El Cajon Valley
Pipe Line

No 1

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H. W. Vincent. City Clerk.

By. Percy L. Day. Deputy.

Level Book - No - 1.

El Cajon Valley - Pipe line.

Presented to Council and

Ordered filed - Mar - 6th 1905.

W33

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

MINUTES	LKS.	MINUTES	LKS.	MINUTES	LKS.
1	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle	COR. IN LINKS	Angle	COR. IN LINKS	Angle	COR. IN LINKS	Angle	COR. IN LINKS
°		°		°		°	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

5280 / .001 / 5.280   5.280   .001

5.28' per mile
=.001' " ft.
=.10' " 100 ft.
=1.0' " 1000 ft.

(Benches)
Block 122

B.M.	Elev.	
No. 1	376.82	N. E. cor University 4/15 Alamo Spike in tel pole (P. 2)
N. 2	367.26	Spike in tel pole 30th n. El Cajon
No. 3	379.16	10 p. Nail driven in South West cor. Meter House top of bank (P. 3)
No. 4	383.24	Nail and copper tacks driven in top of 8"x8" post, at N. W. cor of fence, South side of Road, About opposite Hinkle's house (P. 5)
No. 5	371.24	Copper tack top of fence post at intersection of fences North side of road opposite Sta. 76 (S. W. cor Taggart's place) (P. 7)
No. 6	352.62	Nail in 2"x2" Plug at N. W. Cor of fence South Side of Cajon ave. on the East Boundary of Terrace opposite Sta 102+25 (P. 9)
No. 7	359.64	Stake in third post East of Quartermaster Depot South side of road (P. 9)
No. 8	345.46	Spike in post, North East cor Steilberg's Lot.
No. 9	354.44	Spike in cor fence post at the N. E. cor. Rapids Lemon orchard (P. 12)
No. 10	375.68	Nail in Hub about 75' Left of Sta 155+55 (P. 14)
No. 11	391.40	Nail in Hub 75 Right of Sta. 173 (P. 18)

B.M.	Elev.	
No. 12	390.45	Nail in hub 75' Left Sta 185+65 (P. 21)
No. 13	374.85	Nail in hub 60' Right Sta 212 (P. 26)
No. 14	99.38	20 p Spike in stump of Sycamore tree 50' Right of Sta. 226 (P. 28)
No. 15	282.04	Nail in Hub 60' Left Sta. 234 (P. 31)
No. 16	173.40	Nail in Hub on side hill about 90' right Sta. 247 (P. 33)
No. 17	322.03	Nail in Hub 80' Right Sta. 260 (P. 35)
No. 18	346.71	Nail in Hub 100' Left Sta. 287 (P. 37)
No. 19	354.14	Stone marked with blue Kiel 150' Left of Sta 296 (P. 39)
No. 20	344.31	Stake in stones 150' left of Sta. 308 (P. 41)
No. 21	165.37	Nail in Hub 80' Right Sta. 316 (P. 43)
No. 22	325.10	Copper tack in Hub in pile stone 80' right Sta. 334+50 just west of road (P. 46)
No. 23	395.08	Lath stake and stones 100' Right Sta. 353 near top of saddle (P. 48)
No. 24	279.12	Stone marked with red Kiel 125' Left of Sta. 368 (P. 50)

No. 25	390.29	Highest point of Stone Marked with red Kiel, 75' Left of Sta 385. (P. 53)
No. 26	248.38	Highest point on Stone Marked with red Kiel, 75' Right of Sta. 397+50 (P. 55)
No. 27	267.04	Red Kiel mark on granite Boulder 30' Left Sta. 405+60 (P. 57)
No. 28	282.34	Red and blue Kiel mark on small Boulder, 40 Left Sta. 408 (P. 58)
No. 29	266.03	Point on small boulder marked with blue & red crayon 25' Left of Sta. 417 (P. 60)
No. 30	268.85	Spike driven in blaze of small oak tree 5' Right of Sta 441+75 (P. 66)
No. 31	266.63	Spike in oak tree 20' left of Sta. 461+50 (P. 69)
No. 32	331.22	Nail in Top of 4"x4" Post No. 5 on El Cajon Grant Line near Sta. 472+83 (P. 71)
No. 33	428.01	Knob on boulder marked with red Kiel 60' North of Sta. 482+40 (P. 73)

Dec 3, 1904
Pumsey, Level
Kerr, Rod

(1) Levels for Pipe Line to the proposed Reservoir from University Heights Reservoir South of the Old Mission Dam.

Sta.	+		−	Rod	Elev.	
B.M. No1	2.25	376.07			376.82	
0				4.1	372.0	
1				4.2	371.9	100.0
2				4.2	371.9	100.0
3				4.9	371.2	100.0
4				6.0	370.1	100.0
5				8.8	367.3	
6				10.5	365.6	
7				10.7	365.2	
T. P.	3.61	372.49	10,19		368.88	
8				4.5	368.0	
9				4.9	367.6	
10				6.1	366.4	
11				7.6	364.9	
12				8.2	364.3	
13				9.1	363.4	
14				8.8	363.7	
	5.86		10.19			

Sta.	+	⊙	−	Rod	Elev
T.P.	6.82	371.15	8.16		364.33
15				7.1	364.1
16				6.6	364.6
17				6.4	364.8
+25				6.5	364.7
18				6.1	365.1
+50				6.3	364.9
+70				4.9	366.3
19				6.3	364.9
20				5.3	365.9
T.P.	11.54	377.85	4.84		366.31
+40				10.6	367.3
+60				11.7	366.2
21				10.4	367.5
22				7.4	370.5
+50				6.0	371.9
23				3.8	374.1
	18.36		13.00		

(3)

Sta.	+	○	−	Rod	Elev.
+40				3.0	374.9
24				1.2	376.7
T. P.	4.51	381.27	1.09		376.76
25				3.4	377.9
+40.7				4.2	377.1
26				4.0	377.3
B.M. No. 3				2.11	379.16
27				4.8	376.5
+24.3				5.6	375.7
28				6.3	375.0
29				7.7	373.6
30				8.7	372.6
T. P.	4.06	376.92	8.41		372.86
31				6.5	370.4
32				8.1	368.8
33				5.9	371.0
34				4.7	372.2
	8.57		9.50		

Sta.	+	⊙	−	Rod	Elev.
35				4.2	372.7
36				3.7	373.2
T. P.	7.03	380.76	3.19		373.73
37				7.3	373.5
38				6.7	374.1
39				6.0	374.8
40				5.1	375.7
41				3.8	377.0
42				2.4	378.4
T. P.	4.72	383.43	2.05		378.71
43				5.2	378.2
44				5.0	378.4
45				5.3	378.1
46				4.7	378.7
47				3.6	379.8
48				3.6	379.8
T. P.	5.61 17.36	385.89	3.15 8.39		380.28

(5)

Sta.	+	⊙	−	Rod	Elev.
49				5.7	380.2
50				5.2	380.7
B.M. No. 4				2.64	383.25
51				5.5	380.4
52				5.5	380.4
53				6.0	379.9
54				7.4	378.5
T. P.	2.37	381.40	6.86		379.03
55				3.6	377.8
56				4.9	376.5
57				5.0	376.4
58				5.6	375.8
59				6.3	375.1
60				6.5	374.9
T. P.	3.40	378.74	6.06		375.34
61				4.4	374.3
62				5.0	373.7
	5.77		12.92		

