

BM #	LINE ELEV.	#1 DIFF.	LINE ELEV.	#2 DIFF.	LINE ELEV.
13	752.19				
14	762.07	+9.88	762.05	+9.86	
15	784.87	+22.80	784.85	+22.80	
16	854.66	+69.79	854.64	+69.79	
17	802.34	-52.32	802.35	-52.29	
18	749.31	-53.03	749.33	-53.02	
19	744.13	-5.18	744.15	-5.18	
20	743.30	-0.83	743.32	-0.83	
21	740.78	-2.52	740.80	-2.52	
22	734.36	-6.42	734.38	-6.42	
23	732.83	-1.53	732.82	-1.56	
24	731.89	-1.24	731.64	-1.18	731.62
25	731.60	+0.01	731.73	+0.09	731.66
26	732.46	+0.86	732.60	+0.87	
27	730.29	-2.17	730.42	-2.18	
28	728.92	-1.37	729.04	-1.38	
29	729.66	+0.74	728.35	+0.69	729.78
30	725.99	-3.67	724.27	-3.68	
31	730.61	+4.62	729.27	+4.60	729.27
32	726.56	-4.05	725.17	-4.10	725.21

NOTE: BM #32 = BM #26 ON FUTURE  
RTE. 71 SURVEY

#3 SP. DIFF.	ADJ. DIFF.	ADJ. ELEV.	23.
		752.19	
	+9.87	762.06	
	+22.80	784.86	
	+69.79	854.65	
	-52.31	802.34	
	-53.03	749.31	
	-5.18	744.13	
	-0.83	743.30	
	-2.52	740.78	
	-6.42	734.36	
	-1.55	732.81	
-1.20	-1.19	731.62	
+0.04	+0.02	731.64	
	+0.87	732.51	
	-2.18	730.33	
	-1.38	728.95	
+0.74	+0.74	729.69	
	-3.68	726.01	
+4.60	+4.61	730.62	
-4.06	-4.06	726.56	

ADJUSTMENT OF B.M. ELEVATIONS FROM USGS TO USGS			
B.M. No.	B.M. DIST TOTAL DIST	$\times$ CLOSURE	+ OR - CORRECTION
USGS #9	$\frac{0}{4.6}$ mi	$\times 0.08$	= 0
1-82	$\frac{0.5}{4.6}$ mi	$\times 0.08$	= -0.01
2-82	$\frac{0.7}{4.6}$		= -0.01
3-82	$\frac{0.9}{4.6}$		= -0.02
4-82	$\frac{1.1}{4.6}$		= -0.02
5-82	$\frac{1.5}{4.6}$		= -0.03
6-82	$\frac{1.7}{4.6}$ mi	$\times 0.08$	= -0.03
7-82	$\frac{1.9}{4.6}$		= -0.03
8-82	$\frac{2.1}{4.6}$		= -0.04
9-82	$\frac{2.4}{4.6}$		= -0.04
10-82	$\frac{2.6}{4.6}$		= -0.04
11-82	$\frac{2.8}{4.6}$		= -0.05
USGS #37	$\frac{4.6}{4.6}$ mi	$\times 0.08$	= -0.08

OBSERVED BM ELEV.	ADJUSTED BM ELEV.
768.21	768.21
788.14	788.13
801.56	801.55
738.96	738.94
713.26	713.24
697.32	697.29
676.00	675.97
653.40	653.37
655.96	655.92
627.66	627.62
612.24	612.20
608.36	608.31
813.87	813.79

BM#	LINE #1		LINE #2		LINE
	ELEV.	DIFF	ELEV.	DIFF	ELEV
13	229.268				
14	232.279	+3.011	232.273	+3.005	
15	239.228	+6.949	239.222	+6.949	
16	260.500	+21.272	260.494	+21.272	
17	244.553	-15.947	244.556	-15.938	
18	228.389	-16.164	228.396	-16.160	
19	226.810	-1.579	226.817	-1.579	
20	226.557	-0.253	226.564	-0.253	
21	225.789	-0.768	225.796	-0.768	
22	223.832	-1.957	223.839	-1.957	
23	223.366	-0.466	223.364	-0.475	
24	222.988	-0.378	223.004	-0.360	222.998
25	222.991	+0.003	223.031	+0.027	223.010
26	223.253	+0.262	223.296	+0.265	
27	222.592	-0.661	222.632	-0.664	
28	222.174	-0.418	222.211	-0.421	
29	222.400	+0.226	222.001	+0.210	222.437
30	221.281	-1.119	220.879	-1.122	
31	222.689	+1.408	222.281	+1.402	222.281
32	221.455	-1.234	221.031	-1.250	221.044
NOTE : BM#32 = BM#26 ON FUTURE ROUTE 71 SURVEY					

#3 DIFF	ADJ. DIFF	ADJ. ELEV.
		229.268
	+3.008	232.276
	+6.949	239.225
	+21.272	260.497
	-15.943	244.554
	-16.162	228.392
	-1.579	226.813
	-0.253	226.560
	-0.768	225.792
	-1.957	223.835
	-0.471	223.364
-0.366	-0.363	223.001
+0.012	+0.008	223.009
	+0.264	223.273
	-0.663	222.610
	-0.420	222.190
+0.226	-0.226	221.964
	+1.121	223.085
+1.402	+1.402	224.487
-1.237	-1.236	223.251

Bench Level Adjustment Notes

ADJUSTMENT OF B.M. ELEVATIONS  
FROM USGS TO USGS

B.M. NO.	B.M. DIST TOTAL DIST	x CLOSURE	= + OR - CORRECTION
USGS #9	0/7.4 km	x 0.08	= 0
1-82	0.8/7.4 km	x 0.08	= -0.009
2-82	1.13/7.4 km		= -0.012
3-82	1.45/7.4		= -0.016
4-82	1.77/7.4		= -0.019
5-82	2.41/7.4		= -0.026
6-82	2.74/7.4 km	x 0.08	= -0.029
7-82	3.06/7.4		= -0.033
8-82	3.38/7.4		= -0.036
9-82	3.80/7.4		= -0.041
10-82	4.18/7.4		= -0.045
11-82	4.51/7.4		= -0.049
USGS #37	7.4/7.4		= -0.080

OBSERVED ELEV.	ADJUSTED ELEV.
234.150	234.150
240.225	240.216
244.315	244.303
225.235	244.299
217.402	217.383
212.543	212.517
206.045	206.016
199.156	199.123
199.937	199.901
191.311	191.270
186.611	186.566
185.428	185.379
248.068	247.988