



CUY-90-14.90

PID 77332/85531

APPENDIX SU-02

**Aerial Mapping Accuracy Evaluation
(Reference Document)**

State of Ohio
Department of Transportation
Jolene M. Molitoris, Director

**Innerbelt Bridge
Construction Contract Group 1 (CCG1)**

The ODOT Office of Aerial Engineering completed an evaluation of the Aerial Mapping on the CUY-90 project which yielded the following:

Surface	Root Mean Square Error (feet)	Average Dz (feet)
Pavement	0.2337	-0.03845
Soft Surface (off pavement)	0.4191	-0.05083

A graphic that indicates where the survey shots were taken is included. The mapping locations evaluated meet a DTM Accuracy Class D (on pavement and off pavement) per the ODOT Office of Aerial Engineering – Mapping Specifications.

Mapping Specifications can be found at:

<http://www.dot.state.oh.us/Divisions/ProdMgt/Aerial/Documents/Mapping%20Specifications%20July%2017-2009.pdf>



Compare COGO Points to TIN Surface

TIN File: P:\CUY\I-90 INTERBELT BRIDGE\INTERBELT BRIDGE\Data Files\77332XCB01_2009-08-18.tin

Point	Feature	COGO Elevation	TIN Elevation	Elev Diff	Location
LC012	NOFEAT	676.0310	676.0071	0.0239	ABOVE
LC013	NOFEAT	675.5670	675.6164	-0.0494	BELOW
LC014	NOFEAT	674.9610	674.8933	0.0677	ABOVE
LC015	NOFEAT	674.5040	674.5283	-0.0243	BELOW
LC016	NOFEAT	674.0600	674.0325	0.0275	ABOVE
LC017	NOFEAT	673.4550	673.5152	-0.0602	BELOW
LC018	NOFEAT	672.8660	673.3144	-0.4484	BELOW
LC019	NOFEAT	672.4300	672.7754	-0.3454	BELOW
LC020	NOFEAT	672.0920	672.0410	0.0510	ABOVE
LC021	NOFEAT	671.8550	672.0452	-0.1902	BELOW
LC022	NOFEAT	672.5060	672.4620	0.0440	ABOVE
LC023	NOFEAT	671.9110	672.0408	-0.1298	BELOW
LC024	NOFEAT	671.2900	671.2047	0.0853	ABOVE
LC025	NOFEAT	667.9830	668.2065	-0.2235	BELOW
LC026	NOFEAT	668.0690	668.3883	-0.3193	BELOW
LC027	NOFEAT	668.7140	668.9736	-0.2596	BELOW
LC028	NOFEAT	668.4450	668.4117	0.0333	ABOVE
LC029	NOFEAT	667.8690	667.9168	-0.0478	BELOW
LC030	NOFEAT	667.5410	667.6849	-0.1439	BELOW
LC031	NOFEAT	667.3230	667.4537	-0.1307	BELOW
LC032	NOFEAT	666.8800	667.2502	-0.3702	BELOW
LC033	NOFEAT	666.8140	667.1624	-0.3484	BELOW
LC034	NOFEAT	666.5090	666.9818	-0.4728	BELOW
LC035	NOFEAT	666.4240	666.8326	-0.4086	BELOW
LC036	NOFEAT	666.5310	666.8135	-0.2825	BELOW
LC037	NOFEAT	666.0280	665.9377	0.0903	ABOVE
LC038	NOFEAT	665.5260	665.5036	0.0224	ABOVE
LC039	NOFEAT	665.6230	665.6511	-0.0281	BELOW
LC040	NOFEAT	666.1310	665.9743	0.1567	ABOVE
LC041	NOFEAT	666.2590	666.0251	0.2339	ABOVE
LC042	NOFEAT	665.9040	665.9004	0.0036	ABOVE
LC043	NOFEAT	665.6080	665.6628	-0.0548	BELOW
LC044	NOFEAT	665.8850	665.5782	0.3068	ABOVE
LC045	NOFEAT	665.1460	664.5731	0.5729	ABOVE
LC046	NOFEAT	664.8060	664.2665	0.5395	ABOVE
LC047	NOFEAT	664.5850	663.9323	0.6527	ABOVE
LC048	NOFEAT	664.1480	663.5602	0.5878	ABOVE
LC049	NOFEAT	664.3520	663.7934	0.5586	ABOVE
LC050	NOFEAT	664.6880	664.0760	0.6120	ABOVE
LC051	NOFEAT	665.4890	665.6551	-0.1661	BELOW
LC052	NOFEAT	664.8970	665.0580	-0.1610	BELOW
LC053	NOFEAT	664.8440	664.7385	0.1055	ABOVE
LC054	NOFEAT	664.5140	664.4074	0.1066	ABOVE
LC055	NOFEAT	664.0550	664.0377	0.0173	ABOVE
LC056	NOFEAT	663.8470	663.7363	0.1107	ABOVE

