

Levels for Road in Rose Cañon
from the end of Graded Road
to connection with Main line.

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From Sta. 80 ("Rose Cañon
line") through Sorrento to
City limits.

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From Sta. 99+00 to Station
111+35 "Sorrento Line"

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Levels along center of Alley
between 1st and 2nd "Union to Walnut"
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Levels along center of Alley
between 1st and 2nd "Union to Walnut"
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Levels along center of Alley
between 2nd and 3rd "Union to Walnut"
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Levels along the center line of Road
from Old Town to the City limits.
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Levels for Road from the station
at Taylor to Highway to the main
line.

F.B. 127

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	56.29	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.64	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.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	

Book no. 137

name

date

Pacific Beach Season

Sta.	slope	Left	Center	Right	slope	area sq. ft.	Cu. ft.
0	47.6 1.4 2.4 44.6 1.8 5.4	49.0 1.0 1.0 48.4 1.6 1.6	49.3 0.7 48.6 1.4 1.5	49.2 0.8 48.8 1.2 1.3	49.0 1.0 42.8 7.7 37.7 27 12.3	16.0 52.5 311.2	1712.5 9092.5 10885.0
+50	42.0 2.4 8.0	48.4 1.0 1.6	48.5 1.5	48.7 1.3	37.7 1.0 12.3	123.0	4680.0
1	45.8 1.6 4.2	48.8 1.0 1.2	48.8 1.2	48.9 1.1	43.1 1.0 6.9	642	4072.5
+50	46.1 1.6 3.9	48.9 1.0 1.1	48.8 1.2	48.6 1.4	46.5 1.0 3.5	98.7	11247.5
2	46.3 1.6 4.7	48.5 1.0 1.5	48.8 1.2	48.6 1.4	43.8 1.0 6.2	351.2	14555.0
+50	40.4 2.6 7.6	48.4 1.0 1.6	48.1 1.9	47.7 2.3	37.8 1.0 12.2	231.0	17365.0
3	38.0 2.4 12.0	48.6 1.0 1.4	48.2 1.8	46.4 3.6	45.7 1.0 12.3	463.6	23310.0
+50	32.8 2.4 14.0	48.0 1.0 2.0	48.1 1.9	44.5 5.5	35.0 1.5 15.0	468.8	14465.0
4	34.0 2.4 14.0	48.2 1.0 1.8	47.9 2.1	46.0 1.5 4.0	35.5 1.5 14.5	109.8	1942.5
+50	44.0 2.0 6.0	48.9 1.0 1.1	49.0 1.0	49.1 1.3 6.3	43.7 1.3 6.3	45.6	113297.5
5	44.5 1.8 5.5	48.9 1.0 1.1	49.2 0.8	49.1 0.9	48.2 1.8	27	4196 Cu yds
+25	18	1.0	0.8	0.9	1.8	27	
Surface grade	5.5	1.1	0.8	0.9	1.8	27	

27) 113297.5 / 4196 Cu yds
 10850
 52
 27
 259
 210
 167
 183

1/9/102

3

Levels for the proposed
from the end of graded roadextension of Road in Pine Cation
to connection with "Main Line".

4

Sta.	+	0	-	Red	Elev.	Sta.	+	0	-	Red	Elev.
B.M. (#30)	12.00	402.79			390.79	95				5.9	400.20
= 199 + 22											
102 + 08.7				13.3	389.49	+50				7.2	398.90
102				12.9	389.89	94				8.6	397.50
+50				10.1	392.69	+50				9.6	396.50
101				7.2	395.59	93				10.0	396.10
+50				5.1	397.69	+50				9.1	397.00
100				3.3	399.49	92				8.6	397.50
+50				2.5	400.29	+50				7.1	399.00
99				2.0	400.79	91				5.5	400.60
+50				1.6	401.19	T.P.	1.68	402.39	5.39		400.71
98				1.3	401.49	+50				0.7	401.69
+50				1.0	401.79	90				0.5	401.89
T.P.	4.11	406.10	0.80		401.99	+50				1.3	401.09
97				4.8	401.30	89				2.9	399.49
+51				4.8	401.30	+50				5.4	396.99
96				4.8	401.30	88				7.2	395.19
+50				4.9	401.20	+50				7.8	394.59

16.11

0.80

5

Sta.	+	-	Dist	Elev.	Alt.
T. P.	0.86	391.66	11.59	390.80	80
87			2.2	389.46	+50
+50			3.8	387.86	79
86			4.3	387.36	+50
+50			7.0	384.66	T. P.
85			8.5	383.16	78
+50			9.7	381.96	+50
84			11.4	380.26	77
+50			11.9	379.76	+50
T. P.	1.70	381.89	11.47	380.19	76
83			2.2	379.69	T. P.
+50			2.6	379.29	+50
82			4.4	377.49	75
+50			6.6	375.29	+50
81			5.8	376.09	74
+50			7.1	374.79	+50
B.M. (#36)			3.17	378.72	73
2.56		22.06			

6

Sta.	+	-	Dist	Elev.
80			9.23	372.66
+50			8.7	373.19
79			9.0	372.89
+50			10.7	371.19
T. P.	0.79	371.85	10.83	371.06
78			2.6	369.25
+50			4.8	367.05
77			6.6	365.25
+50			7.9	363.95
76			9.3	362.55
T. P.	1.00	361.83	11.52	360.53
+50			1.8	359.53
75			4.2	357.13
+50			5.8	355.53
74			6.9	354.43
+50			7.5	353.83
73			7.4	353.93
1.70			22.35	

