



1. **Example of File Format for the Primary Control File.** This file is described in the Specifications for Control Survey Deliverables Section of the Scope of Services.

This file lists control positions by point number, X, Y, and Z values in project units. These values are referenced to the Missouri Coordinate System of 1983, **Zone name** Zone, in an ASCII file format with the following column assignments.

Columnized Feature	Point #	X Coordinate	Y Coordinate	Elevation	
Column #'s	1 – 3	5 – 15	17 – 27	29 – 36	

The file is space delimited.

801	2822698.048	1049380.027	879.890	
802	2822109.962	1046386.240	833.220	
803	2824745.770	1047848.664	866.570	
804	2827979.396	1045633.469	807.810	
805	2830295.248	1046379.796	767.000	
806	2832731.880	1045946.490	770.860	
807	2833973.971	1045530.297	823.210	
808	2834925.754	1045765.585	785.850	
809	2840304.352	1044862.477	872.640	
810	2841701.376	1044426.162	894.570	
811	2844038.780	1045215.527	918.880	
812	2844065.693	1044044.473	914.890	
813	2846978.128	1043812.817	924.270	
814	2849221.801	1043268.513	946.570	
815	2851956.658	1042880.686	974.720	
816	2853466.225	1041758.320	934.200	
817	2855618.327	1041573.120	946.820	
818	2857946.557	1043634.129	892.230	
819	2857249.308	1040920.208	939.330	
901	.000	.000	883.130	
903	.000	.000	759.860	
904	.000	.000	832.470	



2. Example of File Format for the Check shots File. This file is described in the Specifications for Control Survey Deliverables Section of the Scope of Services.

This file lists control positions by point number, X, Y, and Z values in project units. These values are referenced to the Missouri Coordinate System of 1983, Zone name Zone and modified by the projection factor. This is an ASCII file format with the following column assignments.

Columnized Feature	Point #	X Coordinate	Y Coordinate	Elevation	
Column #'s	1 – 5	7 – 21	22 – 36	38 – 49	

The file is comma delimited. Spaces are needed before decimal with trailing zeros after decimal to five places.

801, 2822698.048, 1049380.027, 879.890,
802, 2822109.962, 1046386.240, 833.220,
803, 2824745.770, 1047848.664, 866.570,
804, 2827979.396, 1045633.469, 807.810,
805, 2830295.248, 1046379.796, 767.000,
806, 2832731.880, 1045946.490, 770.860,
807, 2833973.971, 1045530.297, 823.210,
808, 2834925.754, 1045765.585, 785.850,
809, 2840304.352, 1044862.477, 872.640,
810, 2841701.376, 1044426.162, 894.570,
811, 2844038.780, 1045215.527, 918.880,
812, 2844065.693, 1044044.473, 914.890,
813, 2846978.128, 1043812.817, 924.270,
814, 2849221.801, 1043268.513, 946.570,
815, 2851956.658, 1042880.686, 974.720,
816, 2853466.225, 1041758.320, 934.200,
817, 2855618.327, 1041573.120, 946.820,
818, 2857946.557, 1043634.129, 892.230,
819, 2857249.308, 1040920.208, 939.330,
901, 0.000, 0.000, 883.130,
903, 0.000, 0.000, 759.860,
904, 0.000, 0.000, 832.470,



3. Example of File Format for the Geodetic Control File. This file is described in the Specifications for Control Survey Deliverables Section of the Scope of Services.

A file containing latitude and longitude information for all control points.

Columnized Feature	Point #	Name of Station	Geodetic Position	Map Coordinates	Scale & Convergence
Column #'s	1 – 8	10 – 24	30 – 48	52 – 62	65 – 80

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MISSOURI COORDINATE SYSTEM OF 1983

CAMDEN RTE. 54
JOB # 5P347
OSAGE BEACH BY PASS WEST TO
RTE. KK TO GLAIZE BRIDGE

PROJECTION FACTOR 1.0001041
GRID FACTOR .9998959
Zone = Missouri Central
  
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POINT	NAME	LATITUDE & LONGITUDE	STATE PLANE (FEET)	CONVERGENCE
239		N 38°07'33.666917" N W 92°41'14.262069" E	834741.3171 446123.0874	- 0°06'56.2857"
240		N 38°07'19.125203" N W 92°41'35.040821" E	833273.8370 444459.6998	- 0°07'09.0759"
241		N 38°07'17.505657" N W 92°41'32.972773" E	833109.6780 444624.6167	- 0°07'07.7949"
242		N 38°05'53.679786" N W 92°40'42.072381" E	824622.6549 448675.7757	- 0°06'36.1670"
243		N 38°05'57.349493" N W 92°40'37.844930" E	824993.1943 449014.4065	- 0°06'33.5675"



- 4. Example of GPS Report Files.** These files contain information reporting the observation, adjustment and analysis details of GPS measurements. These reports illustrate the survey’s compliance to the Control Survey Specifications of the Scope of Service.

