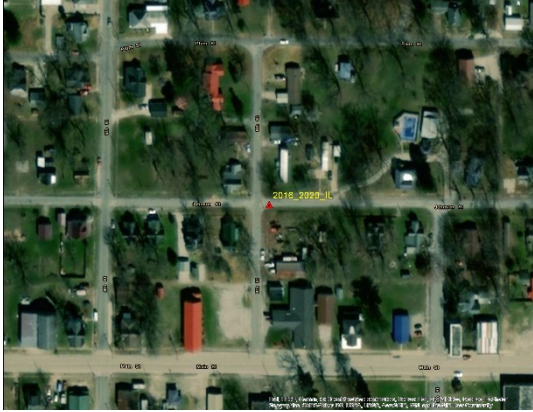


# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2015_2020_IL	<b>Northing (US Ft)</b> 701289.031	<b>Easting (US Ft)</b> 1167773.160	<b>Elevation (US Ft)</b> 424.453
<b>Point Type</b> NVA	<b>Latitude</b> N38°35'27.02849"	<b>Longitude</b> W87°41'28.54877"	<b>Ellipsoid Height (US Ft)</b> 321.214
<b>Location Photo</b>   NORTH			
 <p>2015_2020_IL_3S_20200217</p>		 <p>2015_2020_IL_3E_20200217</p>	





# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2016_2020_IL	<b>Northing (US Ft)</b> 701931.642	<b>Easting (US Ft)</b> 1180106.331	<b>Elevation (US Ft)</b> 458.396
<b>Point Type</b> NVA	<b>Latitude</b> N38°35'32.49946"	<b>Longitude</b> W87°38'53.16363"	<b>Ellipsoid Height (US Ft)</b> 354.955
<b>Location Photo</b>   NORTH			
 <p>2016_2020_IL_3W_20200217</p>		 <p>2016_2020_IL_3E_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2017_2020_IL	<b>Northing (US Ft)</b> 701215.273	<b>Easting (US Ft)</b> 1137066.094	<b>Elevation (US Ft)</b> 444.987
<b>Point Type</b> NVA	<b>Latitude</b> N38°35'28.24362"	<b>Longitude</b> W87°47'55.28864"	<b>Ellipsoid Height (US Ft)</b> 342.132
<b>Location Photo</b>   NORTH			
 <p>2017_2020_IL_3N_20200217</p>		 <p>2017_2020_IL_3E_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2018_2020_IL	<b>Northing (US Ft)</b> 744871.271	<b>Easting (US Ft)</b> 1117756.663	<b>Elevation (US Ft)</b> 459.717
<b>Point Type</b> NVA	<b>Latitude</b> N38°42'40.80453"	<b>Longitude</b> W87°51'55.67765"	<b>Ellipsoid Height (US Ft)</b> 356.630
<b>Location Photo</b>   NORTH			
 <p>2018_2020_IL_3S_20200217</p>		 <p>2018_2020_IL_3N_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2019_2020_IL	<b>Northing (US Ft)</b> 747264.501	<b>Easting (US Ft)</b> 1120381.398	<b>Elevation (US Ft)</b> 450.689
<b>Point Type</b> NVA	<b>Latitude</b> N38°43'04.32646"	<b>Longitude</b> W87°51'22.40776"	<b>Ellipsoid Height (US Ft)</b> 347.555
Location Photo   NORTH			
 2019_2020_IL_3N_20200217	 2019_2020_IL_3E_20200217		


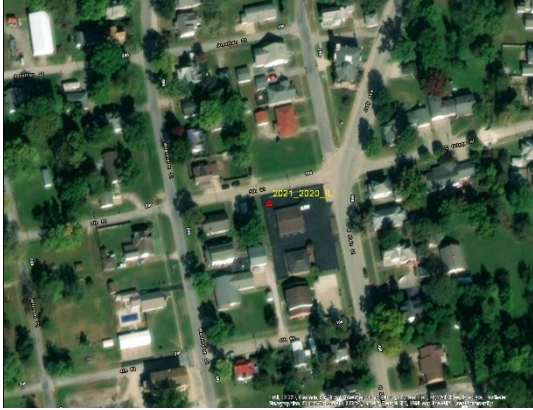




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2020_2020_IL	<b>Northing (US Ft)</b> 747694.314	<b>Easting (US Ft)</b> 1148313.715	<b>Elevation (US Ft)</b> 497.677
<b>Point Type</b> NVA	<b>Latitude</b> N38°43'06.98925"	<b>Longitude</b> W87°45'29.96215"	<b>Ellipsoid Height (US Ft)</b> 394.254
<b>Location Photo</b>   NORTH			
 <p>2020_2020_IL_3W_20200217</p>		 <p>2020_2020_IL_3N_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2021_2020_IL	<b>Northing (US Ft)</b> 744215.533	<b>Easting (US Ft)</b> 1147465.579	<b>Elevation (US Ft)</b> 452.267
<b>Point Type</b> NVA	<b>Latitude</b> N38°42'32.65648"	<b>Longitude</b> W87°45'40.93687"	<b>Ellipsoid Height (US Ft)</b> 348.884
<b>Location Photo</b>   NORTH			
 <p>02/17/2020 13:21</p> <p>2021_2020_IL_3S_20200217</p>		 <p>02/17/2020 13:22</p> <p>2021_2020_IL_3N_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2022_2020_IL	<b>Northing (US Ft)</b> 749344.549	<b>Easting (US Ft)</b> 1158664.780	<b>Elevation (US Ft)</b> 452.459
<b>Point Type</b> NVA	<b>Latitude</b> N38°43'22.63797"	<b>Longitude</b> W87°43'19.22761"	<b>Ellipsoid Height (US Ft)</b> 348.897
<b>Location Photo</b>   NORTH			
 2022_2020_IL_3W_20200217	 2022_2020_IL_3N_20200217		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2023_2020_IL	<b>Northing (US Ft)</b> 751029.213	<b>Easting (US Ft)</b> 1165007.936	<b>Elevation (US Ft)</b> 481.523
<b>Point Type</b> NVA	<b>Latitude</b> N38°43'38.86337"	<b>Longitude</b> W87°41'59.04683"	<b>Ellipsoid Height (US Ft)</b> 377.869
<b>Location Photo</b>   NORTH			
 <p>2023_2020_IL_3S_20200217</p>		 <p>2023_2020_IL_3E_20200217</p>	




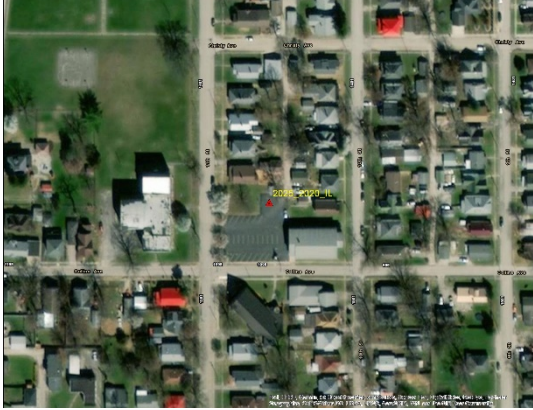




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2024_2020_IL	<b>Northing (US Ft)</b> 752278.536	<b>Easting (US Ft)</b> 1171737.079	<b>Elevation (US Ft)</b> 425.702
<b>Point Type</b> NVA	<b>Latitude</b> N38°43'50.74307"	<b>Longitude</b> W87°40'34.02491"	<b>Ellipsoid Height (US Ft)</b> 321.949
<b>Location Photo</b>   NORTH			
 <p>2024_2020_IL_3S_20200217</p>		 <p>2024_2020_IL_3E_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2025_2020_IL	<b>Northing (US Ft)</b> 749384.495	<b>Easting (US Ft)</b> 1170175.336	<b>Elevation (US Ft)</b> 440.740
<b>Point Type</b> NVA	<b>Latitude</b> N38°43'22.24836"	<b>Longitude</b> W87°40'53.99185"	<b>Ellipsoid Height (US Ft)</b> 337.030
<b>Location Photo</b>   NORTH			
 <p>2025_2020_IL_3W_20200217</p>		 <p>2025_2020_IL_3S_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2026_2020_IL	<b>Northing (US Ft)</b> 774845.652	<b>Easting (US Ft)</b> 1179984.034	<b>Elevation (US Ft)</b> 460.378
<b>Point Type</b> NVA	<b>Latitude</b> N38°47'33.19826"	<b>Longitude</b> W87°38'47.82311"	<b>Ellipsoid Height (US Ft)</b> 356.358
<b>Location Photo</b>   NORTH			
 <p>2026_2020_IL_3S_20200217</p>	 <p>2026_2020_IL_3E_20200217</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2027_2020_IL	<b>Northing (US Ft)</b> 795379.466	<b>Easting (US Ft)</b> 1110653.916	<b>Elevation (US Ft)</b> 491.193
<b>Point Type</b> NVA	<b>Latitude</b> N38°51'00.39519"	<b>Longitude</b> W87°53'22.19179"	<b>Ellipsoid Height (US Ft)</b> 387.594
<b>Location Photo</b>   NORTH			
 <p>2027_2020_IL_3S_20200217</p>	 <p>2027_2020_IL_3E_20200217</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2028_2020_IL	<b>Northing (US Ft)</b> 811174.699	<b>Easting (US Ft)</b> 1094664.100	<b>Elevation (US Ft)</b> 463.042
<b>Point Type</b> NVA	<b>Latitude</b> N38°53'37.23918"	<b>Longitude</b> W87°56'43.45801"	<b>Ellipsoid Height (US Ft)</b> 359.332
<b>Location Photo</b>   NORTH			
 <p>2028_2020_IL_3S_20200221</p>		 <p>2028_2020_IL_3E_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2029_2020_IL	<b>Northing (US Ft)</b> 907324.847	<b>Easting (US Ft)</b> 995045.766	<b>Elevation (US Ft)</b> 581.618
<b>Point Type</b> NVA	<b>Latitude</b> N39°09'29.90863"	<b>Longitude</b> W88°17'42.94248"	<b>Ellipsoid Height (US Ft)</b> 476.756
<b>Location Photo</b>   NORTH			
 <p>2029_2020_IL_3S_20200226</p>		 <p>2029_2020_IL_3E_20200226</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2030_2020_IL	<b>Northing (US Ft)</b> 902989.421	<b>Easting (US Ft)</b> 983617.325	<b>Elevation (US Ft)</b> 582.042
<b>Point Type</b> NVA	<b>Latitude</b> N39°08'47.07943"	<b>Longitude</b> W88°20'08.03077"	<b>Ellipsoid Height (US Ft)</b> 477.235
<b>Location Photo</b>   NORTH			
 <p>2030_2020_IL_3W_20200226</p>	 <p>2030_2020_IL_3S_20200226</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2031_2020_IL	<b>Northing (US Ft)</b> 891845.578	<b>Easting (US Ft)</b> 988979.173	<b>Elevation (US Ft)</b> 588.406
<b>Point Type</b> NVA	<b>Latitude</b> N39°06'56.92869"	<b>Longitude</b> W88°18'59.99692"	<b>Ellipsoid Height (US Ft)</b> 483.760
<b>Location Photo</b>   NORTH			
 <p>2031_2020_IL_3N_20200226</p>		 <p>2031_2020_IL_3E_20200226</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2032_2020_IL	<b>Northing (US Ft)</b> 880816.532	<b>Easting (US Ft)</b> 994259.271	<b>Elevation (US Ft)</b> 588.105
<b>Point Type</b> NVA	<b>Latitude</b> N39°05'07.90134"	<b>Longitude</b> W88°17'53.05810"	<b>Ellipsoid Height (US Ft)</b> 483.613
Location Photo   NORTH			
 <p>2032_2020_IL_3NW_20200226</p>	 <p>2032_2020_IL_3NE_20200226</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2033_2020_IL	<b>Northing (US Ft)</b> 901308.651	<b>Easting (US Ft)</b> 1011581.619	<b>Elevation (US Ft)</b> 575.253
<b>Point Type</b> NVA	<b>Latitude</b> N39°08'30.32330"	<b>Longitude</b> W88°14'13.09305"	<b>Ellipsoid Height (US Ft)</b> 470.452
<b>Location Photo</b>   NORTH			
 <p>2033_2020_IL_3S_20200225</p>		 <p>2033_2020_IL_3E_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2034_2020_IL	<b>Northing (US Ft)</b> 890800.832	<b>Easting (US Ft)</b> 1014336.233	<b>Elevation (US Ft)</b> 561.242
<b>Point Type</b> NVA	<b>Latitude</b> N39°06'46.43301"	<b>Longitude</b> W88°13'38.28588"	<b>Ellipsoid Height (US Ft)</b> 456.572
<b>Location Photo</b>   NORTH			
 <p>2034_2020_IL_3S_20200225</p>	 <p>2034_2020_IL_3E_20200225</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2035_2020_IL	<b>Northing (US Ft)</b> 882675.774	<b>Easting (US Ft)</b> 1014411.684	<b>Elevation (US Ft)</b> 570.118
<b>Point Type</b> NVA	<b>Latitude</b> N39°05'26.12323"	<b>Longitude</b> W88°13'37.44918"	<b>Ellipsoid Height (US Ft)</b> 465.559
<b>Location Photo</b>   NORTH			
 <p>2035_2020_IL_3W_20200225</p>		 <p>2035_2020_IL_3N_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2036_2020_IL	<b>Northing (US Ft)</b> 856943.364	<b>Easting (US Ft)</b> 1004999.432	<b>Elevation (US Ft)</b> 562.872
<b>Point Type</b> NVA	<b>Latitude</b> N39°01'11.87098"	<b>Longitude</b> W88°15'37.08996"	<b>Ellipsoid Height (US Ft)</b> 458.707
Location Photo   NORTH			
 2036_2020_IL_3S_20200225	 2036_2020_IL_3E_20200225		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2037_2020_IL	<b>Northing (US Ft)</b> 845974.495	<b>Easting (US Ft)</b> 1029500.237	<b>Elevation (US Ft)</b> 538.671
<b>Point Type</b> NVA	<b>Latitude</b> N38°59'23.14288"	<b>Longitude</b> W88°10'26.89122"	<b>Ellipsoid Height (US Ft)</b> 434.610
<b>Location Photo</b>   NORTH			
 <p>2037_2020_IL_3N_20200225</p>		 <p>2037_2020_IL_3E_20200225</p>	