LC057	NOFEAT	663.8040	663.6159	0.1881	ABOVE
LC058	NOFEAT	663.9750	663.7970	0.1780	ABOVE
LC059	NOFEAT	664.3610	664.3210	0.0400	ABOVE
LC060	NOFEAT	664.6290	664.5489	0.0801	ABOVE
LC061	NOFEAT	665.0330	664.7505	0.2825	ABOVE
LC062	NOFEAT	665.5930	665.4206	0.1724	ABOVE
LC063	NOFEAT	666.0670	665.7669	0.3001	ABOVE
LC064	NOFEAT	666.3650	666.0060	0.3590	ABOVE
LC065	NOFEAT	666.4120	665.9405	0.4715	ABOVE
LC066	NOFEAT	666.1210	666.1997	-0.0787	BELOW
LC067	NOFEAT	665.8190	665.9258	-0.1068	BELOW
LC068	NOFEAT	665.9080	666.0262	-0.1182	BELOW
LC069	NOFEAT	666.2560	666.3535	-0.0975	BELOW
LC070	NOFEAT	666.4470	666.4851	-0.0381	BELOW
LC071	NOFEAT	666.6010	666.6813	-0.0803	BELOW
LC072	NOFEAT	666.8900	666.9496	-0.0596	BELOW
LC073	NOFEAT	667.1100	667.1984	-0.0884	BELOW
LC074	NOFEAT	667.3590	667.5001	-0.1411	BELOW
LC075	NOFEAT	667.4730	667.7613	-0.2883	BELOW
LC076	NOFEAT	667.9300	668.4182	-0.4882	BELOW
LC077	NOFEAT	668.4610	669.2004	-0.7394	BELOW
LC078	NOFEAT	668.5480	668.7053	-0.1573	BELOW
LC079	NOFEAT	668.2680	668.6262	-0.3582	BELOW
LC080	NOFEAT	668.2690	668.2156	0.0534	ABOVE
LC081	NOFEAT	668.3910	668.4615	-0.0705	BELOW
LC082	NOFEAT	673.4000	673.5410	-0.1410	BELOW
LC083	NOFEAT	673.8430	673.9481	-0.1051	BELOW
LC084	NOFEAT	674.1970	674.3793	-0.1823	BELOW
LC085	NOFEAT	674.7100	674.8864	-0.1764	BELOW
LC086	NOFEAT	675.1360	675.2545	-0.1185	BELOW
LC087	NOFEAT	675.7420	675.7187	0.0233	ABOVE
LC088	NOFEAT	675.9720	676.0684	-0.0964	BELOW
LC089	NOFEAT	676.2090	676.4512	-0.2422	BELOW
LC090	NOFEAT	676.1000	676.1811	-0.0811	BELOW
LC091	NOFEAT	675.4250	675.7616	-0.3366	BELOW
LC092	NOFEAT	674.8780	675.0020	-0.1240	BELOW
LC106	NOFEAT	690.3610	690.2926	0.0684	ABOVE
LC107	NOFEAT	691.5890	691.5093	0.0797	ABOVE
LC175	NOFEAT	694.1140	693.1719	0.9421	ABOVE
LC176	NOFEAT	694.7960	694.0970	0.6990	ABOVE
LC177	NOFEAT	695.3660	694.6659	0.7001	ABOVE
LC178	NOFEAT	695.1880	695.3923	-0.2043	BELOW
LC179	NOFEAT	696.0730	696.2581	-0.1851	BELOW
LC180	NOFEAT	696.6350	696.6569	-0.0219	BELOW
LC181	NOFEAT	697.0830	697.0180	0.0650	ABOVE
LC182	NOFEAT	697.5390	697.4511	0.0879	ABOVE
LC183	NOFEAT	697.9180	697.8600	0.0580	ABOVE
LC184	NOFEAT	698.1960	698.1766	0.0194	ABOVE
LC185	NOFEAT	698.5730	698.4325	0.1405	ABOVE
LC186	NOFEAT	698.6640	698.4469	0.2171	ABOVE
LC190	NOFEAT	699.6480	699.4773	0.1707	ABOVE
LC191	NOFEAT	700.1640	700.2883	-0.1243	BELOW
LC192	NOFEAT	700.4830	700.6432	-0.1602	BELOW
LC193	NOFEAT	694.4620	694.6458	-0.1838	BELOW