Sta.	+	0	-	Pod	Clav.
+50				8.6	352.73
72				10.1	351.23
+50				11.6	349.73
T.P.	1.45	351.25	11.53		349.80
71				2.6	348.65
70+50				2.1	349.15
69+93				4.4	346.85
+50				6.9	344.35
69				9.9	341.35
T.P.	0.63	340.03	11.85		339.40
+50				2.3	337.73
68				3.7	336.33
+50				5.2	334.83
67				9.8	330.23
T.P.	0.89	329.76	11.16		328.87
+50				3.5	326.26
66				7.8	321.96
2.97				34.54	

Sta.	+	0	-	Pod	Clav.
+50				9.1	320.66
65				10.0	319.76
64+50				12.2	317.56
T.P.	0.45	318.51	11.70		318.06
63+96				4.4	314.11
63+50				7.0	311.51
63				9.2	309.31
+50				12.1	306.41
T.P.	0.77	307.80	11.48		307.03
+29				3.5	304.30
62				2.9	304.90
+50				3.6	304.20
61				7.1	300.70
T.P.	0.30	296.85	11.25		296.55
60+72				2.2	294.65
T.P.	0.74	286.03	11.56		285.29
+28				9.8	276.23
2.26				45.92	

Sta.	+	-	Red	Elev.
3'x4' Box 60+23			9.3	276.78
T. P.	8.73	294.02	0.74	285.29
+85Δ			-0.6	294.62
59+50			-0.1	294.12
Plug 58+9.5Δ			3.30	290.72
T. P.	2.77	292.72	4.07	289.95
+72			0.8	291.92
+50			1.9	290.82
+40Δ			3.7	389.02
58			10.8	281.92
T. P.	0.59	281.64	11.67	281.05
+62			11.5	270.14
+50			10.2	271.44
+32Δ			4.7	276.94
57			4.4	274.24
+50			8.3	273.34
+33			10.9	270.74
12.09		16.48		

Sta.	+	-	Red	Elev.
T. P.	0.82	270.75	11.71	269.93
+06			4.7	266.05
3'x4' Box				
56 Aug 4			11.7	259.05
+77			4.5	266.35
+50			4.7	266.05
+25			6.9	263.85
55			4.7	266.05
+75			8.3	262.45
+50			7.8	262.95
54			9.6	261.15
T. P.	0.52	259.90	11.37	259.38
Box +45			4.19	255.91
53			5.2	254.70
+50			10.7	249.20
52			11.1	248.80
+50			6.3	252.60
51			6.2	253.70
1.34		23.08		

Sta.	+	0	-	Pod	Elev.	Sta.	+	0	-	Pod	Elev.
+50				5.8	254.10	44				5.2	247.16
+12				4.5	255.40	+50				7.3	245.06
+11				12.0	247.90	Aug +07				6.93	245.43
50				12.0	247.90	43				6.9	245.46
+97				4.8	255.10	+50				8.0	244.36
+50				6.9	253.00	42				8.8	243.56
49				10.5	249.40	T.P.	4.59	248.34	8.61		243.75
+50				7.7	252.20	+50				4.1	244.24
48				11.4	248.50	41				2.6	245.74
T.P.	3.82	252.36	11.36		248.54	+50				4.8	243.54
+50				3.7	248.66	40				3.6	244.74
47				2.8	249.56	+50				5.6	242.74
+50				8.2	244.16	+25				9.1	239.24
46				6.9	245.46	39				8.3	240.04
+50				5.6	246.76	+75				10.7	237.64
45				5.1	247.26	+50				10.0	238.34
+50				4.7	247.16	38				10.9	237.44

Sta.	+	0	-	Pod	Elev.
5.2				247.16	
7.3				245.06	
6.93				245.43	
6.9				245.46	
8.0				244.36	
8.8				243.56	
4.59	248.34	8.61		243.75	
4.1				244.24	
2.6				245.74	
4.8				243.54	
3.6				244.74	
5.6				242.74	
9.1				239.24	
8.3				240.04	
10.7				237.64	
10.0				238.34	
10.9				237.44	

Alt	+	0	-	Pod	Clear
+50				8.9	239.44
+37 Δ				7.7	240.64
37				6.1	242.24
+50				7.8	240.54
T.P.	2.28	243.09	7.53	240.81	
36				6.3	236.79
+64 Δ				6.0	237.09
+50				5.1	237.99
35				3.0	240.09
+50 Δ				3.9	239.19
T.P.	2.18	240.86	4.41	238.68	
34				1.6	239.26
+50				8.7	232.16
33 +25				9.4	231.46
Aug 32 +99 Δ				4.27	236.59
+75				4.4	236.46
+50				6.9	233.96

4.46

11.94

Alt	+	0	-	Pod	Clear
32				7.3	231.56
+50				3.5	237.36
31				5.9	234.96
T.P. Aug +71 Δ	4.06	235.49	9.43		231.43
+50				2.4	233.09
B.M. (#37)				6.03	229.46
30				3.8	231.69
+50				3.1	232.39
29				5.4	230.09
+50				3.9	231.59
28				3.3	232.19
+50				5.6	229.89
27				7.5	227.99
+50				4.7	230.79
+25 Δ				5.6	229.89
+10				6.6	228.89
26				13.4	222.09

0415

Sta.	+	0	-	Red	Elms	Sta.
+95				7.3	228.19	20
+50				8.7	226.79	+50
25				7.7	227.79	19
T.P.	0.92	229.25	7.16		228.33	+50
+50				2.5	226.75	18
24				2.2	227.05	T.P.
+50				-0.2	229.05	+50
+11				3.4	225.85	+10
23				6.5	222.75	17
+75				8.8	220.45	+85
+50				6.8	222.45	+50
22				5.4	223.85	16
+50				4.3	224.95	+50
+30				3.3	225.95	15
21				4.9	224.35	14 + 6.3
+50				8.9	220.35	+50
+25				10.5	218.75	14