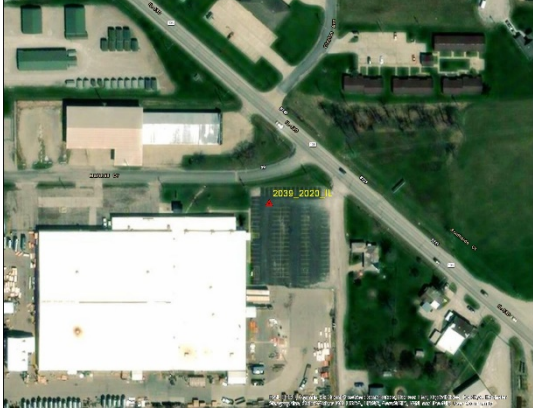




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2038_2020_IL	<b>Northing (US Ft)</b> 846241.052	<b>Easting (US Ft)</b> 1035146.724	<b>Elevation (US Ft)</b> 497.382
<b>Point Type</b> NVA	<b>Latitude</b> N38°59'25.67394"	<b>Longitude</b> W88°09'15.37031"	<b>Ellipsoid Height (US Ft)</b> 393.301
Location Photo   NORTH			
 <p>2038_2020_IL_3N_20200225</p>	 <p>2038_2020_IL_3E_20200225</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2039_2020_IL	<b>Northing (US Ft)</b> 840911.778	<b>Easting (US Ft)</b> 1034051.491	<b>Elevation (US Ft)</b> 528.185
<b>Point Type</b> NVA	<b>Latitude</b> N38°58'33.01899"	<b>Longitude</b> W88°09'29.37168"	<b>Ellipsoid Height (US Ft)</b> 424.185
<b>Location Photo</b>   NORTH			
 <p>2039_2020_IL_3W_20200225</p>		 <p>2039_2020_IL_3E_20200225</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2040_2020_IL	<b>Northing (US Ft)</b> 825002.684	<b>Easting (US Ft)</b> 1071957.381	<b>Elevation (US Ft)</b> 482.633
<b>Point Type</b> NVA	<b>Latitude</b> N38°55'54.77514"	<b>Longitude</b> W88°01'30.06208"	<b>Ellipsoid Height (US Ft)</b> 378.792
<b>Location Photo</b>   NORTH			
 <p>2040_2020_IL_3S_20200225</p>	 <p>2040_2020_IL_3E_20200225</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2041_2020_IL	<b>Northing (US Ft)</b> 848000.837	<b>Easting (US Ft)</b> 1073040.964	<b>Elevation (US Ft)</b> 496.767
<b>Point Type</b> NVA	<b>Latitude</b> N38°59'42.05724"	<b>Longitude</b> W88°01'15.35163"	<b>Ellipsoid Height (US Ft)</b> 392.645
<b>Location Photo</b>   NORTH			
 <p>2041_2020_IL_3W_20200225</p>	 <p>2041_2020_IL_3S_20200225</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2042_2020_IL	<b>Northing (US Ft)</b> 893451.766	<b>Easting (US Ft)</b> 1071812.356	<b>Elevation (US Ft)</b> 555.154
<b>Point Type</b> NVA	<b>Latitude</b> N39°07'11.33800"	<b>Longitude</b> W88°01'28.95938"	<b>Ellipsoid Height (US Ft)</b> 450.451
<b>Location Photo</b>   NORTH			
 2042_2020_IL_3W_20200221	 2042_2020_IL_3N_20200221		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2043_2020_IL	<b>Northing (US Ft)</b> 901569.339	<b>Easting (US Ft)</b> 1094308.492	<b>Elevation (US Ft)</b> 545.263
<b>Point Type</b> NVA	<b>Latitude</b> N39°08'30.71808"	<b>Longitude</b> W87°56'43.08097"	<b>Ellipsoid Height (US Ft)</b> 440.477
<b>Location Photo</b>   NORTH			
 <p>2043_2020_IL_3S_20200221</p>	 <p>2043_2020_IL_3E_20200221</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2044_2020_IL	<b>Northing (US Ft)</b> 902827.603	<b>Easting (US Ft)</b> 1130739.264	<b>Elevation (US Ft)</b> 581.505
<b>Point Type</b> NVA	<b>Latitude</b> N39°08'41.36019"	<b>Longitude</b> W87°49'00.60733"	<b>Ellipsoid Height (US Ft)</b> 476.676
<b>Location Photo</b>  ↑ NORTH			
<p>2044_2020_IL_3W_20200220</p>		<p>2044_2020_IL_3S_20200220</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2045_2020_IL	<b>Northing (US Ft)</b> 873273.346	<b>Easting (US Ft)</b> 1110054.420	<b>Elevation (US Ft)</b> 501.626
<b>Point Type</b> NVA	<b>Latitude</b> N39°03'50.33257"	<b>Longitude</b> W87°53'24.98240"	<b>Ellipsoid Height (US Ft)</b> 397.202
<b>Location Photo</b>  ↑ NORTH			
<p>2045_2020_IL_3W_20200220</p>	<p>2045_2020_IL_3E_20200220</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2046_2020_IL	<b>Northing (US Ft)</b> 800881.602	<b>Easting (US Ft)</b> 1142281.165	<b>Elevation (US Ft)</b> 466.129
<b>Point Type</b> NVA	<b>Latitude</b> N38°51'53.06960"	<b>Longitude</b> W87°46'42.00073"	<b>Ellipsoid Height (US Ft)</b> 362.289
<b>Location Photo</b>   NORTH			
 2046_2020_IL_3W_20200220	 2046_2020_IL_3N_20200220		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2047_2020_IL	<b>Northing (US Ft)</b> 791058.828	<b>Easting (US Ft)</b> 1175806.186	<b>Elevation (US Ft)</b> 441.978
<b>Point Type</b> NVA	<b>Latitude</b> N38°50'13.75487"	<b>Longitude</b> W87°39'39.08064"	<b>Ellipsoid Height (US Ft)</b> 337.884
Location Photo   NORTH			
 <p>2047_2020_IL_3S_20200220</p>	 <p>2047_2020_IL_3E_20200220</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2048_2020_IL	<b>Northing (US Ft)</b> 762917.938	<b>Easting (US Ft)</b> 1143437.195	<b>Elevation (US Ft)</b> 447.162
<b>Point Type</b> NVA	<b>Latitude</b> N38°45'37.76168"	<b>Longitude</b> W87°46'30.31670"	<b>Ellipsoid Height (US Ft)</b> 343.652
Location Photo   NORTH			
 2048_2020_IL_3W_20200217	 2048_2020_IL_3N_20200217		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2049_2020_IL	<b>Northing (US Ft)</b> 906464.503	<b>Easting (US Ft)</b> 1037054.814	<b>Elevation (US Ft)</b> 583.790
<b>Point Type</b> NVA	<b>Latitude</b> N39°09'20.89181"	<b>Longitude</b> W88°08'49.64111"	<b>Ellipsoid Height (US Ft)</b> 478.911
<b>Location Photo</b>   NORTH			
 <p>2049_2020_IL_3W_20200221</p>		 <p>2049_2020_IL_3S_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2050_2020_IL	<b>Northing (US Ft)</b> 887453.364	<b>Easting (US Ft)</b> 1040437.388	<b>Elevation (US Ft)</b> 563.466
<b>Point Type</b> NVA	<b>Latitude</b> N39°06'12.91464"	<b>Longitude</b> W88°08'07.22577"	<b>Ellipsoid Height (US Ft)</b> 458.811
<b>Location Photo</b>   NORTH			
 <p>2050_2020_IL_3W_20200221</p>		 <p>2050_2020_IL_3S_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2051_2020_IL	<b>Northing (US Ft)</b> 842453.910	<b>Easting (US Ft)</b> 991840.957	<b>Elevation (US Ft)</b> 556.974
<b>Point Type</b> NVA	<b>Latitude</b> N38°58'48.72426"	<b>Longitude</b> W88°18'23.87100"	<b>Ellipsoid Height (US Ft)</b> 453.056
<b>Location Photo</b>   NORTH			
 <p>2051_2020_IL_3N_20200225</p>		 <p>2051_2020_IL_3E_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2052_2020_IL	<b>Northing (US Ft)</b> 842233.993	<b>Easting (US Ft)</b> 1014647.394	<b>Elevation (US Ft)</b> 554.165
<b>Point Type</b> NVA	<b>Latitude</b> N38°58'46.38516"	<b>Longitude</b> W88°13'35.06248"	<b>Ellipsoid Height (US Ft)</b> 450.195
<b>Location Photo</b>   NORTH			
 <p>2052_2020_IL_3W_20200225</p>	 <p>2052_2020_IL_3N_20200225</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2053_2020_IL	<b>Northing (US Ft)</b> 825914.245	<b>Easting (US Ft)</b> 1010854.880	<b>Elevation (US Ft)</b> 543.685
<b>Point Type</b> NVA	<b>Latitude</b> N38°56'05.11627"	<b>Longitude</b> W88°14'23.30105"	<b>Ellipsoid Height (US Ft)</b> 439.956
<b>Location Photo</b>   NORTH			
 <p>02/25/2020 12:54</p> <p>2053_2020_IL_3S_20200225</p>		 <p>02/25/2020 12:53</p> <p>2053_2020_IL_3E_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2054_2020_IL	<b>Northing (US Ft)</b> 826144.793	<b>Easting (US Ft)</b> 1046719.152	<b>Elevation (US Ft)</b> 518.273
<b>Point Type</b> NVA	<b>Latitude</b> N38°56'06.78632"	<b>Longitude</b> W88°06'49.41471"	<b>Ellipsoid Height (US Ft)</b> 414.449
<b>Location Photo</b>   NORTH			
 <p>2054_2020_IL_3NW_20200225</p>		 <p>2054_2020_IL_3NE_20200225</p>	




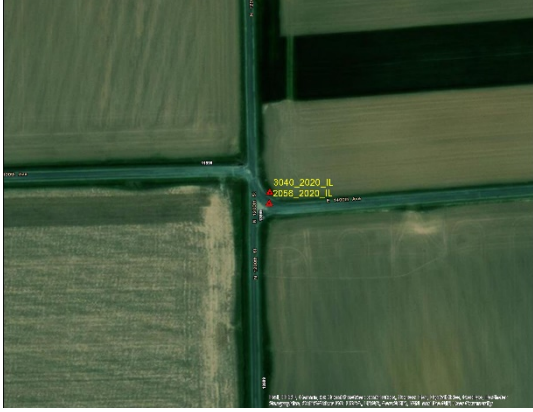

# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2055_2020_IL	<b>Northing (US Ft)</b> 866943.225	<b>Easting (US Ft)</b> 1072350.770	<b>Elevation (US Ft)</b> 518.234
<b>Point Type</b> NVA	<b>Latitude</b> N39°02'49.30926"	<b>Longitude</b> W88°01'23.27584"	<b>Ellipsoid Height (US Ft)</b> 413.869
<b>Location Photo</b>   NORTH			
 <p>2055_2020_IL_3W_20200221</p>		 <p>2055_2020_IL_3N_20200221</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2056_2020_IL	<b>Northing (US Ft)</b> 869203.240	<b>Easting (US Ft)</b> 1035698.369	<b>Elevation (US Ft)</b> 549.007
<b>Point Type</b> NVA	<b>Latitude</b> N39°03'12.62618"	<b>Longitude</b> W88°09'07.80453"	<b>Ellipsoid Height (US Ft)</b> 444.599
<b>Location Photo</b>   NORTH			
 <p>2056_2020_IL_3W_20200221</p>		 <p>2056_2020_IL_3N_20200221</p>	



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2057_2020_IL	<b>Northing (US Ft)</b> 875290.324	<b>Easting (US Ft)</b> 1168432.042	<b>Elevation (US Ft)</b> 502.110
<b>Point Type</b> NVA	<b>Latitude</b> N39°04'06.80330"	<b>Longitude</b> W87°41'04.69361"	<b>Ellipsoid Height (US Ft)</b> 397.365
<b>Location Photo</b>   NORTH			
 <p>2057_2020_IL_3N_20200220</p>	 <p>2057_2020_IL_3E_20200220</p>		


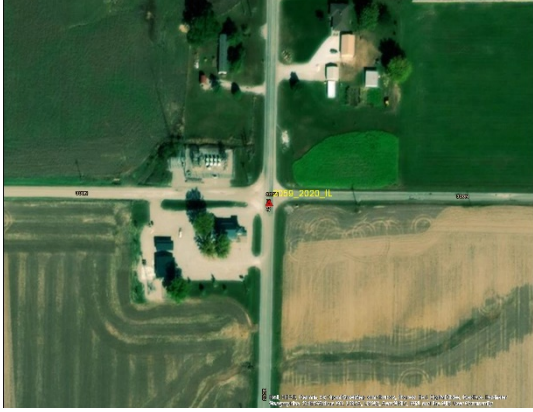




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2058_2020_IL	<b>Northing (US Ft)</b> 799944.995	<b>Easting (US Ft)</b> 1057572.706	<b>Elevation (US Ft)</b> 479.080
<b>Point Type</b> NVA	<b>Latitude</b> N38°51'47.53710"	<b>Longitude</b> W88°04'32.99332"	<b>Ellipsoid Height (US Ft)</b> 375.550
<b>Location Photo</b>   NORTH			
 2058_2020_IL_3S_20200225		 2058_2020_IL_3N_20200225	


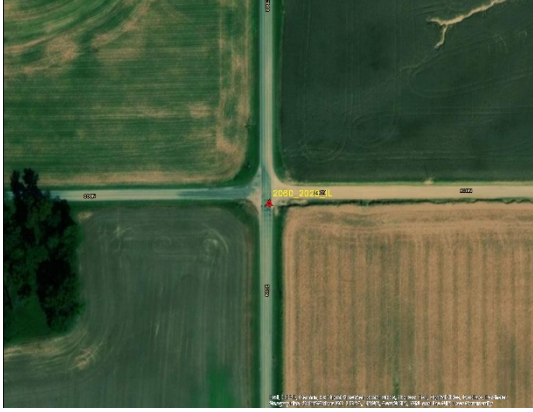




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2059_2020_IL	<b>Northing (US Ft)</b> 709498.393	<b>Easting (US Ft)</b> 1118392.220	<b>Elevation (US Ft)</b> 460.978
<b>Point Type</b> NVA	<b>Latitude</b> N38°36'51.12800"	<b>Longitude</b> W87°51'49.94403"	<b>Ellipsoid Height (US Ft)</b> 358.218
<b>Location Photo</b>   NORTH			
 <p>2059_2020_IL_3W_20200217</p>		 <p>2059_2020_IL_3N_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2060_2020_IL	<b>Northing (US Ft)</b> 725471.448	<b>Easting (US Ft)</b> 1148104.586	<b>Elevation (US Ft)</b> 473.435
<b>Point Type</b> NVA	<b>Latitude</b> N38°39'27.34417"	<b>Longitude</b> W87°45'34.35588"	<b>Ellipsoid Height (US Ft)</b> 370.229
<b>Location Photo</b>   NORTH			
 <p>2060_2020_IL_3N_20200217</p>		 <p>2060_2020_IL_3E_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2061_2020_IL	<b>Northing (US Ft)</b> 725683.388	<b>Easting (US Ft)</b> 1166757.978	<b>Elevation (US Ft)</b> 507.853
<b>Point Type</b> NVA	<b>Latitude</b> N38°39'28.21995"	<b>Longitude</b> W87°41'39.19487"	<b>Ellipsoid Height (US Ft)</b> 404.404
<b>Location Photo</b>   NORTH			
 02/17/2020 11:55 2061_2020_IL_3W_20200217	 02/17/2020 11:55 2061_2020_IL_3N_20200217		


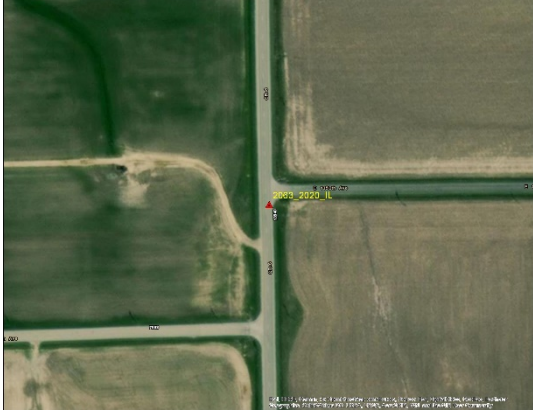




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2062_2020_IL	<b>Northing (US Ft)</b> 790375.490	<b>Easting (US Ft)</b> 1155787.585	<b>Elevation (US Ft)</b> 490.242
<b>Point Type</b> NVA	<b>Latitude</b> N38°50'08.38105"	<b>Longitude</b> W87°43'52.12225"	<b>Ellipsoid Height (US Ft)</b> 386.383
<b>Location Photo</b>   NORTH			
 2062_2020_IL_3S_20200217	 2062_2020_IL_3N_20200217		






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2063_2020_IL	<b>Northing (US Ft)</b> 868332.992	<b>Easting (US Ft)</b> 1136494.658	<b>Elevation (US Ft)</b> 537.740
<b>Point Type</b> NVA	<b>Latitude</b> N39°03'00.09593"	<b>Longitude</b> W87°47'50.14029"	<b>Ellipsoid Height (US Ft)</b> 433.332
<b>Location Photo</b>   NORTH			
 <p>2063_2020_IL_3W_20200220</p>		 <p>2063_2020_IL_3E_20200220</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2064_2020_IL	<b>Northing (US Ft)</b> 887008.013	<b>Easting (US Ft)</b> 1144040.159	<b>Elevation (US Ft)</b> 573.879
<b>Point Type</b> NVA	<b>Latitude</b> N39°06'04.22350"	<b>Longitude</b> W87°46'13.03105"	<b>Ellipsoid Height (US Ft)</b> 469.220
<b>Location Photo</b>   NORTH			
 <p>2064_2020_IL_3W_20200220</p>		 <p>2064_2020_IL_3N_20200220</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2065_2020_IL	<b>Northing (US Ft)</b> 902485.941	<b>Easting (US Ft)</b> 1159092.944	<b>Elevation (US Ft)</b> 514.072
<b>Point Type</b> NVA	<b>Latitude</b> N39°08'36.23425"	<b>Longitude</b> W87°43'00.76054"	<b>Ellipsoid Height (US Ft)</b> 409.084
<b>Location Photo</b>   NORTH			
 <p>2065_2020_IL_3S_20200220</p>		 <p>2065_2020_IL_3N_20200220</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2066_2020_IL	<b>Northing (US Ft)</b> 888118.420	<b>Easting (US Ft)</b> 1115068.233	<b>Elevation (US Ft)</b> 534.510
<b>Point Type</b> NVA	<b>Latitude</b> N39°06'16.81245"	<b>Longitude</b> W87°52'20.46170"	<b>Ellipsoid Height (US Ft)</b> 429.900
<b>Location Photo</b>   NORTH			
 <p>2066_2020_IL_3W_20200220</p>		 <p>2066_2020_IL_3E_20200220</p>	



