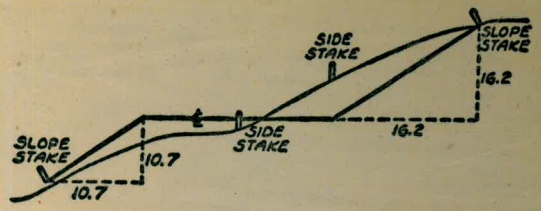
NOTES

#785



Distances from Side Stakes for Cross-Sectioning

Slope 1 to 1. Roadway of Any Width

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	1
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	3
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	4
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	5
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	6
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	7
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	8
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	9
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	10
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	11
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	12
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	13
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	14
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	15
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	16
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	17
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	18
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	19
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	20
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	21
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	22
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	23
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	24
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	25
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	26
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	27
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	28
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	29
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	30
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	31
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	32
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	33
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	34
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	35
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	36
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	37
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	38
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	39
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	40
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	41
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	42
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	43
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	44
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	45
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	46
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	47
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	48
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	49
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	50

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

ALVORADO FILTRATION PLANT #

Table XIII—Corrections for Tangents and Externals

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

For Tangents Add

Central Angle	Degree of Curve													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	03	.06	09	13	16	19	.22	.25	.28	.31	34	38	42	.46
15°	04	10	14	19	24	.29	.34	.39	45	.51	.53	58	.63	.68
20°	06	.13	19	.26	.32	.39	.45	.51	.58	.65	.72	79	.84	.90
25°	.08	16	24	.33	40	49	.58	67	.75	.83	90	.99	1.06	1.14
30°	10	19	.29	39	49	.59	.69	79	.89	.99	1.09	1.20	1.29	1.39
35°	11	22	.34	47	.58	.69	.70	.81	.92	1.04	1.29	1.42	1.54	1.66
40°	13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°	15	.30	44	60	76	91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°	17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°	19	38	.57	76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°	.21	42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°	23	46	.69	.93	1.16	1 40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°	25	.51	76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°	30	.61	.91	1.22	1.53	1.84	2.15	2.46	2 78	3.10	3.44	3.78	4.12	4.46
85°	33	66	1.00	1.33	1.68	2.02	2.36	2 70	3.05	3.40	3.77	4.14	4.55	4 89
90°	36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32
95°	39	79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83
100°	43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34
110°	51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4 76	5.31	5 86	6.43	7 01	7 60
120°	62	1.25	1 93	2.52	3.16	3.81	4 45	5.11	5.77	6 44	7 12	7.80	8.50	9 22

For Externals Add

Central Angle	Degree of Curve													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°	.009	.018	.027	036	.046	.056	.065	.074	.083	.093	.106	120	127	135
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.711	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.286	.383	.480	.578	.678	.777	.877	.977	1.07	1.18	1.29	1.39
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.985	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

INDEX

	0+89.00			
				529.84
	3.470	538.310		
N86.67			5.492	532.818
N77.00			5.447	532.863
N67.33			5.384	532.926
N57.66			5.382	532.928
N48.00			5.302	533.008
N38.33			5.274	533.036
N28.66			5.188	533.122
N19.00			5.158	533.152
N9.33			5.100	533.210
AXIS			5.077	533.233
S10.00			5.004	533.306
S19.66			5.090	533.220
S29.33			5.118	533.192
S39.00			5.197	533.113
S48.66			5.197	533.113
S58.33			5.262	533.048
S68.00			5.298	533.012
S77.66			5.368	532.942

		538.310	
S87.33			5.390 — 532.920
S97.00			5.462 532.848
S106.66			5.490 — 532.820

1+02 11

	538.310		
N 104.80		5.582	532.728
N 95.72		5.560	532.750
N 86.67		5.500	532.810
N 77.00		5.526	532.784
N 67.33		5.427	532.883
N 57.66		5.427	532.883
N 48.00		5.305	533.005
N 38.33		5.325	532.985
N 28.66		5.213	533.097
N 19.00		5.214	533.096
N 9.33		5.143	533.167
AXIS		5.134	533.176
S 10.00		5.030	533.280
S 19.66		5.113	533.197
S 29.33		5.120	533.190
S 39.00		5.200	533.110
S 48.66		5.213	533.097
S 58.33		5.288	533.022
S 68.00		5.300	533.010
S 77.66		5.390	532.920

	538.310		
S 87.33		5.405	532.905
S 97.00		5.475	532.835
S 106.66		5.479	532.831
S 115.71		5.550	532.760
S 124.70		5.583	532.727

3

1+15 23

538.310

N106.00		5.614 ✓	532.696
N96.33		5.576	532.734
N86.67		5.496 ✓	532.814
N77.00		5.510	532.800
N67.33		5.411 ✓	532.899
N57.66		5.416	532.894
N48.00		5.307 ✓	533.003
N38.33		5.329	532.981
N28.66		5.239 ✓	533.071
N19.00		5.227	533.083
N9.33		5.120 ✓	533.190
AXIS		5.136	533.174
S10.00		5.024 ✓	533.286
S19.66		5.133	533.177
S29.33		5.130 ✓	533.180
S39.00		5.221	533.089
S48.66		5.218 ✓	533.092
S58.33		5.307	533.003
S68.00		5.307 ✓	533.003

4

538.310

S87.66		5.394	532.916
S87.33		5.419 ✓	532.891
S97.00		5.487	532.823
S106.66		5.490 ✓	532.820
S116.33		5.565	532.745
S126.00		5.580 ✓	532.730

5

1428 35

538.310

N 106.00	5.632	532.678
N 96.33	5.608	.702
N 86.66	5.515	.795
N 77.00	5.545	.765
N 67.33	5.436	.874
N 57.66	5.440	.870
N 48.00	5.330	.990
N 38.33	5.337	.973
N 28.66	5.234	533.076
N 19.00	5.234	.076
N 9.33	5.158	.152
AXIS	5.155	.155
S 10.00	5.052	.258
S 19.66	5.143	.167
S 29.33	5.133	.177
S 39.00	5.238	.072
S 48.66	5.220	090
S 58.33	5.317	532.993
S 68.00	5.320	.990

6

538.310

S 77.66	5.444	532.896
S 87.33	5.432	.878
S 97.00	5.496	.814
S 106.66	5.496	.814
S 116.33	5.580	.730
S 126.00	5.599	.711

1+41 46

538.310

N 106.00		5.600 ✓	532.710
N 96.33		5.589	.721
N 86.66		5.479 ✓	.831
N 77.00		5.536	.774
N 67.33		5.410 ✓	.900
N 57.66		5.432	.878
N 48.00		5.309 ✓	533.007
N 38.33		5.322	532.988
N 28.66		5.192 ✓	533.118
N 19.00		5.229	.081
N 9.33		5.109 ✓	.201
AXIS		5.127	.183
S 10.00		5.010 ✓	533.300
S 19.66		5.108	.202
S 29.33		5.106 ✓	.204
S 39.00		5.201	.109
S 48.66		5.204 ✓	.106
S 58.33		5.307	.003
S 68.00		5.307 ✓	.003

538.310

S 77.66		5.390	532.920
S 87.33		5.415 ✓	.895
S 97.00		5.490	.820
S 106.66		5.490 ✓	.820
S 116.33		5.565	.745
S 126.00		5.595 ✓	.735

1454 58 SEPT 13, 1940

	8.214	538.130	529.916
N 106.00		5.439	532.891
N 96.33		5.468	
N 86.66		5.349	
N 77.00		5.393	
N 67.33		5.275	
N 57.66		5.282	
N 46.00		5.551	
N 38.33		5.120	
N 28.66		5.059	
N 19.00		5.081	
N 9.33		5.002	
Axis		4.992	
S 10.00		4.863	
S 19.66		4.923	
S 29.33		4.952	
S 39.00		5.044	
S 48.66		5.050	
S 58.33		5.156	
S 68.00		5.141	

	5	538.130	
S 77.66			5.243
S 87.33			5.264
S 97.00			5.345
S 106.66			5.330
S 116.33			5.424
S 126.00			5.430

1467 69

Sept. 13, 1949

	538.130	
N 106.00		5.433 ✓
N 96.33		5.462
N 86.66		5.349 ✓
N 77.00		5.382
N 67.33		5.257 ✓
N 57.66		5.275
N 48.00		5.161 ✓
N 38.33		5.164
N 28.66		5.052 ✓
N 19.00		5.068
N 9.33		4.968 ✓
Axis		4.964
S 10.00		4.855 ✓
S 19.66		4.960
S 29.33		4.946 ✓
S 39.00		5.045
S 48.66		5.050 ✓
S 58.33		5.137
S 68.00		5.129 ✓

	538.130	
S 77.66		5.238
S 87.33		5.255 ✓
S 97.00		5.340
S 106.66		5.333 ✓
S 116.33		5.420
S 126.00		5.428 ✓

13

1+80 81

	538.130	
N 106.00		5.433
N 96.33		5.450
N 86.66		5.342
N 77.00		5.385
N 67.33		5.284
N 57.66		5.284
N 48.00		5.158
N 38.33		5.158
N 28.66		5.048
N 19.00		5.088
N 09.33		4.995
AXIS		4.986
S 10.00		4.872
S 19.66		4.975
S 29.33		4.952
S 39.00		5.042
S 48.66		5.050
S 58.33		5.140
S 68.00		5.131

14

	538.130	
S 77.66		5.223
S 87.33		5.232
S 97.00		5.344
S 106.66		5.318
S 116.33		5.417
S 126.00		5.411

1+93.23

538.130

N 106.00		5.413
N 96.33		5.432
N 86.66		5.338
N 77.00		5.349
N 67.33		5.246
N 57.66		5.305
N 48.00		5.154
N 38.33		5.163
N 28.66		5.038
N 19.00		5.057
N 9.33		4.963
Axis		4.969
S 10.00		4.862
S 19.66		4.967
S 29.33		4.948
S 39.00		5.045
S 48.66		5.020
S 58.33		5.129
S 68.00		5.130

538.130

S 77.66		5.232
S 87.33		5.234
S 97.00		5.338
S 106.66		5.312
S 116.33		5.412
S 126.00		5.490

2+07.05

538.130

N 106.00		5.413 ✓
N 96.33		5.440
N 86.66		5.352 ✓
N 77.00		5.366
N 67.33		5.259 ✓
N 57.66		5.279
N 48.00		5.154 ✓
N 38.33		5.160
N 28.66		5.052 ✓
N 19.00		5.048
N 9.33		4.983 ✓
Axis		4.979
S 10.00		4.882 ✓
S 19.66		4.988
S 29.33		4.960 ✓
S 39.00		5.072
S 48.66		5.067 ✓
S 58.33		5.158
S 68.00		5.160 ✓

538.130

S 77.66		5.249
S 87.33		5.264 ✓
S 97.00		5.336
S 106.66		5.344 ✓
S 116.33		5.425
S 126.00		5.440 ✓

2+20 ℄

	538.130	
N106.00		5.416
N 96.33		5.424
N 86.66		5.331
N 77.00		5.338
N 67.33		5.245
N 57.66		5.280
N 48.00		5.144
N 38.33		5.164
N 28.66		5.034
N 19.00		5.057
N 9.33		4.970
Axis		4.970
S 10.00		4.872
S 19.66		4.973
S 29.33		4.952
S 39.00		5.054
S 48.66		5.054
S 58.33		5.150
S 68.00		5.143