16

Sta.	+	0	-	Pal	Ele.
20				7.6	219.65
+50				7.9	221.35
19				6.4	222.85
+50				8.1	221.15
18				8.4	220.85
T.T.	2.77	224.00	7.96		221.29
+50				4.1	219.96
+100				4.6	219.46
17				4.6	219.46
+85				5.1	218.96
+50				5.3	220.76
16				6.2	217.86
+50				8.0	216.06
15				7.3	216.76
Elg +63				7.80	216.26
+50				6.6	217.46
14				8.5	215.56

Sta.	+	0	-	Red	Elev.
+50				8.3	215.76
13				13.6	210.46
+50				8.0	216.06
12				8.6	215.46
Chg T.P. +69	3.82	217.43	10.45	213.61	7
+50				6.8	210.63
11				6.2	211.23
+50				4.7	212.73
10				4.4	213.13
+92				4.3	213.13
+81				10.3	207.13
+76				10.3	207.13
+72				3.9	213.53
+50				3.7	213.73
9				5.0	212.43
+73				6.0	211.43
+50				6.7	210.73

Sta.	+	0	-	Red	Elev.
+25				8.6	208.83
8				7.0	210.43
+50				7.9	219.53
+15				11.4	206.03
7				10.2	207.23
+50				8.4	209.03
6				10.1	207.33
T.P. 3.35	211.01	9.77			207.66
+50				4.4	206.61
5				3.7	207.31
+82				3.1	207.91
+50				4.1	206.91
4				5.4	205.61
+50				5.8	205.21
3				6.2	204.81
+70				5.7	205.31
+50				5.6	205.41

Sta.	+	-	Red	Clav.
2			7.8	201.21
+50			9.7	201.31
1			5.2	205.81
+50			4.9	206.11
0 <u>Grade</u>			8.9	202.11
B.M. (738)		2.39		208.62 [✓]

Levels for Road from Sta. 80 ("Rose Canyon Line") through Sonora

Sta.	+	-	Red	Elev.	Sta.	+	-	Red	Elev.
B.M. (#36)	1.88	380.60		378.72	+50			3.2	376.37
= 80			7.9	372.70	8			3.9	375.67
+50			11.4	369.20	+50			3.8	375.77
1			13.2	367.40	9			3.9	375.67
+50			12.1	368.50	+50			5.0	374.57
2			9.8	370.80	10			6.0	373.57
+50			9.1	371.50	+50			6.4	373.17
3			8.7	371.90	11			7.0	372.57
+50			8.3	372.30	+50			7.3	372.27
4			7.3	373.30	12			7.7	371.87
+50			6.8	373.80	+50			7.7	371.87
5			6.7	373.90	13			7.8	371.77
+50			5.8	374.80	+50			8.1	371.47
6			5.4	375.20	14			9.6	369.97
T.P.	4.23	379.57	5.26	375.34	T.P.	1.04	371.16	9.45	370.12
+50			3.6	375.97	+50			2.0	369.16
7			3.5	376.07	15			1.9	369.26
6.11			5.21						

Sta.	+	-	Prod	Clar.
+50			2.8	368.36
16			2.7	368.46
+50			3.4	367.76
17			4.8	366.86
+50			5.2	365.96
18			6.2	364.96
13.71 (#39)			5.53	365.63
+50			8.7	362.46
19			10.5	360.66
+09			11.1	360.06
T. P.	0.65	360.72	11.09	360.07
+50 = 20 in Transit Station			3.1	357.62
20			5.7	355.02
+50			7.9	352.82
21			11.3	349.42
T. P.	1.23	350.72	11.23	349.49
+50			4.4	346.32
1.88		22.32		

Sta.	+	-	Prod	Clar.
+90			8.3	342.42
22			13.9	336.82
+03			11.2	339.52
+26			10.7	340.02
+50			12.4	338.32
T. P.	0.39	339.12	11.99	338.73
23			5.6	333.52
+50			6.0	333.12
24			8.8	330.32
+50			10.7	328.42
T. P.	1.98	329.45	11.65	327.47
+95			4.3	325.15
25 +50			6.4	323.05
+85			10.0	319.45
26			13.4	316.05
+15			12.0	317.45
T. P.	0.35	318.33	11.47	317.98
2.72		35.11		

Sta.	+	0	-	Prod.	Mean
+50				2.1	316.23
27				5.3	313.03
+50				9.6	308.73
+70				10.9	307.43
28				16.3	302.03
+50				12.3	306.03
T.P.	1.00	307.43	11.90	306.43	
+80				4.6	302.83
29				6.3	301.13
+50				9.5	297.93
30				11.9	295.53
T.P.	0.89	297.07	11.25	296.18	
+107				2.5	294.59
+50				5.3	291.77
31				4.5	292.57
Aug +33				8.29	288.79
T.P.	1.42	287.30	11.19	285.88	
3.31				34.34	

Sta.	+	0	-	Prod.	Mean
+50				7.1	280.20
32				9.7	277.60
+50				4.7	282.60
+70				2.7	284.60
33				0.7	286.60
+50				7.1	280.20
T.P.	1.00	307.43	11.90	306.43	
+80				4.6	302.83
34				6.3	301.13
+50				9.5	297.93
35				11.9	295.53
T.P.	0.89	297.07	11.25	296.18	
+107				2.5	294.59
+50				5.3	291.77
36				4.5	292.57
Aug +33				8.29	288.79
T.P.	1.42	287.30	11.19	285.88	
3.31				34.34	