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 2067_2020_IL	<b>Northing (US Ft)</b> 811473.069	<b>Easting (US Ft)</b> 1125347.456	<b>Elevation (US Ft)</b> 468.714
<b>Point Type</b> NVA	<b>Latitude</b> N38°53'38.71987"	<b>Longitude</b> W87°50'15.35968"	<b>Ellipsoid Height (US Ft)</b> 364.879
<b>Location Photo</b>   NORTH			
 <p>2067_2020_IL_3W_20200220</p>	 <p>2067_2020_IL_3N_20200220</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3001_2020_IL	<b>Northing (US Ft)</b> 735662.343	<b>Easting (US Ft)</b> 1211328.569	<b>Elevation (US Ft)</b> 412.941
<b>Point Type</b> BRU	<b>Latitude</b> N38°41'03.40632"	<b>Longitude</b> W87°32'16.26526"	<b>Ellipsoid Height (US Ft)</b> 308.733
<b>Location Photo</b>  ↑ NORTH			
<p>3001_2020_IL_3W_20200217</p>	<p>3001_2020_IL_3E_20200217</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3002_2020_IL	<b>Northing (US Ft)</b> 845332.534	<b>Easting (US Ft)</b> 1188596.230	<b>Elevation (US Ft)</b> 458.529
<b>Point Type</b> TWC	<b>Latitude</b> N38°59'09.21650"	<b>Longitude</b> W87°36'52.04383"	<b>Ellipsoid Height (US Ft)</b> 353.800
<b>Location Photo</b>   NORTH			
 3002_2020_IL_3S_20200220	 3002_2020_IL_3E_20200220		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3003_2020_IL	<b>Northing (US Ft)</b> 852975.685	<b>Easting (US Ft)</b> 1195606.923	<b>Elevation (US Ft)</b> 429.795
<b>Point Type</b> FOR	<b>Latitude</b> N39°00'24.20096"	<b>Longitude</b> W87°35'22.47263"	<b>Ellipsoid Height (US Ft)</b> 324.885
<b>Location Photo</b>  ↑ NORTH			
<p>3003_2020_IL_3S_20200220</p>	<p>3003_2020_IL_3N_20200220</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3004_2020_IL	<b>Northing (US Ft)</b> 858397.244	<b>Easting (US Ft)</b> 1182937.348	<b>Elevation (US Ft)</b> 445.170
<b>Point Type</b> FOR	<b>Latitude</b> N39°01'18.77760"	<b>Longitude</b> W87°38'02.43506"	<b>Ellipsoid Height (US Ft)</b> 340.397
<b>Location Photo</b>  ↑ NORTH			
<p>3004_2020_IL_3N_20200220</p>	<p>3004_2020_IL_3E_20200220</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3005_2020_IL	<b>Northing (US Ft)</b> 863288.144	<b>Easting (US Ft)</b> 1170684.965	<b>Elevation (US Ft)</b> 468.700
<b>Point Type</b> FOR	<b>Latitude</b> N39°02'08.01923"	<b>Longitude</b> W87°40'37.22803"	<b>Ellipsoid Height (US Ft)</b> 364.048
<b>Location Photo</b>   NORTH			
 <p>3005_2020_IL_3W_20200220</p>		 <p>3005_2020_IL_3NE_20200220</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3006_2020_IL	<b>Northing (US Ft)</b> 879682.804	<b>Easting (US Ft)</b> 1163050.625	<b>Elevation (US Ft)</b> 543.383
<b>Point Type</b> FOR	<b>Latitude</b> N39°04'50.59067"	<b>Longitude</b> W87°42'12.53660"	<b>Ellipsoid Height (US Ft)</b> 438.659
<b>Location Photo</b>   NORTH			
 <p>3006_2020_IL_3S_20200220</p>	 <p>3006_2020_IL_3E_20200220</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3007_2020_IL	<b>Northing (US Ft)</b> 899989.413	<b>Easting (US Ft)</b> 1148695.023	<b>Elevation (US Ft)</b> 537.720
<b>Point Type</b> FOR	<b>Latitude</b> N39°08'12.23696"	<b>Longitude</b> W87°45'12.93473"	<b>Ellipsoid Height (US Ft)</b> 432.850
<b>Location Photo</b>   NORTH			
 <p>3007_2020_IL_3W_20200220</p>	 <p>3007_2020_IL_3N_20200220</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3008_2020_IL	<b>Northing (US Ft)</b> 906815.772	<b>Easting (US Ft)</b> 1110301.604	<b>Elevation (US Ft)</b> 530.381
<b>Point Type</b> FOR	<b>Latitude</b> N39°09'21.84759"	<b>Longitude</b> W87°53'19.76734"	<b>Ellipsoid Height (US Ft)</b> 425.533
Location Photo   NORTH			
 <p>3008_2020_IL_3S_20200221</p>	 <p>3008_2020_IL_3N_20200221</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3009_2020_IL	<b>Northing (US Ft)</b> 784599.872	<b>Easting (US Ft)</b> 1122717.642	<b>Elevation (US Ft)</b> 436.126
<b>Point Type</b> FOR	<b>Latitude</b> N38°49'13.24026"	<b>Longitude</b> W87°50'50.42996"	<b>Ellipsoid Height (US Ft)</b> 332.569
<b>Location Photo</b>   NORTH			
 <p>3009_2020_IL_3W_20200226</p>		 <p>3009_2020_IL_3E_20200226</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3010_2020_IL	<b>Northing (US Ft)</b> 800922.753	<b>Easting (US Ft)</b> 1139411.926	<b>Elevation (US Ft)</b> 453.805
<b>Point Type</b> FOR	<b>Latitude</b> N38°51'53.64715"	<b>Longitude</b> W87°47'18.27207"	<b>Ellipsoid Height (US Ft)</b> 349.983
<b>Location Photo</b>   NORTH			
 <p>3010_2020_IL_3W_20200220</p>	 <p>3010_2020_IL_3E_20200220</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3011_2020_IL	<b>Northing (US Ft)</b> 816151.543	<b>Easting (US Ft)</b> 986891.384	<b>Elevation (US Ft)</b> 530.217
<b>Point Type</b> FOR	<b>Latitude</b> N38°54'28.75110"	<b>Longitude</b> W88°19'26.58443"	<b>Ellipsoid Height (US Ft)</b> 426.707
<b>Location Photo</b>   NORTH			
 <p>3011_2020_IL_3N_20200225</p>		 <p>3011_2020_IL_3E_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3012_2020_IL	<b>Northing (US Ft)</b> 806368.639	<b>Easting (US Ft)</b> 1154003.965	<b>Elevation (US Ft)</b> 522.150
<b>Point Type</b> FOR	<b>Latitude</b> N38°52'46.57291"	<b>Longitude</b> W87°44'13.34265"	<b>Ellipsoid Height (US Ft)</b> 418.189
<b>Location Photo</b>   NORTH			
 <p>3012_2020_IL_3SW_20200220</p>	 <p>3012_2020_IL_3N_20200220</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3013_2020_IL	<b>Northing (US Ft)</b> 800848.383	<b>Easting (US Ft)</b> 1181141.327	<b>Elevation (US Ft)</b> 533.357
<b>Point Type</b> FOR	<b>Latitude</b> N38°51'50.11959"	<b>Longitude</b> W87°38'30.72213"	<b>Ellipsoid Height (US Ft)</b> 429.128
<b>Location Photo</b>   NORTH			
 <p>3013_2020_IL_3S_20200220</p>	 <p>3013_2020_IL_3N_20200220</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3014_2020_IL	<b>Northing (US Ft)</b> 701226.981	<b>Easting (US Ft)</b> 1137045.999	<b>Elevation (US Ft)</b> 443.068
<b>Point Type</b> TWC	<b>Latitude</b> N38°35'28.36051"	<b>Longitude</b> W87°47'55.54087"	<b>Ellipsoid Height (US Ft)</b> 340.213
<b>Location Photo</b>   NORTH			
 <p>3014_2020_IL_3N_20200217</p>		 <p>3014_2020_IL_3E_20200217</p>	




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3015_2020_IL	<b>Northing (US Ft)</b> 725440.599	<b>Easting (US Ft)</b> 1142708.605	<b>Elevation (US Ft)</b> 474.860
<b>Point Type</b> TWC	<b>Latitude</b> N38°39'27.36742"	<b>Longitude</b> W87°46'42.38002"	<b>Ellipsoid Height (US Ft)</b> 371.713
<b>Location Photo</b>   NORTH			
 <p>3015_2020_IL_3S_20200217</p>	 <p>3015_2020_IL_3E_20200217</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3016_2020_IL	<b>Northing (US Ft)</b> 730829.817	<b>Easting (US Ft)</b> 1121130.773	<b>Elevation (US Ft)</b> 517.410
<b>Point Type</b> TWC	<b>Latitude</b> N38°40'21.83973"	<b>Longitude</b> W87°51'14.03782"	<b>Ellipsoid Height (US Ft)</b> 414.442
<b>Location Photo</b>   NORTH			
 <p>3016_2020_IL_3W_20200217</p>	 <p>3016_2020_IL_3E_20200217</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3017_2020_IL	<b>Northing (US Ft)</b> 739848.374	<b>Easting (US Ft)</b> 1183697.797	<b>Elevation (US Ft)</b> 417.539
<b>Point Type</b> TWC	<b>Latitude</b> N38°41'47.00728"	<b>Longitude</b> W87°38'04.29442"	<b>Ellipsoid Height (US Ft)</b> 313.724
<b>Location Photo</b>   NORTH			
 <p>3017_2020_IL_3W_20200217</p>		 <p>3017_2020_IL_3S_20200217</p>	






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3018_2020_IL	<b>Northing (US Ft)</b> 739104.983	<b>Easting (US Ft)</b> 1160044.964	<b>Elevation (US Ft)</b> 431.458
<b>Point Type</b> TWC	<b>Latitude</b> N38°41'41.33648"	<b>Longitude</b> W87°43'02.68189"	<b>Ellipsoid Height (US Ft)</b> 327.967
<b>Location Photo</b>   NORTH			
 <p>3018_2020_IL_3S_20200217</p>	 <p>3018_2020_IL_3E_20200217</p>		






# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3019_2020_IL	<b>Northing (US Ft)</b> 763100.246	<b>Easting (US Ft)</b> 1126974.294	<b>Elevation (US Ft)</b> 451.078
<b>Point Type</b> TWC	<b>Latitude</b> N38°45'40.50498"	<b>Longitude</b> W87°49'58.13474"	<b>Ellipsoid Height (US Ft)</b> 347.720
<b>Location Photo</b>   NORTH			
 <p>3019_2020_IL_3W_20200217</p>		 <p>3019_2020_IL_3S_20200217</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3020_2020_IL	<b>Northing (US Ft)</b> 776709.258	<b>Easting (US Ft)</b> 1163852.690	<b>Elevation (US Ft)</b> 437.126
<b>Point Type</b> TWC	<b>Latitude</b> N38°47'52.76618"	<b>Longitude</b> W87°42'11.39244"	<b>Ellipsoid Height (US Ft)</b> 333.281
<b>Location Photo</b>   NORTH			
 <p>3020_2020_IL_3W_20200217</p>	 <p>3020_2020_IL_3N_20200217</p>		









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3021_2020_IL	<b>Northing (US Ft)</b> 766702.759	<b>Easting (US Ft)</b> 1201988.941	<b>Elevation (US Ft)</b> 422.897
<b>Point Type</b> TWC	<b>Latitude</b> N38°46'10.99064"	<b>Longitude</b> W87°34'10.77522"	<b>Ellipsoid Height (US Ft)</b> 318.628
<b>Location Photo</b>   NORTH			
 <p>3021_2020_IL_3W_20200217</p>	 <p>3021_2020_IL_3N_20200217</p>		





# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3022_2020_IL	<b>Northing (US Ft)</b> 907297.003	<b>Easting (US Ft)</b> 995118.580	<b>Elevation (US Ft)</b> 581.706
<b>Point Type</b> TWC	<b>Latitude</b> N39°09'29.63311"	<b>Longitude</b> W88°17'42.01822"	<b>Ellipsoid Height (US Ft)</b> 476.844
<b>Location Photo</b>   NORTH			
 <p>3022_2020_IL_3W_20200226</p>	 <p>3022_2020_IL_3N_20200226</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3023_2020_IL	<b>Northing (US Ft)</b> 897683.818	<b>Easting (US Ft)</b> 983610.001	<b>Elevation (US Ft)</b> 588.188
<b>Point Type</b> TWC	<b>Latitude</b> N39°07'54.63855"	<b>Longitude</b> W88°20'08.12206"	<b>Ellipsoid Height (US Ft)</b> 483.455
<b>Location Photo</b>   NORTH			
 <p>3023_2020_IL_3W_20200226</p>	 <p>3023_2020_IL_3S_20200226</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3024_2020_IL	<b>Northing (US Ft)</b> 884547.138	<b>Easting (US Ft)</b> 1004934.139	<b>Elevation (US Ft)</b> 572.601
<b>Point Type</b> BRU	<b>Latitude</b> N39°05'44.71237"	<b>Longitude</b> W88°15'37.63694"	<b>Ellipsoid Height (US Ft)</b> 468.037
<b>Location Photo</b>   NORTH			
 <p>3024_2020_IL_3S_20200225</p>		 <p>3024_2020_IL_3E_20200225</p>	


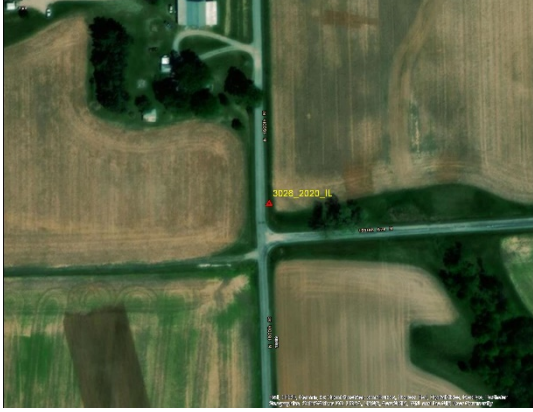




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3025_2020_IL	<b>Northing (US Ft)</b> 897216.505	<b>Easting (US Ft)</b> 1027549.438	<b>Elevation (US Ft)</b> 570.753
<b>Point Type</b> TWC	<b>Latitude</b> N39°07'49.65991"	<b>Longitude</b> W88°10'50.50916"	<b>Ellipsoid Height (US Ft)</b> 465.981
<b>Location Photo</b>   NORTH			
 <p>3025_2020_IL_3W_20200221</p>	 <p>3025_2020_IL_3N_20200221</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3026_2020_IL	<b>Northing (US Ft)</b> 893421.885	<b>Easting (US Ft)</b> 1067581.930	<b>Elevation (US Ft)</b> 558.925
<b>Point Type</b> TWC	<b>Latitude</b> N39°07'11.18133"	<b>Longitude</b> W88°02'22.63796"	<b>Ellipsoid Height (US Ft)</b> 454.216
Location Photo   NORTH			
 <p>3026_2020_IL_3S_20200221</p>	 <p>3026_2020_IL_3E_20200221</p>		


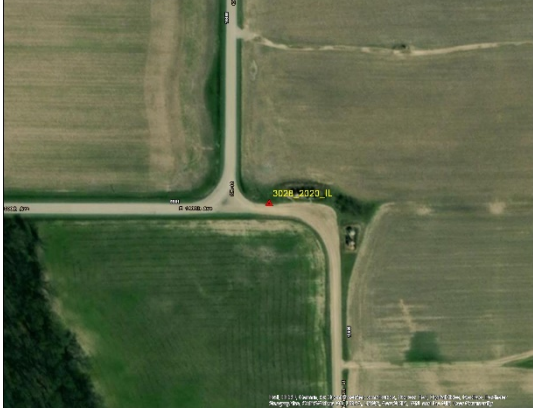




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3027_2020_IL	<b>Northing (US Ft)</b> 874924.421	<b>Easting (US Ft)</b> 1072220.834	<b>Elevation (US Ft)</b> 530.455
<b>Point Type</b> TWC	<b>Latitude</b> N39°04'08.20018"	<b>Longitude</b> W88°01'24.57811"	<b>Ellipsoid Height (US Ft)</b> 425.988
<b>Location Photo</b>   NORTH			
 <p>3027_2020_IL_3W_20200221</p>	 <p>3027_2020_IL_3N_20200221</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3028_2020_IL	<b>Northing (US Ft)</b> 881433.271	<b>Easting (US Ft)</b> 1125734.104	<b>Elevation (US Ft)</b> 553.141
<b>Point Type</b> TWM	<b>Latitude</b> N39°05'10.18127"	<b>Longitude</b> W87°50'05.62607"	<b>Ellipsoid Height (US Ft)</b> 448.609
<b>Location Photo</b>   NORTH			
 <p>3028_2020_IL_3W_20200220</p>		 <p>3028_2020_IL_3N_20200220</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3029_2020_IL	<b>Northing (US Ft)</b> 869010.837	<b>Easting (US Ft)</b> 1158024.144	<b>Elevation (US Ft)</b> 517.307
<b>Point Type</b> TWC	<b>Latitude</b> N39°03'05.45251"	<b>Longitude</b> W87°43'17.18743"	<b>Ellipsoid Height (US Ft)</b> 412.749
<b>Location Photo</b>   NORTH			
 <p>3029_2020_IL_3W_20200220</p>		 <p>3029_2020_IL_3E_20200220</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3030_2020_IL	<b>Northing (US Ft)</b> 862527.976	<b>Easting (US Ft)</b> 1118116.245	<b>Elevation (US Ft)</b> 503.224
<b>Point Type</b> TWC	<b>Latitude</b> N39°02'03.72593"	<b>Longitude</b> W87°51'43.47920"	<b>Ellipsoid Height (US Ft)</b> 398.924
Location Photo   NORTH			
 <p>3030_2020_IL_3N_20200220</p>	 <p>3030_2020_IL_3E_20200220</p>		