LC194	NOFEAT	693.8980	694.0818	-0.1838	BELOW
LC195	NOFEAT	693.5790	693.7370	-0.1580	BELOW
LC196	NOFEAT	693.3050	693.3537	-0.0487	BELOW
LC197	NOFEAT	693.1090	693.2171	-0.1081	BELOW
LC276	NOFEAT	687.7350	687.3933	0.3417	ABOVE
LC277	NOFEAT	687.8340	687.1462	0.6878	ABOVE
LC278	NOFEAT	688.6170	687.5290	1.0880	ABOVE
LC279	NOFEAT	688.1210	687.1762	0.9448	ABOVE
LC280	NOFEAT	680.1140	680.2158	-0.1018	BELOW
LC281	NOFEAT	677.6890	677.8564	-0.1674	BELOW
LC282	NOFEAT	675.6680	675.7786	-0.1106	BELOW
LC283	NOFEAT	673.9280	674.0503	-0.1223	BELOW
LC293	NOFEAT	625.8030	626.0729	-0.2699	BELOW
LC294	NOFEAT	625.7610	625.9339	-0.1729	BELOW
LC295	NOFEAT	625.3650	625.7371	-0.3721	BELOW
LC296	NOFEAT	625.0720	625.2506	-0.1786	BELOW
LC297	NOFEAT	624.8490	625.0027	-0.1537	BELOW
LC298	NOFEAT	624.8480	624.8707	-0.0227	BELOW
LC299	NOFEAT	624.3520	624.5828	-0.2308	BELOW
LC305	NOFEAT	582.2870	582.7736	-0.4866	BELOW
LC306	NOFEAT	583.3530	583.4242	-0.0712	BELOW
LC307	NOFEAT	583.0340	583.4873	-0.4533	BELOW
LC308	NOFEAT	582.8510	583.1885	-0.3375	BELOW
LC309	NOFEAT	583.3810	583.7561	-0.3751	BELOW
LC310	NOFEAT	583.8790	584.3377	-0.4587	BELOW
LC311	NOFEAT	580.8850	580.7813	0.1037	ABOVE
LC312	NOFEAT	580.7310	580.6723	0.0587	ABOVE
LC313	NOFEAT	580.7250	580.5900	0.1350	ABOVE
LC314	NOFEAT	580.5840	580.5317	0.0523	ABOVE
LC315	NOFEAT	580.4940	580.4478	0.0462	ABOVE
LC316	NOFEAT	580.4470	580.3565	0.0905	ABOVE
LC317	NOFEAT	580.2510	580.2456	0.0054	ABOVE
LC318	NOFEAT	580.0620	580.1314	-0.0694	BELOW
LC319	NOFEAT	580.2350	580.1361	0.0989	ABOVE
LC320	NOFEAT	580.2010	580.1346	0.0664	ABOVE
LC336	NOFEAT	581.8110	582.2033	-0.3923	BELOW
LC337	NOFEAT	581.7110	582.1273	-0.4163	BELOW
LC338	NOFEAT	581.6210	582.1164	-0.4954	BELOW
LC339	NOFEAT	581.9090	582.1437	-0.2347	BELOW
LC340	NOFEAT	581.8950	582.1626	-0.2676	BELOW
LC341	NOFEAT	581.8300	582.2135	-0.3835	BELOW
LC342	NOFEAT	581.7840	582.1218	-0.3378	BELOW
LC343	NOFEAT	581.7460	582.1614	-0.4154	BELOW
LC344	NOFEAT	581.8550	582.0402	-0.1852	BELOW
LC345	NOFEAT	581.8620	581.9560	-0.0940	BELOW
LC346	NOFEAT	581.9630	581.9988	-0.0358	BELOW
LC354	NOFEAT	675.4680	675.3827	0.0853	ABOVE
LC355	NOFEAT	675.8890	675.8632	0.0258	ABOVE
LC356	NOFEAT	676.1490	676.0479	0.1011	ABOVE
LC357	NOFEAT	676.3580	676.3049	0.0531	ABOVE
LC358	NOFEAT	676.7140	676.6788	0.0352	ABOVE
LC359	NOFEAT	676.9980	676.9838	0.0142	ABOVE
LC360	NOFEAT	677.4430	677.4176	0.0254	ABOVE
LC361	NOFEAT	677.7530	677.7686	-0.0156	BELOW