Sta.	+	⊙	−	Rod	Elev
63				5.3	373.4
64				5.2	373.5
65				6.3	372.4
66				6.2	372.5
T. P.	3.24	376.16	5.82		372.92
+30				3.9	372.3
+45				2.3	373.9
+75				4.4	371.8
67				4.6	371.6
68				5.7	370.5
69				6.3	369.9
70				7.1	369.1
71				8.0	368.2
72				9.0	367.2
T. P.	3.77	371.44	8.49		367.67
73				5.2	366.2
74				5.1	366.3
	7.01		14.31		

Sta.	+	o	−	Rod	Elev.
75				5.3	366.1
76				5.4	366.0
77				5.9	365.5
B.M. No. 5				0.19	371.25
78				6.7	364.7
T.P. 5 III/04	3.74	368.91	6.27		365.17
79				4.2	364.7
80				4.4	364.5
81				4.9	364.0
82				4.9	364.0
83				4.6	364.3
84				5.0	363.9
T.P.	5.09	369.41	4.59		364.32
85				5.3	364.1
86				5.1	364.3
87				5.0	364.4
88				5.6	363.8
	8.83		10.76		

Sta.	+	○	−	Rod	Elev.
89				5.8	363.6
90				5.6	363.8
T.P.	4.64	368.91	5.14		364.27
91				5.3	363.6
92				5.2	363.7
93				5.1	363.8
94				5.3	363.6
95				4.8	364.1
96				5.1	363.8
T.P.	1.34½	366.56	4.69		364.22
97				2.1	363.5
98				4.5	361.1
99				10.0	355.6
T.P.	1.96	355.73	11.79		353.77
100				3.5	352.2
101				5.5	350.2
Hub 102				4.90	350.83
	7.94		21.64		

Sta.	+	⊙	−	Rod	Elev.
B.M. No. 6	6.32	358.94	3.11		352.62
103				7.1	351.8
104				5.8	353.1
105				5.0	353.9
106				4.0	354.9
+36				3.4	355.5
107				3.0	355.9
T. P.	6.16	362.69	2.41		356.53
108				6.2	356.5
109				5.5	357.2
110				5.4	357.3
111				5.0	357.7
112				5.0	357.7
113				4.7	358.0
T. P.	3.58	361.99	4.28		358.41
114				3.2	358.8
B.M. No 7				2.35	359.64
	16.06		9.80		

Sta.	+	⊙	−	Rod	Elev.
115				4.2	357.8
116+46				4.7	357.3
116				5.6	356.4
117				6.7	355.3
118				8.0	354.0
119				8.7	353.3
T. P.	6.53	360.39	8.13		353.86
120				7.4	353.0
121				6.5	353.9
122				5.0	355.4
123				4.4	356.0
124				8.4	352.0
125				11.9	348.5
T. P.	2.87	351.93	11.33		349.06
126				5.2	346.7
127				5.3	346.6
128				6.3	345.6
	9.40		19.46		

Sta.	+	⊙	−	Rod	Elev.
129				5.9	346.0
B.M. No. 8	8.73	354.19	6.47		345.46
+03				8.1	346.1
130				6.5	347.7
+20				6.3	347.9
+60				7.7	346.5
131				7.1	347.1
132				6.6	347.6
T. P.	11.48	359.63	6.04		348.15
+35				10.8	348.8
133				8.1	351.5
134				3.7	355.9
T+55				2.0	357.6
T. P.	2.50	360.16	1.97		357.66
135				3.5	356.7
+25				3.4	356.8
136				4.9	355.3
	22.71		14.48		

Sta.	+	⊙	−	Rod	Elev.
137				6.9	353.8
138				7.1	353.1
+68				5.2	355.0
on Plug T. P. 6/11/04	7.87	362.88	5.15		355.01 ✓
B.M. No. 9				8.44	354.44
139				7.8	355.1
+15				7.0	355.9
+75				5.7	355.2
140				5.6	357.3
141				4.3	358.6
142				1.9	361.0
T. P.	9.58	371.05	1.41		361.47
143				7.4	363.6
+25				6.7	364.3
+45				4.9	366.1
+65				5.9	365.1
144				5.2	365.8
	17.45		6.56		

Sta.	+	⊙	−	Rod	Elev.
+20				4.5	366.5
+40				3.4	367.6
145				1.5	369.5
T. P.	11.66	381.88	0.83		370.22
146				8.2	373.7
+35				7.4	373.5
+50				6.7	375.2
147				6.6	375.3
+25				6.5	375.4
+55				5.0	376.9
148				5.4	376.5
+35				5.6	376.3
+65				4.6	377.3
149				6.1	375.8
T. P.	5.43	381.95	5.36		376.52
+45				5.3	376.6
+70				7.5	374.4
	17.09		6.19		

Sta.	+	⊙	−	Rod	Elev.
150				6.8	375.1
+75				7.9	374.0
+90				6.6	375.3
151				7.1	374.8
+35				10.1	371.8
152				8.2	373.7
+30				7.7	374.2
+55				6.1	375.8
+80				6.5	375.4
153				6.2	375.7
+20				5.0	376.9
154				4.4	377.5
155				4.9	377.0
B.M. No. 10				6.27	375.68
+55				5.5	376.4
+90				8.8	373.1
T.P.	0.55	370.85	11.65		370.30

Sta.	+	⊙	−	Rod	Elev.
156				1.7	369.2
T. P.	0.74	359.78	11.81		359.04
T. P.	0.53	348.60	11.71		348.07
" "	0.57	337.62	11.55		337.05
" "	0.42	326.07	11.97		325.65
157				1.2	324.9
T. P.	0.36	314.61	11.82		314.25
" "	0.36	303.25	11.72		302.89
+95				16.0	287.2
158				21.6	281.6
+05				16.0	287.2
+50				10.9	292.3
+70				11.3	291.9
+85				7.8	295.4
159				3.9	299.3
T. P.	11.75	314.64	0.36		302.89
" "	12.16	326.58	0.22		314.42
	326.89		71.16		

Sta.	+	○	−	Rod	Elev
160				2.7	323.9
T. P.	11.85	337.25	1.18		325.4
" "	11.69	348.16	0.78		336.47
+80				9.4	338.8
161				0.4	347.8
T. P.	11.83	359.99	0.00		348.16
" "	11.88	371.08	0.79		359.20
" "	11.64	382.13	0.59		370.49
+65				7.3	374.8
162				4.0	378.1
T. P.	11.87	392.44	1.56		380.57
+45				11.7	380.7
+75				11.6	381.4
163				10.5	381.9
+40				10.8	381.6
+85				12.0	380.4
164				10.5	381.9
	70.96		4.90		

Sta.	+	⊙	−	Rod	Elev.
+45				6.0	386.4
165				3.6	388.8
T. P.	9.48	399.14	2.78		389.66
+25				9.2	389.9
+55				9.8	389.3
+60				9.0	390.1
166				8.09	391.05
167				6.5	392.6
168				5.5	393.6
169				4.0	395.1
+50				3.8	395.3
T. P.	3.90	399.75	3.29		395.85
170				4.8	394.9
171				5.5	394.2
+75				10.9	388.8
172				8.3	391.4
173				9.1	390.6
	13.38		6.07		