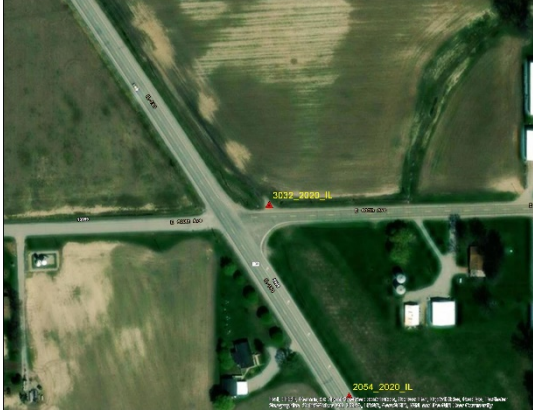




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3031_2020_IL	<b>Northing (US Ft)</b> 833721.794	<b>Easting (US Ft)</b> 1073744.966	<b>Elevation (US Ft)</b> 487.726
<b>Point Type</b> TWC	<b>Latitude</b> N38°57'20.89656"	<b>Longitude</b> W88°01'07.05954"	<b>Ellipsoid Height (US Ft)</b> 383.777
<b>Location Photo</b>   NORTH			
 <p>3031_2020_IL_3W_20200225</p>		 <p>3031_2020_IL_3N_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3032_2020_IL	<b>Northing (US Ft)</b> 826541.165	<b>Easting (US Ft)</b> 1046553.679	<b>Elevation (US Ft)</b> 518.572
<b>Point Type</b> TWC	<b>Latitude</b> N38°56'10.70813"	<b>Longitude</b> W88°06'51.49682"	<b>Ellipsoid Height (US Ft)</b> 414.743
<b>Location Photo</b>   NORTH			
 <p>3032_2020_IL_3W_20200225</p>		 <p>3032_2020_IL_3S_20200225</p>	


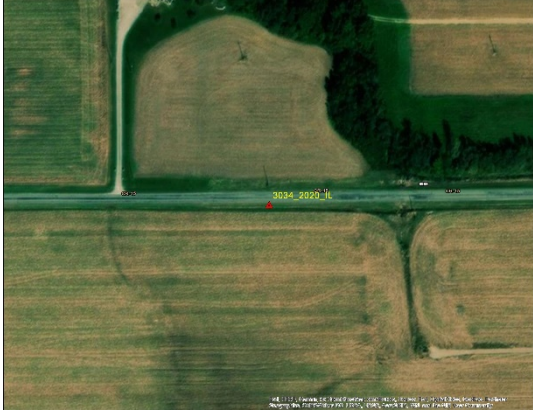




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3033_2020_IL	<b>Northing (US Ft)</b> 825875.096	<b>Easting (US Ft)</b> 1010807.930	<b>Elevation (US Ft)</b> 542.339
<b>Point Type</b> TWC	<b>Latitude</b> N38°56'04.72978"	<b>Longitude</b> W88°14'23.89573"	<b>Ellipsoid Height (US Ft)</b> 438.611
<b>Location Photo</b>   NORTH			
 <p>3033_2020_IL_3W_20200225</p>		 <p>3033_2020_IL_3S_20200225</p>	


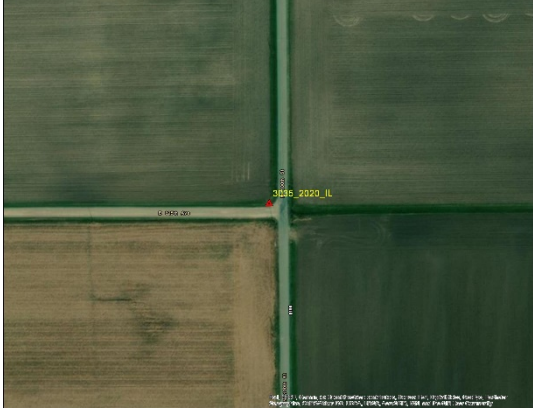




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3034_2020_IL	<b>Northing (US Ft)</b> 833008.064	<b>Easting (US Ft)</b> 1128218.616	<b>Elevation (US Ft)</b> 489.430
<b>Point Type</b> TWC	<b>Latitude</b> N38°57'11.41681"	<b>Longitude</b> W87°49'37.53372"	<b>Ellipsoid Height (US Ft)</b> 385.396
<b>Location Photo</b>   NORTH			
 <p>3034_2020_IL_3W_20200220</p>		 <p>3034_2020_IL_3N_20200220</p>	


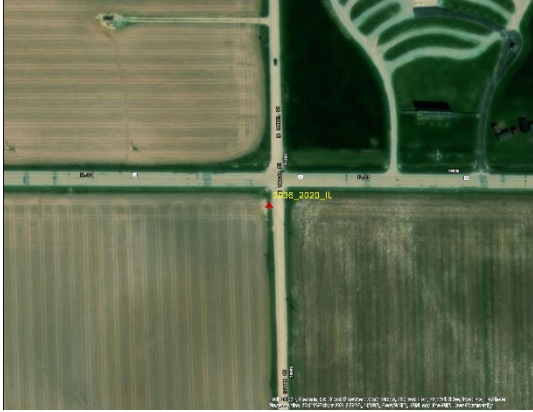




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3035_2020_IL	<b>Northing (US Ft)</b> 839554.949	<b>Easting (US Ft)</b> 1099768.378	<b>Elevation (US Ft)</b> 493.723
<b>Point Type</b> TWC	<b>Latitude</b> N38°58'17.53466"	<b>Longitude</b> W87°55'37.29984"	<b>Ellipsoid Height (US Ft)</b> 389.699
<b>Location Photo</b>   NORTH			
 <p>3035_2020_IL_3SE_20200221</p>	 <p>3035_2020_IL_3N_20200221</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3036_2020_IL	<b>Northing (US Ft)</b> 853535.085	<b>Easting (US Ft)</b> 1057756.011	<b>Elevation (US Ft)</b> 533.630
<b>Point Type</b> TWC	<b>Latitude</b> N39°00'37.23253"	<b>Longitude</b> W88°04'28.75344"	<b>Ellipsoid Height (US Ft)</b> 429.435
<b>Location Photo</b>   NORTH			
 <p>3036_2020_IL_3NE_20200225</p>		 <p>3036_2020_IL_3N_20200225</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3037_2020_IL	<b>Northing (US Ft)</b> 867735.363	<b>Easting (US Ft)</b> 1008946.845	<b>Elevation (US Ft)</b> 568.364
<b>Point Type</b> TWC	<b>Latitude</b> N39°02'58.50722"	<b>Longitude</b> W88°14'46.94276"	<b>Ellipsoid Height (US Ft)</b> 464.030
<b>Location Photo</b>   NORTH			
 <p>3037_2020_IL_3W_20200225</p>		 <p>3037_2020_IL_3S_20200225</p>	




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3038_2020_IL	<b>Northing (US Ft)</b> 886435.062	<b>Easting (US Ft)</b> 1093441.826	<b>Elevation (US Ft)</b> 521.306
<b>Point Type</b> TWC	<b>Latitude</b> N39°06'01.16941"	<b>Longitude</b> W87°56'54.89480"	<b>Ellipsoid Height (US Ft)</b> 416.712
<b>Location Photo</b>   NORTH			
 <p>3038_2020_IL_3S_20200221</p>	 <p>3038_2020_IL_3E_20200221</p>		



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3039_2020_IL	<b>Northing (US Ft)</b> 906450.795	<b>Easting (US Ft)</b> 1056721.793	<b>Elevation (US Ft)</b> 572.786
<b>Point Type</b> TWC	<b>Latitude</b> N39°09'20.28313"	<b>Longitude</b> W88°04'39.97064"	<b>Ellipsoid Height (US Ft)</b> 467.913
<b>Location Photo</b>   NORTH			
 <p>3039_2020_IL_3W_20200221</p>		 <p>3039_2020_IL_3S_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3040_2020_IL	<b>Northing (US Ft)</b> 869226.025	<b>Easting (US Ft)</b> 1035699.636	<b>Elevation (US Ft)</b> 547.941
<b>Point Type</b> TWC	<b>Latitude</b> N39°03'12.85137"	<b>Longitude</b> W88°09'07.78789"	<b>Ellipsoid Height (US Ft)</b> 443.533
<b>Location Photo</b>   NORTH			
 <p>02/21/2020 15:43</p> <p>3040_2020_IL_3W_20200221</p>	 <p>02/21/2020 15:42</p> <p>3040_2020_IL_3N_20200221</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3041_2020_IL	<b>Northing (US Ft)</b> 848810.575	<b>Easting (US Ft)</b> 990056.400	<b>Elevation (US Ft)</b> 561.928
<b>Point Type</b> TWC	<b>Latitude</b> N38°59'51.56008"	<b>Longitude</b> W88°18'46.45189"	<b>Ellipsoid Height (US Ft)</b> 457.917
<b>Location Photo</b>   NORTH			
 <p>3041_2020_IL_3W_20200225</p>		 <p>3041_2020_IL_3E_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3042_2020_IL	<b>Northing (US Ft)</b> 829108.862	<b>Easting (US Ft)</b> 1199887.492	<b>Elevation (US Ft)</b> 515.713
<b>Point Type</b> TWC	<b>Latitude</b> N38°56'27.96475"	<b>Longitude</b> W87°34'30.76579"	<b>Ellipsoid Height (US Ft)</b> 410.964
<b>Location Photo</b>   NORTH			
 3042_2020_IL_3N_20200220	 3042_2020_IL_3E_20200220		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3043_2020_IL	<b>Northing (US Ft)</b> 839528.975	<b>Easting (US Ft)</b> 1167662.484	<b>Elevation (US Ft)</b> 489.527
<b>Point Type</b> TWC	<b>Latitude</b> N38°58'13.40545"	<b>Longitude</b> W87°41'17.66460"	<b>Ellipsoid Height (US Ft)</b> 385.132
<b>Location Photo</b>   NORTH			
 <p>3043_2020_IL_3W_20200220</p>	 <p>3043_2020_IL_3S_20200220</p>		




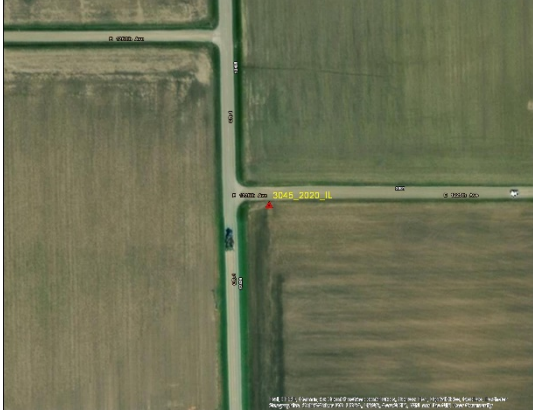

# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3044_2020_IL	<b>Northing (US Ft)</b> 845146.661	<b>Easting (US Ft)</b> 1142419.593	<b>Elevation (US Ft)</b> 529.666
<b>Point Type</b> TWC	<b>Latitude</b> N38°59'10.57507"	<b>Longitude</b> W87°46'36.83579"	<b>Ellipsoid Height (US Ft)</b> 425.449
<b>Location Photo</b>   NORTH			
 <p>3044_2020_IL_3W_20200221</p>		 <p>3044_2020_IL_3N_20200221</p>	









# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3045_2020_IL	<b>Northing (US Ft)</b> 861164.838	<b>Easting (US Ft)</b> 1104711.428	<b>Elevation (US Ft)</b> 500.033
<b>Point Type</b> TWC	<b>Latitude</b> N39°01'50.90468"	<b>Longitude</b> W87°54'33.43777"	<b>Ellipsoid Height (US Ft)</b> 395.757
<b>Location Photo</b>   NORTH			
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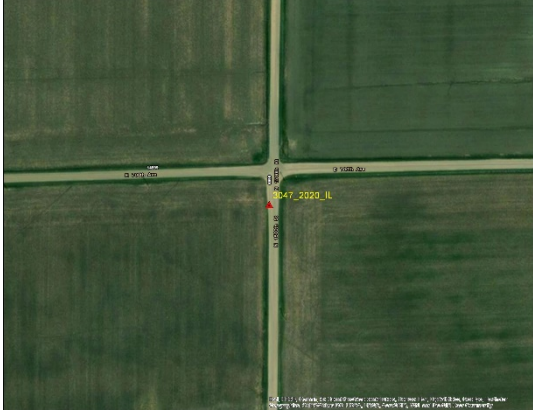




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3046_2020_IL	<b>Northing (US Ft)</b> 882348.252	<b>Easting (US Ft)</b> 1054630.926	<b>Elevation (US Ft)</b> 548.238
<b>Point Type</b> TWC	<b>Latitude</b> N39°05'22.11114"	<b>Longitude</b> W88°05'07.34950"	<b>Ellipsoid Height (US Ft)</b> 443.654
<b>Location Photo</b>   NORTH			
 <p>3046_2020_IL_3NW_20200221</p>		 <p>3046_2020_IL_3E_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3047_2020_IL	<b>Northing (US Ft)</b> 831855.412	<b>Easting (US Ft)</b> 1052403.203	<b>Elevation (US Ft)</b> 517.603
<b>Point Type</b> TWC	<b>Latitude</b> N38°57'03.09032"	<b>Longitude</b> W88°05'37.29014"	<b>Ellipsoid Height (US Ft)</b> 413.697
<b>Location Photo</b>   NORTH			
 <p>3047_2020_IL_3W_20200225</p>	 <p>3047_2020_IL_3N_20200225</p>		


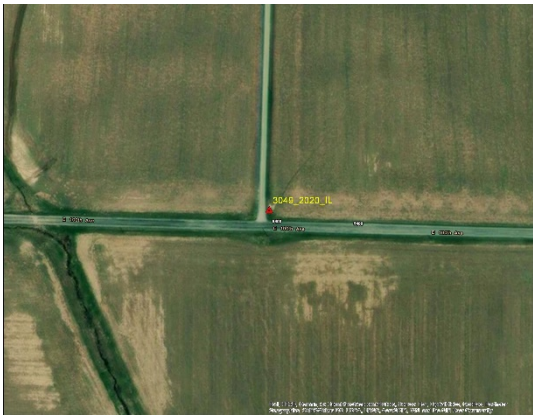




# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3048_2020_IL	<b>Northing (US Ft)</b> 818535.163	<b>Easting (US Ft)</b> 1030893.668	<b>Elevation (US Ft)</b> 578.530
<b>Point Type</b> TWC	<b>Latitude</b> N38°54'51.89890"	<b>Longitude</b> W88°10'09.86811"	<b>Ellipsoid Height (US Ft)</b> 474.850
<b>Location Photo</b>   NORTH			
 <p>3048_2020_IL_3S_20200225</p>		 <p>3048_2020_IL_3E_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3049_2020_IL	<b>Northing (US Ft)</b> 799370.526	<b>Easting (US Ft)</b> 1022627.970	<b>Elevation (US Ft)</b> 516.590
<b>Point Type</b> TWC	<b>Latitude</b> N38°51'42.60071"	<b>Longitude</b> W88°11'54.80283"	<b>Ellipsoid Height (US Ft)</b> 413.162
<b>Location Photo</b>   NORTH			
 <p>3049_2020_IL_3S_20200225</p>	 <p>3049_2020_IL_3E_20200225</p>		







