CITY OF LAKELAND BENCH RUN

Project Summary: Vertical: (NAVD88), Horizontal: NAD83, 2011 Adjustment
Project name: 10th Street/Parkview Pl from Lakeland Hills Blvd to Kettles Ave; Kettles Ave from 10th St to Memorial Blvd; Memorial Blvd from Kettles Ave to Lincoln Ave; Lincoln Ave from Memorial Blvd to Pear St; Pear St from Lincoln Ave to Kathleen Rd
Surveyor: JC
Reviewed: Richard Powell, PLS
Linear unit: US Feet
Field completion date: October 20, 2016
Level: Topcon Digital Level DL102-C
Adjustment Summary
Adjustment type: Height, Constraint
Confidence level: 95%
Number of height adjusted points: 34
Number of height control points: 2

Control Points-benchmarks

Name	Northing	Easting	Elevation	Description
BM131-35A	1355245.1	671280.2	180.788	PK&W, cen s/w, e side Lakeland Hills Blvd, 150'+/- s of c/l Parkview Pl
BM138-67B	1355429.1	671080.1	183.977	COL PK&W, s face CUP #175419, n side 10th St, +/-300'w Lakeland Hills Blvd
BM138-67C	1355432.0	670802.9	189.384	COL PK&W, in s/w, n side 10th St, +/-100'e LRMC emergency entrance
BM138-67D	1355431.8	670515.1	194.811	COL PK&W, cen s/w, n side 10th St, +/-125'w of Morrell Dr
BM138-67E	1355431.9	670223.2	196.820	COL PK&W, cen s/w, n side 10th St, +/-75'e LRMC entrance
BM138-67F	1355432.7	670040.9	197.819	COL PK&W, cen s/w, n side 10th St @ pc, +/-175'e c/l N Fla Ave
BM138-68A	1355434.1	669816.8	199.287	COL PK&W, e end curb inlet, nw quad 10th St & N Fla Ave
BM138-68B	1355432.5	669558.3	201.601	COL PK&W, cen s/w, n side 10th St, +/-275'e of New York Ave
BM138-68C	1355430.1	669277.0	203.094	COL PK&W, cen s/w, n side 10th St, +/-75'w of New York Ave
BM138-68D	1355430.1	668996.4	204.250	COL PK&W, cen s/w, n side 10th St, +/-125'w of Virginia Ave ext'd
BM138-68E	1355433.2	668711.7	205.396	COL PK&W, cen s/w, n side 10th St, +/-125'e of MLK Jr Ave
BM138-68F	1355459.6	668575.1	205.598	COL PK&W, top curb inlet @ nw quad 10th St & MLK Jr Ave

BM138-69A	1355419.9	668473.5	206.243	COL PK&W, cen s/w, n side 10th S,t +/-125'e MLK Jr Ave
BM138-69B	1355412.5	668192.7	204.527	COL PK&W, cen s/w, n side 10th St, +/-275'e of Kettles Ave
BM138-69C	1355410.9	667950.5	199.557	COL PK&W, top curb inlet, ne Quad 10th St & Kettles Ave
BM138-69D	1355134.8	667977.9	203.390	COL PK&W, top curb inlet, n side W 9th St, +/-50'e of Kettles Ave
BM138-69E	1355089.8	667954.1	203.329	COL PK&W, e gut line Kettles Ave, +/-c/l of W 9th St
BM138-69F	1354809.4	667907.3	207.645	COL PK&W, top curb inlet, s of W 8th St, +/-40'w of Kettles Ave
BM138-70A	1354621.6	667956.7	207.615	COL PK&W, w gut line Kettles Ave @ n pt of n return W 7th St
BM138-70B	1354281.3	667909.3	209.755	COL PK&W, top curb inlet, s side W 6th St, +/-40'w of Kettles Ave
BM138-70C	1354087.7	667961.6	211.496	COL RBC, +/-1'e boc, e side Kettles Ave, +/-40'n of W 5th St
BM138-70D	1353796.7	667968.3	212.304	COL PK&W, toc @ apron, e side Kettles Ave, +/-125's of W 4th St
BM138-70E	1353512.4	667968.3	213.137	COL PK&W, e gut line Kettles Ave, +/-150'n of 2nd St
BM138-70F	1353219.2	667969.7	213.599	COL PK&W, toc @ apron, e side Kettles Ave, +/-250's of W 2nd St
BM138-71A	1353143.8	667969.2	213.100	COL PK&W, e gut line Kettles Ave, +/-500's of W 2nd St
BM138-71B	1352820.8	667969.8	212.184	COL PK&W, e gut line Kettles Ave, +/-150'n c/l Memorial Blvd
BM138-71C	1352711.7	667990.5	212.533	COL PK&W, top curb inlet, n side Memorial Blvd, +/-40'e of Kettles Ave
BM138-71D	1352714.2	667702.4	209.154	COL PK&W, cen s/w, n side Memorial Blvd, +/-75'e of Ohio Ave
BM138-71E	1352712.3	667408.1	208.016	COL PK&W, cen s/w, n side Memorial Blvd, +/-125'e of Lincoln Ave
BM138-71F	1352703.4	667271.7	207.736	COL PK&W, top curb inlet, nw quad Memorial Blvd & Lincoln Ave
BM138-72A	1352428.2	667258.6	203.787	COL PK&W, cen s/w, nw quad Lincoln Ave & Quincy St
BM138-72B	1352137.2	667273.3	202.383	COL PK&W, cen s/w, w side Lincoln Ave, +/-120'n of Emma St
BM138-72C	1351824.6	667279.2	206.868	COL PK&W, cen s/w @ apron, w side Lincoln Ave, +/-125'n of Adams
BM138-72D	1351510.5	667286.4	210.396	COL PK&W, cen s/w @ apron, w side Lincoln Ave, +/-150'n of Pear St
BM138-72E	1351417.6	667197.3	209.246	COL PK&W, cen s/w, n side Pear St, +/-125'w of Lincoln Ave
BM131-17A	1351498.4	667010.1	205.128	COL PK&W, cen s/w, e side Kathleen Rd, +/-140'n c/l Pear St.