	539.130	
S 77.66		5.229
S 87.33		5.242
S 97.00		5.327
S 106.66		5.330
S 116.33		5.423
S 126.00		5.440
		5.440

21

2+33.28

538.130

N 106.00		5.422 ✓
N 96.33		5.450
N 86.66		5.342 ✓
N 77.00		5.368
N 67.33		5.252 ✓
N 57.66		5.265
N 48.00		5.153 ✓
N 38.33		5.168
N 28.66		5.055 ✓
N 19.00		5.058
N 9.33		4.974 ✓
AXIS		4.983
S 10.00		4.882 ✓
S 19.66		4.980
S 29.33		4.960 ✓
S 39.00		5.057
S 48.66		5.066 ✓
S 58.33		5.156
S 68.00		5.165 ✓

22

538.130

S 77.66		5.240
S 87.33		5.266 ✓
S 97.00		5.345
S 106.66		5.345 ✓
S 116.33		5.423
S 126.00		5.426 ✓

2+46 39

	538.130
N 106.00	5.430 ✓
N 96.33	5.468
N 86.66	5.335 ✓
N 77.00	5.386
N 67.33	5.260 ✓
N 57.66	5.255
N 48.00	5.140 ✓
N 38.33	5.155
N 28.66	5.024 ✓
N 19.00	5.055
N 9.33	4.944 ✓
AXIS	4.950
S 10.00	4.850 ✓
S 19.66	4.962
S 29.33	4.945 ✓
S 39.00	5.040
S 48.66	5.040 ✓
S 58.33	5.139
S 68.00	5.142 ✓

	538.130
S 77.66	5.230
S 87.33	5.236 ✓
S 97.00	5.335
S 106.66	5.320 ✓
S 116.33	5.405
S 126.00	5.410 ✓

2+59.50

539.130

N 106.00	5.436
N 96.33	5.465
N 86.66	5.348
N 77.00	5.371
N 67.33	5.257
N 57.66	5.284
N 48.00	5.158
N 38.33	5.172
N 28.66	5.054
N 19.00	5.080
N 9.33	4.980
AXIS	4.968
S 10.00	4.865
S 19.66	4.971
S 29.33	4.980
S 39.00	5.062
S 48.66	5.074
S 58.33	5.157
S 68.00	5.157

539.130

S 77.66	5.244
S 87.33	5.245
S 97.00	5.338
S 106.00	5.346
S 116.33	5.404
S 126.00	5.410

2+72 ~~C2~~

538.130

N 106.00	5.439
N 96.33	5.463
N 86.66	5.335
N 77.00	5.380
N 67.33	5.271
N 57.66	5.290
N 48.00	5.153
N 38.33	5.170
N 28.66	5.054
N 19.00	5.076
N 9.33	4.983
Axis	4.990
S 10.00	4.860
S 19.66	4.963
S 29.33	4.970
S 39.00	5.053
S 48.66	5.053
S 58.33	5.145
S 68.00	5.153

538.130

S 77.66	5.243
S 87.33	5.243
S 97.00	5.913
S 106.66	5.330
S 116.33	5.422
S 126.00	5.429

ck to B.M.

Corr. 529.916

Q218 529.912

2+85.73

8.325 538.241 529.916

N 106.00	5.586	
N 96.33	5.581	
N 86.66	5.452	
N 77.00	5.494	
N 67.33	5.390	
N 57.66	5.394	
N 48.00	5.269	
N 38.33	5.294	
N 28.66	5.160	
N 19.00	5.176	
N 9.33	5.090	
AXIS	5.101	
S 10.00	4.995	
S 19.66	5.098	
S 29.33	5.086	
S 39.00	5.170	
S 48.66	5.173	
S 58.33	5.283	
S 68.00	5.280	

Sept. 20-49
Rain

A Shipman
King
Pt. West

577.66		5.361
587.33		5.349
597.00		5.445
606.00		5.460
616.33		5.546
626.00		5.553

2498 85

538.241

N 10		5.550	
N 96.33		5.570	
N 86.66		5.427	
N 77.00		5.475	
N 67.33		5.343	
N 57.66		5.385	
N 48.0		5.241	
N 38.33		5.244	
N 28.66		5.268	
N. 19.00		5.147	
N 9.33		5.162	
N x 0		5.066	
S 10.0		5.075	
S. 19.66		4.949	
S 29.33		5.078	
S 39.0		5.070	
S 48.66		5.167	
S 58.33		5.250	
S 68.00		5.253	

S 77.66			5.360
S 87.33			5.352
S 97.0			5.460
S 106.66			5.446
S 116.33			5.534
S 126.00			5.525

3+1196

538.241

N 106		5.553
N 96.33		5.582
N 86.66		5.448
N 77.00		5.461
N 67.33		5.349
N 57.66		5.381
N 48.00		5.254
N 38.33		5.279
N 28.66		5.165
N 19.00		5.193
N 9.33		5.087
Axis		5.074
S 10		4.972
S 19.66		5.097
S 29.33		5.100
S 39.0		5.163
S 48.66		5.182
S 58.33		5.260
S 68.00		5.270

538.241

S 77.66		5.351
S 87.33		5.363
S 97.0		5.458
S 106.00		5.452
S 116.33		5.542
S 126.00		5.549

7+25.08
13 ''

538.241

N 106	5.550
N 96.33	5.479
N 86.66	5.432
N 77.00	5.465
N 67.33	5.347
N 57.66	5.375
N 48.00	5.252
N 38.33	5.277
N 28.66	5.156
N 19.00	5.194
N 9.37	5.069
Axis	5.084
S 10	4.969
S 19.66	5.081
S 29.33	5.076
S 39.0	5.133
S 48.66	5.144
S 58.33	5.208
S 68.00	5.231

S 77.66		5.345
S 87.33	ℓ	5.379
S 97.0		5.451
S 106.00		5.458
S 116.33		5.508
S 126.00		5.525

3438.20

538.241

N	N 106		5.555
N	N 96.33		5.577
N	N 86.66		5.454
N	N 77.00		5.488
N	N 67.33		5.346
N	N 57.66		5.378
N	N 48.00		5.250
N	N 38.33		5.287
N	N 28.66		5.182
N	N 19.00		5.203
	N 9.33		5.092
H	Hx 13		5.090
S	S 10.00		4.978
S	S 19.66		5.085
S	S 29.33		5.087
S	S 39.0		5.165
S	S 48.66		5.165
S	S 58.33		5.249
S	S 68.00		5.252

538.241

S 77.66	8		5.355
S 87.33			5.363
S 97.00			5.460
S 106.00			5.452
S 116.33			5.525
S 126.00			5.529

3+5/1.3/

538.24

N106		5.547
N 96.33		5.562
N 86.66		5.437
N 77.00		5.471
N 67.33		5.336
N 57.66		5.374
N 48.00		5.247
N 38.33		5.270
N 28.66		5.145
N 19.00		5.165
N 9.33		5.068
N X15		5.073
S 1000		4.953
S 19.66		5.040
S 29.33		5.044
S 39.0		5.144
S 48.66		5.159
S 58.33		5.234
S 6800		5.238

S 77.66		5.342
S 87.33		5.360
S 97.0		5.437
S 106.0		5.438
S 116.33		5.507
S 126.0		5.528

3+6443

538.241

N 106		5.546
N 96.33		5.560
N 86.66		5.451
N 77.00		5.480
N 67.33		5.365
N 57.66		5.389
N 48.00		5.266
N 38.33		5.284
N 28.66		5.172
N 19.00		5.195
N 9.33		5.085
Axis		5.093
S 10.00		5.002
S 19.66		5.078
S 29.33		5.071
S 39.00		5.173
S 48.66		5.184
S 58.33		5.272
S 68.00		5.272

538.241

S 72.66		5.344
S 83.33		5.359
S 97.0		5.450
S 106.0		5.461
S 116.33		5.539
S 126.0		5.544

3+7754

N 10.6	5.544
N 96.33	5.584
N 86.66	5.452
N 77.00	5.476
N 67.33	5.366
N 57.66	5.394
N 48.00	5.259
N 38.33	5.271
N 28.66	5.163
N 19.00	5.187
N 9.33	5.082
AX15	5.076
10.00	4.966
19.66	5.067
29.33	5.077
39.6	5.157
48.66	5.170
58.33	5.242
68.00	5.258

S 72.66	
S 87.33	
S 97.0	
S 106.0	
S 116.33	
S 126	

5.38.241

	5348
	5.755
	5.443
	5.450
	5.532
	5.541

Check Shots ON N.W. Cor Res.

1+28.35

9-20-49 - Cool

King Shipman West

B.M.	8.335	538.175		529.84		538.175		5.212 ✓
N 106			5.514 ✓	532.661	S 68°			5.313
N 96.33			5.305	.670	S 72.66			5.320 ✓
N 86.66			5.404 ✓	.771	S 87.33			5.392
N 77.00			5.440	.735	S 97.0			5.386 ✓
N 67.33			5.316 ✓	.859	S 106			5.472
N 57.66			5.340	.835	S 116.33			5.482 ✓ .693
N 48.00			5.214 ✓	.961	S 126			
N 38.33			5.228	.947				
N 28.66			5.121 ✓	.854				
N 19.00			5.133	.842				
N 9.33			5.050 ✓	.125				
Avg			5.053	.122				
S 10			4.939 ✓	.236				
S 19.41			5.045	.130				
S 29.33			5.026 ✓	.949				
S 39.10			5.133					
S 48.66			5.112 ✓					
S 58.33			5.200					

1+54 58

N 106.00 TO S 126.00

CHECK SHOTS

STATION	B.S.	H.I.	F.S.	Elev.
B.M #7	8.241	~~538.157~~ 538.157		529.916
T.N. N 106.00			5.457	532.700
N 96.33			5.493	532.664
		✓	5.500	532.657 Recheck 3:25 (Cooler)
N 86.66			5.373	532.784
N 77.00			5.404	532.753
N 67.33			5.301	532.856
		✓	5.308	532.849 Recheck
N 57.66			5.301	532.856
		✓	5.308	532.849 Recheck
N 48.00			5.178	532.979
N 38.33		✓	5.195	532.962
N 28.66			5.087	533.070
N 19.00			5.113	533.044
N 9.33			5.024	533.133
4x15		✓	5.024	533.133
S 10.00			4.895	533.262
S 19.66			5.001	533.156
S 29.33			4.977	533.180
S 39.00			5.080	533.077
S 48.66			5.083	533.074
S 58.33		✓	5.186	532.971

Denotes ✓ Recheck Reading

Oct. 6, 1949 – 2:30 pm. – Wye T #

Beatty Cool & Bright

Rogers T

Finney ¢

	H.I.	F.S.	Elev.
	538.157		
S 68.00		5.168	532.989
S 77.66		5.264	532.893
S 87.33		5.280	532.877
S 97.00	✓	5.373	532.784
S 106.66		5.354	532.803
S 116.33		5.452	532.705
S 126.00		5.453	532.704
Ck B.M. #7		8.246	529.911 = 529.916

3 + 90 66

OCT. 10, 1947
Beatty
Rogers
Finney

BM # 7	8.416	538.332	529.916
N 106.00		5.640	
N 96.33		5.660	
N 86.66		5.552	
N 77.00		✓ 5.580 79	
N 67.33		5.456	
N 57.66		5.488	
N 48.00		5.375	
N 38.33		5.375 8	
N 28.66		5.276	
N 19.00		5.291	
N 9.33		5.182	
Axis		✓ 5.189 91	
S 10.00		5.078	
S 19.66		✓ 5.172 3	
S 29.33		5.185	
S 39.00		5.255	
S 48.66		5.266	
S 58.33		✓ 5.360	

Mild & Bright
Wye # .