1/14/02

27

Sta.	+	0	-	Red	Elas
36 Plug A				6.35	259.67
+50				11.2	254.82
T.P.	0.58	254.72	11.88		254.14
37 Plug A				2.60	252.12
+50				4.3	250.42
38				6.7	248.02
+50				10.0	244.72
39				11.9	242.82
T.P.	1.25	244.18	11.79		242.93
+50				5.0	239.18
40 Plug A				8.80	235.38
+50				7.2	236.98
41				8.3	235.88
T.P.	0.55	232.93	11.80		232.38
+50				6.0	226.93
T.P.	1.06	222.22	11.77		221.16
+75				3.1	219.12
13.24					47.24

28

Sta.	+	0	-	Red	Elas
T.P.	4.30	215.42	11.10		211.12
34.22				12.3	203.12
T.P.	11.66	222.78	4.30		211.12
Plug + 43	7.24	228.91	1.11	1.1	221.67
+50				6.2	222.71
+85				2.5	226.41
43				3.8	225.11
T.P.	0.99	218.27	11.63		217.28
+44				4.4	213.87
44				10.0	208.27
+20				12.3	205.97
+50				9.4	208.87
+84				8.1	210.17
45				9.9	208.37
T.P.	0.93	207.84	11.36		206.91
+50				6.5	201.34
+75				3.8	204.04
25.12					37.50

Sta.	+	-	Red	Elm
46 + 0.6 Δ			7.3	200.54
+ 50			8.0	199.84
47			10.0	197.84
T. P. 0.76	196.86	11.74		196.10
+ 29 Δ			3.6	193.26
+ 50			5.8	191.16
48			13.7	183.16
T. P. 1.26	187.28	10.84		186.02
+ 50			3.3	183.98
49			4.9	182.38
+ 50			7.2	180.08
Plg + 87 Δ			11.05	176.23
50			10.8	176.42
+ 50			10.2	177.08
T. P. 0.67	176.06	11.89		175.39
51			1.9	174.2
+ 50			9.5	166.51
2.69				34.47

Sta.	+	-	Red	Elm
			9.9	166.16
			11.03	165.69
			10.0	155.69
			10.4	155.29
			15.0	150.29
			10.7	154.99
			15.5	151.19
			11.3	154.39
			8.8	156.89
			8.8	156.89
			4.1	161.59
			4.0	161.69
			3.2	162.49
			7.1	158.59
			0.90	154.74
			1.4	153.34
			4.1	150.64
			3.34	151.40
			6.4	148.34
1.93				23.25

Sta.	+	0	-	Red	Blar.
+50				9.3	151.44
56				5.1	149.64
+12.4				5.9	148.84
+50				7.0	147.74
57				9.1	145.64
+50				11.5	143.24
T.P.	2.44	145.37	11.81		142.93
+50				2.69	142.68
3x3 Port +80				5.8	139.57
58				4.7	140.67
+50				1.9	143.47
59				3.8	141.57
+50				5.1	140.27
Plag + 66				5.08	140.29
60				7.2	138.17
+50				7.9	137.47
61				6.4	138.97

Sta.	+	0	-	Red	Blar.
+50				7.0	138.37
Plag + 66	0.89	136.97	9.29		136.08
62				1.6	135.37
1 1/2 Port +25				3.7	133.27
+50				1.5	135.47
63				4.0	132.97
+50				4.8	132.17
+86				6.8	130.17
64				6.5	130.47
B.M. (#40)				1.22	135.75
+50				6.2	130.77
65				8.7	128.27
+50				8.9	128.07
66				8.4	128.57
+50				11.1	125.87
T.P.	11.82	127.78	11.01		125.96
67				3.7	124.08

Sta.	+	0	-	Red	Elav.
+50				2.9	124.88
68				2.3	125.48
+50				4.1	123.68
+91 Δ				4.4	123.38
69				4.2	123.58
+50				7.1	120.68
70				7.2	120.58
+50				7.1	120.68
71				8.1	119.68
+50				10.2	117.58
Plug + 53 Δ				10.32	117.46
72				8.5	119.28
T. P.	1.15	117.54	11.39		116.39
+50				1.6	115.94
73				4.9	112.64
+50				4.5	113.04
Plug + 93 Δ				4.86	112.68

Sta.	+	0	-	Red	Elav.
74 + 50				4.4	113.14
75				6.5	111.04
+50				8.6	108.94
				9.3	108.24
+50				11.2	106.34
				11.7	105.84
T. P.	0.86	106.79	11.61		105.93
+50				1.5	105.29
78				1.9	104.89
+50				2.4	104.39
79				0.40	106.39
+50				4.5	102.29
+70 Δ				5.6	101.19
80				6.9	99.89
+50				8.1	98.69
81				6.9	99.89
+50				5.7	101.09

35

Sta.	+	-	Prod	Elav.
Chg +78.4			5.65	101.14
82			7.8	98.99
+50			6.7	100.09
T. P.	2.65	102.77	6.67	100.12
+62			2.7	100.07
Port or Bridge			8.0	94.77
+65			3.1	99.67
+68			3.4	99.37
83			2.5	100.27
+50			4.0	98.77
84			5.1	97.67
+50			8.8	93.97
85			92.48	93
T. P.	1.50	93.98	10.29	
+40			5.5	88.48
+50			5.8	88.18
86			5.9	88.08
+50			6.2	87.78
4.15		16.96		

1/16/52

36

Sta.	+	-	Prod	Elav.
			7.9	86.08
			8.6	85.38
			9.1	84.88
			8.6	85.38
			9.9	84.08
			8.7	85.28
			3.0	86.08
			9.7	79.38
			11.1	77.98
			11.5	77.58
			11.5	77.58
			10.8	78.28
			12.1	76.98
			72.40	
			3.9	74.35
			5.0	73.25
			5.1	73.15
4.65		20.38		