LC362	NOFEAT	678.0710	678.0528	0.0182	ABOVE
LC363	NOFEAT	678.2920	677.7106	0.5814	ABOVE
LC364	NOFEAT	678.8190	678.7541	0.0649	ABOVE
LC365	NOFEAT	679.1470	679.1299	0.0171	ABOVE
LC366	NOFEAT	679.6120	679.4734	0.1386	ABOVE
LC367	NOFEAT	679.9070	679.7824	0.1246	ABOVE
LC368	NOFEAT	680.0480	680.0919	-0.0439	BELOW
LC369	NOFEAT	680.0200	680.0907	-0.0707	BELOW
LC370	NOFEAT	679.8990	679.9470	-0.0480	BELOW
LC371	NOFEAT	679.7780	679.8070	-0.0290	BELOW
LC372	NOFEAT	679.6830	679.6734	0.0096	ABOVE
LC373	NOFEAT	679.5570	679.4988	0.0582	ABOVE
LC374	NOFEAT	679.4060	679.3995	0.0065	ABOVE
LC375	NOFEAT	679.1540	679.2102	-0.0562	BELOW
LC376	NOFEAT	678.9300	678.9867	-0.0567	BELOW
LC377	NOFEAT	678.6940	678.6765	0.0175	ABOVE
LC378	NOFEAT	678.5330	678.5262	0.0068	ABOVE
LC423	NOFEAT	674.7420	674.9344	-0.1924	BELOW
LC424	NOFEAT	674.8420	674.8210	0.0210	ABOVE
LC425	NOFEAT	674.5790	674.6343	-0.0553	BELOW
LC426	NOFEAT	674.5490	674.6349	-0.0859	BELOW
LC427	NOFEAT	674.6030	674.7614	-0.1584	BELOW
LC428	NOFEAT	674.7470	674.8761	-0.1291	BELOW
LC429	NOFEAT	639.1310	639.5454	-0.4144	BELOW
LC430	NOFEAT	636.5060	636.4715	0.0345	ABOVE
LC431	NOFEAT	631.1830	631.4652	-0.2822	BELOW
LC432	NOFEAT	613.8800	613.8859	-0.0059	BELOW
LC433	NOFEAT	612.0750	612.0862	-0.0112	BELOW
LC434	NOFEAT	610.1700	609.9034	0.2666	ABOVE
LC435	NOFEAT	607.9240	607.8003	0.1237	ABOVE
LC436	NOFEAT	606.1110	606.0929	0.0181	ABOVE
LC437	NOFEAT	604.2440	604.0925	0.1515	ABOVE
LC438	NOFEAT	601.2810	601.1064	0.1746	ABOVE
LC439	NOFEAT	599.2000	598.9846	0.2154	ABOVE
LC440	NOFEAT	597.2380	596.9640	0.2740	ABOVE
LC441	NOFEAT	595.1100	594.7891	0.3209	ABOVE
LC442	NOFEAT	592.0250	591.7214	0.3036	ABOVE
LC443	NOFEAT	589.6350	589.5999	0.0351	ABOVE
LC444	NOFEAT	587.4210	587.3542	0.0668	ABOVE
LC445	NOFEAT	586.5670	586.4726	0.0944	ABOVE
LC446	NOFEAT	586.0850	585.9697	0.1153	ABOVE
LC468	NOFEAT	679.8090	679.8479	-0.0389	BELOW
LC469	NOFEAT	679.5930	679.6654	-0.0724	BELOW
LC470	NOFEAT	679.8520	679.8594	-0.0074	BELOW
LC471	NOFEAT	680.0440	679.9482	0.0958	ABOVE
LC472	NOFEAT	680.0410	680.0278	0.0132	ABOVE
LC473	NOFEAT	680.0160	680.1284	-0.1124	BELOW
LC474	NOFEAT	680.2180	680.1928	0.0252	ABOVE
LC475	NOFEAT	680.3200	680.3513	-0.0313	BELOW
LC476	NOFEAT	680.2480	680.3315	-0.0835	BELOW
LC477	NOFEAT	680.1380	680.2260	-0.0880	BELOW
LC478	NOFEAT	680.1930	680.1573	0.0357	ABOVE
LC479	NOFEAT	680.1680	680.0858	0.0822	ABOVE
LC480	NOFEAT	679.4660	680.1013	-0.6353	BELOW