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3050_2020_IL	<b>Northing (US Ft)</b> 815404.745	<b>Easting (US Ft)</b> 1010523.917	<b>Elevation (US Ft)</b> 537.526
<b>Point Type</b> TWC	<b>Latitude</b> N38°54'21.23932"	<b>Longitude</b> W88°14'27.62420"	<b>Ellipsoid Height (US Ft)</b> 433.942
<b>Location Photo</b>   NORTH			
 <p style="text-align: center;">3050_2020_IL_3N_20200225</p>		 <p style="text-align: center;">3050_2020_IL_3E_20200225</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3051_2020_IL	<b>Northing (US Ft)</b> 824789.395	<b>Easting (US Ft)</b> 1106667.754	<b>Elevation (US Ft)</b> 448.882
<b>Point Type</b> TWC	<b>Latitude</b> N38°55'51.27726"	<b>Longitude</b> W87°54'10.82455"	<b>Ellipsoid Height (US Ft)</b> 344.995
<b>Location Photo</b>   NORTH			
 <p>3051_2020_IL_3W_20200221</p>		 <p>3051_2020_IL_3E_20200221</p>	







# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3052_2020_IL	<b>Northing (US Ft)</b> 784376.333	<b>Easting (US Ft)</b> 1197419.230	<b>Elevation (US Ft)</b> 450.894
<b>Point Type</b> TWC	<b>Latitude</b> N38°49'06.04574"	<b>Longitude</b> W87°35'06.64333"	<b>Ellipsoid Height (US Ft)</b> 346.565
Location Photo   NORTH			
 <p>3052_2020_IL_3S_20200220</p>		 <p>3052_2020_IL_3N_20200220</p>	








# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3053_2020_IL	<b>Northing (US Ft)</b> 854312.596	<b>Easting (US Ft)</b> 1072594.321	<b>Elevation (US Ft)</b> 498.773
<b>Point Type</b> TWC	<b>Latitude</b> N39°00'44.45867"	<b>Longitude</b> W88°01'20.73582"	<b>Ellipsoid Height (US Ft)</b> 394.572
<b>Location Photo</b>   NORTH			
 <p>3053_2020_IL_3W_20200225</p>		 <p>3053_2020_IL_3N_20200225</p>	



# GCP OBSERVATION LOG

<b>Project Number</b> 80713	<b>Project Name</b> Wabash Basin LiDAR	<b>Company</b> Woolpert	<b>Field Operator</b> Subconsultant
<b>Coordinate System</b> United States/State Plane 1983	<b>Hor. Datum</b> NAD 1983 (Conus)	<b>Ver. Datum</b> NAVD88	<b>Zone</b> Illinois East 1201
<b>Station ID</b> 3054_2020_IL	<b>Northing (US Ft)</b> 811091.430	<b>Easting (US Ft)</b> 1094650.302	<b>Elevation (US Ft)</b> 461.940
<b>Point Type</b> TWC	<b>Latitude</b> N38°53'36.41671"	<b>Longitude</b> W87°56'43.63701"	<b>Ellipsoid Height (US Ft)</b> 358.232
<b>Location Photo</b>   NORTH			
 <p>3054_2020_IL_3W_20200221</p>		 <p>3054_2020_IL_3N_20200221</p>	



# Section 4: Geodetic Control Information and Resources

This section contains the solutions returned from Online Positioning User Service(OPUS) and the Australian Online Positioning (AUS POS) for the temporary control station that was used to establish 3-dimensional coordinates for each of the newly established ground control survey points for the project.

# The NGS Data Sheet

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

PROGRAM = datasheet95, VERSION = 8.12.5.7

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = APRIL 27, 2020
KB0261 *****
KB0261 DESIGNATION - A 176
KB0261 PID - KB0261
KB0261 STATE/COUNTY- IL/JASPER
KB0261 COUNTRY - US
KB0261 USGS QUAD - ROSE HILL (2018)
KB0261
KB0261 *CURRENT SURVEY CONTROL
KB0261
KB0261* NAD 83(2011) POSITION- 39 00 48.39018(N) 088 08 50.27338(W) ADJUSTED
KB0261* NAD 83(2011) ELLIP HT- 120.751 (meters) (06/27/12) ADJUSTED
KB0261* NAD 83(2011) EPOCH - 2010.00
KB0261* NAVD 88 ORTHO HEIGHT - 152.525 (meters) 500.41 (feet) ADJUSTED
KB0261
KB0261 GEOID HEIGHT - -31.763 (meters) GEOID18
KB0261 NAD 83(2011) X - 160,437.599 (meters) COMP
KB0261 NAD 83(2011) Y - -4,959,887.768 (meters) COMP
KB0261 NAD 83(2011) Z - 3,993,552.614 (meters) COMP
KB0261 LAPLACE CORR - -0.06 (seconds) DEFLEC18
KB0261 DYNAMIC HEIGHT - 152.434 (meters) 500.11 (feet) COMP
KB0261 MODELED GRAVITY - 980,028.3 (mgal) NAVD 88
KB0261
KB0261 VERT ORDER - FIRST CLASS II
KB0261
KB0261 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KB0261 Standards:
KB0261 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
KB0261 Horiz Ellip SD_N SD_E SD_h (unitless)
KB0261 -----
KB0261 NETWORK 0.47 0.76 0.21 0.17 0.39 0.05329633
KB0261 -----
KB0261 Click here for local accuracies and other accuracy information.
KB0261
KB0261
KB0261.The horizontal coordinates were established by GPS observations
KB0261.and adjusted by the National Geodetic Survey in June 2012.
KB0261
KB0261.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KB0261.been affixed to the stable North American tectonic plate. See
KB0261.NA2011 for more information.
KB0261
KB0261.The horizontal coordinates are valid at the epoch date displayed above
KB0261.which is a decimal equivalence of Year/Month/Day.
KB0261
KB0261.The orthometric height was determined by differential leveling and

```



KB0261\_PROJECTION: PROJECTING 8 CENTIMETERS  
 KB0261\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 KB0261\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 KB0261+STABILITY: SURFACE MOTION  
 KB0261\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 KB0261+SATELLITE: SATELLITE OBSERVATIONS - April 07, 2020

KB0261

KB0261	HISTORY	- Date	Condition	Report By
KB0261	HISTORY	- 1956	MONUMENTED	CGS
KB0261	HISTORY	- 19970228	GOOD	NGS
KB0261	HISTORY	- 19990927	GOOD	ILDT
KB0261	HISTORY	- 20070909	GOOD	ILDT
KB0261	HISTORY	- 20100804	GOOD	ILDT
KB0261	HISTORY	- 20100925	GOOD	PB
KB0261	HISTORY	- 20200407	GOOD	ILDT

KB0261

KB0261 STATION DESCRIPTION

KB0261

KB0261'DESCRIBED BY COAST AND GEODETIC SURVEY 1956

KB0261'1.8 MI N FROM NEWTON.

KB0261'ABOUT 1.75 MILES NORTH ALONG THE ILLINOIS CENTRAL RAILROAD FROM  
 KB0261'THE STATION AT NEWTON, ABOUT 0.4 MILE SOUTH OF MILE POST P 158,  
 KB0261'AT AN EAST-WEST GRAVEL ROAD CROSSING, 73 FEET EAST OF EAST RAIL,  
 KB0261'22 FEET SOUTH OF CENTER LINE OF ROAD, 9 FEET EAST OF CENTER  
 KB0261'LINE OF A FIELD ROAD SOUTH, 2 FEET WEST OF A TELEPHONE POLE ON  
 KB0261'AN EAST-WEST TELEPHONE LINE, 39 FEET EAST-SOUTHEAST OF SOUTHEAST  
 KB0261'CORNER OF A WOODEN CULVERT UNDER GRAVEL ROAD, 6 1/2 FEET  
 KB0261'SOUTH-SOUTHEAST OF EAST END OF A 15-INCH PIPE CULVERT UNDER  
 KB0261'FIELD ROAD SOUTH, ABOUT 1 FOOT ABOVE LEVEL OF TRACK AND SET IN  
 KB0261'THE TOP OF A CONCRETE POST PROJECTING 3 INCHES.

KB0261

KB0261 STATION RECOVERY (1997)

KB0261

KB0261'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (RKB)

KB0261'THE STATION IS LOCATED ABOUT 2 MI (3.2 KM) NORTH-NORTHEAST OF NEWTON.  
 KB0261'TO REACH FROM THE JUNCTION OF STATE ROUTES 33 AND 130, ABOUT 1.8 MI  
 KB0261'(2.9 KM) NORTHEAST OF NEWTON, GO NORTH ON ROUTE 130 FOR 0.25 MI (0.40  
 KB0261'KM) TO COUNTY ROAD 1125N. TURN LEFT, WEST, ON ROAD 1125N, FOR 0.4 MI  
 KB0261'(0.6 KM) TO THE STATION ON THE LEFT, NEAR THE REMAINS OF AN OLD  
 KB0261'RAILROAD BED, ACROSS THE ROAD FROM THE MIKE JAYNE RESIDENCE, 6.3 M  
 KB0261'(20.7 FT) SOUTH OF THE ROAD, 15.4 M (50.5 FT) WEST OF A 12-INCH PINE  
 KB0261'TREE, 5.9 M (19.4 FT) SOUTHEAST OF THE END OF A METAL CULVERT PIPE,  
 KB0261'2.7 M (8.9 FT) SOUTHWEST OF THE END OF A METAL CULVERT PIPE, AND 8.6 M  
 KB0261'(28.2 FT) EAST OF A FENCE END.

KB0261

KB0261 STATION RECOVERY (1999)

KB0261

KB0261'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 1999 (RA)

KB0261'RECOVERED AS DESCRIBED

KB0261'

KB0261

KB0261 STATION RECOVERY (2007)

KB0261

KB0261'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2007 (CW)

KB0261'FOUND AS DESCRIBED

KB0261  
KB0261 STATION RECOVERY (2010)  
KB0261  
KB0261 'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010 (RA)  
KB0261 'RECOVERED AS DESCRIBED  
KB0261  
KB0261 STATION RECOVERY (2010)  
KB0261  
KB0261 'RECOVERY NOTE BY PBS&J 2010 (MAZ)  
KB0261 'PICTURES ARE AVAILABLE  
KB0261  
KB0261 STATION RECOVERY (2020)  
KB0261  
KB0261 'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2020 (SAB)  
KB0261 '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...

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1      National Geodetic Survey,      Retrieval Date = APRIL 27, 2020
DM6901 *****
DM6901 DESIGNATION - CRAW 01
DM6901 PID - DM6901
DM6901 STATE/COUNTY- IL/CRAWFORD
DM6901 COUNTRY - US
DM6901 USGS QUAD - FLAT ROCK (2018)
DM6901
DM6901 *CURRENT SURVEY CONTROL
DM6901
DM6901* NAD 83(2011) POSITION- 38 52 57.45347(N) 087 41 04.87655(W) ADJUSTED
DM6901* NAD 83(2011) ELLIP HT- 127.110 (meters) (06/27/12) ADJUSTED
DM6901* NAD 83(2011) EPOCH - 2010.00
DM6901* NAVD 88 ORTHO HEIGHT - 158.847 (meters) 521.15 (feet) ADJUSTED
DM6901
DM6901 GEOID HEIGHT - -31.736 (meters) GEOID18
DM6901 NAD 83(2011) X - 200,847.432 (meters) COMP
DM6901 NAD 83(2011) Y - -4,967,557.424 (meters) COMP
DM6901 NAD 83(2011) Z - 3,982,262.051 (meters) COMP
DM6901 LAPLACE CORR - -2.04 (seconds) DEFLEC18
DM6901 DYNAMIC HEIGHT - 158.752 (meters) 520.84 (feet) COMP
DM6901 MODELED GRAVITY - 980,029.9 (mgal) NAVD 88
DM6901
DM6901 VERT ORDER - SECOND CLASS I
DM6901
DM6901 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
DM6901 Standards:
DM6901 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
DM6901 Horiz Ellip SD_N SD_E SD_h (unitless)
DM6901 -----
DM6901 NETWORK 0.60 0.96 0.28 0.20 0.49 -0.04681625
DM6901 -----
DM6901 Click here for local accuracies and other accuracy information.
DM6901
DM6901
DM6901.The horizontal coordinates were established by GPS observations
DM6901.and adjusted by the National Geodetic Survey in June 2012.
DM6901
DM6901.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
DM6901.been affixed to the stable North American tectonic plate. See
DM6901.NA2011 for more information.
DM6901
DM6901.The horizontal coordinates are valid at the epoch date displayed above
DM6901.which is a decimal equivalence of Year/Month/Day.
DM6901
DM6901.The orthometric height was determined by differential leveling and

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DM6901\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 DM6901+SATELLITE: SATELLITE OBSERVATIONS - March 30, 2012

DM6901

DM6901	HISTORY	- Date	Condition	Report By
DM6901	HISTORY	- 20100701	MONUMENTED	ILDT
DM6901	HISTORY	- 20120330	GOOD	TROTT

DM6901

DM6901 STATION DESCRIPTION

DM6901

DM6901'DESCRIBED BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010

DM6901'THE STATION IS LOCATED 1.4 MI (2.3 KM) SOUTHWEST OF FLAT ROCK IL.

DM6901'

DM6901'TO REACH FROM THE INTERSECTION OF IL 1 AND US 50 IN LAWRENCEVILLE GO

DM6901'NORTH ON IL 1, 10.5 MI (16.9 KM) TO THE STATION ON THE LEFT. IT IS

DM6901'APPROXIMATELY. 2.1 MI (3.4 KM) NORTH OF THE LAWRENCE-CRAWFORD COUNTY

DM6901'LINE. IT IS 55.2' WEST OF THE CENTERLINE OF IL 1 AND IT IS 25.5'

DM6901'SOUTH OF A FIELD ENTRANCE AND 1.1' EAST OF A FIBERGLASS WITNESS POST.

DM6901'THE MARK IS AN ALUMINUM DISK IN CONCRETE FLUSH WITH THE GROUND THAT

DM6901'CONTAINS A MAGNETIC REBAR.

DM6901

DM6901 STATION RECOVERY (2012)

DM6901

DM6901'RECOVERY NOTE BY TROTTER AND ASSOCIATES 2012 (JMM)

DM6901'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 = 8.12.5.7

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = APRIL 27, 2020
JA1649 *****
JA1649 DESIGNATION - J 294
JA1649 PID - JA1649
JA1649 STATE/COUNTY- IL/LAWRENCE
JA1649 COUNTRY - US
JA1649 USGS QUAD - LAWRENCEVILLE (2018)
JA1649
JA1649 *CURRENT SURVEY CONTROL
JA1649
JA1649* NAD 83(2011) POSITION- 38 43 46.10077(N) 087 40 28.29621(W) ADJUSTED
JA1649* NAD 83(2011) ELLIP HT- 98.073 (meters) (06/27/12) ADJUSTED
JA1649* NAD 83(2011) EPOCH - 2010.00
JA1649* NAVD 88 ORTHO HEIGHT - 129.697 (meters) 425.51 (feet) ADJUSTED
JA1649
JA1649 GEOID HEIGHT - -31.629 (meters) GEOID18
JA1649 NAD 83(2011) X - 202,159.828 (meters) COMP
JA1649 NAD 83(2011) Y - -4,978,145.348 (meters) COMP
JA1649 NAD 83(2011) Z - 3,968,994.564 (meters) COMP
JA1649 LAPLACE CORR - -2.09 (seconds) DEFLEC18
JA1649 DYNAMIC HEIGHT - 129.618 (meters) 425.26 (feet) COMP
JA1649 MODELED GRAVITY - 980,015.4 (mgal) NAVD 88
JA1649
JA1649 VERT ORDER - FIRST CLASS II
JA1649
JA1649 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
JA1649 Standards:
JA1649 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
JA1649 Horiz Ellip SD_N SD_E SD_h (unitless)
JA1649 -----
JA1649 NETWORK 1.07 1.51 0.48 0.38 0.77 -0.04239986
JA1649 -----
JA1649 Click here for local accuracies and other accuracy information.
JA1649
JA1649
JA1649.The horizontal coordinates were established by GPS observations
JA1649.and adjusted by the National Geodetic Survey in June 2012.
JA1649
JA1649.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
JA1649.been affixed to the stable North American tectonic plate. See
JA1649.NA2011 for more information.
JA1649
JA1649.The horizontal coordinates are valid at the epoch date displayed above
JA1649.which is a decimal equivalence of Year/Month/Day.
JA1649
JA1649.The orthometric height was determined by differential leveling and
JA1649.adjusted by the NATIONAL GEODETIC SURVEY
JA1649.in June 1991.
    
```

JA1649

JA1649.Significant digits in the geoid height do not necessarily reflect accuracy.

JA1649.GEOID18 height accuracy estimate available [here](#).