837

Sta.	+	0	-	Red	Clas.
95				6.2	72.05
+50				5.7	72.55
96				5.8	72.45
+50				10.1	68.15
+75				11.3	66.95
97				9.1	69.15
+50				10.8	67.45
98 Plug Δ 0.07	66.81	11.51		66.74	105
+50				2.9	63.91
99				7.0	69.81
+50				10.2	56.61
100				10.9	55.91
+50				11.0	55.81
+68 Plug Δ 1.84	57.62	17.03		55.78	107
101				2.2	55.42
Not bank work				3.0	54.62
+41				4.3	53.32
Rest bank work					
+41					
1.91					
22.54					

738

Sta.	+	0	-	Red	Clas.
102				3.8	53.82
+50				4.7	52.92
103				5.7	51.92
+50				6.9	50.72
104				8.7	48.92
+50				10.4	47.22
T.P.	1.00	47.24	11.38	46.24	
105				2.5	44.74
+50				3.5	43.74
106				4.6	42.64
3rd on A				5.6	41.64
+27.5 Δ				6.1	41.14
+50				8.3	38.94
107				10.0	37.24
S. bank work				10.5	36.74
+50				11.3	35.94
N. bank work				10.5	36.74
+6.5					
108					
+50					

Sta.	+	-	Pod	Elav.
109			10.0	37.24
+50			8.7	38.54
110			7.4	39.84
+50			6.4	40.84
111			5.3	41.94
+50			5.0	42.24
T. P.	5.12	47.53	4.83	42.41
112			4.6	42.93
+50			3.5	44.03
113			3.1	44.43
5th and B			2.3	45.23
+46.5			6.9	40.63
114			11.6	35.93
+50			35.97	
T. P.	0.65	36.62	11.56	30.82
115			10.7	25.92
+50			25.71	
T. P.	1.83	27.74	10.71	27.10
	7.60			

Sta.	+	-	Pod	Elav.
116			4.5	23.24
+50			4.5	23.24
117			4.7	23.04
+20			4.7	23.04
Center track - level rails			2.4	25.34
+50			3.7	24.04
+57			4.8	22.94
B.M. (41)			2.30	25.44
118			4.9	22.84
+50			5.3	22.44
119			4.8	22.94
+50			4.8	22.94
120			4.5	23.24
5th and C			4.56	23.18
+16.5			4.8	22.94
+50			4.9	22.84
121			5.3	22.44
122				

Sta.	+	-	Pool	Ellev.
123			6.2	21.54
T. P.	2.65	24.62	5.77	21.97
124			5.7	20.92
125			4.0	20.42
126			4.3	20.32
127			5.0	19.42
128			5.2	19.42
129			5.2	19.42
130			5.4	19.22
131			6.1	18.52
132			6.3	18.32
T. T.	3.73	22.53	5.82	18.80
133			4.7	17.83
134			4.6	17.93
135			4.4	18.13
136			4.6	17.93
137			4.8	17.73
6.38				11.59

Sta.	+	-	Pool	Ellev.
138			4.9	17.63
139			5.0	17.53
140			4.5	18.03
141			5.6	16.93
142	16.5	5.99	32.69	5.83
143			5.6	17.09
144			5.1	17.59
145			5.0	17.69
146			4.9	17.79
147			6.2	16.49
148			5.2	14.49
149			7.9	14.79
150			5.2	17.49
151			6.00	16.69
152			4.9	17.8
153			5.7	16.99
154			5.1	17.59

Sta.	+	-	-	Pod	Class
147+50				5.6	17.89
148+50				6.5	16.19
149+50				4.3	18.39
T.P.	11.39	30.29	3.79		18.90
150				12.7	17.59
+25				10.3	19.99
+50				5.8	24.49
T.P.	9.53	38.69	1.13		29.16
151				6.0	32.69
+50				0.8	37.89
T.P.	5.95	43.59	1.07		37.62
152+04				1.2	42.37
+25				0.3	43.27
+50				3.0	40.57
+85				11.2	32.37
T.P.	0.74	33.10	11.20		32.36
153				8.5	24.60
	27.61		17.20		

Sta.	+	-	-	Pod	Class
T.P.	0.80	22.68	11.22		21.88
+12				0.8	21.88
+50				9.5	13.18
				10.3	12.38
				10.4	12.28
				10.4	12.28
				11.3	11.38
					11.84
T.P.	5.54	17.38	10.84		
				5.5	11.88
				5.8	11.58
				5.2	12.18
				4.9	12.48
				5.6	11.78
				7.5	9.88
				7.0	10.38
				6.4	10.98
				5.9	11.48
	6.34		22.06		

Sta.	+	-	Red	Blw.
166			7.1	10.28
T.P.	3.96	14.34	7.00	10.38
+48			5.0	9.34
+54			2.5	11.84
167			2.6	11.74
168			3.4	10.94
169			4.0	10.34
170			4.9	9.44
171			5.6	8.74
172			6.0	8.34
173			6.2	8.14
174			6.7	7.64
175			6.8	7.54
T.P.	4.63	12.35	6.62	7.72
176			4.7	7.45
177			4.8	7.55
B.M. (43)			3.96	8.39
8.59		13.62		

Sta.	+	-	Red	Blw.
+32			5.0	7.35
+52			6.8	5.55
178			5.3	7.35
179			4.8	7.55
180			4.6	7.75
181			4.9	7.45
182			5.8	6.55
183			6.2	6.15
T.P.	2.63	8.53	6.45	5.90
184			3.5	5.03
185			3.7	4.83
186			4.8	3.73
187			4.5	4.03
188			4.3	4.23
189			4.3	4.23
190			4.8	3.73