Sta.	+	⊙	−	Rod	Elev.
B.M. No. 11				8.35	391.40
T.P.	0.52	388.40	11.87		387.88
+55				0.7	387.7
174				7.1	381.3
T.P.	0.75	377.61	11.54		376.86
+40				7.5	370.
T.P.	0.31	366.15	11.77		365.84
" "	0.40	354.62	11.93		354.22
175				7.1	347.5
T.P.	1.49	344.47	11.64		342.98
" "	0.40	333.05	11.82		332.65
" "	0.48	321.91	11.62		321.43
" "	0.42	310.88	11.45		310.46
176				8.3	302.6
T.P.	0.10	299.18	11.80		299.08
" "	0.11	287.48	11.81		287.37
" "	0.45	275.98	11.95		275.53
	5.43		129.20		

Sta.	+	⊙	−	Rod	Elev.
T. P.	1.03	265.35	11.66		264.32
+65				1.0	264.3
T. P.	0.95	254.43	11.87		253.48
" "	0.07	242.77	11.73		242.70
177				1.3	241.5
T. P.	0.74	232.28	11.23		231.54
" "	0.31	221.07	11.52		220.76
" "	0.25	209.41	11.91		209.16
" "	3.62	201.24	11.79		197.62
+88				10.6	190.6
178				10.4	190.8
+27				10.6	190.6
+28				13.4	187.8
+40				12.6	188.6
179				12.0	189.2
+40				10.1	191.1
T. P.	11.74	212.81	0.17		201.07
	18.71		81.88		

Sta.	+	0	−	Rod	Elev.
180				1.0	211.8
T. P.	11.67	223.82	0.66		212.1
" "	11.58	235.07	0.33		223.49
" "	10.82	244.68	2.21		232.86
" "	11.81	255.49	1.00		243.68
+75				8.9	246.6
181				0.50	255.0
T. P.	11.99	267.07	0.43		255.06
7/11/04					
" "	11.46	278.19	0.32		266.73
" "	11.09	288.72	0.56		277.63
182				11.3	277.4
183				7.3	281.4
+30				2.8	285.9
T. P.	11.42	299.61	0.53		288.19
" "	10.87	310.38	0.10		299.51
" "	11.41	321.17	0.62		309.76
" "	11.91	332.31	0.77		320.40
	127.03		7.53		

Sta.	+	⊙	−	Rod	Elev.
184				6.3	326.0
T. P.	11.81	344.04	0.08		332.23
" "	11.85	355.46	0.43		343.61
" "	11.63	366.96	0.13		355.33
" "	11.92	378.70	0.18		366.78
" "	11.75	390.30	0.15		378.55
185				11.7	378.6
T. P.	8.99	395.89	3.40		386.90
+65				5.9	390.0
B.M. No. 12				5.44	390.45
186				5.6	390.3
187				5.1	390.8
+30				4.9	391.0
188				5.2	390.7
T. P.	6.88	397.97	4.80		391.09
189				7.5	390.5
+25				6.4	391.6
	74.83		9.17		

395.89
5.44
390.45

Sta.	+	○	−	Rod	Elev.
+50				6.3	391.7
190				5.8	392.2
191				4.8	393.2
+35				5.6	392.4
+60				6.7	391.3
192				8.9	389.1
T. P.	0.51	387.17	11.31		386.66
193				3.7	383.5
194				9.7	377.5
T. P.	0.33	375.71	11.79		375.38
" "	0.03	363.86	11.88		363.83
195				3.4	360.5
+30				7.7	356.2
T. P.	0.14	352.24	11.76		352.10
+65				6.7	345.5
T. P.	0.07	340.83	11.46		340.76
196				6.6	334.2
	1.08		58.22		

Sta.	+	⊙	−	Rod	Elev.
T.P.	0.26	329.24	11.85		328.98
+20				3.8	325.4
197				9.2	320.0
198				19.0	310.2
199				6.6	322.6
+30				5.0	324.2
T.P.	0.18	317.81	11.61		317.63
200				8.3	309.5
T.P.	0.03	306.28	11.56		306.25
" "	0.53	294.90	11.91		294.37
" "	0.41	284.24	11.07		283.83
201				10.5	273.7
T.P.	0.09	272.34	11.99		272.25
+25				10.0	262.3
+40				4.1	268.2
+65				3.7	268.6
202				7.7	264.6
	1.50		69.99		

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.35	260.92	11.77		260.57
+70				4.3	256.6
203				11.7	249.2
T. P.	0.27	249.78	11.41		249.51
+30				4.2	245.6
T. P.	0.26	238.30	11.74		238.04
204				4.8	233.5
+70				14.0	224.3
205				11.9	226.4
+40				6.6	231.7
+55				9.9	228.4
+75				4.4	233.9
T. P.	11.91	250.03	0.18		238.12
206				8.1	241.9
T. P.	11.89	261.75	0.17		249.86
" "	11.48	272.57	0.66		261.09
" "	12.01	284.34	0.24		272.33
	48.17		36.17		

Sta.	+	○	−	Rod	Elev.
207				11.0	273.3
T. P.	11.88	296.19	0.03		284.31
" "	11.59	307.73	0.05		296.14
" "	11.55	318.77	0.51		307.22
208				5.0	313.8
T. P.	12.00	330.26	0.51		318.26
+40				3.0	327.3
T. P.	11.94	341.51	0.69		329.57
209				1.4	340.1
T. P.	11.94	353.33	0.12		341.39
+25				7.7	345.6
T. P.	11.99	365.32	0.00		353.33
+65				6.9	358.4
210				1.4	363.9
T. P.	10.34	375.19	0.47		364.85
211				2.4	372.8
212				6.0	369.2
	93.23		2.38		

375.19
0.3 V
374.85

Sta.	+	⊙	−	Rod	Elev.
B.M. No 13				0.34	374.85
T. P.	0.09	363.55	11.73		363.46
213				8.3	355.3
T. P.	0.09	351.77	11.87		351.68
214				8.5	343.3
T. P.	0.00	339.87	11.90		339.87
+55				2.8	337.1
+80				8.0	331.9
(215)					
T. P.	0.11	328.03	11.95		327.92
" "	0.09	316.18	11.92		316.11
" "	0.16	304.62	11.72		304.46
216				6.2	298.4
T. P.	0.21	293.12	11.71		292.91
" "	0.14	281.71	11.55		281.57
" "	0.01	270.14	11.58		270.13
217				4.9	265.2
T. P.	0.35	258.93	11.56		258.58
	1.13		117.49		

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.12	247.43	11.62		247.31
+75				8.2	239.2
218				8.1	239.3
+20				15.0	222.4
T. P.	0.18	235.76	11.85		235.58
+50				5.0	230.8
+85				7.1	228.7
219				8.0	227.8
T. P.	0.28	224.52	11.52		224.24
" "	0.88	213.61	11.79		212.73
220				8.7	204.9
T. P.	0.35	202.04	11.92		201.69
" "	0.19	190.41	11.82		190.22
221				10.6	179.8
T. P.	0.18	178.75	11.84		178.57
" "	0.31	167.10	11.96		166.79
222				2.0	165.1
	2.49		94.32		