538.332

S 68.00		5.365
S 77.66		5.464
S 87.33		5.460
S 97.00	✓	5.550
S 106.66	✓	5.550
S 116.33		5.628
S 126.00		5.638
CK BM # 7		8.419 529.913

4+03 ZZ

10-10-29
Beatty T
Finney ϕ
Rogers

B.M. #7	8.419	538.335	529.916
N 106.00		5.635	
N 96.33		5.650	
N 86.66		5.535	
N 77.00		v 5.563	
N 67.33		5.452	
N 57.66		5.471	
N 48.00		5.340	
N 38.33		v 5.378	
N 28.66		5.260	
N 19.00		5.264	
N 9.33		5.142	
Axis		v 5.163	
S 10.00		5.052	
S 19.66		5.164	
S 29.33		5.174	
S 39.00		5.258	
S 48.66		5.262	
S 58.33		v 5.358	

Light Wind

L 538.335

S 68.00	5.353	
S 77.66	5.434	
S 87.33	5.453	
S 97.00	5.547	
S 106.66	5.535	
S 116.33	5.620	
S 126.00	5.608	
ck BM. #7	8.425	529.910

4 + 16 89

10-10-49
Beatty
Rogers &
Finney T.

Light Wind

B.M. #7	8.422	538.338	529.916	538.338	
N 106.00		5.636		S 68.00	5.368
N 96.33		✓ 5.665		S 77.66	5.467
N 86.66		5.555		S 87.33	5.471
N 77.00		5.582		S 97.00	✓ 5.559
N 67.33		5.464		S 106.66	5.555
N 57.66		✓ 5.482		S 116.33	5.617
N 48.00		5.376		S 126.00	5.623
N 38.33		5.387		Ck. B.M. #7	8.422 529.916
N 28.66		5.266			
N 19.00		✓ 5.280			
N 9.33		5.180			
Axis		5.182			
S 10.00		5.076			
S 19.66		✓ 5.182			
S 29.33		5.177			
S 39.00		5.264			
S 48.66		5.273			
S 58.33		✓ 5.357			

10-10-49
Beatty & Rogers T Finney

4+30.00

B.M. #7	8.392	538.308	529.916
N 106.00		5.610	
N 96.33		✓5.623	
N 86.66		5.516	
N 77.00		5.545	
N 67.33		5.427	
N 57.66		✓5.443	
N 48.00		5.328	
N 38.33		✓5.334	
N 28.66		5.240	
N 19.00		5.250	
N 9.33		5.151	
Axis		✓5.147	
S 10.00		5.031	
S 19.66		✓5.138	
S 29.33		5.141	
S 39.00		5.228	
S 48.66		5.234	
S 58.33		✓5.319	

538.308

S 68.00		5.332
S 77.66		5.427
S 87.33		5.435
S 97.00	✓	5.520
S 106.66		5.519
S 116.33		5.570
S 126.00		5.590
OK B.M. #7		8.395 529.913

55 57

4 + 4.3 12

Oct 11, 1929
Beatty
Rogers T
Finney ϕ

B.M #7	8.257	538.173		529.916
N 106.00			5.488	
N 96.33			5.502	
N 86.66			5.385	
N 77.00		✓	5.415 411	
N 67.33			5.300	
N 57.66			5.331	
N 48.00			5.204	
N 38.33		✓	5.215	
N 28.66			5.091	
N 19.00			5.127	
N 9.33			5.025	
Axis.		✓	5.033	
S 10.00			4.928	
S 19.66			5.023	
S 29.33			5.023	
S 39.00		✓	5.101	
S 48.66			5.101	
S 58.33		✓	5.187 190	

58

Mild & Bright
No Wind

538.173

S 68.00			5.200
S 77.66		✓	5.288
S 87.33		✓	5.304
S 97.00		✓	5.380
S 106.66		✓	5.377
S 116.33			5.463
S 126.00			5.460
CK BM. 7			8.253 529.920

(Light Wind)

4+56 23

10-11-49
Beatty T
Rogers
Finney

B.M. #7	8.256	538.172	529.916
N 106.00		5.468	
N 96.33		5.490	
N 86.66		5.389	
N 77.00		✓ 5.417	
N 67.33		5.290	
N 57.66		5.300	
N 48.00		5.173	
N 38.33		✓ 5.194	
N 28.66		5.089	
N 19.00		5.098	
N 9.33		4.992	
Axis		✓ 4.975	
S 10.00		4.903	
S 19.66		✓ 4.982	
S 29.33		4.997	
S 39.00		5.078	
S 48.66		5.078	
S 58.33		✓ 5.168	

Mild
Bright
Windy

S 68.00		5.174
S 77.66		5.267
S 87.33		5.263
S 97.00	✓	5.353
S 106.66		5.362
S 116.33		5.450
S 126.00		5.460
CK BM #7		8.253

4+69 35

10-11-49
Beatty &
Rogers
Zinney π

BM. #7 8257	538.173	529.916	
N 106.00	5.483		
N 96.33 ~	5.520		
N 86.66	5.403		
N 77.00	5.430		
N 67.33	5.303		
N 57.66 ✓	5.324		
N 48.00	5.196		
N 38.33	5.215		
N 28.66 ✓	5.108		
N 19.00	5.130		
N 9.33	5.028		
Axis ✓	5.020		
S 10.00	4.920		
S 19.66 ✓	5.006		
S 29.33	5.008		
S 39.00	5.101		
S 48.66	5.101		
S 58.33 √	5.199		

Mild - Bright PM.
Windy

538.173

S 68.00	5.199		
S 77.66 ✓	5.281		
S 87.33	5.297		
S 97.00	5.380		
S 106.66 ✓	5.387		
S 116.33	5.457		
S 126.00	5.457		
CK BM #7	8.253	529.920	
B.M. #8	8.241	529.932	

4+82 ±6

Oct. 11, 1949
Beaty
Rogers T
Finney ϕ

BM #8	5.236	538.168		529.932
BM #7			8.247	529.921
N 106.00			5.468	
N 96.33			5.499	
N 86.66			5.391	
N 77.00		✓	5.407	
N 67.33			5.281	
N 57.66			5.303	
N 48.00			5.181	
N 38.33		✓	5.195	
N 28.66			5.110	
N 19.00			5.119	
N 9.33			5.007	
Axis		✓	5.000	
S 10.00			4.899	
S 19.66		✓	5.007	
S 29.33			5.009	
S 39.00			5.084	
S 48.66			5.088	
S 58.33		✓	5.188	

Bright-Mild-Windy

S 68.00			5.188
S 77.66			5.288
S 87.33			5.285
S 97.00		✓	5.363
S 106.66			5.366
S 116.33			5.440
S 126.00			5.450
ck BM. #7		8.244	529.924

4 + 95.58

11-11-69
Beatty π
Rogers ϕ
Finney

BM #7	8.243	538.159	529.916
N 106.00		5.469	
N 96.33		5.509	
N 86.66		5.404	
N 77.00		✓ 5.421	
N 67.33		5.290	
N 57.66		5.320	
N 48.00		5.203	
N 38.33		✓ 5.218	
N 28.66		5.115	
N 19.00		5.126	
N 9.33		5.021	
Axis		✓ 5.017	
S 10.00		4.922	
S 19.66		✓ 5.021	
S 29.33		5.005	
S 39.00		5.090	
S 48.66		5.087	
S 58.33		✓ 5.178	

538.159

S 68.00		5.198
S 77.66		5.275
S 87.33		5.290
S 97.00	✓	5.371
S 106.66		5.371
S 116.33		5.453
S 126.00		5.457
CK BM #8		8.240 529.919

0 + 89 00
RECHECK

BM	1.38	537.770		536.39	BM on DAM
TBM. 1.	6.04	538.360	5.45	532.32	
			5.89	532.45	= 382.45
N 86.67			5.540		DEFL.
N 77.00			5.500		.014
N 67.33			5.432		
N 57.66			5.424		.026
N 48.00			5.364		
N 38.33			5.323		.019
N 28.66			5.243		
N 19.00			5.210		.010
N 9.33			5.158		
AXIS			5.122	532.246	.012
S 10.00			5.062		
S 19.66			5.129		.013
S 29.33			5.170		
S 39.00			5.233		.025
S 48.66			5.245		
S 58.33			5.306		.013

FEB. 8 1950
BEATTY
PAYNE

		DEFL.
S 68.00	5.340	
S 77.66	5.408	.018
S 87.33	5.440	
S 97.00	5.503	.013
S 106.67	5.540	

1+02 ℄
RECHECK

538.360

		Defl.
N 106.80	5.627	
N 96.33	5.610	.023
N 86.67	5.547	
N 77.00	5.567	.067
N 67.33	5.453	
N 57.66	5.468	.060
N 48.00	5.363	
N 38.33	5.370	.055
N 28.66	5.268	
N 19.00	5.270	.041
N 9.33	5.191	
Axis	5.170	.033
S 10.00	5.082	
S 19.66	5.162	.035
S 29.33	5.172	
S 39.00	5.247	.031
S 48.66	5.260	
S 58.33	5.335	.030

		Defl.
S 68.00	5.350	
S 77.66	5.432	.032
S 87.33	5.450	
S 97.00	5.520	.031
S 106.69	5.528	
S 116.33	5.598	.024
S 124.76	5.620	

(FOR 1+15 23 See Pg. 75)
1+28 35

		DEFL.
	538.360	
N 106.00	5.667	
N 96.33	5.640	.029
N 86.66	5.555	
N 77.00	5.582	.069
N 67.33	5.471	
N 57.66	5.473	.056
N 48.00	5.362	
N 38.33	5.370	.050
N 28.66	5.277	
N 19.00	5.283	.044
N 9.33	5.201	
Axis	5.202	.053
S 10.00	5.097	
S 19.66	5.187	.049
S 29.33	5.178	
S 39.00	5.282	.059
S 48.66	5.268	
S 58.33	5.360	.045
S 68.00	5.362	

		DEFL.
S 77.66	5.455	.038
S 87.33	5.471	
S 97.00	5.540	.033
S 106.67	5.542	
S 116.33	5.622	.031
S 126.00	5.640	

1+41 47

	538360	DEFL.
N 106+00	5.635	
N 96.33	5.678	.046
N 86.67	5.530	
N 77.00	5.575	.031
N 67.33	5.458	
N 57.66	5.464	.059
N 48.00	5.351	
N 38.33	5.364	.056
N 28.66	5.245	
N 19.00	5.270	.066
N 9.33	5.163	
Axis	5.175	.059
S 10.00	5.070	
S 19.66	5.140	.024
S 29.33	5.162	
S 39.00	5.248	.036
S 48.66	5.262	
S 58.33	5.348	.040
S 68.00	5.354	

		DEFL.
S 77.66	5.428	.021
S 87.33	5.460	
S 97.00	5.525	.026
S 106.67	5.539	
S 116.33	5.603	.022
S 126.00	5.623	

1+15 23
RECHECK

538.360

N 106.00	5.662
N 96.33	5.623
N 86.66	5.538
N 77.00	5.547
N 67.33	5.467
N 57.66	5.450
N 48.00	5.353
N 38.33	5.376
N 28.66	5.304
N 19.00	5.282
N 9.33	5.172
AXIS	5.170
S 10.00	5.073
S 19.66	5.170
S 29.33	5.171
S 39.00	5.260
S 48.66	5.255
S 58.33	5.350
S 68.00	5.347