Provide for water supply
at this point, off the ridge 128

Sta.	+	-	Red	Clas.
191			6.0	2.53
T.P.	9.34	12.61	5.26	3.27
192			9.8	2.81
Bridge +60 Δ			10.0	2.61
B.M. (#44)			9.10	3.51
193			9.2	3.41
+50			6.9	5.71
194			3.3	9.31
T.P.	11.45	23.38	0.68	11.93
+50			10.8	12.58
195			7.9	15.48
+54 Δ			5.3	18.08
+92			1.9	21.48
196			3.3	20.08
+50			9.9	13.48
197			8.5	14.88
+50			3.9	19.48
20.79			5.94	

Sta.	+	-	Red	Clas.
T.P.	11.58	30.41	4.55	18.83
198			5.0	25.41
+50			4.0	26.41
199			2.5	27.91
+25			5.7	24.71
+50			2.2	28.21
T.P.	11.77	41.39	0.79	29.62
+75 Δ			7.8	33.59
200			7.7	33.69
+25			9.4	31.99
+50			8.5	32.89
201			4.9	36.49
+35			4.0	37.39
+50			6.2	35.19
+62			8.5	32.89
202			1.9	39.49
T.P.	6.36	46.53	1.22	40.17
20.71			6.56	

Sta.	+	0	-	Pod	Elev.
+50				1.6	44.93
+81 Δ				2.6	43.93
T.P.	1.02	44.69	2.86	43.67	
203				3.3	41.39
+50				9.2	35.49
+65 Δ				10.5	34.19
204				11.0	33.69
T.P.	0.89	34.21	11.37	33.32	
+50				6.2	28.01
205				3.7	30.51
+50				7.8	26.41
206				12.1	22.11
Play +20 Δ	1.61	23.91	11.91	22.30	
+50				1.8	22.11
207				5.1	18.81
+50				8.6	15.31
+70				10.7	13.21
3.52					26.74

Sta.	+	0	-	Pod	Elev.
208				10.1	13.81
+50				10.8	13.11
T.P.	1.31	13.74	11.48		12.43
209				3.2	10.54
+50				6.7	7.04
+82 Δ				8.7	5.04
210				9.7	4.04
+50				8.6	5.14
211				10.3	3.44
+45.30 End of Pool				8.7	5.04
+50				8.4	5.34
212				11.7	2.04
+50				14.1	0.36
213				15.3	1.56
B.M. (45)				5.96	7.78 ✓

Levels from Sta. 79+00

B Line

Sta.	+	0	-	Pod	Elev.
Sta. 100+68.8					59.66
299				0.0	59.66
+50				0.5	59.16
1				1.5	58.16
+50				1.6	58.06
2				0.5	59.16
+50				3.0	56.66
3				3.8	55.86
+50				5.6	54.06
4				6.6	53.06
+50				5.6	54.06
5				8.6	51.06
T.P.	2.27	52.70	9.23		50.43
+50				2.5	50.20
6				2.8	49.90
+50				2.1	50.60
7				2.9	49.80

to Sta. 111+35, "Sonoma Line"

Sta.	+	0	-	Pod	Elev.
+50				3.4	49.30
8				5.1	47.60
+50				7.5	45.20
9				9.2	43.50
+12				9.9	42.80
111+35					

17/2/62

Canning

River

Quinn

S.E. cor

University and 1st.

B.M. 8.08 282.40

Cent. University and ally

+ 56

+ 16

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

Levels along centre of ally
bet. 1st. and 2nd. str.

+ 0 - Rod Elev

274.32

277.4

277.6

277.6

277.8

275.5

274.7

276.9

276.7

275.4

274.9

273.2

271.5

270.6

270.92

269.9

269.6

269.6

269.6

269.6

269.6

269.6

University to Walnut

+ 0 - Rod Elev

250

4

+ 50

3

+ 50

2

+ 50

1

+ 50

N. line Throat

O. 260

C. 260

S. line Throat

T.P. 0.68 262.78 10.27

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 50

+ 0 - Rod Elev

2.5 269.9

3.8 268.6

4.0 268.4

5.2 267.2

6.7 265.7

6.8 266.1

7.2 265.2

9.6 262.8

9.5 262.9

10.3 262.1

10.3 262.1

10.5 261.9

262.10

2.0 260.8

2.9 259.9

5.3 257.5

8.0 254.8

Sta.	+	-	-	Red	Elm.
T. P.	1.70	252.50	11.98		250.80
4				7.1	245.4
T. P.	0.23	240.93	11.80		240.70
11	0.45	229.51	11.57		229.36
+50				2.9	226.9
T. P.	1.01	218.99	11.82		217.98
3				8.2	210.8
+60				15.7	203.3
+50				12.3	206.7
T. P.	11.93	230.24	0.68		218.31
2				9.4	220.8
+50				1.9	228.3
T. P.	11.62	241.18	0.68		229.56
1				5.1	236.1
T. P.	11.67	252.13	0.72		240.46
+50				1.2	250.9
T. P.	10.78	262.17	0.74		251.39
47.39		49.99		5	

Sta.	+	-	-	Red	Elm.
N. line Broken				4.4	257.8
O=+40					
Center				1.7	260.5
+30					
T. P.	5.83	267.73	0.27		261.90
S. line Broken				5.1	262.6
6				4.2	263.5
+50				4.6	263.1
5				5.5	262.2
+50				5.4	262.3
4				5.5	262.2
+50				5.7	262.0
3				5.5	262.2
+50				5.6	262.1
2				6.6	261.1
+50				7.8	259.9
1				7.9	259.8
N. line Walnut				7.2	260.5
O				7.4	260.3
Center Walnut					
-40				7.58	260.15
Off Road					