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.32	155.66	11.76		155.34
+55				0.0	155.7
T. P.	0.15	143.89	11.92		143.74
223				3.1	140.8
T. P.	0.28	132.29	11.88		132.01
+35				6.6	125.7
T. P.	0.45	120.84	11.90		120.39
224				3.6	117.2
+55				9.5	111.3
T. P.	0.18	109.18	11.76		109.08
225				4.0	105.2
T. P.	3.65	102.22	10.61		98.57
8/11/04					
B.M. No 14				2.84	99.38
226				6.1	96.1
+10				6.2	96.0
+15				8.8	93.4
		Alhambra Canyon			
+90				7.4	94.8
	5.00		69.83		

Sta.	+	○	—	Rock	Elev.
+90				4.5	97.7
227				4.7	97.5
+60				5.5	96.7
T. P.	11.95	113.06	1.11		101.11
228				18.0	95.1
+10				17.5	95.6
+30				3.7	109.4
T. P.	11.83	124.45	0.44		112.62
229				5.2	119.2
T. P.	11.77	136.20	0.02		124.43
+20				1.3	134.9
T. P.	11.90	147.87	0.23		135.97
230				2.0	145.9
T. P.	11.78	159.34	0.31		147.56
" "	11.96	171.09	0.21		159.13
" "	11.71	182.48	0.32		170.77
" "	11.82	194.22	0.08		182.40
	94.22		2.74		

Sta.	+	○	−	Rod	Elev.
231				10.2	184.0
T. P.	11.68	205.36	0.54		193.68
" "	11.76	217.08	0.04		205.32
" "	11.87	228.87	0.65		216.43
232				5.3	223.6
T. P.	11.78	239.71	0.37		227.93
" "	12.01	251.19	0.53		239.18
" "	11.87	262.66	0.40		250.79
+75				10.9	251.8
233				1.5	261.2
T. P.	11.70	274.24	0.12		262.54
" "	11.21	284.64	0.81		273.43
+50				7.7	276.9
T. P.	7.44	291.09	0.99		283.65
+90				6.2	284.9
234				5.1	286.0
+25				3.9	287.2
	101.32		4.45		

(31)

Sta.	+	⊙	−	Rod	Elev.
+60				5.2	285.9
B.M. No. 15				9.05	282.04
T. P.	0.30	280.15	11.24		279.85
235				2.2	277.9
+25				7.6	272.5
T. P.	1.05	269.57	11.63		268.52
" "	1.21	259.11	11.67		257.90
" "	0.31	247.62	11.80		247.31
236				8.0	239.6
T. P.	0.29	236.16	11.75		235.87
+25				7.6	228.6
T. P.	0.07	224.41	11.82		224.34
+50				5.3	219.1
T. P.	0.28	213.31	11.38		213.03
237				10.6	202.7
T. P.	0.50	201.91	11.90		201.41
" "	0.23	190.89	11.25		190.66
	4.24		104.44		

Sta.	+	0	−	Rod	Elev.
238				5.3	185.6
+75				13.8	177.1
T. P.	0.17	179.17	11.89		179.00
239				0.8	178.4
+25				0.3	178.9
240				7.1	172.1
T. P.	0.04	167.30	11.91		167.26
+50				1.0	166.3
+70				6.5	160.8
241				6.1	161.2
+35				6.8	160.5
+65				11.1	156.2
242				9.1	158.2
243				11.0	156.3
T. P.	10.55	166.11	11.74		155.56
+55				10.5	155.6
+65				13.2	152.9
	10.76		35.54		

Sta.	+	⊙	−	Rod	Elev.
244				11.0	155.1
+30.				10.3	155.8
+40				12.0	154.1
+70				10.0	156.1
245				10.9	155.2
+20				8.4	157.7
246				6.0	160.1
+55				3.8	162.3
247				5.4	160.7
+25				2.3	163.8
T. P.	11.14	175.35	1.90		164.21
B.M. No. 16				1.95	173.40
248				8.0	167.3
249				5.4	169.9
T. P.	11.88	182.72	4.51		170.84
+60				8.3	174.4
250				2.0	180.7
	23.02		6.41		

Sta.	+	⊙	−	Rod	Elev.
T. P.	11.57	194.01	0.28		182.44
+50				4.8	189.2
251				1.3	192.7
T. P.	11.82	205.07	0.76		193.25
252				1.8	203.3
+25				7.0	198.1
+40				16.6	188.5
+70				9.9	195.2
253				18.3	186.8
+55				20.8	184.3
254				14.7	190.4
T. P.	11.91	215.11	1.87		203.20
+85				3.6	211.5
255				4.1	211.0
+35				11.5	203.6
T. P.	11.84	226.55	0.40		214.71
" "	12.01	237.86	0.71		225.85
	59.15		4.07		

Sta.	+	⊙	−	Rod	Elev.
256				8.5	234.7
T. P.	11.55	249.32	0.09		237.77
" "	11.78	260.52	0.58		248.74
" "	11.82	272.14	0.20		260.32
" "	11.89	283.31	0.72		271.42
257				5.6	277.7
T. P.	11.88	295.08	0.11		283.20
" "	11.80	306.51	0.37		294.71
" "	11.88	317.92	0.47		306.04
258				13.1	304.8
T 445				4.6	313.3
T. P.	9.80	325.98	1.74		316.18
259				7.5	318.5
260				4.2	321.8
B.M. No. 17				3.95	322.03
261				5.5	320.5
262				3.4	322.6
	92.40		4.28		

Sta.	+	⊙	−	Rod	Elev.
+60				1.2	324.8
263				1.8	324.2
T. P.	7.05	331.79	1.24		324.74
264				6.5	325.3
265				3.7	328.1
+35				3.5	328.3
266				8.5	323.3
267				12.1	319.7
268				8.0	323.8
269				5.1	326.7
T. P.	11.39	338.67	4.51		327.28
270				8.3	330.4
271				4.0	334.7
T. P.	11.65	349.60	0.72		337.95
+50				9.6	340.0
272				6.0	343.6
273				1.4	348.2
	30.09		6.47		

Sta.	+	⊙	−	Rod	Elev.
T. P.	6.91	354.80	1.71		347.89
274				5.1	349.7
Plug 375				3.02	351.78
+20				3.2	351.6
+35				4.8	350.0
+60				2.9	351.9
+85				5.2	349.6
276				5.7	349.1
+35				5.8	349.0
277				11.2	343.6
278				14.4	340.4
T. P.	5.23	350.49	9.54		345.26
279				8.5	342.0
+25				6.4	344.1
280				4.5	346.0
281				5.3	345.2
B. M. No. 18				3.78	346.7
	12.14		11.25		

Sta.	+	⊙	−	Rod	Elev.
+30				5.6	344.9
T.R.	0.79	339.70	11.58		338.91
282				4.6	335.1
T.P.	0.61	328.39	11.92		327.78
283				5.7	322.7
284				10.4	318.0
285				15.0	313.4
286				14.0	314.4
287				11.3	317.1
T.P.	10.64	335.66	3.37		325.02
288				13.0	322.7
289				8.5	327.2
+40				7.4	328.3
+50				8.3	327.4
290				2.0	333.7
T.P.	11.83	347.03	0.46		335.20
291				7.9	339.1
	23.87		27.33		