LC481	NOFEAT	680.0130	680.0121	0.0009	ABOVE
LC482	NOFEAT	679.9010	679.9679	-0.0669	BELOW
LC483	NOFEAT	679.9180	679.9402	-0.0222	BELOW
LC484	NOFEAT	679.8880	679.8610	0.0270	ABOVE
LC485	NOFEAT	679.9920	679.8055	0.1865	ABOVE
LC486	NOFEAT	679.3610	679.7291	-0.3681	BELOW
LC487	NOFEAT	679.7440	679.6038	0.1402	ABOVE
LC488	NOFEAT	679.6830	679.5682	0.1148	ABOVE
LC489	NOFEAT	679.7220	679.6699	0.0521	ABOVE
LC490	NOFEAT	680.0730	680.0791	-0.0061	BELOW
LC491	NOFEAT	679.8180	679.9355	-0.1175	BELOW
LC492	NOFEAT	679.8530	679.8553	-0.0023	BELOW
LC493	NOFEAT	679.9300	679.8288	0.1012	ABOVE
LC494	NOFEAT	679.7260	679.7711	-0.0451	BELOW
LC495	NOFEAT	679.3900	679.6694	-0.2794	BELOW
LC496	NOFEAT	679.4620	679.6407	-0.1787	BELOW
LC497	NOFEAT	679.3880	679.5946	-0.2066	BELOW
LC498	NOFEAT	679.0730	679.1209	-0.0479	BELOW
LC513	NOFEAT	672.3550	672.5321	-0.1771	BELOW
LC514	NOFEAT	672.3610	672.3970	-0.0360	BELOW
LC520	NOFEAT	673.9140	674.1715	-0.2575	BELOW
LC521	NOFEAT	674.4410	674.5704	-0.1294	BELOW
LC522	NOFEAT	675.6760	675.3591	0.3169	ABOVE
LC523	NOFEAT	675.8980	676.0381	-0.1401	BELOW
LC524	NOFEAT	675.7080	675.8516	-0.1436	BELOW
LC525	NOFEAT	675.4660	675.6752	-0.2092	BELOW
LC526	NOFEAT	675.3510	675.5158	-0.1648	BELOW
LC527	NOFEAT	675.2620	675.3615	-0.0995	BELOW
LC528	NOFEAT	675.2130	675.2556	-0.0426	BELOW
LC529	NOFEAT	673.9510	673.9957	-0.0447	BELOW
LC530	NOFEAT	673.7310	673.7838	-0.0528	BELOW
LC531	NOFEAT	673.6060	673.6180	-0.0120	BELOW
LC532	NOFEAT	673.4970	673.4695	0.0275	ABOVE
LC533	NOFEAT	673.2730	673.2984	-0.0254	BELOW
LC534	NOFEAT	672.9840	673.0261	-0.0421	BELOW
LC535	NOFEAT	672.7710	672.8066	-0.0356	BELOW
LC536	NOFEAT	672.2770	672.3026	-0.0256	BELOW
LC537	NOFEAT	672.1730	672.2289	-0.0559	BELOW
LC538	NOFEAT	670.6900	670.8003	-0.1103	BELOW
LC539	NOFEAT	670.9120	671.1390	-0.2270	BELOW
LC540	NOFEAT	671.5980	671.8233	-0.2253	BELOW
LC541	NOFEAT	672.5490	672.6909	-0.1419	BELOW
LC542	NOFEAT	673.1650	673.3074	-0.1424	BELOW
LC543	NOFEAT	673.8320	673.8563	-0.0243	BELOW
LC544	NOFEAT	674.2960	674.4011	-0.1051	BELOW
LC545	NOFEAT	674.9430	675.1082	-0.1652	BELOW
LC546	NOFEAT	675.9650	676.1033	-0.1383	BELOW
LC547	NOFEAT	677.0180	677.1618	-0.1438	BELOW
LC548	NOFEAT	677.8660	677.9672	-0.1012	BELOW
LC549	NOFEAT	678.9290	678.9882	-0.0592	BELOW
LC550	NOFEAT	680.0680	680.1287	-0.0607	BELOW
LC551	NOFEAT	681.0020	681.0722	-0.0702	BELOW
LC552	NOFEAT	682.0200	682.1321	-0.1121	BELOW
LC553	NOFEAT	683.0590	683.1876	-0.1286	BELOW