Levels along center of alley

Sta.	+	0	-	Red	Elar
Stk. S.E. cor University and 1st. B. W.	0.77	275.09			274.32
T. P.	1.57	264.70	11.96		263.13
"	1.59	254.65	11.68		253.02
Cent. University + 5.6				11.0	243.6
S. line + 1.6				14.1	240.5
"				11.6	243.0
+ 5.0				3.2	251.4
T. P.	11.69	265.33	0.97		253.64
3				1.1	264.2
T. P.	10.56	275.11	0.78		264.55
+ 5.0				8.6	266.5
2				7.1	268.0
+ 5.0				6.4	268.7
1				4.6	270.5
+ 5.0				5.1	270.0
N. line Robinson				8.5	269.6
Center + 3.0				6.4	268.7
26.18				25.39	

Stk. 1st. and Albation
University to Walnut

Sta.	+	0	-	Red	Elar
S. line Robinson				6.8	268.3
+ 5.0				7.6	267.5
5				8.5	266.6
T. P.	1.15	267.95	8.31		266.80
+ 5.0				2.0	265.9
4				4.3	263.6
+ 5.0				5.2	262.7
3				5.9	262.0
+ 5.0				7.4	260.5
2				7.6	260.3
+ 5.0				9.8	258.1
T. P.	8.77	256.87	11.85		256.10
"	2.34	247.47	11.74		245.13
1				4.8	242.7
T. P.	1.11	236.67	11.91		235.56
+ 5.0				4.4	231.3
N. line Thornton				12.2	224.5
5.37				43.81	

Stn.	+	-	Pod	Elev
T.P.	0.95	225.73	11.89	224.78
Cut				
+30			3.3	222.4
S. Pine Thornton			5.6	220.1
6			7.2	218.5
+50			12.4	213.3
5				
T.P.	0.36	214.15	11.94	213.79
"	1.41	203.79	11.77	202.38
+50			4.2	198.6
T.P.	0.64	192.73	11.70	192.09
4			9.6	183.1
+83			14.5	178.2
+50			3.6	189.1
T.P.	11.20	203.33	0.60	192.13
3			2.2	201.1
T.P.	11.44	214.14	0.63	202.70
+50			0.5	213.6
T.P.	11.45	224.76	0.83	213.31
37.45		49.36		

Stn.	+	-	Pod	Elev
T.P.	11.52	235.43	0.85	223.91
2			0.9	234.5
T.P.	11.26	240.33	11.39	234.04
"	11.90	256.14	1.06	244.24
+50			7.4	248.7
1			4.5	251.6
+50			3.8	252.3
W. Pine Brook			4.8	251.3
+60				
Cut			6.0	250.1
+30			6.2	250.1
S. Pine Brook			7.0	249.1
6			6.4	249.7
+50			5.1	251.0
4			5.4	250.7
T.P.	5.87	253.72	6.29	249.85
+50			4.0	249.7
3			4.3	249.4
38.55		9.50		

58 61

Sta.	+	0	-	Red	Clear
+50				4.2	249.5
2				3.7	250.0
+50				3.1	250.6
1				3.4	250.3
+50				3.4	250.3
N. line Walnut				4.7	249.0
0				5.3	248.4
Cont. Walnut					
+40					
T.P.	10.46	263.50	0.68		253.04
Ref. Point			3.41		260.09 (260.15)

18/2/02 Levels along the Centre
of Alley bet. Brandt and
Albion, from University to Walnut

58 62

Sta.	+	0	-	Red	Clear
24 SE cor University & 1st St	1.54	275.86			274.32
B. Peg			11.48		264.38
Center Robinson +30			11.9		264.0
N. line Robinson +60			11.1		264.8
+50			10.8		265.1
1			11.3		264.6
T.P.	0.46	264.82	11.50		264.36
+50			2.0		262.8
+72			3.5		261.3
T.P.	1.58	254.84	11.56		253.26
2			7.2		247.6
T.P.	0.25	248.52	11.57		248.27
"	0.47	232.67	11.32		232.20
+50			4.9		227.8
T.P.	1.10	227.60	11.17		221.50
3			5.8		216.8
+25			7.4		215.2

Sta.	+	-	Pod	Elev
+32			11.2	211.4
+50			P.F.	213.8
T.P.	11.47	232.72	11.35	221.25
4			5.6	227.1
T.P.	10.63	242.99	0.36	232.36
S. line University +16			9.2	233.8
T.P.	6.45	249.08	0.36	242.63
Center University +56			3.3	245.8
Ref. Point	0.87	245.25		264.38
S. line Robinson 6			1.2	264.0
+50			1.9	263.3
5			2.9	262.3
+50			4.3	260.9
4			6.2	259.0
+50			9.5	255.7
T.P.	0.69	254.26	11.68	253.57

Sta.	+	-	Pod	Elev
3			9.8	244.5
T.P.	11.23	243.56	11.93	242.33
"	11.16	232.90	11.82	231.74
+50			5.2	227.7
T.P.	0.22	221.51	11.61	221.29
"	4.97	214.71	11.77	209.74
2			6.3	208.4
+65			15.9	198.8
+50			12.8	201.9
T.P.	11.79	225.20	0.80	213.91
1			4.9	220.3
T.P.	11.23	235.81	0.62	224.58
+75			6.9	228.9
+50			3.3	232.5
T.P.	10.78	245.59	1.00	234.81
S. line Robinson +60 Center +30			7.2	238.4
			4.3	241.3
40.88			49.55	

Sta	#	o	-	Red	Ellen
S. Linn. Thornton	6			3.6	242.0
+50				3.1	242.5
5				2.3	243.3
+65				1.8	243.8
+50				2.9	242.7
T.P.	2.31	236.32	11.58		234.01
4				1.3	235.0
T.P.	0.72	225.29	11.75		224.57
+50				1.6	223.7
T.P.	0.29	213.64	11.94		213.35
3				3.6	210.0
T.P.	0.31	202.54	11.41		202.23
+50				11.9	190.6
T.P.	0.70	191.48	11.76		179.78
11	0.47	180.36	11.59		179.89
2				4.0	176.4
T.P.	0.24	168.61	11.99		168.37
5.04		82.02			