JA1649

JA1649.Click [photographs](#) - Photos may exist for this station.

JA1649

JA1649.The X, Y, and Z were computed from the position and the ellipsoidal ht.

JA1649

JA1649.The Laplace correction was computed from DEFLEC18 derived deflections.

JA1649

JA1649.The ellipsoidal height was determined by GPS observations

JA1649.and is referenced to NAD 83.

JA1649

JA1649.The dynamic height is computed by dividing the NAVD 88

JA1649.geopotential number by the normal gravity value computed on the

JA1649.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

JA1649.degrees latitude ( $g = 980.6199$  gals.).

JA1649

JA1649.The modeled gravity was interpolated from observed gravity values.

JA1649

JA1649. The following values were computed from the NAD 83(2011) position.

JA1649

JA1649;		North	East	Units	Scale Factor	Converg.
JA1649;SPC IL E	-	229,152.801	357,285.574	MT	1.00001539	+0 24 43.9
JA1649;SPC IL E	-	751,812.15	1,172,194.42	sFT	1.00001539	+0 24 43.9
JA1649;UTM 16	-	4,286,972.474	441,369.487	MT	0.99964233	-0 25 19.3

JA1649

JA1649! - Elev Factor x Scale Factor = Combined Factor

JA1649!SPC IL E - 0.99998461 x 1.00001539 = 1.00000000

JA1649!UTM 16 - 0.99998461 x 0.99964233 = 0.99962695

JA1649

JA1649\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16SDH4136986972(NAD 83)

JA1649

JA1649 SUPERSEDED SURVEY CONTROL

JA1649

JA1649 NAD 83(2007)- 38 43 46.10095(N) 087 40 28.29694(W) AD(2002.00) 1

JA1649 ELLIP H (06/09/11) 98.082 (m) GP(2002.00) 3 2

JA1649 NAVD 88 129.70 (m) 425.5 (f) LEVELING 3

JA1649

JA1649.Superseded values are not recommended for survey control.

JA1649

JA1649.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

JA1649.See file [dsdata.pdf](#) to determine how the superseded data were derived.

JA1649

JA1649\_MARKER: F = FLANGE-ENCASED ROD

JA1649\_SETTING: 15 = METAL ROD DRIVEN INTO GROUND. SEE TEXT FOR ADDITIONAL

JA1649+WITH SETTING: INFORMATION.

JA1649\_STAMPING: J 294 1986

JA1649\_MARK LOGO: NGS

JA1649\_PROJECTION: FLUSH

JA1649\_MAGNETIC: I = MARKER IS A STEEL ROD

JA1649\_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY

JA1649\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

JA1649+SATELLITE: SATELLITE OBSERVATIONS - July 12, 2013

JA1649\_ROD/PIPE-DEPTH: 1.7 meters

JA1649

JA1649	HISTORY	- Date	Condition	Report By
JA1649	HISTORY	- 1986	MONUMENTED	NGS
JA1649	HISTORY	- 20100804	GOOD	ILDT
JA1649	HISTORY	- 20120403	GOOD	TROTT
JA1649	HISTORY	- 20130712	GOOD	PATRIC

JA1649

JA1649

STATION DESCRIPTION

JA1649

JA1649'DESCRIBED BY NATIONAL GEODETIC SURVEY 1986

JA1649'IN LAWRENCEVILLE.

JA1649'IN LAWRENCEVILLE, AT THE INTERSECTION OF STATE AND 4TH STREETS, 27.6 M  
 JA1649'(90.6 FT) EAST-SOUTHEAST OF THE SOUTHEAST CORNER OF A LIQUOR STORE,  
 JA1649'7.7 M (25.3 FT) NORTH OF THE CENTERLINE OF STATE STREET, 3.9 M (12.8  
 JA1649'FT) WEST OF THE CENTER OF A DRIVEWAY, 1.8 M (5.9 FT) EAST OF THE  
 JA1649'EXTENDED CENTER OF 4TH STREET, 1.0 M (3.3 FT) NORTH OF A CURB, AND  
 JA1649'0.6 M (2.0 FT) WEST OF A UTILITY POLE. NOTE--ACCESS TO DATUM POINT IS  
 JA1649'HAD THROUGH A 5-INCH LOGO CAP.

JA1649'THE MARK IS ABOVE LEVEL WITH STATE STREET.

JA1649

JA1649

STATION RECOVERY (2010)

JA1649

JA1649'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010 (RA)

JA1649'RECOVERED AS DESCRIBED

JA1649

JA1649

STATION RECOVERY (2012)

JA1649

JA1649'RECOVERY NOTE BY TROTTER AND ASSOCIATES 2012 (JMM)

JA1649'RECOVERED IN GOOD CONDITION.

JA1649

JA1649

STATION RECOVERY (2013)

JA1649

JA1649'RECOVERY NOTE BY PATRICK ENGINEERING INCORPORATED 2013 (SAL)

JA1649'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 = 8.12.5.7

Starting Datasheet Retrieval...

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1      National Geodetic Survey,   Retrieval Date = APRIL 27, 2020
JB0100 *****
JB0100 DESIGNATION - V 173 RESET 1965
JB0100 PID - JB0100
JB0100 STATE/COUNTY- IL/JASPER
JB0100 COUNTRY - US
JB0100 USGS QUAD - SAINTE MARIE (2018)
JB0100
JB0100 *CURRENT SURVEY CONTROL
JB0100
JB0100* NAD 83(2011) POSITION- 38 54 26.60616(N) 088 05 45.39761(W) ADJUSTED
JB0100* NAD 83(2011) ELLIP HT- 121.213 (meters) (06/27/12) ADJUSTED
JB0100* NAD 83(2011) EPOCH - 2010.00
JB0100* NAVD 88 ORTHO HEIGHT - 152.84 (meters) 501.4 (feet) RESET
JB0100
JB0100 GEOID HEIGHT - -31.612 (meters) GEOID18
JB0100 NAD 83(2011) X - 165,129.078 (meters) COMP
JB0100 NAD 83(2011) Y - -4,967,141.201 (meters) COMP
JB0100 NAD 83(2011) Z - 3,984,398.093 (meters) COMP
JB0100 LAPLACE CORR - -0.28 (seconds) DEFLEC18
JB0100 VERT ORDER - THIRD
JB0100
JB0100 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
JB0100 Standards:
JB0100 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
JB0100 Horiz Ellip SD_N SD_E SD_h (unitless)
JB0100 -----
JB0100 NETWORK 0.58 0.86 0.27 0.19 0.44 0.04567396
JB0100 -----
JB0100 Click here for local accuracies and other accuracy information.
JB0100
JB0100
JB0100.The horizontal coordinates were established by GPS observations
JB0100.and adjusted by the National Geodetic Survey in June 2012.
JB0100
JB0100.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
JB0100.been affixed to the stable North American tectonic plate. See
JB0100.NA2011 for more information.
JB0100
JB0100.The horizontal coordinates are valid at the epoch date displayed above
JB0100.which is a decimal equivalence of Year/Month/Day.
JB0100
JB0100.The orthometric height was computed from unverified reset data.
JB0100
JB0100.No vertical observational check was made to the station.
JB0100
JB0100.Significant digits in the geoid height do not necessarily reflect accuracy.
JB0100.GEOID18 height accuracy estimate available here.

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JB0100

JB0100.Click [photographs](#) - Photos may exist for this station.

JB0100

JB0100.The X, Y, and Z were computed from the position and the ellipsoidal ht.

JB0100

JB0100.The Laplace correction was computed from DEFLEC18 derived deflections.

JB0100

JB0100.The ellipsoidal height was determined by GPS observations

JB0100.and is referenced to NAD 83.

JB0100

JB0100. The following values were computed from the NAD 83(2011) position.

JB0100

JB0100;		North	East	Units	Scale Factor	Converg.
JB0100;SPC IL E	-	248,724.095	320,590.481	MT	0.99998022	+0 08 56.7
JB0100;SPC IL E	-	816,022.30	1,051,803.94	sFT	0.99998022	+0 08 56.7
JB0100;UTM 16	-	4,307,070.527	404,975.485	MT	0.99971119	-0 41 18.1
JB0100!	-	Elev Factor	x	Scale Factor	=	Combined Factor
JB0100!SPC IL E	-	0.99998098	x	0.99998022	=	0.99996120
JB0100!UTM 16	-	0.99998098	x	0.99971119	=	0.99969218

JB0100

JB0100\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16SDJ0497507070(NAD 83)

JB0100

#### SUPERSEDED SURVEY CONTROL

JB0100

JB0100	NAD 83(2007)-	38 54 26.60628(N)	088 05 45.39843(W)	AD(2002.00)	1
JB0100	ELLIP H (06/09/11)	121.238 (m)		GP(2002.00)	3 2
JB0100	NAVD 88	152.83 (m)	501.4 (f)	LEVELING	3
JB0100	NGVD 29 (??/??/??)	152.91 (m)	501.7 (f)	RESET	3

JB0100

JB0100.Superseded values are not recommended for survey control.

JB0100

JB0100.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

JB0100.See file [dsdata.pdf](#) to determine how the superseded data were derived.

JB0100

JB0100\_MARKER: DB = BENCH MARK DISK

JB0100\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

JB0100\_STAMPING: V 173 RESET 1965

JB0100\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

JB0100+STABILITY: SURFACE MOTION

JB0100\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

JB0100+SATELLITE: SATELLITE OBSERVATIONS - August 04, 2010

JB0100

JB0100	HISTORY	- Date	Condition	Report By
JB0100	HISTORY	- 1965	MONUMENTED	CGS
JB0100	HISTORY	- 20100804	GOOD	ILDT

JB0100

JB0100 STATION DESCRIPTION

JB0100

JB0100'DESCRIBED BY COAST AND GEODETIC SURVEY 1965

JB0100'7 MI SE FROM NEWTON.

JB0100'6.95 MILES SOUTHEAST ALONG STATE HIGHWAY 130 FROM THE

JB0100'NORTHEAST CORNER OF THE COURTHOUSE SQUARE IN NEWTON, AT AN

JB0100'EAST-WEST GRAVEL ROAD CROSSING, 102 FEET SOUTHEAST OF THE



JB0100'CENTERLINE OF THE EAST-WEST ROAD, 49.5 FEET NORTHEAST OF THE  
JB0100'CENTERLINE OF THE HIGHWAY, 28 FEET SOUTHWEST OF THE SOUTHWEST  
JB0100'RAIL OF RAILROAD, 2 FEET NORTHWEST OF A POWERLINE POLE AND 1.5  
JB0100'FEET SOUTHEAST OF A METAL WITNESS POST. THE POST PROJECTS 3  
JB0100'INCHES ABOVE THE GROUND.

JB0100

JB0100 STATION RECOVERY (2010)

JB0100

JB0100'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010 (RA)