Digital Level Closure

From	To	Distance	Closure	Allowable Error
BM131-35A	BM131-17-A	8599.76	0.002	0.064

DL Observations

#	Point	BS	FS	Instrument Elevation	Elevation	Distance
BR138P66−1	131-35A	4.391		185.179	180.788	189.980
BR138P66−2	1		1.202	185.179	183.977	193.240
BR138P66−3	1	6.868		190.845	183.977	135.480
BR138P66−4	2		1.461	190.845	189.384	141.520
BR138P66−5	2	8.303		197.687	189.384	141.720
BR138P66−6	3		2.876	197.687	194.811	145.720
BR138P66−7	3	6.145		200.956	194.811	147.280
BR138P66−8	4		4.135	200.956	196.820	144.460
BR138P66−9	4	5.566		202.386	196.820	89.600
BR138P66−10	5		4.567	202.386	197.819	92.560
BR138P66−11	5	5.404		203.223	197.819	120.440
BR138P66−12	6		3.936	203.223	199.287	117.780
BR138P66−13	6	6.937		206.224	199.287	128.320
BR138P66−14	7		4.623	206.224	201.601	130.100
BR138P66−15	7	6.268		207.869	201.601	141.980
BR138P66−16	8		4.775	207.869	203.094	139.140
BR138P66−17	8	5.828		208.922	203.094	146.000
BR138P66−18	9		4.672	208.922	204.250	134.460

BR138P66−19	9	5.923		210.173	204.250	141.020
BR138P66−20	10		4.777	210.173	205.396	143.380
BR138P66−21	10	5.072		210.468	205.396	71.680
BR138P66−22	11		4.870	210.468	205.598	70.060
BR138P66−23	11	5.635		211.233	205.598	53.840
BR138P66−24	12		4.990	211.233	206.243	59.660
BR138P66−25	12	4.924		211.167	206.243	143.860
BR138P66−26	13		6.640	211.167	204.527	136.900
BR138P66−27	13	2.338		206.865	204.527	125.360
BR138P66−28	14		7.308	206.865	199.557	116.660
BR138P66−29	14	6.266		205.822	199.557	147.620
BR138P66−30	15		2.433	205.822	203.390	131.100
BR138P66−31	15	4.766		208.156	203.390	27.060
BR138P66−32	16		4.827	208.156	203.329	29.580
BR138P66−33	16	7.509		210.838	203.329	146.600
BR138P66−34	17		3.193	210.838	207.645	140.780
BR138P66−35	17	5.156		212.801	207.645	112.620
BR138P66−36	18		5.185	212.801	207.615	81.460
BR138P66−37	18	6.259		213.874	207.615	173.700
BR138P66−38	19		4.118	213.874	209.755	172.280
BR138P66−39	19	5.853		215.608	209.755	106.460
BR138P66−40	20		4.112	215.608	211.496	93.840
BR138P66−41	20	5.106		216.602	211.496	145.120
BR138P66−42	21		4.299	216.602	212.304	145.740
BR138P66−43	21	5.733		218.037	212.304	142.180
BR138P66−44	22		4.900	218.037	213.137	141.920
BR138P66−45	22	5.855		218.992	213.137	157.640

BR138P66−46	23		5.393	218.992	213.599	135.480
BR138P66−47	23	4.972		218.571	213.599	37.840
BR138P66−48	24		5.471	218.571	213.100	37.700
BR138P66−49	24	5.096		218.196	213.100	167.640
BR138P66−50	25		6.012	218.196	212.184	155.060
BR138P66−51	25	5.183		217.367	212.184	58.020
BR138P66−52	26		4.834	217.367	212.533	55.200
BR138P66−53	26	3.726		216.259	212.533	144.280
BR138P66−54	27		7.105	216.259	209.154	143.600
BR138P66−55	27	4.567		213.721	209.154	149.040
BR138P66−56	28		5.704	213.721	208.016	145.120
BR138P66−57	28	4.926		212.942	208.016	67.540
BR138P66−58	29		5.206	212.942	207.736	70.400
BR138P66−59	29	3.754		211.490	207.736	142.380
BR138P66−60	30		7.703	211.490	203.787	133.340
BR138P66−61	30	3.178		206.965	203.787	140.520
BR138P66−62	31		4.582	206.965	202.383	150.900
BR138P66−63	31	7.060		209.443	202.383	157.540
BR138P66−64	32		2.575	209.443	206.868	154.500
BR138P66−65	32	7.564		214.432	206.868	154.100
BR138P66−66	33		4.036	214.432	210.396	159.840
BR138P66−67	33	5.237		215.634	210.396	94.420
BR138P66−68	34		6.387	215.634	209.246	89.580
BR138P66−69	34	2.576		211.822	209.246	131.420
BR138P66−70	131-17A		6.694	211.822	205.128	86.400
Total Length						**8599.760**