S 77.00	5.430
S 87.33	5.465
S 97.00	5.530
S 106.67	5.535
S 116.33	5.611
S 126.00	5.640

1+54 58

RECHECK

			DEFL.
		538.360	
N	N 106.00	5.653	
N	N 96.33	5.670	.068
N	N 86.66	5.552	
N	N 77.00	5.583	.066
N	N 67.33	5.487	
N	N 57.66	5.475	.049
N	N 48.00	5.370	
N	N 38.33	5.370	.049
N	N 28.66	5.272	
N	N 19.00	5.297	.053
N	N 9.33	5.215	
A	AXIS	5.200	.052
S	S 10.00	5.081	
S	S 19.66	5.180	.055
S	S 29.33	5.169	
S	S 39.00	5.260	.042
S	S 48.66	5.268	
S	S 58.33	5.360	.046
S	S 68.00	5.360	

		DEFL.
S 77.66	5.440	.029
S 87.33	5.463	
S 97.00	5.548	.045
S 106.67	5.544	
S 116.33	5.623	.031
S 126.00	5.640	

1+67.70
RECHECK

538.360

N 106.00	5.650
N 96.33	5.662
N 86.66	5.560
N 77.00	5.583
N 67.33	5.471
N 57.66	5.482
N 48.00	5.373
N 38.33	5.372
N 28.66	5.271
N 19.00	5.283
N 9.33	5.193
AXIS	5.174
S 10.00	5.088
S 19.66	5.174
S 29.33	5.173
S 39.00	5.261
S 48.66	5.273
S 58.33	5.345
S 68.00	5.352

S 77.00	5.443
S 87.33	5.463
S 97.00	5.540
S 106.67	5.547
S 116.33	5.620
S 126.00	5.640

14808'
RECHECK

			DEFL.
	538.360		
N 106.00		5.654	
N 96.33		5.654	.048
N 86.66		5.558	
N 77.00	(in water)	5.590	.065
N 67.33		5.49.5	
N 57.66		5.490	.054
N 48.00		5.380	
N 38.33		5.373	.048
N 28.66		5.270	
N 19.00	(in water)	5.302	.061
N 9.33		5.213	
AXIS		5.195	.043
S 10.00		5.092	
S 19.66		5.188	.055
S 29.33		5.174	
S 39.00		5.260	.035
S 48.66		5.275	
S 58.33		5.355	.043
S 68.00		5.356	

			DEFL.
S 77.66		5.442	.030
S 87.33		5.468	
S 97.00		5.554	.050
S 106.67		5.540	
S 116.33		5.630	.043
S 126.00		5.634	

CK TBM #1	5.47	537.79	6.04	532.32
CK BM (ON DAM)			1.40	536.39 =536.39

1+93 93
RECHECK

TRAN #1	6135	538.455	532.32 (pg 82)
N 106.00		5.724	
96.33		5.726	
86.66		5.625	
77.00		5.630	
67.33		5.528	
57.66		5.588	
48.00		5.452	
38.33		5.450	
28.66		5.338	
19.00		5.348	
9.33		5.267	
AXIS		5.260	
10.00		5.150	
19.66		5.262	
29.33		5.257	
39.00		5.350	
48.66		5.333	
58.33		5.420	

68.00	5.432
77.66	5.523
87.33	5.530
97.00	5.622
106.69	5.613
116.33	5.695
126.00	5.700

2+07 05
Reebeck

		DEFL.
	538.455	
S 126.00	5.720	
116.33	5.710	.036
106.67	5.628	
97.00	5620	.031
87.33	5.550	
77.66	5.530	.029
68.00	5.453	
58.33	5433	.031
48.66	5352	
39.00	5.357	.055
29.33	5.252	
19.66	5.270	.058
10.00	5.172	
Axis	5.267	.040
N 9.33	5.282	
19.00	5.340	.028
28.66	5.343	
38.33	5.442	.042
48.00	5.456	

2/9/50

		DEFL.
N 57.66	5.565	.062
67.33	5.550	
77.00	5.641	.057
86.66	5.630	
96.33	5.720	.054
106.00	5.702	

2 + 20 16

538.455

N 106.00	5.710
N 96.33	5.710
N 86.66	5.625
N 77.00	5.620
N 67.33	5.537
N 57.66	5.565
N 48.00	5.442
N 38.33	5440
N 28.66	5.333
N 19.00	534.3
N 9.33	5273
Axis	5.253
S 10.00	5.167
S 19.66	5.257
S 29.33	5.250
S 39.00	5345
S 48.66	5.350
S 58.33	5433
S 68.00	5.433

S 77.66	5520
S 87.33	5.536
S 97.00	5.613
S 106.66	5.620
S 116.33	5690
S 126.00	5.700

2+33 28

RECHECK

538.455

N 106.00	5.722
N 96.33	5.728
N 86.66	5.630
N 77.00	5.648
N 67.33	5.545
N 57.66	5.550
N 48.00	5.447
N 38.33	5.452
N 28.66	5.344
N 19.00	5.350
N 9.33	5.280
Axis	5.266
S 10.00	5.177
S 19.66	5.268
S 29.33	5.257
S 39.00	5.348
S 48.66	5.351
S 58.33	5.438
S 68.00	5.452

S 77.66	5.520
S 87.33	5.544
S 97.00	5.618
S 106.66	5.623
S 116.33	5.694
S 126.00	5.700

2+46 39
RECHECK

	538.455
N 106.00	5.733
N 96.33	5.748
N 86.66	5.621
N 77.00	5.671
N 67.33	5.560
N 57.66	5.542
N 48.00	5.436
N 38.33	5.440
N 28.66	5.325
N 19.00	5.345
N 9.33	5.253
Axis	5.238
S 10.00	5.151
S 19.66	5.250
S 29.33	5.247
S 39.00	5.333
S 48.66	5337
S 58.33	5.420
S 68.00	5.432

S 77.00	5.520
S 87.33	5.533
S 97.00	5.612
S 106.66	5.604
S 116.33	5.682
S 126.00	5.701

2+59.50
RECHECK

538.455

N 106.00	5.732
N 96.33	5.743
N 86.66	5.630
N 77.00	5.653
N 67.33	5.551
N 57.66	5.563
N 48.00	5.454
N 38.33	5.454
N 28.66	5.350
N 19.00	5.370
N 9.33	5.278
Axis	5.265
S 10.00	5.167
S 19.66	5.261
S 29.33	5.280
S 39.00	5.358
S 48.66	5.370
S 58.33	5.450
S 68.00	5.454

S 77.66	5.530
S 87.33	5.542
S 97.00	5.618
S 106.66	5.630
S 116.33	5.694
S 126.00	5.702

2+726
RECHECK

	538.455	
N 106.00		5.736
N 96.33		5.741
N 86.66		5.628
N 77.00	(in water)	5.664
N 67.33		5.564
N 57.66		5.568
N 48.00		5.448
N 38.33		5.448
N 28.66		5.347
N 19.00		5.364
N 9.33		5.282
Axis		5.270
S 10.00		5.163
S 19.66		5.254
S 29.33		5.270
S 39.00		5.345
S 48.66		5.350
S 58.33		5.430
S 68.00		5.450

S 77.00	5.522	
S 87.33	5.530	
S 97.00	5.590	
S 106.66	5.630	
S 116.33	5.701	
S 126.00	5.717	
CKTBM	6.137	532.318 - 532.32

CHECK LEVELS. ON ROOF ALVARADO REGULATING RESERVOIR

0+89.00

STATION	ROD	ELEV	STATION	ROD	ELEV
BM	0.130	536.52		536.39	
TP	3.330	535.600	4.250	532.27	
TP	3.288	535.578	3.310	532.29	
TP	2.938	535.218	3.298	532.280	
SET TBM			2.740	532.478	NW Cor SLO Building WEST SIDE
			S 126.00		
Coping Wall			Coping Wall		
N 92.00	2.885		S 112.00	2.860	
N 86.66	2.417		S 106.66	2.395	
N 77.00	2.379		S 97.00	2.367	
N 67.33	2.308		S 87.33	2.291	
N 57.66	2.302		S 77.66	2.270	
N 48.00	2.238		S 68.00	2.197	
N 38.33	2.200		S 58.33	2.165	
N 28.66	2.116		S 48.66	2.11	
N 19.00	2.082		S 39.00	2.102	
N 9.33	2.028		S 29.33	2.036	
Axis	1.989		S 19.66	1.998	
			S 10.00	1.924	

JAN. 25, 1952 BEATTY LEONARD POWELL

Light RAIN. FILLING

1+02.11

H.I. 535.218

STATION	ROD	ELEV	STATION	ROD	ELEV.
Coping Wall			Coping Wall		
N 105.50			S 125.50	2.922	
N 106.50	2.958				
Roof 125.00			125.00		
N 106.60	2.508		S 126.00	2.480	
N 96.33	2.502		S 116.33	2.478	
N 86.66	2.420		S 106.66	2.398	
N 77.00	2.443		S 97.00	2.398	
N 67.33	2.335		S 87.33	2.312	
N 57.66	2.346		S 77.66	2.305	
N 48.00	2.223		S 68.00	2.210	
N 38.33	2.250		S 58.33	2.203	
N 28.66	2.148		S 48.66	2.124	
N 19.00	2.145		S 39.00	2.122	
N 9.33	2.056		S 29.33	2.040	
Axis	2.046		S 19.66	203.8	
			S 10.00	1.941	

9/99

CHECK LEVELS ON ROOF
ALVARADO REG. RES

1+15 23

H.I. 535.218

		Coping Wall S 126.50	2.920
Coping Wall N 106.50	295.6	S 126.00	249.2
N 106.00	2,540	S 116.33	2,482
N 96.33	2.512	S 106.66	2.402
N 86.66	2.405	S 97.00	240.8
N 77.00	2.422	S 87.33	232.8
N 67.33	2,325	S 77.66	2.302
N 57.66	2.322	S 68.00	2.202
N 48.00	2.216	S 58.33	2.210
N 38.33	2.250	S 48.66	2,11.0
N 28.66	2160	S 39.00	2.120
N 19.00	2.146	S 29.33	2.030
N 9.33	2.020	S 19.66	2.031
Axis	2.033	S 10.00	1922

1/25/52

100

1+28 35

H.I. 535.218

		Coping Wall S 126.50	2.938
Coping Wall N 106.50	2.987	S 126.00	2.492
N 106.00	2.540	S 116.33	2.501
N 96.33	2.528	S 106.66	2.414
N 86.66	2.423	S 97.00	2.422
N 77.00	2.450	S 87.33	2.340
N 67.33	2.345	S 77.66	2.339
N 57.66	2.350	S 68.00	2.232
N 48.00	2.230	S 58.33	2.234
N 38.33	2.243	S 48.66	2.133
N 28.66	2.143	S 39.00	2.150
N 19.00	2.147	S 29.33	2.048
N 9.33	2.060	S 19.66	2.055
Axis	2.066	S 10.00	1.954