Sta.	+	○	−	Rod	Elev.
292				4.7	342.3
293				0.5	346.5
T. P.	11.49	358.05	0.47		346.56
+55				9.4	348.6
294				10.3	347.7
+60				8.6	349.4
295				7.7	350.3
+80				5.3	352.7
296				6.7	351.3
B.M. No. 19				3.91	354.14
297				4.9	353.1
298				4.1	353.9
T. P.	6.18	360.74	3.49		354.56
+85				5.4	355.3
299				7.2	353.5
+20				5.2	355.5
+45				7.3	353.4
	17.67		3.96		

	+75			5.5	355.2
	300			6.8	353.9
	+30			8.0	352.7
	301			5.2	355.5
	+50			5.5	355.2
	302			6.3	354.4
	+25			6.5	354.2
	+45			4.5	356.2
	+75			6.1	354.6
	303			6.2	354.5
	+20			4.5	356.2
	+80			6.0	354.7
	304			5.5	355.2
	T.P.	2.50	359.87	3.37	357.37
	+15			5.1	354.8
	+35			2.7	357.2
	+60			5.0	354.9
		2.50		8.37	

+80				3.0	356.9
305				5.3	354.6
Nail +60.				4.51	355.36
306				5.4	354.5
307				10.2	349.7
T. P. 8/11/04	0.69	350.80	9.76		350.11
308				5.9	344.9
B.M. No. 70				6.49	344.31
+75				8.2	342.6
309				11.4	339.4
T. P.	0.31	340.13	10.98		339.82
+85				4.5	335.6
310				6.8	333.3
T. P.	0.24	328.49	11.88		328.25
+55				2.2	326.3
+75				9.1	319.4
311				12.7	315.8
	1.24		32.62		

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.35	317.09	11.75		316.74
+10				2.5	314.6
T. P.	0.04	305.18	11.95		305.14
+55				2.0	303.2
+80				5.5	299.7
312				10.0	295.2
T. P.	0.25	293.48	11.95		293.23
" "	0.11	281.68	11.91		281.57
" "	0.27	270.09	11.86		269.82
313				12.5	257.6
T. P.	0.14	258.33	11.90		258.19
" "	0.39	246.86	11.86		246.47
" "	0.28	235.29	11.85		235.01
" "	0.24	223.67	11.86		223.43
" "	0.03	211.79	11.91		211.76
214				2.6	209.2
T. P.	0.43	200.35	11.87		199.92
	2.53		130.67		

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.81	189.32	11.84		188.51
" "	0.01	177.45	11.88		177.44
+65				1.7	175.7
315				11.8	165.6
T. P.	2.70	168.79	11.36		166.09
+20				6.9	161.9
+40				9.0	159.8
+43				12.5	156.3
+60				9.4	159.4
316				6.4	162.4
+30				4.8	164.0
317				4.5	164.3
B.M. No. 21				3.42	165.37
+55				2.0	166.8
T. P.	11.31	179.21	0.89		167.90
318				14.4	164.8
+75				11.0	168.2
	14.83		35.97		

Sta.	+	⊙	−	Rod	Elev
T. P.	11.83	190.44	0.60		178.61
" "	11.87	202.06	0.25		190.19
319				16.4	185.7
T. P.	11.75	213.60	0.21		201.85
320				5.2	208.4
T. P.	11.64	225.22	0.02		213.58
" "	11.89	237.05	0.06		225.16
" "	11.65	248.53	0.17		236.88
321				12.7	235.8
T. P.	11.84	260.30	0.07		248.46
322				6.5	253.8
T. P.	11.75	271.74	0.31		259.99
" "	11.75	283.31	0.18		271.56
323				14.8	269.0
T. P.	11.78	294.67	0.42		282.89
324				10.8	283.9
T. P.	11.77	305.95	0.49		294.18
	129.52		2.178		

Sta.	+	⊙	−	Rod	Elev.
325				7.9	298.0
T. P.	11.88	317.58	0.25		305.70
326				5.1	312.5
T. P.	11.99	329.28	0.29		317.29
327				1.1	328.2
T. P.	11.86	340.76	0.58		328.70
+15				9.7	331.1
328				6.4	334.4
+20				5.8	335.0
+30				4.2	336.6
329				1.4	339.4
T. P.	5.75	345.06	1.25		339.31
330 on hub				2.91	342.15
+40				5.0	340.1
331				4.8	340.2
+40				4.0	341.1
332				7.4	337.7
	41.48		2.87		

Sta.	+	⊙	−	Rod	Elv
T. P.	1.00	334.24	11.87		333.24
333				12.3	321.9
T. P.	3.53	326.05	11.72		322.52
+70				14.5	311.5
334				15.5	310.5
335				9.7	316.3
B.M. No 77				0.95	325.10
T. P.	11.84	337.33	0.56		325.49
336				9.2	328.1
+80				2.1	335.2
337				2.5	334.8
+25				1.2	336.1
+60				1.6	335.7
T. P.	11.33	348.18	0.48		336.85
+90				9.4	338.8
338				9.9	338.3
+30				11.1	337.1
	27.70		24.58		

Sta.	+	○	−	Rod	Elev.
+60				8.2	340.0
339				8.5	339.7
340				5.8	342.4
+45				2.9	345.3
341				2.8	345.4
T. P.	5.84	353.39	0.63		347.55
+60				5.0	348.4
342				5.7	347.7
343				4.5	348.9
+20				3.0	350.4
SM Plug +80				2.73	350.66
344				2.9	350.5
345				3.6	349.8
+40				4.2	349.2
346				9.8	343.6
T. P.	6.34	350.05	9.68		343.71
+80				14.9	335.1
	12.18		10.91		

Sta.	+	⊙	−	Rod	Elev
347				16.4	333.6
+10				15.9	334.1
+35				9.2	340.8
348				1.4	348.6
T. P.	11.87	361.26	0.66		349.39
349				2.6	358.7
T. P.	11.73	372.26	0.73		360.53
350				4.7	367.6
T. P.	11.70	383.57	0.39		371.87
351				6.2	377.4
T. P.	12.00	395.35	0.22		383.35
352				10.1	385.3
353				3.5	391.9
B.M. No. 23				0.27	395.08
+50				1.2	394.2
354				5.0	390.4
T. P.	0.52 44.8 N	384.06	11.81 13.81		383.54

Sta.	+	∘	−	Rod	Elev.
355				3.4	380.7
356				11.3	372.8
T. P.	0.48	372.91	11.63		372.43
357				8.0	364.9
T. P.	0.00	360.90	12.01		360.90
358				4.3	356.6
359				12.7	348.2
T. P.	0.23	349.56	11.57		349.33
Hub +80				9.61	339.95
360				12.4	337.2
T. P.	0.43	338.30	11.69		337.87
" "	0.38	327.05	11.63		326.67
361				7.8	319.2
T. P.	0.10	315.40	11.75		315.30
" " 10/11/64	0.09	304.39	11.10		304.30
362				3.2	301.2
+35				10.2	294.2
	1.71		81.88		