JB0100'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 = 8.12.5.7

Starting Datasheet Retrieval...

```

1      National Geodetic Survey,   Retrieval Date = APRIL 27, 2020
KA1352 *****
KA1352 CBN          -   This is a Cooperative Base Network Control Station.
KA1352 DESIGNATION -   W 90
KA1352 PID         -   KA1352
KA1352 STATE/COUNTY-  IL/CRAWFORD
KA1352 COUNTRY    -   US
KA1352 USGS QUAD   -   MEROM (2019)
KA1352
KA1352                                *CURRENT SURVEY CONTROL
KA1352
KA1352* NAD 83(2011) POSITION- 39 00 03.68725(N) 087 37 17.66997(W)   ADJUSTED
KA1352* NAD 83(2011) ELLIP HT- 104.447 (meters)                    (06/27/12)   ADJUSTED
KA1352* NAD 83(2011) EPOCH   - 2010.00
KA1352* NAVD 88 ORTHO HEIGHT - 136.378 (meters)                    447.43 (feet) ADJUSTED
KA1352
KA1352 GEOID HEIGHT   -          -31.923 (meters)                    GEOID18
KA1352 NAD 83(2011) X   -          205,975.637 (meters)                    COMP
KA1352 NAD 83(2011) Y   -         -4,959,061.173 (meters)                    COMP
KA1352 NAD 83(2011) Z   -          3,992,471.120 (meters)                    COMP
KA1352 LAPLACE CORR    -           -2.41 (seconds)                    DEFLEC18
KA1352 DYNAMIC HEIGHT  -           136.297 (meters)                    447.17 (feet) COMP
KA1352 MODELED GRAVITY -          980,032.1 (mgal)                    NAVD 88
KA1352
KA1352 VERT ORDER      -   FIRST      CLASS II
KA1352
KA1352 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KA1352 Standards:
KA1352          FGDC (95% conf, cm)      Standard deviation (cm)      CorrNE
KA1352          Horiz Ellip              SD_N   SD_E   SD_h          (unitless)
KA1352 -----
KA1352 NETWORK      0.40    0.76              0.18   0.14   0.39          0.01644086
KA1352 -----
KA1352 Click here for local accuracies and other accuracy information.
KA1352
KA1352
KA1352.The horizontal coordinates were established by GPS observations
KA1352.and adjusted by the National Geodetic Survey in June 2012.
KA1352
KA1352.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KA1352.been affixed to the stable North American tectonic plate. See
KA1352.NA2011 for more information.
KA1352
KA1352.The horizontal coordinates are valid at the epoch date displayed above
KA1352.which is a decimal equivalence of Year/Month/Day.
KA1352
KA1352.The orthometric height was determined by differential leveling and
KA1352.adjusted by the NATIONAL GEODETIC SURVEY

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KA1352.in June 1991.

KA1352

KA1352.Significant digits in the geoid height do not necessarily reflect accuracy.

KA1352.GEOID18 height accuracy estimate available [here](#).

KA1352

KA1352.Click [photographs](#) - Photos may exist for this station.

KA1352

KA1352.The X, Y, and Z were computed from the position and the ellipsoidal ht.

KA1352

KA1352.The Laplace correction was computed from DEFLEC18 derived deflections.

KA1352

KA1352.The ellipsoidal height was determined by GPS observations

KA1352.and is referenced to NAD 83.

KA1352

KA1352.The dynamic height is computed by dividing the NAVD 88

KA1352.geopotential number by the normal gravity value computed on the

KA1352.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

KA1352.degrees latitude (g = 980.6199 gals.).

KA1352

KA1352.The modeled gravity was interpolated from observed gravity values.

KA1352

KA1352. The following values were computed from the NAD 83(2011) position.

KA1352

KA1352;		North	East	Units	Scale Factor	Converg.
KA1352;SPC IL E	-	259,332.760	361,654.969	MT	1.00002179	+0 26 52.6
KA1352;SPC IL E	-	850,827.56	1,186,529.68	sFT	1.00002179	+0 26 52.6
KA1352;SPC IN W	-	416,747.817	853,376.143	MT	0.99999342	-0 20 19.5
KA1352;SPC IN W	-	1,367,280.13	2,799,784.90	sFT	0.99999342	-0 20 19.5
KA1352;UTM 16	-	4,317,073.981	446,177.286	MT	0.99963567	-0 23 28.3

KA1352

KA1352! Elev Factor x Scale Factor = Combined Factor

KA1352!SPC IL E - 0.99998361 x 1.00002179 = 1.00000540

KA1352!SPC IN W - 0.99998361 x 0.99999342 = 0.99997703

KA1352!UTM 16 - 0.99998361 x 0.99963567 = 0.99961929

KA1352

KA1352\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16SDJ4617717073(NAD 83)

KA1352

KA1352 SUPERSEDED SURVEY CONTROL

KA1352

KA1352	NAD 83(2007)-	39 00 03.68736(N)	087 37 17.67080(W)	AD(2002.00)	0
KA1352	ELLIP H (02/10/07)	104.457 (m)		GP(2002.00)	
KA1352	ELLIP H (10/15/04)	104.453 (m)		GP( )	4 2
KA1352	NAD 83(1997)-	39 00 03.68731(N)	087 37 17.67089(W)	AD( )	B
KA1352	ELLIP H (04/10/98)	104.457 (m)		GP( )	4 1
KA1352	NAD 83(1986)-	39 00 03.69541(N)	087 37 17.66400(W)	AD( )	1
KA1352	NAVD 88	136.38 (m)	447.4 (f)	LEVELING	3
KA1352	NGVD 29 (??/??/92)	136.511 (m)	447.87 (f)	ADJ UNCH	1 2
KA1352	NGVD 29	136.51 (m)	447.9 (f)	LEVELING	3

KA1352

KA1352.Superseded values are not recommended for survey control.

KA1352

KA1352.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

KA1352.See file [dsdata.pdf](#) to determine how the superseded data were derived.

KA1352

KA1352\_MARKER: DB = BENCH MARK DISK  
 KA1352\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 KA1352\_STAMPING: W 90 1935  
 KA1352\_MARK LOGO: CGS  
 KA1352\_PROJECTION: RECESSED 2 CENTIMETERS  
 KA1352\_MAGNETIC: N = NO MAGNETIC MATERIAL  
 KA1352\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 KA1352+STABILITY: SURFACE MOTION  
 KA1352\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR  
 KA1352+SATELLITE: SATELLITE OBSERVATIONS - January 13, 2014

KA1352

KA1352	HISTORY	- Date	Condition	Report By
KA1352	HISTORY	- 1935	MONUMENTED	CGS
KA1352	HISTORY	- 1956	GOOD	CGS
KA1352	HISTORY	- 19901012	GOOD	NGS
KA1352	HISTORY	- 19970522	GOOD	ILDT
KA1352	HISTORY	- 19970622	GOOD	NGS
KA1352	HISTORY	- 19990503	GOOD	CMT
KA1352	HISTORY	- 19990927	GOOD	ILDT
KA1352	HISTORY	- 20100517	GOOD	ILDT
KA1352	HISTORY	- 20100804	GOOD	ILDT
KA1352	HISTORY	- 20140113	GOOD	INDOT

KA1352

KA1352

#### STATION DESCRIPTION

KA1352

KA1352'DESCRIBED BY COAST AND GEODETIC SURVEY 1956

KA1352'AT PALESTINE.

KA1352'AT PALESTINE, ABOUT 0.45 MILE WEST ALONG STATE HIGHWAY 33 FROM THE  
 KA1352'INTERSECTION OF MAIN STREET, THENCE ABOUT 0.25 MILE SOUTH ALONG  
 KA1352'WASHINGTON STREET, ABOUT 0.35 MILE SOUTH ALONG WASHINGTON STREET  
 KA1352'FROM CROSSING OF THE ILLINOIS CENTRAL RAILROAD, AT PALESTINE  
 KA1352'TOWNSHIP HIGH SCHOOL, 25 FEET WEST OF CENTER LINE OF STREET,  
 KA1352'88 1/2 FEET EAST OF CENTER OF EAST DOORWAY ENTRANCE TO SCHOOL,  
 KA1352'13 FEET SOUTH-SOUTHWEST OF AN 8-INCH MAPLE TREE, 7 1/2  
 KA1352'FEET NORTH-NORTHWEST TO THE NORTHWEST CORNER OF BRICK COLUMN  
 KA1352'ON THE NORTH SIDE OF WALK LEADING TO EAST ENTRANCE TO SCHOOL,  
 KA1352'9 1/4 FEET NORTH OF NORTH EDGE OF WALK TO ENTRANCE, 6 1/2  
 KA1352'FEET WEST OF WEST EDGE OF WALK ALONG WEST SIDE OF WASHINGTON  
 KA1352'STREET, ABOUT LEVEL WITH WALKS AND SET IN THE TOP OF A CONCRETE  
 KA1352'POST FLUSH WITH GROUND.

KA1352

KA1352

#### STATION RECOVERY (1990)

KA1352

KA1352'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1990

KA1352'STATION IS LOCATED IN THE WEST SECTION OF PALESTINE, IN THE FRONT LAWN  
 KA1352'OF THE PALESTINE TOWNSHIP HIGH SCHOOL, AT THE ENTRANCE PILLARS, IN  
 KA1352'SOUTH CENTRAL SECTION 34, T 7 N, 9 11 W. OWNERSHIP--SCHOOL DISTRICT  
 KA1352'3, C/O SUPERINTENDENT DARREL BROWN, 201 SOUTH MAIN STREET, PALESTINE,  
 KA1352'IL 62451. PHONE NUMBER IS 618-586-2713. PERMISSION BY MR. BROWN.  
 KA1352'(NOTE--CALL IN ADVANCE BECAUSE THERE MAY BE A PROBLEM PARKING AT  
 KA1352'STATION. ARRANGEMENTS CAN BE MADE TO PARK ON THE GRASS. THE SCIENCE  
 KA1352'CLASS MAY WANT TO OBSERVE NGS IN ACTION. OBSERVER SHOULD HAVE SOME  
 KA1352'HANDOUTS, ETC, HANDY JUST IN CASE.)TO REACH FROM THE JUNCTION OF  
 KA1352'JACKSON STREET (STATE HIGHWAY 33) AND GRAND PRAIRIE STREET IN THE  
 KA1352'EAST SECTION OF PALESTINE, GO WEST ON GRAND PRAIRIE STREET FOR 0.98

KA1352'KM (0.61 MI) TO A T-STREET. TURN LEFT, SOUTH, ON WASHINGTON STREET  
 KA1352'FOR 0.11 KM (0.07 MI) TO THE SCHOOL ENTRANCE AND THE STATION ON THE  
 KA1352'RIGHT.

KA1352'STATION MARK IS SET IN THE TOP OF A 15-CM SQUARE CONCRETE POST 2 CM  
 KA1352'BELOW GROUND. IT IS 2.9 M (9.5 FT) NORTH OF NORTH EDGE OF THE  
 KA1352'ENTRANCE SIDEWALK, 1.9 M (6.2 FT) WEST OF WEST EDGE OF THE STREET  
 KA1352'SIDEWALK, 2.1 M (6.9 FT) NORTH-NORTHWEST OF NORTHWEST CORNER OF THE  
 KA1352'NORTH BRICK ENTRANCE PILLAR, 13.3 M (43.6 FT) SOUTHWEST OF THE  
 KA1352'FLAGPOLE, AND 25.2 M (82.7 FT) EAST-NORTHEAST OF THE NORTHEAST CORNER  
 KA1352'OF THE BOTTOM STEP AT BUILDING ENTRANCE.

KA1352

KA1352

STATION RECOVERY (1997)

KA1352

KA1352'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 1997 (LK)  
 KA1352'THE STATION IS LOCATED IN THE WEST PART OF PALESTINE, IN THE FRONT  
 KA1352'LAWN OF THE PALESTINE TOWNSHIP HIGH SCHOOL, AT THE ENTRANCE PILLARS.  
 KA1352'TO REACH FROM THE INTERSECTION OF STATE ROUTE 33, JACKSON STREET, AND  
 KA1352'GRAND PRAIRIE STREET IN THE EAST PART OF PALESTINE, GO WEST ON GRAND  
 KA1352'PRAIRIE STREET FOR 0.6 MI (1.0 KM) TO A T-STREET. TURN LEFT, SOUTH,  
 KA1352'ON WASHINGTON STREET FOR 0.07 MI (0.11 KM) TO THE SCHOOL ENTRANCE AND  
 KA1352'THE STATION ON THE RIGHT, 2.9 M (9.5 FT) NORTH OF THE NORTH EDGE OF  
 KA1352'THE ENTRANCE SIDEWALK, 1.9 M (6.2 FT) WEST OF THE WEST EDGE OF THE  
 KA1352'STREET SIDEWALK, 2.1 M (6.9 FT) NORTH-NORTHWEST OF THE NORTHWEST  
 KA1352'CORNER OF THE NORTH BRICK ENTRANCE PILLAR, 13.3 M (43.6 FT) SOUTHWEST  
 KA1352'OF THE FLAGPOLE, AND 25.2 M (82.7 FT) EAST-NORTHEAST OF THE NORTHEAST  
 KA1352'CORNER OF THE BOTTOM STEP AT BUILDING ENTRANCE.

KA1352

KA1352

STATION RECOVERY (1997)

KA1352

KA1352'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)

KA1352'RECOVERED AS DESCRIBED.

KA1352

KA1352

STATION RECOVERY (1999)

KA1352

KA1352'RECOVERY NOTE BY CRAWFORD MURPHY AND TILLY INC 1999 (KWS)

KA1352'RECOVERED IN GOOD CONDITION.

KA1352

KA1352

STATION RECOVERY (1999)

KA1352

KA1352'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 1999 (RA)

KA1352'RECOVERED AS DESCRIBED

KA1352'

KA1352

KA1352

STATION RECOVERY (2010)

KA1352

KA1352'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010 (MW)

KA1352'RECOVERED IN GOOD CONDITION.

KA1352

KA1352

STATION RECOVERY (2010)

KA1352

KA1352'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010 (RA)

KA1352'RECOVERED AS DESCRIBED

KA1352

KA1352

STATION RECOVERY (2014)

KA1352

KA1352'RECOVERY NOTE BY INDIANA DEPARTMENT OF TRANSPORTATION 2014 (GK)  
KA1352'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 = 8.12.5.7

Starting Datasheet Retrieval...

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1      National Geodetic Survey,      Retrieval Date = APRIL 27, 2020
KB0257 *****
KB0257 DESIGNATION - X 175
KB0257 PID - KB0257
KB0257 STATE/COUNTY- IL/JASPER
KB0257 COUNTRY - US
KB0257 USGS QUAD - ROSE HILL (2018)
KB0257
KB0257 *CURRENT SURVEY CONTROL
KB0257
KB0257* NAD 83(2011) POSITION- 39 03 13.70360(N) 088 08 48.29827(W) ADJUSTED
KB0257* NAD 83(2011) ELLIP HT- 135.006 (meters) (06/27/12) ADJUSTED
KB0257* NAD 83(2011) EPOCH - 2010.00
KB0257* NAVD 88 ORTHO HEIGHT - 166.832 (meters) 547.35 (feet) ADJUSTED
KB0257
KB0257 GEOID HEIGHT - -31.825 (meters) GEOID18
KB0257 NAD 83(2011) X - 160,394.182 (meters) COMP
KB0257 NAD 83(2011) Y - -4,957,076.597 (meters) COMP
KB0257 NAD 83(2011) Z - 3,997,042.512 (meters) COMP
KB0257 LAPLACE CORR - -0.12 (seconds) DEFLEC18
KB0257 DYNAMIC HEIGHT - 166.733 (meters) 547.02 (feet) COMP
KB0257 MODELED GRAVITY - 980,029.7 (mgal) NAVD 88
KB0257
KB0257 VERT ORDER - FIRST CLASS II
KB0257
KB0257 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KB0257 Standards:
KB0257 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
KB0257 Horiz Ellip SD_N SD_E SD_h (unitless)
KB0257 -----
KB0257 NETWORK 0.75 1.08 0.31 0.30 0.55 0.10881810
KB0257 -----
KB0257 Click here for local accuracies and other accuracy information.
KB0257
KB0257
KB0257.The horizontal coordinates were established by GPS observations
KB0257.and adjusted by the National Geodetic Survey in June 2012.
KB0257
KB0257.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KB0257.been affixed to the stable North American tectonic plate. See
KB0257.NA2011 for more information.
KB0257
KB0257.The horizontal coordinates are valid at the epoch date displayed above
KB0257.which is a decimal equivalence of Year/Month/Day.
KB0257
KB0257.The orthometric height was determined by differential leveling and
KB0257.adjusted by the NATIONAL GEODETIC SURVEY
KB0257.in June 1991.

```

KB0257  
 KB0257.Significant digits in the geoid height do not necessarily reflect accuracy.  
 KB0257.GEOID18 height accuracy estimate available [here](#).  
 KB0257  
 KB0257.Click [photographs](#) - Photos may exist for this station.  
 KB0257  
 KB0257.The X, Y, and Z were computed from the position and the ellipsoidal ht.  
 KB0257  
 KB0257.The Laplace correction was computed from DEFLEC18 derived deflections.  
 KB0257  
 KB0257.The ellipsoidal height was determined by GPS observations  
 KB0257.and is referenced to NAD 83.  
 KB0257  
 KB0257.The dynamic height is computed by dividing the NAVD 88  
 KB0257.geopotential number by the normal gravity value computed on the  
 KB0257.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45  
 KB0257.degrees latitude (g = 980.6199 gals.).  
 KB0257  
 KB0257.The modeled gravity was interpolated from observed gravity values.  
 KB0257  
 KB0257. The following values were computed from the NAD 83(2011) position.  
 KB0257  

KB0257;		North	East	Units	Scale Factor	Converg.
KB0257;SPC IL E	-	264,967.850	316,150.438	MT	0.99997821	+0 07 03.2
KB0257;SPC IL E	-	869,315.35	1,037,236.90	sFT	0.99997821	+0 07 03.2
KB0257;UTM 16	-	4,323,373.252	400,774.819	MT	0.99972123	-0 43 21.2

KB0257!		Elev Factor	x	Scale Factor	=	Combined Factor
KB0257!SPC IL E	-	0.99997882	x	0.99997821	=	0.99995703
KB0257!UTM 16	-	0.99997882	x	0.99972123	=	0.99970005

  
 KB0257\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16SDJ0077423373(NAD 83)  
 KB0257  
 KB0257 SUPERSEDED SURVEY CONTROL  
 KB0257  

KB0257	NAD 83(2007)-	39 03 13.70364(N)	088 08 48.29924(W)	AD(2002.00)	1
KB0257	ELLIP H (06/09/11)	135.031 (m)		GP(2002.00)	3 2
KB0257	NAVD 88	166.83 (m)	547.3 (f)	LEVELING	3
KB0257	NGVD 29 (??/??/92)	166.898 (m)	547.56 (f)	ADJ UNCH	1 2

  
 KB0257.Superseded values are not recommended for survey control.  
 KB0257  
 KB0257.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 KB0257.See file [dsdata.pdf](#) to determine how the superseded data were derived.  
 KB0257  
 KB0257\_MARKER: DB = BENCH MARK DISK  
 KB0257\_SETTING: 30 = SET IN A LIGHT STRUCTURE  
 KB0257\_SP\_SET: CULVERT  
 KB0257\_STAMPING: X 175 1956  
 KB0257\_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY  
 KB0257\_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR  
 KB0257+SATELLITE: SATELLITE OBSERVATIONS - July 26, 2012  
 KB0257  

KB0257	HISTORY	- Date	Condition	Report By
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KB0257 HISTORY - 1956 MONUMENTED CGS  
 KB0257 HISTORY - 20100804 GOOD ILDT  
 KB0257 HISTORY - 20120726 GOOD ILDT

KB0257

KB0257

KB0257

STATION DESCRIPTION

KB0257'DESCRIBED BY COAST AND GEODETIC SURVEY 1956

KB0257'AT FALMOUTH.

KB0257'AT FALMOUTH, ALONG THE ILLINOIS CENTRAL RAILROAD, ABOUT 0.4 MILE

KB0257'SOUTH OF MILE POST P 155, AT CROSSING OF MAIN EAST-WEST GRAVEL

KB0257'ROAD, 80 FEET WEST OF WEST RAIL, 14 FEET NORTH OF CENTER LINE

KB0257'OF ROAD, IN THE TOP OF THE EAST END OF NORTH HEAD WALL OF AN

KB0257'8-FOOT CONCRETE BOX CULVERT UNDER GRAVEL ROAD, AND ABOUT LEVEL

KB0257'WITH ROAD AND ABOUT 2 1/2 FEET BELOW LEVEL OF TRACK.

KB0257

KB0257

KB0257

STATION RECOVERY (2010)

KB0257'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010 (RA)

KB0257'RECOVERED AS DESCRIBED

KB0257

KB0257

KB0257

STATION RECOVERY (2012)

KB0257'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2012 (MW)

KB0257'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...