101

CHECK LEVELS ON ROOF
ALVARADO REG. RES.
1+41 46

H.I. 535.218

Coping Wall	
N 106.50	2.998
N 106.00	2.510
N 96.33	2.501
N 86.66	2.390
N 77.00	2.426
N 67.33	2.318
N 57.66	2.333
N 48.00	2.212
N 38.33	2.225
N 28.66	2.096
N 19.00	2.128
N 9.33	2.014
Axis	2.039

Coping Wall	
S 126.50	2.930
S 126.00	2.482
S 116.33	2.479
S 106.66	2.407
S 97.00	2.402
S 87.33	2.329
S 77.66	2.310
S 68.00	2.215
S 58.33	2.218
S 48.66	2.115
S 39.00	2.112
S 29.33	2.020
S 19.66	2.003
S 10.00	1.927

1/25/52

102

1+54 58

H.I. 535.218

Coping Wall	
N 106.50	3.010
N 106.00	2.530
N 96.33	2.540
N 86.66	2.430
N 77.00	2.457
N 67.33	2.345
N 57.66	2.350
N 48.00	2.213
N 38.33	2.230
N 28.66	2.130
N 19.00	2.157
N 9.33	2.075
Axis	2.068

Coping Wall	
S 126.50	2.942
S 126.00	2.493
S 116.33	2.500
S 106.66	2.411
S 97.00	2.427
S 87.33	2.332
S 77.66	2.322
S 68.00	2.228
S 58.33	2.240
S 48.66	2.138
S 39.00	2.131
S 29.33	2.029
S 19.66	2.050
S 10.00	1.942

CHECK LEVELS ON ROOF
ALVARADO REG. RES.
1+67 69

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.990	S 126.50	2.922
N 106.00	2.520	S 126.00	2.490
N 96.33	2.538	S 116.33	2.490
N 86.66	2.423	S 106.66	2.412
N 77.00	2.446	S 97.00	2.416
N 67.33	2.331	S 87.33	2.330
N 57.66	2.348	S 77.66	2.322
N 48.00	2.224	S 68.00	2.218
N 38.33	2.234	S 58.33	2.220
N 28.66	2.129	S 48.66	2.137
N 19.00	2.144	S 39.00	2.127
N 9.33	2.028	S 29.33	2.030
Axis	2.038	S 19.66	2.042
		S 10.00	1.942

1+80 81

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.970	S 126.50	2.928
N 106.00	2.520	S 126.00	2.489
N 96.33	2.532	S 116.33	2.500
N 86.66	2.425	S 106.66	2.410
N 77.00	2.457	S 97.00	2.428
N 67.33	2.353	S 87.33	2.335
N 57.66	2.360	S 77.66	2.320
N 48.00	2.242	S 68.00	2.220
N 38.33	2.240	S 58.33	2.227
N 28.66	2.132	S 48.66	2.140
N 19.00	2.165	S 39.00	2.130
N 9.33	2.074	S 29.33	2.038
Axis	2.065	S 19.66	2.057
		S 10.00	1.950

CHECK LEVELS ON ROOF
ALVARADO REG. RES.
1+93 93

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.968	S 126.50	2.925
N 106.00	2.510	S 126.00	2.480
N 96.33	2.510	S 116.33	2.490
N 86.66	2.400	S 106.66	2.406
N 77.00	2.410	S 97.00	2.420
N 67.33	2.319	S 87.33	2.328
N 57.66	2.370	S 77.66	2.319
N 48.00	2.230	S 68.00	2.225
N 38.33	2.238	S 58.33	2.211
N 28.66	2.105	S 48.66	2.130
N 19.00	2.130	S 39.00	2.132
N 9.33	2.040	S 29.33	2.039
Axis	2.041	S 19.66	2.047
		S 10.00	1.928

1/25/52

2+07 05

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.967	S 126.50	2.944
N 106.00	2.499	S 126.00	2.501
N 96.33	2.512	S 116.33	2.510
N 86.66	2.422	S 106.66	2.423
N 77.00	2.440	S 97.00	2.420
N 67.33	2.333	S 87.33	2.341
N 57.66	2.355	S 77.66	2.338
N 48.00	2.243	S 68.00	2.248
N 38.33	2.240	S 58.33	2.236
N 28.66	2.136	S 48.66	2.128
N 19.00	2.132	S 39.00	2.152
N 9.33	2.072	S 29.33	2.050
Axis	2.062	S 19.66	2.067
		S 10.00	1.958

Check Levels on Roof Alvarado Reg. Res

2+20 16

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.988	S 126.50	2.935
N 106.00	2.508	S 126.00	2.508
N 96.33	2.505	S 116.33	2.508
N 86.66	2.401	S 106.66	2.425
N 77.00	2.417	S 97.00	2.428
N 67.33	2.318	S 87.33	2.338
N 57.66	2.361	S 77.66	2.323
N 48.00	2.223	S 68.00	2.230
N 38.33	2.240	S 58.33	2.238
N 28.66	2.120	S 48.66	2.145
N 19.00	2.140	S 39.00	2.144
N 9.33	2.060	S 29.33	2.041
Axis	2.055	S 19.66	2.056
		S 10.00	1.958

1/25/52

2+33 28

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.980	S 126.50	2.950
N 106.00	2.516	S 126.00	2.502
N 96.33	2.527	S 116.33	2.505
N 86.66	2.421	S 106.66	2.430
N 77.00	2.440	S 97.00	2.431
N 67.33	2.330	S 87.33	2.348
N 57.66	2.343	S 77.66	2.330
N 48.00	2.238	S 68.00	2.250
N 38.33	2.250	S 58.33	2.248
N 28.66	2.138	S 48.66	2.148
N 19.00	2.143	S 39.00	2.150
N 9.33	2.065	S 29.33	2.048
Axis	2.065	S 19.66	2.070
		S 10.00	1.968

CHECK LEVELS ON ROOF ALVARADO REG. RES.

2+46 39

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.982	S 126.50	2.955
N 106.00	2.522	S 126.00	2.500
N 96.33	2.540	S 116.33	2.490
N 86.66	2.410	S 106.66	2.399
N 77.00	2.452	S 97.00	2.420
N 67.33	2.323	S 87.33	2.328
N 57.66	2.330	S 77.66	2.325
N 48.00	2.210	S 68.00	2.229
N 38.33	2.230	S 58.33	2.228
N 28.66	2.111	S 48.66	2.128
N 19.00	2.133	S 39.00	2.125
N 9.33	2.038	S 29.33	2.030
Ax 13	2.04 0.32	S 19.66	2.020
		S 10.00	1.938

2+59 50

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.965	S 126.50	2.942
N 106.00	2.515	S 126.00	2.498
N 96.33	2.538	S 116.33	2.501
N 86.66	2.420	S 106.66	2.430
N 77.00	2.441	S 97.00	2.430
N 67.33	2.340	S 87.33	2.342
N 57.66	2.351	S 77.66	2.342
N 48.00	2.238	S 68.00	2.258
N 38.33	2.250	S 58.33	2.252
N 28.66	2.139	S 48.66	2.172
N 19.00	2.158	S 39.00	2.158
N 9.33	2.070	S 29.33	2.075
Ax 15	2.061	S 19.66	2.060
		S 10.00	1.950

111

CHECK LEVELS ON ROOF
ALVARADO REG RES.
2+72 62

H.I. 535.218

Coping Wall		Coping Wall	
N 106.50	2.982	S 126.50	2.930
N 106.00	2.518	S 126.00	2.510
N 96.33	2.527	S 116.33	2.507
N 86.66	2.412	S 106.66	2.430
N 77.00	2.450	S 97.00	2.398
N 67.33	2.350	S 87.33	2.330
N 57.66	2.360	S 77.66	2.328
N 48.00	2.221	S 68.00	2.224
N 38.33	2.242	S 58.33	2.234
N 28.66	2.138	S 48.66	2.140
N 19.00	2.160	S 39.00	2.140
N 9.33	2.065	S 29.33	2.057
Axis	2.062	S 19.66	2.040
		S 10.00	1.950

1/25/52

112

2+85 73

H.I. 535.218

Coping Wall			Coping Wall	
N 106.50	2.970		S 126.50	2.945
N 106.00	2.518		S 126.00	251.5
N 96.33	2.531		S 116.33	2.516
N 86.66	2.417		S 106.66	2.440
N 77.00	2.450		S 97.00	2.421
N 67.33	2.340		S 87.33	2.338
N 57.66	2.350		S 77.66	2.340
N 48.00	2.238		S 68.00	2.265
N 38.33	2.242		S 58.33	2.258
N 28.66	2.122		S 48.66	2.155
N 19.00	2.132		S 39.00	2.145
N 9.33	206.2	233.156	S 29.33	2.078
Axis	2.063	233.155	S 19.66	2.065
			S 10.00	1.960
CK TP			2.760	232.478

Check Levels on Roof Alvarado Regulating Reservoir

0+89 CO

Sta	Rod	Elev
	5.815	538.293
Coping Wall		
N 92.00	5.968	
N 86.66	5.488	
N 77.00	5.499	
N 67.33	5.383	
N 57.66	5.378	
N 48.00	5.315	
N 38.33	5.279	
N 28.66	5.196	
N 19.00	5.163	
N 9.33	5.107	
Axis	5.069	

Sta	Rod	Elev
	532.478	TBM NW Cor
Coping Wall		
S 112.00	5.907	
S 106.66	5.479	
S 97.00	5.442	
S 87.33	5.367	
S 77.66	5.347	
S 68.00	5.275	
S 58.33	5.244	
S 48.66	5.187	
S 39.00	5.179	
S 29.33	5.114	
S 19.66	5.076	
S 10.00	5.020	

West
martell
Varontakis

8 Jan 53

1402 11

Warm
Water standing
on Roof from rain

EW Buttres West side		
Coping Wall		
N 105.5	6.024	
N 105.0	5.573	
N 96.33	5.572	
N 86.66	5.487	
N 77.00	5.520	
N 67.33	5.407	
N 57.66	5.422	
N 48.00	5.302	
N 38.33	5.331	
N 28.00	5.222	
N 19.00	5.228	
N 9.33	5.134	
Axis	5.105	

		S 125.50 6.015
		S 125.00 5.544
		S 116.33 5.547
		S 106.66 5.472
		S 97.00 5.470
		S 87.33 5.387
		S 77.66 5.380
		S 68.00 5.284
		S 58.33 5.277
		S 48.66 5.195
		S 39.00 5.199
		S 29.33 5.117
		S 19.66 5.117
		S 10.00 5.019

1+15 23

Hi 538.297

Coping Wall	
N 106.50	6.028
N 106.00	5.612
N 96.33	5.583
N 86.66	5.477
N 77.00	5.494
N 67.33	5.397
N 57.66	5.403
N 48.00	5.292
N 38.33	5.326
N 28.66	5.239
N 19.00	5.227
N 9.33	5.098
Axis	5.111

Coping Wall	
126.50	5.995
S 106.00	5.572
S 116.33	5.555
S 106.66	5.483
S 97.00	5.485
S 87.33	5.403
S 77.66	5.385
S 68.00	5.278
S 58.33	5.289
S 48.66	5.190
S 39.00	5.198
S 29.33	5.104
S 19.66	5.112
S 10.00	5.001

1+28 33

Hi 538.297

Coping Wall	
N 106.50	6.061
N 106.00	5.613
N 96.33	5.597
N 86.66	5.499
N 77.00	5.526
N 67.33	5.416
N 57.66	5.429
N 48.00	5.308
N 38.33	5.323
N 28.66	5.223
N 19.00	5.227
N 9.33	5.137
Axis	5.143