Sta.	+	H.I.	−	Rod	Elev.
+80				14.3	290.1
363				11.8	292.6
T. P.	0.46	293.66	11.19		293.20
364				1.0	292.7
365				5.6	288.1
366				11.6	282.1
T. P.	4.79	286.84	11.61		282.05
367				11.7	275.1
+50				11.7	275.1
on hwy 368				10.91	275.93
B.M. No. 24				7.72	279.12
+30				10.2	276.6
Work 10' wide +35				13.9	272.9
+40				9.7	277.1
+55				8.2	278.6
T. P.	11.70	297.44	1.10		285.74
369	16.95		28.90	10.2	287.2

Sta.	+	⊙	−	Rod	Elev.
T. P.	11.91	309.14	0.21		297.23
370				6.4	302.7
T. P.	11.61	320.28	0.47		308.67
+75				6.0	314.3
371				2.9	317.4
T. P.	9.90	329.50	0.68		319.60
372				3.6	325.9
+60				0.5	329.0
373				0.54	329.0
374				8.8	320.7
T. P.	0.04	317.62	11.92		317.58
375				8.6	309.0
+20				10.7	306.9
T. P.	0.29	306.02	11.89		305.73
" "	0.16	294.43	11.75		294.27
376				3.3	291.1
T. +15				8.4	286.0
	33 91		36.92		

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.26	282.75	11.94		282.49
T. P.	0.16	270.96	11.95		270.80
+85				11.7	259.3
T. P.	0.19	259.79	11.43		259.53
377				4.1	255.7
+55				16.0	243.8
378				3.1	256.7
T. P.	11.65	271.27	0.10		259.62
" "	11.48	282.25	0.50		270.77
" "	11.76	293.78	0.23		282.02
379				10.4	283.4
T. P.	11.73	305.33	0.18		293.60
+30				12.5	292.8
380				4.3	301.0
T. P.	11.53	316.56	0.30		305.03
381				1.2	315.4
T. P.	11.77	328.33	0.00		316.56

70.53 16.63

Sta.	+	o	−	Rod	Elev.
T. P.	11.61	339.94	0.00		328.33
382				5.8	334.1
T. P.	11.75	351.49	0.20		339.74
" "	11.81	363.30	0.00		351.49
383				8.4	354.9
T. P.	11.80	374.92	0.18		363.12
" "	11.67	386.55	0.04		374.88
+70				12.7	373.9
384				5.6	381.0
T. P.	11.01	396.43	1.13		385.42
+60				3.9	392.5
385				0.4	396.0
+50				1.4	395.0
B.M. No. 25				6.14	390.29
On Plug 386				4.70	391.73
T. P.	0.53	385.24	11.72		384.71
387				2.2	383.0
	70.18		13.27		

Sta.	+	⊙	−	Rod	Elev.
388				6.0	379.2
389				9.6	375.6
T. P.	0.64	373.91	11.97		373.27
+60				4.0	369.9
390				10.4	363.5
T. P.	0.57	362.55	11.93		361.98
" "	0.14	350.89	11.80		350.75
391				5.2	345.7
+40				5.7	345.2
392				8.7	342.2
T. P.	0.72	339.81	11.80		339.09
393				5.6	334.2
T. P.	0.56	328.76	11.61		328.20
394				2.7	326.1
+15				5.9	322.9
+40				7.8	321.0
+60				12.1	316.7
	2.63		59.11		

Sta	+	⊙	−	Rod	Elev.
T. P.	0.44	317.30	11.90		316.86
395				4.0	313.3
+35				5.2	312.1
+60				10.7	306.6
T. P.	0.17	305.49	11.98		305.32
396				9.7	295.8
T. P.	0.10	293.68	11.91		293.58
+15				1.4	292.3
T. P.	0.43	282.12	11.99		281.69
" "	0.11	270.30	11.93		270.19
397				9.6	260.7
T. P.	0.26	258.60	11.96		258.34
+25				9.2	249.4
+60				15.3	243.3
+70				15.1	243.5
398				9.3	249.3
B.M. No. 76				10.22	248.38
	1.51		71.67		

Sta.	+	H	−	Rod	Elev
+10				7.1	251.5
T. P.	11.59	269.49	0.70		257.90
399				10.7	258.8
T. P.	11.78	281.27	0.00		269.49
400				10.1	271.2
T. P.	11.83	292.95	0.15		281.12
401				9.4	283.5
T. P.	11.78	304.65	0.08		292.87
402				6.3	298.3
T. P.	7.85	312.12	0.38		304.27
+75				2.3	309.8
On Plug 403				2.01	310.11
+15				2.3	309.8
+30				4.6	307.5
T. P.	0.42	300.63	11.91		300.21
404				6.5	294.1
T. P.	0.22	289.48	11.37		289.26
	55.47		34.59		

Sta.	+	=	—	Rod	Elev
+40				4.8	284.7
T. P.	0.21	278.37	11.32		278.16
405				11.1	267.3
T. P.	0.38	267.04	11.71		266.66
B.M. No. 27				6.10	260.94
+70				8.0	259.0
T. P.	1.04	256.18	11.90		255.14
406				2.7	253.5
+70			Persp. Rods	7.4	248.8
				13.8	242.4
+50				14.3	241.9
T. P.	11.44	267.49	0.13		256.05
407				4.4	263.1
T. P.	10.89	277.63	0.75		266.74
+10				8.1	269.5
T. P.	11.41	286.53	2.51		275.12
+70				1.8	284.7
408				1.5	285.0
	35.37		38.32		

Sta:	+	o	−	Rod	Elev.
+10				1.9	284.6
B.M. No. 28				4.19	282.34
12/11/34					
T. P.	0.66	275.31	11.88		274.65
+50				3.0	272.3
+75				6.7	268.6
+85				13.4	261.9
409 + 15				13.7	261.6
+30				4.8	270.5
+50				3.5	271.8
410				4.4	270.9
411				8.2	267.1
+80				10.3	265.0
T. P.	5.32	271.28	9.35		265.96
+95				11.1	260.2
412				11.7	259.6
+12				12.5	258.8
+25				8.7	262.6
	5.98		21.23		

Sta.	+	○	−	Rod	Elev
+35				8.3	263.0
+45				12.4	258.9
+75				10.5	260.8
+93				3.6	267.7
413				2.3	269.0
+45				2.6	268.7
+70				6.9	264.4
+85				15.0	256.3
414				9.5	261.8
+12				2.6	268.7
+60				6.3	265.0
+75				13.8	257.5
+92				11.6	259.7
415				10.3	261.0
T. P.	10.84	273.26	8.86		262.42
+25				13.9	259.4
+37				15.8	257.5

Sta.	+	○	−	Rod	Elev.
+50				11.3	262.0
+58				11.0	262.3
+90				13.4	259.9
416				15.5	257.8
+24				9.4	263.9
+60				7.2	266.1
+70				12.3	261.0
+77				11.8	261.5
+90				4.0	269.3
417				1.7	271.6
B.M. No. 29				7.23	266.03
+30				2.0	271.3
T.P.	0.85	262.23	11.88		261.38
+61				12.5	249.7
+70				13.6	248.6
T.P.	11.65	272.90	0.98		261.25
+90				7.6	265.3
	12.50		12.86		