LC564	NOFEAT	675.9300	676.0081	-0.0781	BELOW
LC565	NOFEAT	676.0490	676.2934	-0.2444	BELOW
LC566	NOFEAT	676.0670	676.1255	-0.0585	BELOW
LC567	NOFEAT	675.8820	676.0032	-0.1212	BELOW
LC568	NOFEAT	675.8270	675.7746	0.0524	ABOVE
LC569	NOFEAT	676.0640	676.0560	0.0080	ABOVE
LC570	NOFEAT	676.5710	676.7749	-0.2039	BELOW
LC571	NOFEAT	677.7400	677.7898	-0.0498	BELOW
LC572	NOFEAT	679.0570	679.0686	-0.0116	BELOW
LC573	NOFEAT	680.1160	680.1756	-0.0596	BELOW
LC574	NOFEAT	680.4280	680.5307	-0.1027	BELOW
LC575	NOFEAT	680.4510	680.0261	0.4249	ABOVE
LC576	NOFEAT	679.9910	680.0402	-0.0492	BELOW
LC577	NOFEAT	679.3270	679.4441	-0.1171	BELOW
LC578	NOFEAT	678.6150	678.7760	-0.1610	BELOW
LC579	NOFEAT	677.8430	678.0096	-0.1666	BELOW
LC580	NOFEAT	677.3500	677.4573	-0.1073	BELOW
LC581	NOFEAT	676.7390	676.7695	-0.0305	BELOW
LC582	NOFEAT	653.2240	653.1135	0.1105	ABOVE
LC583	NOFEAT	651.2030	651.1743	0.0287	ABOVE
LC584	NOFEAT	649.2170	649.1390	0.0780	ABOVE
LC585	NOFEAT	647.4800	647.3985	0.0815	ABOVE
LC586	NOFEAT	645.9150	645.8030	0.1120	ABOVE
LC587	NOFEAT	643.8230	643.8208	0.0022	ABOVE
LC588	NOFEAT	642.0140	642.1308	-0.1168	BELOW
LC589	NOFEAT	639.4330	639.4334	-0.0004	BELOW
LC590	NOFEAT	637.1820	636.8995	0.2825	ABOVE
LC591	NOFEAT	634.5110	634.5513	-0.0403	BELOW
LC592	NOFEAT	632.7650	632.8495	-0.0845	BELOW
LC593	NOFEAT	630.9710	630.9012	0.0698	ABOVE
LC594	NOFEAT	629.1780	629.3457	-0.1677	BELOW
LC595	NOFEAT	627.5140	627.7617	-0.2477	BELOW
LC596	NOFEAT	625.9690	626.2026	-0.2336	BELOW
LC597	NOFEAT	624.4140	624.6362	-0.2222	BELOW
LC608	NOFEAT	601.5820	601.3470	0.2350	ABOVE
LC609	NOFEAT	601.3320	601.2252	0.1068	ABOVE
LC610	NOFEAT	601.1340	601.0773	0.0567	ABOVE
LC611	NOFEAT	601.0340	600.9864	0.0476	ABOVE
LC612	NOFEAT	600.8870	600.8864	0.0006	ABOVE
LC613	NOFEAT	600.7410	600.7889	-0.0479	BELOW
LC614	NOFEAT	600.6300	600.6977	-0.0677	BELOW
LC615	NOFEAT	600.5030	600.6137	-0.1107	BELOW
LC616	NOFEAT	600.7370	600.7700	-0.0330	BELOW
LC617	NOFEAT	600.8370	601.0204	-0.1834	BELOW
LC618	NOFEAT	601.2820	601.3495	-0.0675	BELOW
LC619	NOFEAT	601.8310	602.0102	-0.1792	BELOW
LC620	NOFEAT	602.3260	602.6954	-0.3694	BELOW
LC621	NOFEAT	602.8830	603.1889	-0.3059	BELOW
LC622	NOFEAT	603.4300	603.7302	-0.3002	BELOW
LC623	NOFEAT	603.7550	604.2020	-0.4470	BELOW
LC624	NOFEAT	604.2510	604.6639	-0.4129	BELOW
LC632	NOFEAT	616.7230	616.8495	-0.1265	BELOW
LC633	NOFEAT	614.0560	614.1681	-0.1121	BELOW
LC634	NOFEAT	611.6700	611.7620	-0.0920	BELOW

LC635	NOFEAT	609.5710	609.6377	-0.0667	BELOW
LC636	NOFEAT	607.7120	607.7974	-0.0854	BELOW
LC637	NOFEAT	605.4720	605.4537	0.0183	ABOVE
LC638	NOFEAT	602.8250	602.9187	-0.0937	BELOW
LC639	NOFEAT	601.0730	601.1274	-0.0544	BELOW
LC640	NOFEAT	599.3810	599.5169	-0.1359	BELOW
LC641	NOFEAT	597.8660	598.0798	-0.2138	BELOW
LC642	NOFEAT	596.5470	596.6814	-0.1344	BELOW
LC643	NOFEAT	595.4520	595.9750	-0.5230	BELOW
LC644	NOFEAT	595.4480	595.7184	-0.2704	BELOW
LC645	NOFEAT	595.5870	595.7180	-0.1310	BELOW
LC646	NOFEAT	595.7380	595.8042	-0.0662	BELOW
LC647	NOFEAT	595.7470	595.8995	-0.1525	BELOW
LC648	NOFEAT	595.9020	596.0162	-0.1142	BELOW
LC649	NOFEAT	596.0550	596.1215	-0.0665	BELOW
LC650	NOFEAT	596.1590	596.1907	-0.0317	BELOW
LC651	NOFEAT	596.2350	596.3064	-0.0714	BELOW