Coping	
S 126.50	6.006
S 116.00	5.567
S 116.33	5.575
S 106.66	5.512
S 97.00	5.511
S 87.33	5.422
S 77.66	5.411
S 68.00	5.298
S 58.33	5.309
S 48.66	5.208
S 39.00	5.227
S 29.33	5.121
S 19.66	5.133
S 10.00	5.031

1+11 46

		Hi 538.297		
			S 126.50	5.598
Coping Wall				
N 106.50	6.068		S 126.00	5.548
N 106.00	5.583		S 116.33	5.596
N 96.33	5.579		S 106.66	5.475
N 86.66	5.470		S 97.00	5.472
N 77.00	5.507		S 87.33	5.400
N 67.35	5.392		S 77.66	5.382
N 57.66	5.412		S 68.00	5.386
N 48.00	5.292		S 58.33	5.292
N 38.33	5.303		S 48.66	5.192
N 28.66	5.171		S 39.00	5.190
N 19.00	5.204		S 29.33	5.097
N 9.33	x		S 19.66	5.083
Axis	5.115		S 10.00	5.002

1+54 58

Hi 538.297

		S 126.50	Coping Wall 6.015
Coping Wall			
N 106.50	6.085	S 126.00	5.562
N 106.00	5.606	S 116.33	5.568
N 96.33	5.613	S 106.66	5.479
N 86.66	5.504	S 97.00	5.498
N 77.00	5.530	S 87.33	5.403
N 67.33	5.417	S 77.66	5.395
N 57.66	5.427	S 68.00	5.302
N 48.00	5.288	S 58.33	5.312
N 38.33	5.308	S 48.66	5.211
N 28.66	5.207	S 39.00	5.211
N 19.00	5.238	S 29.33	5.107
N 9.33	5.154	S 19.66	5.131
Axis	5.149	S 10.00	5.020

1+67 69

538.297

		Coping Wall		
			S 126.50	5.955
Coping Wall				
N 106.50	6.053		S 126.00	5.516
N 106.00	5.588		S 116.33	5.523
N 96.33	5.610		S 106.66	5.493
N 86.66	5.492		S 97.00	5.491
N 77.00	5.502		S 87.33	5.408
N 67.33	5.408		S 77.66	5.399
N 57.66	5.427		S 68.00	5.299
N 48.00	5.301		S 58.33	5.299
N 38.33	5.314		S 4866	5.212
N 28.66	5.203		S 3900	5.203
N 1900	5.222		S 29.33	5.108
N 9.33	510.7		S 19.66	5.121
Axis	511.7		S 10.00	5.022

1+80 81

538.297

		Copin Wall	
		S 126.50	5.987
Coping Wall			
N 106.50	6.044	S 126.00	5.558
N 106.00	5.590	S 116.33	5.573
N 96.33	5.607	S 106.66	5.480
N 8666	5.499	S 97.00	5.497
N 7700	5.531	S 87.33	5.403
N 6733	5.423	S 77.66	5.390
N 5766	5.438	S 68.00	5.291
N 4800	5.319	S 58.33	5.302
N 3833	5.322	S 4866	5.213
N 28.66	5.205	S 39.00	5.203
N 19.00	5.242	S 29.33	5.112
N 9.33	5.148	S 19.66	5.133
Axis	5.143	S 10.00	5.027

1+93 93

Hi 538.297

Coping Wall	
N 106.5	6.035
N 106.00	5.588
N 96.33	5.595
N 86.66	5.483
N 77.00	5.490
N 67.33	5.391
N 57.66	5.445
N 48.00	5.301
N 38.33	5.312
N 28.66	5.181
N 19.00	5.207
N 9.33	5.112
Axis	5.116

Coping Wall	
S 125.50	5.599
S 126.00	5.550
S 116.33	5.561
S 106.66	5.475
S 97.00	5.489
S 87.33	5.391
S 77.66	5.388
S 68.00	5.298
S 58.33	5.282
S 48.66	5.202
S 39.00	5.209
S 29.33	5.107
S 19.66	5.117
S 10.00	5.001

2+07 07

Hi 538.290

106.50	6.038
106.00	5.571
96.33	5.594
86.66	5.500
77.00	5.515
67.33	5.404
57.66	5.430
48.00	5.319
38.33	5.312
28.66	5.208
19.00	5.211
9.33	5.150
Axis	5.142

S 126.50	6.064
S 126.00	5.567
S 116.33	5.570
S 106.66	5.493
S 97.00	5.491
S 87.33	5.411
S 77.66	5.406
S 68.00	5.316
S 58.33	5.310
S 48.66	5.218
S 39.00	5.223
S 29.33	5.121
S 19.66	5.139
S 10.00	5.033

2+20 16

Hi 538.290

Coping Wall	
N 106.5	6.058
N 106.00	5.575
N 96.33	5.562
N 86.66	5.465
N 77.00	5.487
N 67.33	5.387
N 57.66	5.438
N 48.00	5.289
N 38.33	5.312
N 28.66	5.187
N 19.00	5.206
N 9.33	5.119
N Axis	5.122

Coping Wall	
S 126.50	5.986
S 126.00	5.559
S 116.33	5.552
S 106.66	5.475
S 97.00	5.473
S 87.33	5.385
S 77.66	5.379
S 68.00	5.287
S 58.33	5.292
S 48.66	5.207
S 39.00	5.210
S 29.33	5.110
S 19.66	5.123
S 10.00	5.024

2+33 28

Hi 538.290

Coping Wall	
N 106.50	6.048
N 106.00	5.585
N 96.33	5.602
N 86.66	5.495
N 77.00	5.512
N 67.33	5.394
N 57.66	5.408
N 48.00	5.302
N 38.33	5.330
N 28.66	5.211
N 19.00	5.223
N 9.33	5.141
N Axis	5.133

Coping Wall	
S 126.50	6.005
S 126.00	5.558
S 116.33	5.570
S 106.66	5.490
S 97.00	5.495
S 87.33	5.408
S 77.66	5.392
S 68.00	5.311
S 58.33	5.307
S 48.66	5.210
S 39.00	5.216
S 29.33	5.115
S 19.66	5.132
S 10.00	5.130

125

D + 46 39

Jan 8, 53

Hi 538.290

Coping Wall	
N 106.50	6.055
N 106.00	5.603
N 96.33	5.627
N 86.66	5.495
N 77.00	5.540
N 67.33	5.421
N 57.66	5.418
N 48.00	5.302
N 38.33	5.322
N 28.66	5.204
N 19.00	5.223
N 9.33	5.178
Axis	5.098

Coping Wall	
S 125.50	5.996
S 116.00	5.534
S 116.33	5.535
S 106.66	5.446
S 97.00	5.470
S 87.33	5.375
S 77.66	5.378
S 68.00	5.278
S 58.33	5.276
S 48.66	5.183
S 39.00	5.181
S 29.33	5.098
S 19.66	5.103
S 10.00	4.991

5.812 532.478

532.478
JDM

Alvarado Res Roof Check Levels 126

West Martell Varonfakis

D + 59 50

532.478
+ 5.835
Hi = 538 313

JDM 9 Jan 53

Coping Wall	
N 106.50	6.052
N 106.00	5.606
N 96.33	5.633
N 86.66	5.514
N 77.00	5.537
N 67.33	5.433
N 57.66	5.447
N 48.00	5.333
N 38.33	5.343
N 28.66	5.228
N 19.00	5.247
N 9.33	5.153
Axis	5.152

Coping Wall	
S 126.50	6.019
S 126.00	5.575
S 116.33	5.583
S 106.66	5.515
S 97.00	5.512
S 87.33	5.427
S 77.66	5.425
S 68.00	5.338
S 58.33	5.344
S 48.66	5.258
S 39.00	5.243
S 29.33	5.159
S 19.66	5.148
S 10.00	5.038

125

2+46 39

Jan 8, 53

Hi 538.290

Coping Wall	
10650	6.055
10600	5.603
N 96.33	5.627
N 86.66	5.495
N 77.00	5.540
N 6733	5.421
N 57.66	5.418
N 48.00	5.302
N 38.33	5.322
N 28.66	5.204
N 19.00	5.223
N 9.33	5.128
Axis	5.098

Coping Wall		
S 126.50	5.996	
S 116.00	5.534	
S 116.33	5.535	
S 106.66	5.446	
S 97.00	5.470	
S 87.33	5.375	
S 77.66	5.378	
S 68.00	5.278	
S 58.33	5.276	
S 48.66	5.183	
S 39.00	5.181	
S 29.33	5.098	
S 19.66	5.103	
S 10.00	4.991	
	5.812	532.478
		532.478
		JBM

Alvarado Res Roof Chuck Levels 12F

West Martell Varonfakis

2+59 50

532.478 JBM

+ 5.835

Hi = 538 313

9 Jan 53

Coping wall	
N 106.50	6.052
N 106.00	5.606
N 96.33	5.633
N 86.66	5.514
N 77.00	5.537
N 67.33	5.433
N 57.66	5.447
N 48.00	5.333
N 38.33	5.343
N 28.66	5.228
N 19.00	5.247
N 9.33	5.153
Axis	5.152

Coping Wall	
S 126.50	6.019
S 126.00	5.575
S 116.33	5.583
S 106.66	5.515
S 97.00	5.512
S 87.33	5.427
S 77.66	5.425
S 6800	5.338
S 5833	5.344
S 48.66	5.258
S 39.00	5.243
S 2933	5.159
S 19.66	5.148
S 10.00	5.038

2+70.63

Hi = 538.313

	Coping Wall
N 106.50	6.072
N 106.00	5.608
N 96.33	5.614
N 86.66	5.502
N 77.00	5.540
N 67.33	5.435
N 57.66	5.448
N 48.00	5.306
N 38.33	5.333
N 28.66	5.224
N 19.00	5.244
N 9.33	5.152
Axis	5.151

	Coping Wall
S 126.50	6.006
S 126.00	5.588
S 116.33	5.594
S 106.66	5.515
S 97.00	5.474
S 87.33	5.404
S 77.66	5.411
S 68.00	5.331
S 58.33	5.322
S 48.66	5.226
S 39.00	5.227
S 29.33	5.143
S 19.66	5.137
S 10.00	6.032

2+85.73

Hi 538.313

	Coping Wall
N 106.50	6.062
N 106.00	5.614
N 96.33	5.627
N 86.66	5.514
N 77.00	5.542
N 67.33	5.429
N 57.66	5.438
N 48.00	5.323
N 38.33	5.332
N 28.66	5.217
N 19.00	5.225
N 9.33	5.153
Axis	5.152

	Coping Wall
S 126.50	6.023
S 126.00	5.593
S 116.33	5.593
S 106.66	5.524
S 97.00	5.508
S 87.33	5.419
S 77.66	5.427
S 68.00	5.348
S 58.33	5.342
S 48.66	5.242
S 39.00	5.233
S 29.33	5.166
S 19.66	5.158
S 10.00	5.053

2 + 98 85

532.478
5.823
Hi = 538.301

Coping wall	
N 106.50	6.055
N 106.00	5.610
N 96.33	5.618
N 86.66	5.488
N 77.00	5.517
N 67.33	5.395
N 57.66	5.423
N 48.00	5.288
N 38.33	5.312
N 28.66	5.202
N 19.00	5.204
N 9.33	5.126
Axis	5.120