Sta.	+	○	−	Rod	Ela.
418				6.6	266.3
+12				3.9	269.0
+50				2.6	270.3
419				14.5	258.4
+25				0.8	272.1
T. P.	5.51	277.62	0.79		272.11
+68				0.3	277.3
420				4.6	273.0
+40				8.2	269.4
T. P.	0.95	267.07	11.50		266.12
+58				10.0	257.1
+76				7.0	260.1
421				14.5	252.6
+25				7.2	259.9
+33				7.6	259.5
+55				13.7	253.4
+80				2.7	264.4
	6.46		12.29		

Sta.	+	⊙	−	Rod	Elev.
+85				0.9	266.2
422				6.2	260.9
T. P.	11.75	278.66	0.16		266.91
+40				1.3	277.4
T. P.	10.78	288.03	1.41		277.25
423				2.4	285.6
424				7.8	280.2
T. P.	1.29	277.31	12.01		276.02
425				5.4	271.9
+08				7.0	270.3
T. P.	0.20	265.65	11.86		265.45
+30				20.0	245.6
T. P.	4.66	269.30	1.01		264.64
+80				1.8	267.5
426				3.2	266.1
+35				4.7	264.6
427				13.7	255.6
	28.68		26.45		

Sta.	+	○	—	Rod	Elev.
T. P.	1.46	259.25	11.51		257.79
+24				7.1	252.1
+65				7.6	251.6
428				8.7	250.5
+08				10.4	248.8
+30				7.8	251.4
+50				8.8	250.4
+58				15.3	243.9
+98				12.0	247.2
429				14.2	245.0
+22				7.5	251.7
+60				3.9	255.3
T. P.	11.86	270.74	0.37		258.88
430				8.6	262.1
+45				0.9	269.8
+57				3.1	267.6
+70				8.6	262.1
	13.32		11.88		

Sta.	+	⊙	−	Rod	Elev.
431				0.2	270.5
T. P.	10.42	280.10	1.06		269.68
+18				11.1	269.0
+54				2.8	277.3
+78				1.1	279.0
432				5.1	275.0
T. P.	1.06	273.46	7.70		272.40
+15				11.3	262.2
+23				14.0	259.5
T. P.	11.43	284.44	0.45		273.01
+75				2.4	282.0
T. P.	10.70	294.59	0.05		284.89
433				6.8	287.8
+12				4.8	289.8
434				4.5	290.1
+48				4.1	290.5
+55				5.5	289.1
	33.11		9.26		

Sta	+	o	−	Rod	Elev.
T. P.	4.29	287.06	11.82		282.77
+80				13.1	2740
435				7.8	279.3
+07				6.0	281.1
+21				8.6	278.5
+76				6.5	280.6
436				6.6	280.5
+15				6.9	270.2
437				10.8	276.3
T. P.	1.24	276.80	11.50		275.56
438				5.2	271.6
+22				0.6	276.2
+50				5.0	271.8
+66				5.0	271.8
439				9.5	267.3
440				9.9	266.9
T. P.	2.85	270.05	9.60		267.20
	8.38		21.42		

Sta.	+	⊙	−	Rod	Elev.
441				4.5	265.5
+10			(Boulders)	3.2	266.8
+20				4.3	265.7
B.M. No 30				1.20	268.85
442				6.0	264.0
+60				5.5	264.5
443				0.0	270.0
T. P.	11.72	280.84	0.43		269.62
+55				10.9	269.9
444				5.3	275.5
T. P.	11.53	291.68	0.69		280.15
445				9.8	281.9
+50				8.0	283.7
+60				5.0	286.7
446				7.5	284.2
+78				4.9	286.8
T. P.	6.28 29.03	294.14	3.82 4.94		287.86

⊙ 270.05
1.20
268.85

Sta.	+	○	−	Rod	Elev
13/11/04					
447				0.5	293.6
+12				1.6	292.5
+36				9.0	285.1
+54				5.0	289.1
+69				6.1	288.0
+81				11.0	283.1
+93				11.8	282.3
448				9.4	284.7
+24				7.3	286.8
+60				7.9	286.2
T. P.	0.23	282.64	11.73		282.41
+78				4.2	278.4
449				9.8	272.8
T. P	0.80	272.00	11.44		271.20
450				5.6	266.4
451				5.2	266.8
452				6.5	265.5
	1.03		23.17		

Sta.	+	~~0~~	—	Rod	Elev
+79				3.6	268.4
T. P.	11.63	278.04	5.59		266.41
453				7.4	270.6
+78				2.7	275.3
+95				11.4	266.6
454				11.7	266.3
+05				11.3	266.7
+21				2.1	275.9
T. P.	6.59	284.37	0.26		277.78
455				3.1	281.3
+23				4.5	279.9
+25				6.8	277.6
+39				11.4	273.0
+63				10.4	274.0
T. P.	2.41	275.24	11.54		272.83
456				5.2	270.0
+05				9.9	265.3
	20.63		17.39		

Sta.	+	⊙	−	Rod	Elev.
457				13.6	261.6
458			(in road along East edge of road close to bank about 5' high	14.9	260.3
+16				9.8	265.4
459				3.2	272.0
+20				0.9	274.3
+35				0.0	275.2
460				7.6	267.6
+31				7.4	267.8
+70				12.5	262.7
461				5.0	270.2
B.M. No. 31				8.61	266.63
T. P.	11.29	285.63	0.90		274.34
462				13.6	272.0
463				4.5	281.1
+15				2.6	283.0
T. P.	11.77	296.36	1.04		284.59
+40				5.2	291.2
	23.06		1.94		

275.24
8.61
266.63

Sta.	+	⊙	−	Rod	Elev.
T. P.	11.58	305.72	2.22		294.14
464				6.7	299.0
+70				4.2	301.5
465				3.4	302.3
T. P.	11.11	313.21	3.62		302.10
466				8.1	305.1
+70				1.9	311.3
467				3.1	310.1
+45				5.3	307.9
T. P.	10.99	319.45	4.75		308.46
+75				8.1	311.3
468				8.9	310.5
469				2.7	316.7
T. P.	11.72	330.96	0.21		319.24
470				7.3	323.7
+50				6.2	324.8
471				1.9	329.1
	45.40		10.80		

Sta.	+	○	−	Rod	Elev
T. P.	11.38	340.96	1.38		329.58
472				10.4	330.6
+83				11.1	329.9
B.M. No. 32				9.74	331.22
473				9.5	331.5
+81				6.0	335.0
474				3.0	338.0
T. P.	11.71	352.67	0.00		340.96
+36				9.8	342.9
475				8.9	343.8
+53				8.0	344.7
476				4.0	348.7
+40				5.9	346.8
+60				3.8	348.9
T. P.	11.64	364.07	0.24		352.43
477				7.9	356.2
+50				0.7	363.4
	34.73		1.62		

340.96
9.74
331.22 0.2m.