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Average Elevation Difference = -0.03845

The Root Mean Square Error is = 0.2337

Compare COGO Points to TIN Surface

TIN File: P:\CUY\I-90 INTERBELT BRIDGE\INTERBELT BRIDGE\Data Files\77332XCB01_2009-08-18.tin

Point	Feature	COGO Elevation	TIN Elevation	Elev Diff	Location
LC001	NOFEAT	667.5070	667.8116	-0.3046	BELOW
LC002	NOFEAT	667.2950	667.5327	-0.2377	BELOW
LC003	NOFEAT	666.9570	666.9049	0.0521	ABOVE
LC004	NOFEAT	666.1910	666.3030	-0.1120	BELOW
LC005	NOFEAT	666.9990	667.1466	-0.1476	BELOW
LC006	NOFEAT	666.6290	666.8656	-0.2366	BELOW
LC007	NOFEAT	667.1460	667.3204	-0.1744	BELOW
LC008	NOFEAT	667.6010	667.5435	0.0575	ABOVE
LC009	NOFEAT	667.5840	667.5432	0.0408	ABOVE
LC010	NOFEAT	667.5670	667.5618	0.0052	ABOVE
LC011	NOFEAT	667.5650	667.4652	0.0998	ABOVE
LC093	NOFEAT	673.8430	673.6450	0.1980	ABOVE
LC094	NOFEAT	674.0270	674.0155	0.0115	ABOVE
LC095	NOFEAT	674.0320	674.2205	-0.1885	BELOW
LC098	NOFEAT	671.5330	671.4543	0.0787	ABOVE
LC099	NOFEAT	668.8510	668.7235	0.1275	ABOVE
LC100	NOFEAT	670.5330	670.4110	0.1220	ABOVE
LC101	NOFEAT	671.1550	671.0822	0.0728	ABOVE
LC102	NOFEAT	671.2990	671.3345	-0.0355	BELOW
LC103	NOFEAT	671.3130	671.4866	-0.1736	BELOW
LC104	NOFEAT	676.9080	677.0150	-0.1070	BELOW
LC105	NOFEAT	684.9620	684.8303	0.1317	ABOVE
LC284	NOFEAT	672.6130	672.7802	-0.1672	BELOW
LC285	NOFEAT	672.7030	672.8782	-0.1752	BELOW
LC286	NOFEAT	672.4360	672.6558	-0.2198	BELOW
LC287	NOFEAT	672.0790	672.2376	-0.1586	BELOW
LC288	NOFEAT	671.5230	671.8283	-0.3053	BELOW
LC289	NOFEAT	671.2950	671.6488	-0.3538	BELOW
LC290	NOFEAT	671.2840	671.5439	-0.2599	BELOW
LC291	NOFEAT	670.9730	671.2776	-0.3046	BELOW
LC292	NOFEAT	670.5850	670.9230	-0.3380	BELOW
LC300	NOFEAT	595.9880	595.5854	0.4026	ABOVE
LC301	NOFEAT	595.7980	595.1412	0.6568	ABOVE
LC302	NOFEAT	595.3890	594.9143	0.4747	ABOVE
LC303	NOFEAT	595.3590	594.8729	0.4861	ABOVE
LC304	NOFEAT	595.6850	595.8449	-0.1599	BELOW
LC321	NOFEAT	581.1590	581.0314	0.1276	ABOVE
LC322	NOFEAT	581.1780	581.0906	0.0874	ABOVE
LC323	NOFEAT	581.8850	581.2214	0.6636	ABOVE
LC324	NOFEAT	582.0920	581.0868	1.0052	ABOVE
LC325	NOFEAT	582.2580	580.9770	1.2810	ABOVE
LC326	NOFEAT	582.2340	580.8561	1.3779	ABOVE
LC327	NOFEAT	582.4760	581.2465	1.2295	ABOVE
LC328	NOFEAT	582.6190	581.8742	0.7448	ABOVE
LC329	NOFEAT	581.1790	580.9176	0.2614	ABOVE