Coping wall	
S 126.50	6.015
S 126.00	5.562
S 116.33	5.584
S 106.66	5.497
S 97.00	5.507
S 87.33	5.408
S 77.66	5.418
S 68.00	5.319
S 58.33	5.303
S 48.66	5.214
S 39.00	5.219
S 29.33	5.123
S 19.66	5.129
S 10.00	5.004

3 + 11 96

Hi 538.301

Coping wall	
N 106.50	6.044
N 106.00	5.612
N 96.33	5.632
N 86.66	5.506
N 77.00	5.510
N 67.33	5.399
N 57.66	5.427
N 48.00	5.309
N 38.33	5.335
N 28.66	5.249
N 19.00	5.259
N 9.33	5.156
Axis	5.147

Coping wall	
S 126.50	6.023
S 126.00	5.595
S 116.33	5.603
S 106.66	5.513
S 97.00	5.530
S 87.33	5.434
S 77.66	5.421
S 68.00	5.330
S 58.33	5.324
S 48.66	5.240
S 39.00	5.232
S 29.33	5.153
S 19.66	5.150
S 10.00	5.031

3+25.08

H.= 538.301

Coping wall	
N 106.50	6.067
N 106.00	5.622
N 96.33	5.623
N 86.66	5.488
N 77.00	5.512
N 67.33	5.407
N 57.66	5.425
N 48.00	5.302
N 38.33	5.327
N 28.66	5.219
N 19.00	5.256
N 9.33	5.138
Axis	5.147

Coping Wall	
S 106.50	6.006
S 106.00	5.577
S 96.33	5.577
S 86.66	5.514
S 77.00	5.519
S 67.33	5.425
S 57.66	5.405
S 48.00	5.296
S 38.33	5.274
S 28.66	5.193
S 19.00	5.206
S 9.33	5.138
S 0.66	5.139
S 10.00	5.039

3+38.29

H.=538.301

Coping wall	
N 106.50	6.055
N 106.00	5.610
N 96.33	5.631
N 86.66	5.503
N 77.00	5.539
N 67.33	5.395
N 57.66	5.439
N 48.00	5.323
N 38.33	5.335
N 28.66	5.240
N 19.00	5.265
N 9.33	5.166
N Axis	5.164

Coping Wall	
S 106.50	5.042
S 106.00	5.143
S 96.33	5.151
S 86.66	5.233
S 77.00	5.230
S 67.33	5.220
S 57.66	5.331
S 48.00	5.422
S 38.33	5.432
S 28.66	5.529
S 19.00	5.519
S 9.33	5.588
S 0.66	5.580
S 10.00	6.008

3+51 31

5538.301

N 106.50	6.054		S 126.50	6.014
N 106.00	5,603		S 126.00	5.567
N 96.33	5.611		S 116.33	5.558
N 86.66	5.488		S 106.66	5.495
N 77.00	5.521		S 97.00	5.488
N 67.33	5.388		S 87.33	5.423
N 57.66	5.424		S 77.66	5.403
N 48.00	5.310		S 68.00	5.302
N 38.33	5.318		S 58.33	5.290
N 28.66	5.195		S 48.66	5.205
N 19.00	5.218		S 39.00	5.191
N 9.33	5.122		S 29.33	5.191
Axis	5.121		S 19.66	5.103
			S 10.00	5.015

3+64 43

H: 5538.301

Bearing wall N 106.50	6.057		Bearing wall S 126.50	6.022
N 106.00	5.611		S 126.00	5.583
N 96.33	5.619		S 116.33	5.595
N 86.66	5.522		S 106.66	5.515
N 77.00	5.538		S 97.00	5.519
N 67.33	5.430		S 87.33	5.416
N 57.66	5.443		S 77.66	5.407
N 48.00	5.323		S 68.00	5.334
N 38.33	5.340		S 58.33	5.335
N 28.66	5.242		S 48.66	5.243
N 19.00	5.259		S 39.00	5.238
N 9.33	5.132		S 29.33	5.134
Axis	5.149		S 19.66	5.127
			S 10.00	5.058

3+77 54

Hi 538.301

Departing Wall	
N 106.50	6.054
N 106.00	5.607
N 96.33	5.624
N 86.66	5.493
N 77.00	5.538
N 67.33	5.434
N 57.66	5.448
N 48.00	5.313
N 38.33	5.322
N 28.66	5.222
N 19.00	5.231
N 9.33	5.134
Axis	5.128

Departing Wall	
S 126.50	6.004
S 126.00	5.580
S 116.33	5.577
S 106.66	5.517
S 97.00	5.495
S 87.33	5.413
S 77.66	5.394
S 68.00	5.306
S 58.33	5.303
S 48.66	5.223
S 39.00	5.212
S 29.33	5.119
S 19.66	5.115
S 10.00	5.013

3+90 66

Hi 538.301

Departing Wall	
N 106.50	6.056
N 106.00	5.618
N 96.33	5.622
N 86.66	5.512
N 77.00	5.543
N 67.33	5.417
N 57.66	5.446
N 48.00	5.348
N 38.33	5.344
N 28.66	5.253
N 19.00	5.259
N 9.33	5.152
Axis	5.153

S 126.50	6.018
S 126.00	5.602
S 116.33	5.596
S 106.66	5.518
S 97.00	5.512
S 87.33	5.423
S 77.66	5.418
S 68.00	5.327
S 58.33	5.323
S 48.66	5.232
S 39.00	5.219
S 29.33	5.150
S 19.66	5.138
S 10.00	5.035

137

4+03 77

Hi = 538 301

Coping Wall			Coping Wall	
N 106.50	6.084		S 126.50	6.014
N 106.00	5.623		S 126.00	5.568
N 96.33	5.631		S 116.33	5.570
N 86.66	5.507		S 106.66	5.502
N 77.00	5.530		S 97.00	5.487
N 67.33	5.420		S 87.33	5.418
N 57.66	5.435		S 77.66	5.402
N 48.00	5.307		S 68.00	5.318
N 38.33	5.335		S 58.33	5.314
N 28.66	5.212		S 48.66	5.228
N 19.00	5.224		S 39.00	5.212
N 9.33	5.087		S 29.33	5.140
AXIS	5.103		S 19.66	5.103
			S 10.00	5.004

5.828 538473

= 532478

138

4+16 87

532.478 JBM

5.848

538326

Coping Wall			Coping Wall	
N 106.50	6.041		S 126.50	6.012
N 106.00	5.591		S 126.00	5.568
N 96.33	5.616		S 116.33	5.569
N 86.66	5.512		S 106.66	5.512
N 77.00	5.535		S 97.00	5.518
N 67.33	5.423		S 87.33	5.430
N 57.66	5.434		S 77.66	5.422
N 48.00	5.328		S 68.00	5.323
N 38.33	5.341		S 58.33	5.322
N 28.66	5.223		S 48.66	5.234
N 19.00	5.237		S 39.00	5.227
N 9.33	5.142		S 29.33	5.135
AXIS	5.142		S 19.66	5.141
			S 10.00	5.028

4 + 30.00

Hi = 538.326

Coping Wall		Coping Wall	
N 106.50	6.079	S 126.50	6.003
N 106.00	5.608	S 126.00	5.563
N 96.33	5.606	S 116.33	5.554
N 86.66	5.503	S 106.66	5.503
N 77.00	5.538	S 97.00	5.502
N 67.33	5.407	S 87.33	5.426
N 57.66	5.424	S 77.66	5.411
N 48.00	5.306	S 68.00	5.323
N 38.33	5.318	S 58.33	5.308
N 28.66	5.218	S 48.66	5.227
N 19.00	5.231	S 39.00	5.219
N 9.33	5.142	S 29.33	5.128
Axis	5.133	S 19.66	5.123
		S 10.00	5.009

5.844 532.482
= 532.478

West
Martell
Varonfakis

4 + 43 12

536.39
1.740
Hi. 538.130

BM on Dam

12. Jan 53

Coping Wall		Coping Wall	
N 106.50	5.907	S 126.50	5.878
N 106.00	5.370	S 126.00	5.422
N 96.33	5.482	S 116.33	5.433
N 86.66	5.369	S 106.66	5.358
N 77.00	5.398	S 97.00	5.361
N 67.33	5.267	S 87.33	5.287
N 57.66	5.299	S 77.66	5.277
N 48.00	5.158	S 68.00	5.184
N 38.33	5.183	S 58.33	5.178
N 28.66	5.068	S 48.66	5.088
N 19.00	5.103	S 39.00	5.092
N 9.33	5.014	S 29.33	5.014
Axis	5.008	S 19.66	5.011
		S 10.00	4.909

4+56 23

H. 538.130

Coping Wall		Coping Wall	
106.50	5.898	S126.50	5.878
106.00	5.452	S126.00	5.442
96.33	5.468	S116.33	5.447
86.66	5.355	S106.66	5.359
77.00	5.395	S97.00	5.350
67.33	5.257	S87.33	5.248
57.66	5.285	S77.66	5.259
48.00	5.152	S68.00	5.160
38.33	5.177	S58.33	5.168
28.66	5.058	S48.66	5.065
19.00	5.078	S39.00	5.068
9.33	4.964	S29.33	4.983
Axis	4.963	S19.66	4.977
		S10.00	4.873

4+69 35

H. 538.130

Coping Wall		Coping Wall	
N106.50	5.903	S126.50	5.889
N106.00	5.462	S126.00	5.452
N96.33	5.494	S116.33	5.450
N86.66	5.372	S106.66	5.366
N77.00	5.402	S97.00	5.374
N67.33	5.278	S87.33	5.288
N57.66	5.296	S77.66	5.279
N48.00	5.177	S68.00	5.198
N38.33	5.196	S58.33	5.194
N28.66	5.183	S48.66	5.091
N19.00	5.112	S39.00	5.093
N9.33	5.012	S29.33	4.998
Axis	5.012	S19.66	4.998
		S10.00	4.908

1.746 536.384 =

= 536.39 BM on Dam

536.390 BM on Dam
1.744
4+80 46/41 = 538.134

13 Jan 53

Coping Wall		Coping Wall	
		S126.50	5.855
N106.50	5.892	S126.00	5.422
N106.00	5.443	S116.33	5.420
N96.33	5.472	S106.66	5.354
N86.66	5.356	S97.00	5.348
N77.00	5.377	S87.33	5.253
N67.33	5.249	S77.66	5.263
N57.66	5.279	S68.00	5.175
N48.00	5.154	S58.33	5.164
N38.33	5.163	S48.66	5.066
N28.66	5.078	S39.00	5.057
N19.00	5.087	S29.33	4.982
N9.33	4.983	S19.66	4.979
Axis	4.978	S10.00	4.874

West
Martell
Voronfakis

4+95.58 Cool

H.