Sta.	+	⊙	−	Rod	Elev
T. P.	7.50	371.28	0.29		363.78
478				6.7	364.6
+35				7.1	364.2
+75				8.1	363.2
479				11.8	359.5
+15				10.3	361.0
T. P.	11.56	382.72	0.12		371.16
+34				12.9	369.8
+50				13.0	369.7
T. P.	11.55	393.94	0.33		382.39
480				8.9	385.0
+25				0.6	393.3
T. P.	11.94	405.69	0.19		393.75
+54				4.6	401.1
T. P.	11.59	417.04	0.24		405.45
481				9.8	407.2
+50					
T. P.	11.63	428.20	0.47		416.57
	65.77		1.64		

Boulders outcrop

Sta.	+	⊙	−	Rod	Elev.
T.P.	11.77	439.49	0.48		427.72
482				11.1	428.4
+12				7.1	432.4
+40			End outlet pipe	6.1	433.4
B.M. No. 33			11.48		428.01 ✓

From B.M. No. 32 to USGS. B.M. near old Mission Dam

B.M. No. 32	0.43	331.65			331.22
T.P.	0.31	320.31	11.65		320.00
" "	0.08	308.56	11.83		308.48
" "	0.44	297.04	11.96		296.60
" "	3.39	288.81	11.62		285.42
			6.19		282.62
			"USGS. B.M.		288.00
			Diff		= 5.38
			It should be		288.513 (CSA)
					282.62
					5.90

CSA
US Geo. B.M. (True Elv 288.513)
Elv as marked on bronze Tablet

(74)

Levels on E½ Blk 122 Unity Hts

376.82
2.35
379.17

Sta.	+	o	−	Rod	Elev.
B.M.	2.35	379.17			376.82
A				4.1	375.1
A 1				4.1	375.1
A 2				2.5	376.7
A 3				3.0	376.2
B 4				2.3	376.9
B 3				3.7	375.5
B 2				3.7	375.5
B 1				4.2	375.0
B				4.3	374.9
C				2.6	376.6
C 1				3.3	375.9
C 2				3.9	375.3
C 3				3.9	375.3
C 4				3.2	376.0
D 4				3.8	375.4
D 3				4.3	374.9

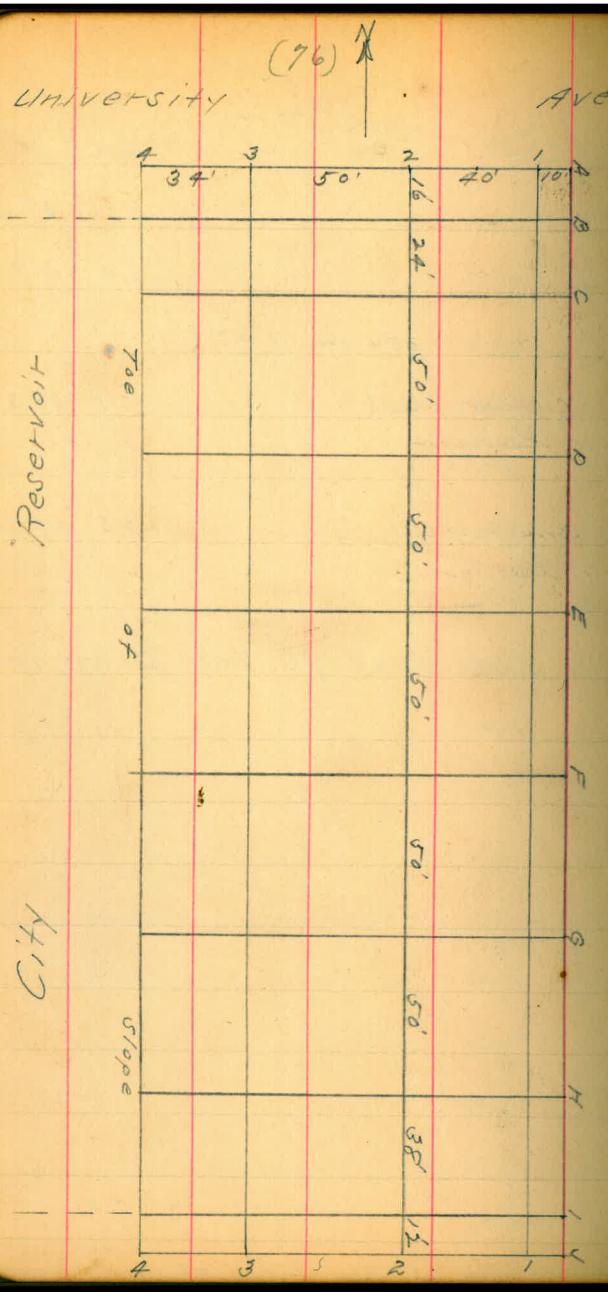
Sta.	+	o	−	Rod	Elev.
D 2				4.5	374.7
D 1				4.6	374.6
D				4.3	374.9
10' N. E 1				4.4	374.8
E				3.3	375.9
E 1				3.2	376.0
7' N. E 1				4.5	374.7
E 2				4.6	374.6
E 3				4.6	374.6
E 4				4.2	375.0
F 4				4.2	375.0
F 3				4.8	374.4
F 2				5.0	373.2
F 1				4.7	374.5
F				4.8	374.4
G				5.1	374.1
G 1				5.2	374.0

Sta.	+	⊙	−	Rod	Elev
G 2				4.6	374.6
G 3				5.0	374.2
G 4				4.6	374.6
H 4				4.9	374.3
H 3				5.2	374.0
H 2				5.6	373.6
H 1				5.2	374.0
H				5.4	373.8
I				5.5	373.7
I 1				5.5	373.7
I 2				5.6	373.6
I 3				5.3	373.9
I 4				4.0	375.2
J 4				4.9	374.3
J 3				5.4	373.8
J 2				5.5	373.7
J 1				5.5	373.7

~~379.17~~
1.43
377.74
7.06
~~384.74~~

Sta.	+	⊙	−	Rod	Elev
J				5.6	373.6
				2.6	376.6
T.P.	7.00	384.74	1.43		
Top of cement wall S.E. cor Reservoir				1.25	383.49
Top of cement wall N.E. cor Reservoir				1.23	383.51

See page 76 for Diagram


(76)
N
University
Ave
4
3
2
1
34'
50'
16'
40'
10'
A
B
C
D
E
F
G
H
I
J
24'
50'
50'
50'
50'
50'
35'
12'
Toe
of
Slope
Reservoir
City

(79)

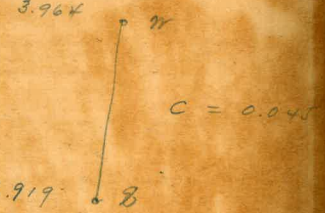
Block East of Block 122

B.M.	4.45	381.27		376.82
N.W. Cor.			5.9	375.4
N.E. Cor.			7.5	373.8
S.E. Cor.			7.8	373.5
S.W. Cor.			7.3	374.0

376.82
4.45
381.27

B
M
N.
S.
S.

3.964
3.919
0.045
4.527
4.572



TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19 51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24 62	96.81	25 04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28 40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38 67	67
23	92.05	39.07	91.88	39 47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89 69	44.23	89.49	44.62	89.30	45 01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52 99	84.57	53.36	84.34	53.73	84.10	54 10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60 53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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