The files document proof of these specifications:

- a) *Fixed* preprocess baseline solutions.
- b) Preprocessed ratios between variances generated in the integer search > two (2).
- c) Reference variances < ten (10).
- d) Control station relative positional accuracies of 10 ppm in relation to adjacent stations at the 95% confidence level.
- e) Post-adjustment residual values < 3 cm in any dimension for control stations

	From Station	To Station	Solution Type	Slope Distance (meters)	Ratio	Reference Variance	From Ant. Ht. (meas. meters)	To Ant. Ht. (meas. meters)
1	1 GRS CA01	803	iono free fixed	1050.358	47.8	0.720	1.468	1.574
2	1 GRS CA01	801	iono free fixed	1113.209	48.3	0.695	1.468	1.569
3	1 GRS CA01	802	iono free fixed	894.368	28.1	1.695	1.468	1.520
4	802	803	iono free fixed	161.246	37.4	1.671	1.520	1.574
5	802	801	iono free fixed	234.541	45.1	1.393	1.520	1.569
6	803	801	iono free fixed	150.591	73.6	0.517	1.574	1.569
7	803	805	iono free fixed	759.694	15.4	1.177	1.574	1.529



5. Example of ASCII coordinate file. This file is described in the Specifications for ASCII Survey Deliverables Section of the Scope of Services.

This file lists section location points by point code, X, Y, and Z values in project units. These values are referenced to the Missouri Coordinate System of 1983, Zone name Zone **and modified by the projection factor**. This is an ASCII file format with the following column assignments.

Columnized Feature	Point #	X Coordinate	Y Coordinate	Elevation	Code	Linking Code	Comment
Column #'s	1 – 5	7 – 21	22 – 36	38 – 49	51 – 54	56 – 59	61 – 100

2001	1493733.6037	1680412.0330	1046.9031	755	-BS		South End of Valley Section
2002	1493734.8938	1680589.1186	1046.6232	755			
2003	1493734.3449	1680849.4171	1046.8231	755			
2004	1493733.0785	1680640.0107	1049.1831	755			
2005	1493736.4857	1680297.0907	1056.4631	755			
2006	1493730.8658	1680463.1365	1043.8632	755			
2007	1493739.7600	1681003.6282	1036.3031	755			
2008	1493729.1805	1681020.3111	1032.8231	755			
2009	1493732.6212	1680772.7421	1044.7432	755			
2010	1493735.5559	1681115.1527	1012.8632	755			
2011	1493729.9020	1681034.6798	1029.9832	755			
2012	1493731.1692	1680354.5509	1051.8231	755			
2013	1493729.7146	1680900.4171	1046.0231	755			
2014	1493731.1667	1680760.1757	1046.1432	755			
2015	1493729.5378	1680725.5532	1048.5831	755			
2016	1493728.0645	1680324.7744	1055.1831	755	-ES		North End of Valley Section
2017	1493736.6366	1681045.0101	1028.3431	755	-BS		West End of Valley Section
2018	1493732.2524	1680422.7118	1045.7831	755			
2019	1493728.5201	1680498.0051	1043.8231	755			
2020	1493737.6257	1680864.7977	1046.9431	755	-ES		East End of Valley Section
2021	1493729.4129	1680376.6705	1049.9431	101			
2022	1493732.6091	1680337.0953	1053.5032	102			
2023	1493736.6573	1680553.5910	1044.1432	103			
2024	1493733.7694	1681138.7330	1007.7031	104			
2025	1493738.8081	1680531.5129	1042.3832	105			
2026	1493731.6096	1680607.1505	1048.4231	106			
2027	1493733.5886	1680659.7624	1049.7432	107			
2028	1493733.8626	1680947.7051	1042.4631	108			
2029	1493730.5960	1681053.7462	1026.9031	109			
2030	1493733.7689	1681078.3643	1021.3031	110			
2031	1493737.3482	1680399.6171	1047.5431	111			
2032	1493731.2640	1680450.6210	1044.1831	301			
2033	1493731.1776	1680709.2456	1049.4631	302			
2034	1493733.7812	1680828.1086	1046.5431	303			
2035	1493736.1656	1680812.5292	1045.5831	304			
2036	1493730.4846	1681065.9005	1023.7831	305			
2037	1493735.1396	1680966.8297	1040.7831	306			
2038	1493729.3275	1680688.7999	1050.5032	307			
2039	1493729.6920	1681157.3570	1004.1031	308			
2040	1493735.5161	1680513.6674	1042.8231	309			
2041	1493736.1545	1681125.3292	1011.3431	310			
2042	1493735.3617	1680787.1784	1044.5431	311			
2043	1493740.3307	1680800.8345	1044.2231	312			