Coping Wall		Coping Wall	
N106.50	5.880	S126.50	5.876
N106.00	5.452	S126.00	5.432
N96.33	5.484	S116.33	5.435
N86.66	5.388	S106.66	5.358
N77.00	5.392	S97.00	5.342
N67.33	5.248	S87.33	5.264
N57.66	5.285	S77.66	5.263
N48.00	5.174	S68.00	5.177
N38.33	5.187	S58.33	5.160
N28.66	5.073	S48.66	5.063
N19.00	5.102	S39.00	5.065
N9.33	4.993	S29.33	4.982
Axis	4.990	S19.66	4.990
		S10.00	4.895

5+08 69

H: 538.134

Coping Wall	
N 106.50	5.882
N 106.00	5.448
N 96.33	5.460
N 86.66	5.353
N 77.00	5.362
N 67.33	5.238
N 57.66	5.249
N 48.00	5.138
N 38.33	5.149
N 28.66	5.044
N 19.00	5.061
N 9.33	4.952
Axis	4.954

Coping Wall	
S 126.50	5.862
S 126.00	5.422
S 116.33	5.407
S 106.66	5.330
S 97.00	5.330
S 87.33	5.258
S 77.66	5.242
S 68.00	5.154
S 58.33	5.132
S 48.66	5.050
S 39.00	5.048
S 29.33	4.983
S 19.66	4.975
S 10.00	4.863

5+21 81

H: 538.134

Coping Wall	
N 106.50	5.892
N 106.00	5.462
N 96.33	5.488
N 86.66	5.363
N 77.00	5.380
N 67.33	5.252
N 57.66	5.278
N 48.00	5.175
N 38.33	5.184
N 28.66	5.080
N 19.00	5.095
N 9.33	4.979
Axis	4.988

Coping Wall	
S 126.50	5.862
S 126.00	5.424
S 116.33	5.420
S 106.66	5.355
S 97.00	5.359
S 87.33	5.267
S 77.66	5.250
S 68.00	5.168
S 58.33	5.168
S 48.66	5.174
S 39.00	5.079
S 29.33	4.993
S 19.66	4.975
S 10.00	4.878

147

5+34.92

H: 538.134

Coping wall	
N 106.5	5.887
N 106.00	5.460
N 96.33	5.470
N 86.66	5.359
N 77.00	5.366
N 67.33	5.249
N 57.66	5.268
N 48.00	5.150
N 38.33	5.155
N 28.66	5.043
N 19.00	5.081
N 9.33	5.975
Axis	4.971

Coping wall	
S 106.50	5.852
S 106.00	5.424
S 116.33	5.424
S 106.66	5.355
S 97.00	5.353
S 87.33	5.249
S 77.66	5.244
S 68.00	5.161
S 58.33	5.160
S 48.66	5.071
S 39.00	5.074
S 29.33	4.995
S 19.66	4.972
S 10.00	4.870

5+48.03

H: 538.134

See FB 856 Page 41

148

Coping wall	
N 106.50	5.895
N 106.00	5.470
N 96.33	5.487
N 86.66	5.364
N 77.00	5.392
N 67.33	5.249
N 57.66	5.282
N 48.00	5.168
N 38.33	5.189
N 28.66	5.061
N 19.00	5.090
N 9.33	4.975
Axis	4.989

Coping wall	
S 106.50	5.852
S 106.00	5.424
S 116.33	5.432
S 106.66	5.365
S 97.00	5.352
S 87.33	5.260
S 77.66	5.269
S 68.00	5.172
S 58.33	5.172
S 48.66	5.072
S 39.00	5.070
S 29.33	4.987
S 19.66	4.983
S 10.00	4.873

TROJAN AVE PIPELINE & PROFILE
300' SOUTH - EL CAJON BLVD

			465.35 ✓
			465.51
BM.	4.26	469.6'	465.66
		4.42	465.19 ✓
86+26?		5.04	464.57 ✓
86+29.20 BK } EQUA 86+13.60 AH }		5.1	464.5 ✓
+50		4.25	465.4 ✓
87+00		4.5	465.1 ✓
+24		4.6	465.0 ✓
+37		4.3	465.3 ✓
+50		4.3	465.3 ✓
88+00.		4.2	465.4 ✓
+50		4.1	465.5 ✓
89+00		3.9	465.7 ✓

April 22 1952
Beatty
West
Powell

BM ELEV. TROJAN AVE RL - EL CAJON & CATOCTIN
BM " CITY DATUM - } EL CAJON & 63rd
BM " CITY DATUM -

Top of Curb 6' RT. & of Pipe
Top of Driveway curb on & of pipe

(LEFT)		(RIGHT)		
4.1		4.2	4.7	4.2
6	C	2	2	6
4.4		4.5	4.7	4.6
4	C	3	3	6
4.5		4.4		
5	C	5		
4.4		4.2		
5	C	5		
4.4		5.1		
6	C	6		
4.3		4.3		
5		6		
4.1		3.9		
6		6		
3.8		3.9		
6		6		

151

469.61

89+50	3.9	465.7 ✓
90+00	4.1	465.5 ✓
+50	4.3	465.3 ✓

152

3.6 6	C	4.0 6
4.1 6	C	4.2
4.1 6	C	4.3 C

153

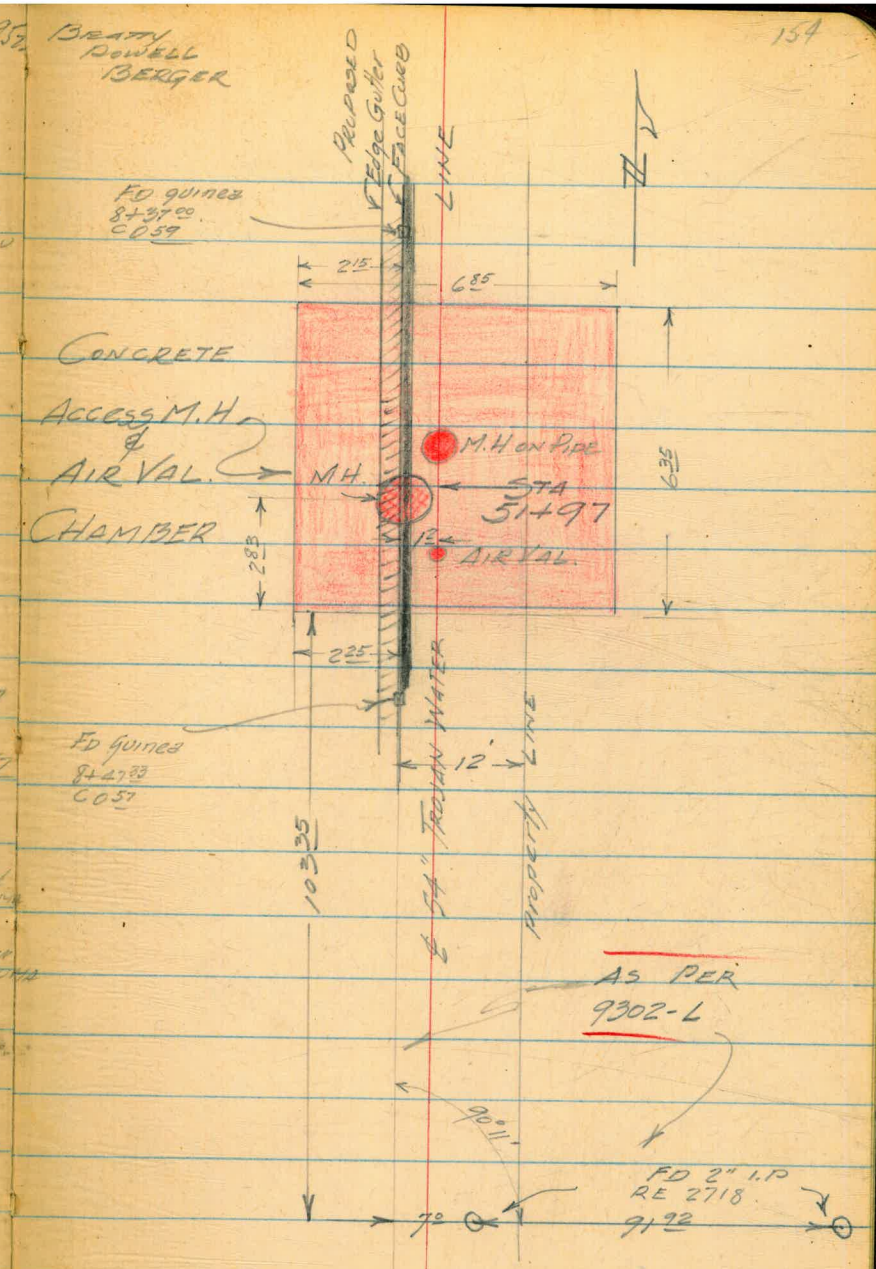
April 4 1952

Interference of Concrete Valve Chamber on Trojan Ave P Line & New Proposed Curb

BM	4.97	456.64 ~~456.87~~		451.67 ~~451.90~~	Nail in Po. Pole Mkrd Elev
NE Cor Conc Val Chm			3.84	452.80	
NW. " " " "			3.60	453.04	
S.W " " " "			3.57	453.07	
SE " " " "			3.80	452.84	
Top lid Access M.H.			7.93	448.71	
Top. Air Val Assem.			6.30	450.34	
West Side - Rim of M.H			3.58	453.06	
Nor. on guines		(8+37)(C 0 59)	3.71	452.93	452.36 C 0 57 Curb Grd
So. " "		(8+47.33)(C 0 57)	3.67	452.97	452.4 C 0 57
Pan F.H	2.17	458.08 ~~458.31~~	0.73	455.91 ~~456.14~~	
Top of F.H	2.01	453.55 ~~453.78~~	6.54	451.54 ~~451.77~~	SE Cor Catoctin & Montezuma
CK BM			5.80	447.75 ~~447.98~~	BP SW Cor. Catoctin & Montezuma
II Top F.H	7.75	459.29 ~~459.52~~		451.54 ~~451.77~~	
II D	5.97	~~463.35~~ ~~463.58~~	1.91	457.38 ~~457.61~~	
CK BM: Top F.H. - SE Cor Art & Catoctin			0.02	463.33 ~~463.56~~ = 463.33	

154

Beatty Dowell Berger



Oct. 7, 1949
Beatty
Rogers
Finney

Gauge Elev. Set. Intake tower Murray Lake

B.M.	4.03	546.54	542.51

BM on SE END of DAM
U.S.G.S. Datum
(536.39 City Datum)

Elev. of operating floor Intake tower

0.00 546.54

Orig. Elev. of GAUGE 100.

4.87 541.67

SET: Chis Mrk for new Gauge 100.

5.00 541.54 (USGS Dat)

529.916

538.15
8.214
529.936

89.48

100.00

Oon quage 441.00 spillway

38.241
5.556
32.685

38.130
5.439
32.691

546.5
545.5
3.88
541.54 F

103.8

= 541.62

38 Guage 100
5.550
32.691

38.130
5.436
32.694

Top floor 104.88

City Datum
536.39 BM
4.03
540.42 di

540.42
0.00
540.42 oper. Floor

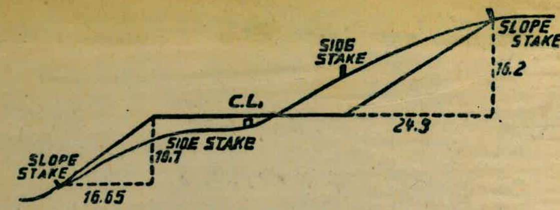
540.42
4.87
535.55 = 100 Ga ORIG.

USGS Datum
542.51 BM
4.03
546.54 di

546.54
4.87
541.67 = ORIG 100 Ga.

0.00
546.54
oper. floor

546.54
541.62
4.92 = ~~Set~~ New 100 Ga
5.00 = Reset.



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.20	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

THE NATIONAL BLANK BOOK COMPANY
HOLYOKE MASSACHUSETTS
NEW YORK CHICAGO BOSTON SAN FRANCISCO