LC330	NOFEAT	581.3250	581.3883	-0.0633	BELOW
LC331	NOFEAT	581.3900	581.6419	-0.2519	BELOW
LC332	NOFEAT	581.3870	581.6505	-0.2635	BELOW
LC333	NOFEAT	581.4880	582.3177	-0.8297	BELOW
LC334	NOFEAT	581.6290	582.4177	-0.7887	BELOW
LC335	NOFEAT	581.6380	582.5191	-0.8811	BELOW
LC347	NOFEAT	582.2700	582.0695	0.2005	ABOVE
LC348	NOFEAT	581.9490	582.0588	-0.1098	BELOW
LC349	NOFEAT	581.9410	582.3157	-0.3747	BELOW
LC350	NOFEAT	581.8790	582.3748	-0.4958	BELOW
LC351	NOFEAT	581.9580	582.4215	-0.4635	BELOW
LC352	NOFEAT	581.9860	582.3991	-0.4131	BELOW
LC353	NOFEAT	582.1060	582.4244	-0.3184	BELOW
LC391	NOFEAT	675.0430	675.8205	-0.7775	BELOW
LC392	NOFEAT	674.9940	675.8201	-0.8261	BELOW
LC393	NOFEAT	674.9810	675.5734	-0.5924	BELOW
LC394	NOFEAT	675.1410	675.6327	-0.4917	BELOW
LC395	NOFEAT	676.2370	676.8885	-0.6515	BELOW
LC396	NOFEAT	676.3260	676.7587	-0.4327	BELOW
LC397	NOFEAT	676.4090	676.5846	-0.1756	BELOW
LC398	NOFEAT	676.5890	676.6802	-0.0912	BELOW
LC399	NOFEAT	676.6500	676.8243	-0.1743	BELOW
LC400	NOFEAT	677.0350	676.9895	0.0455	ABOVE
LC401	NOFEAT	677.1800	677.1168	0.0632	ABOVE
LC402	NOFEAT	677.1510	677.2995	-0.1485	BELOW
LC403	NOFEAT	677.1520	677.5009	-0.3489	BELOW
LC499	NOFEAT	679.8850	679.6667	0.2183	ABOVE
LC500	NOFEAT	679.9720	679.8406	0.1314	ABOVE
LC501	NOFEAT	680.1750	680.0684	0.1066	ABOVE
LC502	NOFEAT	680.2970	679.9340	0.3630	ABOVE
LC503	NOFEAT	680.5380	679.5398	0.9982	ABOVE
LC504	NOFEAT	680.2570	679.4336	0.8234	ABOVE
LC505	NOFEAT	680.4190	679.9415	0.4775	ABOVE
LC506	NOFEAT	680.2800	680.2428	0.0372	ABOVE
LC507	NOFEAT	680.1480	680.1284	0.0196	ABOVE
LC508	NOFEAT	678.2860	678.6005	-0.3145	BELOW
LC509	NOFEAT	678.1610	678.3409	-0.1799	BELOW
LC510	NOFEAT	677.9550	678.1406	-0.1856	BELOW
LC511	NOFEAT	677.9310	678.0333	-0.1023	BELOW
LC512	NOFEAT	677.7350	678.1500	-0.4150	BELOW
LC554	NOFEAT	689.2460	688.9161	0.3299	ABOVE
LC555	NOFEAT	688.4930	688.3235	0.1695	ABOVE
LC556	NOFEAT	688.3990	688.7659	-0.3669	BELOW
LC557	NOFEAT	688.0690	688.3157	-0.2467	BELOW
LC558	NOFEAT	688.0470	688.1972	-0.1502	BELOW
LC559	NOFEAT	688.3780	688.3550	0.0230	ABOVE
LC560	NOFEAT	688.5640	688.8070	-0.2430	BELOW
LC561	NOFEAT	685.7150	685.9419	-0.2269	BELOW
LC562	NOFEAT	683.1780	683.3575	-0.1795	BELOW
LC563	NOFEAT	681.3190	681.8127	-0.4937	BELOW
LC600	NOFEAT	663.4220	663.7570	-0.3350	BELOW
LC601	NOFEAT	663.1060	663.1332	-0.0272	BELOW
LC602	NOFEAT	662.5510	662.6116	-0.0606	BELOW
LC603	NOFEAT	662.2810	661.9615	0.3195	ABOVE

LC604	NOFEAT	661.9630	662.0840	-0.1210	BELOW
LC605	NOFEAT	661.5080	661.5351	-0.0271	BELOW
LC606	NOFEAT	661.1980	661.3153	-0.1173	BELOW
LC607	NOFEAT	660.8360	661.1434	-0.3074	BELOW
LC625	NOFEAT	622.6200	623.0448	-0.4248	BELOW
LC626	NOFEAT	623.2720	623.5530	-0.2810	BELOW
LC627	NOFEAT	623.2750	623.5554	-0.2804	BELOW
LC628	NOFEAT	623.4150	623.4740	-0.0590	BELOW
LC629	NOFEAT	623.1890	623.4123	-0.2233	BELOW
LC630	NOFEAT	623.1480	623.3188	-0.1708	BELOW

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Average Elevation Difference = -0.05083

The Root Mean Square Error is = 0.4191