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1      National Geodetic Survey,      Retrieval Date = APRIL 27, 2020
JA1659 *****
JA1659 DESIGNATION - Z 294
JA1659 PID - JA1659
JA1659 STATE/COUNTY- IL/LAWRENCE
JA1659 COUNTRY - US
JA1659 USGS QUAD - SUMNER (2018)
JA1659
JA1659 *CURRENT SURVEY CONTROL
JA1659
JA1659* NAD 83(2011) POSITION- 38 43 01.59707(N) 087 50 52.87214(W) ADJUSTED
JA1659* NAD 83(2011) ELLIP HT- 111.955 (meters) (06/27/12) ADJUSTED
JA1659* NAD 83(2011) EPOCH - 2010.00
JA1659* NAVD 88 ORTHO HEIGHT - 143.395 (meters) 470.46 (feet) ADJUSTED
JA1659
JA1659 GEOID HEIGHT - -31.447 (meters) GEOID18
JA1659 NAD 83(2011) X - 187,117.596 (meters) COMP
JA1659 NAD 83(2011) Y - -4,979,603.373 (meters) COMP
JA1659 NAD 83(2011) Z - 3,967,932.576 (meters) COMP
JA1659 LAPLACE CORR - -1.25 (seconds) DEFLEC18
JA1659 DYNAMIC HEIGHT - 143.307 (meters) 470.17 (feet) COMP
JA1659 MODELED GRAVITY - 980,013.5 (mgal) NAVD 88
JA1659
JA1659 VERT ORDER - FIRST CLASS II
JA1659
JA1659 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
JA1659 Standards:
JA1659 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
JA1659 Horiz Ellip SD_N SD_E SD_h (unitless)
JA1659 -----
JA1659 NETWORK 0.61 0.94 0.28 0.21 0.48 -0.01308490
JA1659 -----
JA1659 Click here for local accuracies and other accuracy information.
JA1659
JA1659
JA1659.The horizontal coordinates were established by GPS observations
JA1659.and adjusted by the National Geodetic Survey in June 2012.
JA1659
JA1659.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
JA1659.been affixed to the stable North American tectonic plate. See
JA1659.NA2011 for more information.
JA1659
JA1659.The horizontal coordinates are valid at the epoch date displayed above
JA1659.which is a decimal equivalence of Year/Month/Day.
JA1659
JA1659.The orthometric height was determined by differential leveling and
JA1659.adjusted by the NATIONAL GEODETIC SURVEY
JA1659.in June 1991.

```

JA1659

JA1659.Significant digits in the geoid height do not necessarily reflect accuracy.

JA1659.GEOID18 height accuracy estimate available [here](#).

JA1659

JA1659.Click [photographs](#) - Photos may exist for this station.

JA1659

JA1659.The X, Y, and Z were computed from the position and the ellipsoidal ht.

JA1659

JA1659.The Laplace correction was computed from DEFLEC18 derived deflections.

JA1659

JA1659.The ellipsoidal height was determined by GPS observations

JA1659.and is referenced to NAD 83.

JA1659

JA1659.The dynamic height is computed by dividing the NAVD 88

JA1659.geopotential number by the normal gravity value computed on the

JA1659.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

JA1659.degrees latitude (g = 980.6199 gals.).

JA1659

JA1659.The modeled gravity was interpolated from observed gravity values.

JA1659

JA1659. The following values were computed from the NAD 83(2011) position.

JA1659

JA1659;		North	East	Units	Scale Factor	Converg.
JA1659;SPC IL E	-	227,686.261	342,206.893	MT	0.99999693	+0 18 12.8
JA1659;SPC IL E	-	747,000.67	1,122,723.78	sFT	0.99999693	+0 18 12.8
JA1659;UTM 16	-	4,285,726.034	426,276.362	MT	0.99966693	-0 31 49.6

JA1659

JA1659! - Elev Factor x Scale Factor = Combined Factor

JA1659!SPC IL E - 0.99998243 x 0.99999693 = 0.99997936

JA1659!UTM 16 - 0.99998243 x 0.99966693 = 0.99964937

JA1659

JA1659\_U.S. NATIONAL GRID SPATIAL ADDRESS: 16SDH2627685726(NAD 83)

JA1659

JA1659 SUPERSEDED SURVEY CONTROL

JA1659

JA1659	NAD 83(2007)-	38 43 01.59728(N)	087 50 52.87285(W)	AD(2002.00)	1
JA1659	ELLIP H (06/09/11)	111.973 (m)		GP(2002.00)	3 2
JA1659	NAVD 88	143.40 (m)	470.5 (f)	LEVELING	3

JA1659

JA1659.Superseded values are not recommended for survey control.

JA1659

JA1659.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

JA1659.See file [dsdata.pdf](#) to determine how the superseded data were derived.

JA1659

JA1659\_MARKER: I = METAL ROD

JA1659\_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

JA1659\_STAMPING: Z 294 1986

JA1659\_MARK LOGO: NGS

JA1659\_PROJECTION: RECESSED 2 CENTIMETERS

JA1659\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

JA1659\_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

JA1659+SATELLITE: SATELLITE OBSERVATIONS - September 09, 2011

JA1659\_ROD/PIPE-DEPTH: 5.8 meters

JA1659

JA1659	HISTORY	- Date	Condition	Report By
JA1659	HISTORY	- 1986	MONUMENTED	NGS
JA1659	HISTORY	- 20100804	GOOD	ILDT
JA1659	HISTORY	- 20110909	GOOD	JCLS

JA1659

JA1659

JA1659

## STATION DESCRIPTION

JA1659'DESCRIBED BY NATIONAL GEODETIC SURVEY 1986

JA1659'14.7 KM (9.15 MI) WEST FROM LAWRENCEVILLE.

JA1659'1.0 KM (0.6 MI) WESTERLY ALONG U.S. HIGHWAY 50 BUSINESS FROM THE

JA1659'COURTHOUSE IN LAWRENCEVILLE, THENCE 13.7 KM (8.5 MI) WESTERLY ALONG

JA1659'STATE HIGHWAY 250, NEAR THE NORTHWEST CORNER OF THE SUMNER CEMETARY,

JA1659'9.2 M (30.2 FT) SOUTH OF THE CENTERLINE OF THE HIGHWAY, 7.8 M (25.6

JA1659'FT) EAST OF THE CENTER OF THE WEST ENTRANCE TO THE CEMETARY, AND 1.4 M

JA1659'(4.6 FT) EAST OF A UTILITY POLE WITH A GUY WIRE. NOTE--ACCESS TO

JA1659'DATUM POINT IS HAD THROUGH A 5-INCH LOGO CAP.

JA1659'THE MARK IS ABOVE LEVEL WITH THE HIGHWAY.

JA1659

JA1659

## STATION RECOVERY (2010)

JA1659

JA1659'RECOVERY NOTE BY ILLINOIS DEPARTMENT OF TRANSPORTATION 2010 (RA)

JA1659'RECOVERED AS DESCRIBED

JA1659

JA1659

## STATION RECOVERY (2011)

JA1659

JA1659'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2011

JA1659'RECOVERED IN GOOD CONDITION.

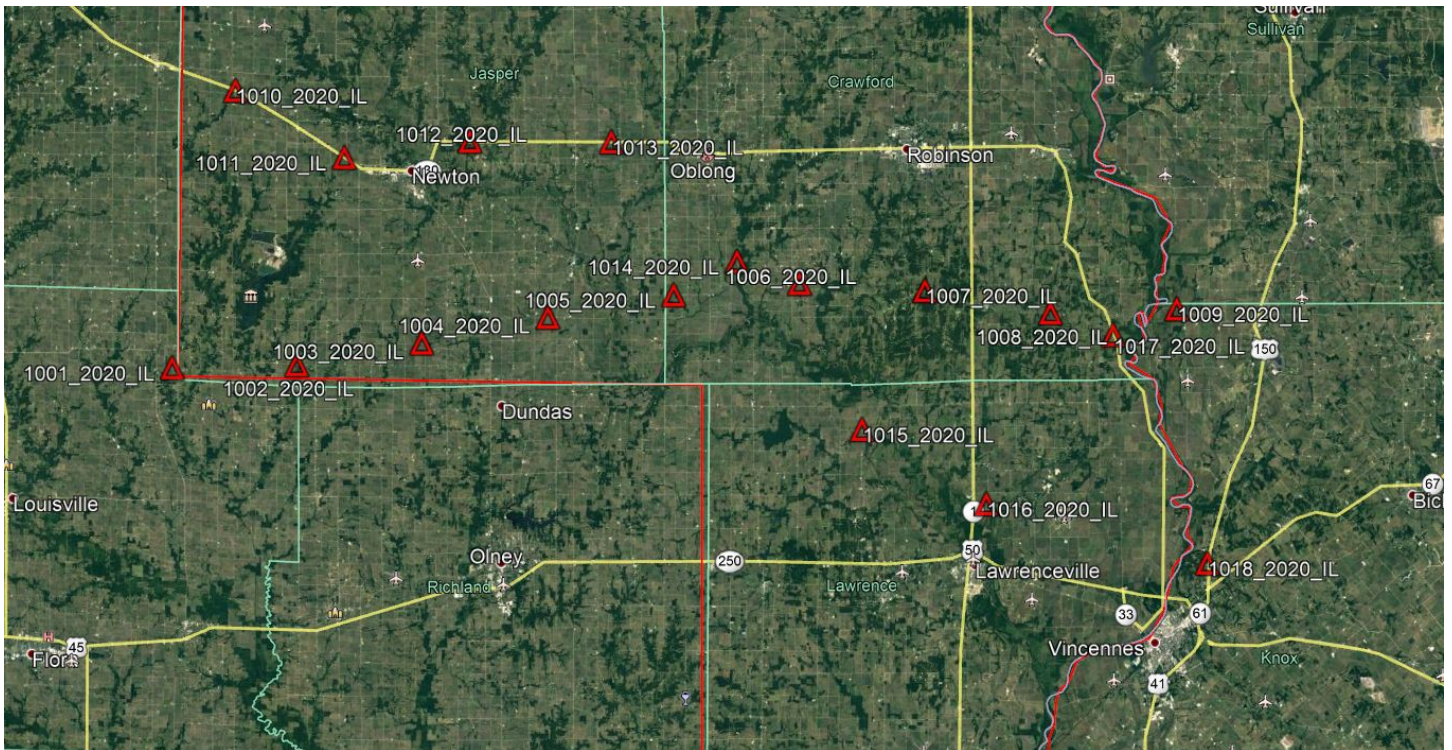
\*\*\* retrieval complete.

Elapsed Time = 00:00:02

# Section 5: GPS Control Diagram

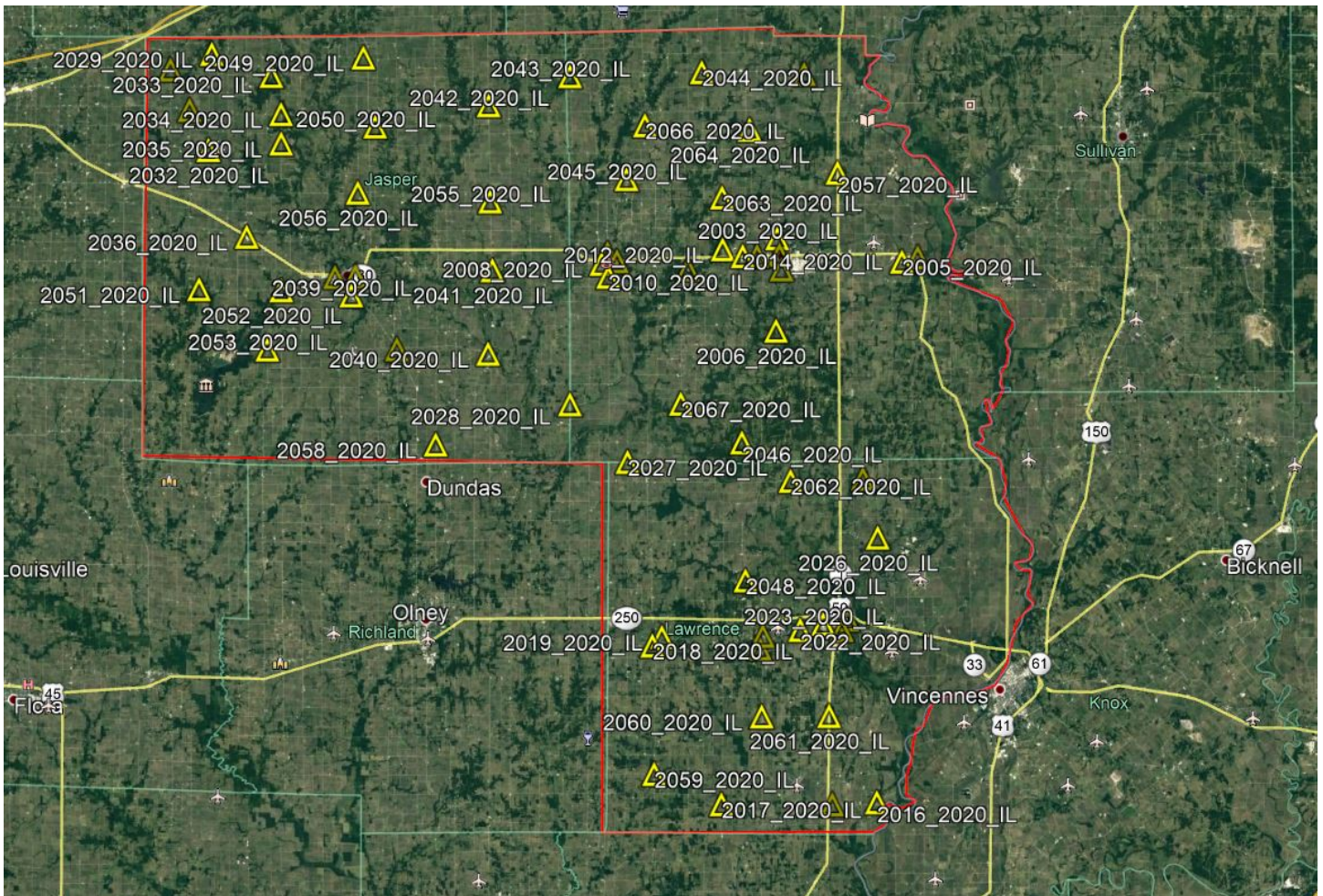
This section contains a graphical representation of the new and existing control stations used for the project.

LiDAR Control Points:



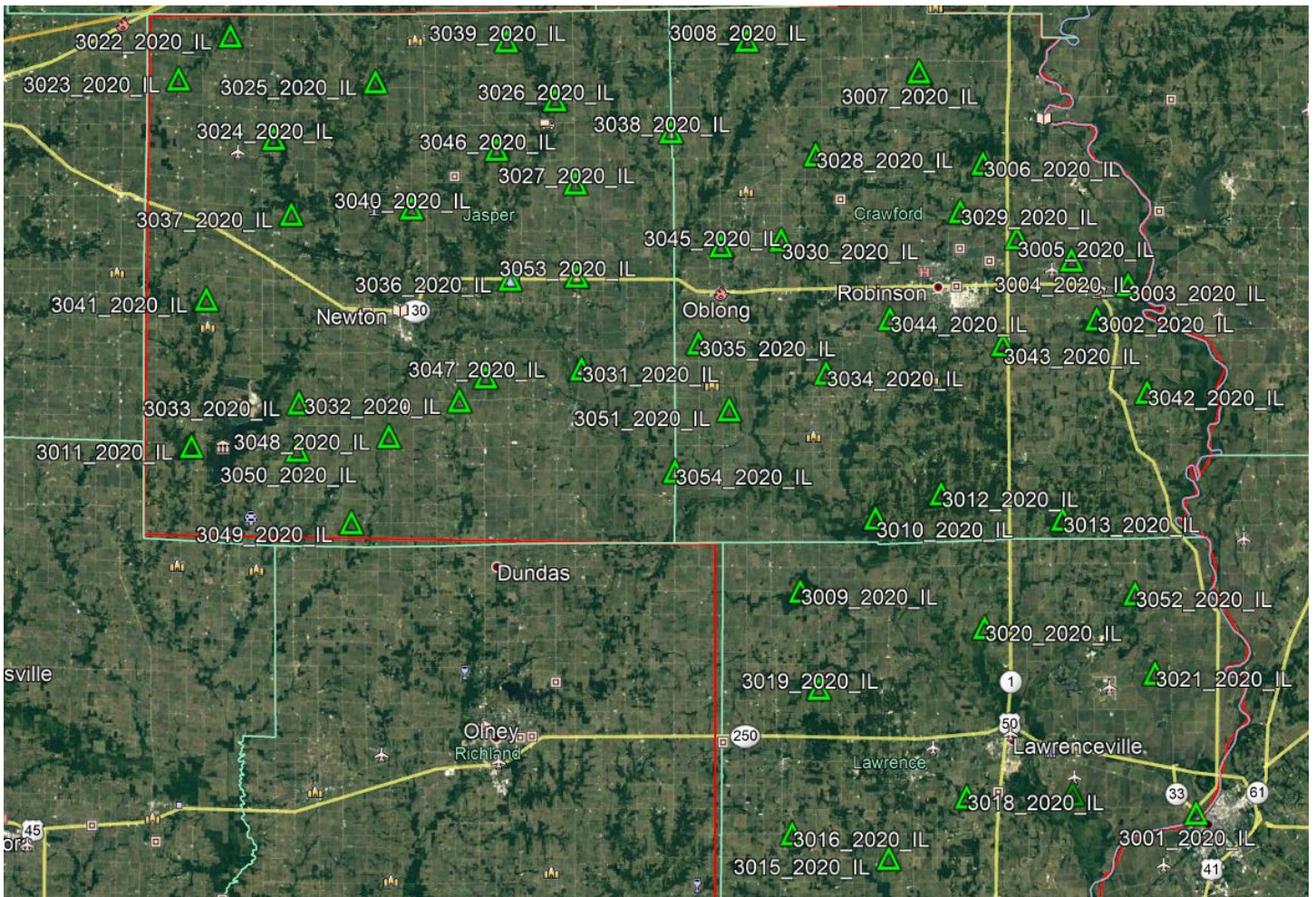
Not to Scale

NVA Check Points:



Not to Scale

VVA Check Points:



Not to Scale