Sta	#	o	-	Red	Ellen
				8.4	160.2
				14.6	154.0
				8.5	160.1
T.P.	11.11	179.47	0.25		168.36
+50				7.6	171.9
T.P.	11.24	190.71	0.00		179.47
M. Linn. Brookman				5.9	184.8
+40					
T.P.	6.81	197.15	0.37		190.34
Callan				4.9	192.2
+30					
S. Linn. Brookman				0.7	196.4
6				1.8	195.3
+50				3.6	193.5
T.P.	0.90	186.48	11.57		185.58
5				3.3	183.2
T.P.	3.29	178.28	11.49		174.99
+50				12.0	166.3
T.P.	11.85	189.54	0.59		177.69
45.20		24.27			

Sta.	+	0	-	Perk	Eller
4				4.7	184.8
T. P.	11.94	201.48	0.00		189.54
+75				9.2	192.3
+50				7.8	193.7
+12				8.4	193.1
3				6.9	194.6
+50				3.4	198.1
2				4.4	197.1
T. P.	11.70	212.49	0.69		200.79
+50				5.0	207.5
+30				1.9	210.6
T. P.	11.64	223.87	0.26		212.23
11	8.68	231.75	0.80		223.07
1				5.8	225.9
+75				1.3	230.4
+50				1.2	230.5
T. P.	0.87	220.19	11.93		219.82
44.33			42.68		

T. P.	0.51	208.75	11.95	1	208.24
W. line Walnut					
0				1.4	207.3
T. P.	0.43	197.56	11.62		197.13
-30				4.6	193.0
Center Walnut					
-40				10.0	187.6

Aug 12 102
69

Bavin

Dep. took to S.E.
from Am Bridge
B. M.

Lavels along the
Old Town to the

center line of Road, from
City Limits

70

Sta. + 0 - Rod Elev.

Sta. + 0 - Rod Elev.

18.12 20.10 11.98

+50 6.0 14.3

T. P. 1.24 12.23 9.11 10.99

+75 Western line Hickory 4.8 15.5

0

7 4.4 15.7

+2.5 0.2 12.0

+50 4.6 15.7

+50 0.9 11.3

5.2 15.1

1 2.0 10.2

+05 6.1 14.2

+50 3.1 9.1

+09 8.3 12.0

2 4.2 8.0

+25 10.7 9.6

+50 4.9 7.3

+35 11.1 9.2

3 5.1 7.1

+43 5.5 14.8

+50 5.7 6.5

+50 5.1 15.2

4 5.0 7.2

+80 4.6 15.7

+50 4.1 8.1

9 5.0 15.3

5 3.0 9.3

+50 7.3 13.8

+50 2.5 9.7

10 5.2 15.1

T. P. 9.31 20.30 1.24 10.99

+50 4.6 15.7

6 9.4 10.9

11 6.2 14.1

Relocated from the center
of Taylor and Hickory to
39 + 6.5, see page 103

18.67

10.35

71

Mission Valley Road.

Sta.	+	0	-	Prod	Elw.
+50				6.9	13.4
12				7.0	13.3
+50				3.7	6.6
13				2.9	17.4
Peg	2.36	10.06	2.60	17.70	+50
+20				3.4	16.7
+50				7.4	12.7
14				8.3	11.3
+32				8.8	11.3
+50				8.8	11.3
15				8.1	12.3
+50				8.2	11.9
16				7.9	12.2
+50				8.0	12.1
T. R.	2.94	15.71	7.29	12.77	23
17				3.8	11.9
+50				4.3	11.4
5.30					9.80

72

Sta.	+	0	-	Prod	Elw.
+79				4.7	11.0
18				4.9	10.8
18				3.17	12.54
18				2.85	12.86
+50				4.7	11.0
19				5.1	10.6
+50				6.1	9.6
20				7.4	8.3
+50				8.1	7.1
21				7.8	7.9
+50				8.2	7.5
22				7.7	8.0
T. R.	5.59	15.62	7.68	8.03	
+50				5.6	8.0
23				5.0	8.6
+50				5.4	8.2
24				5.4	8.2

18
 186 N.E. cor.
 Old Pumping station
 B.M.
 High water
 Mark - 1895

473

Sta.	+	-	Dist	Elav.
25	+50		5.6	8.0
			5.7	7.9
	+50		4.5	9.1
26			4.2	9.4
Plg +12			4.19	9.43
	+50		4.1	9.5
27			3.5	10.1
	+50		3.4	10.2
28			4.9	9.4
	+50		5.2	8.4
29			6.5	7.1
	+50		3.9	9.7
Plg +63	9.52	20.67	2.47	11.15
30			9.9	10.8
	+50		8.9	11.8
31			7.5	13.2
	+50		10.8	9.9

874

Sta.	+	-	Dist	Elav.
			9.5	11.2
			7.9	12.8
			6.6	14.1
			8.5	12.2
			7.7	13.0
			5.8	14.9
			1.3	19.4
			0.6	20.1
				18.18
			3.8	18.0
			4.7	17.1
			9.8	12.0
			9.9	11.9
			10.6	11.2
			10.5	11.3
			9.7	12.1
			7.6	14.2

No.	+	0	-	Ord	Elem
+50				5.6	16.2
+65				5.1	16.7
40				5.1	18.7
T.P.	11.79	30.63	2.97	18.84	
+50				9.0	21.6
41				6.2	24.4
+50				6.8	23.8
42				7.6	23.0
+50				7.7	22.9
43				6.4	24.2
+50				3.3	27.3
T.P.	11.39	41.04	0.98	29.65	
44				10.1	30.9
+50				7.5	32.5
45				5.9	35.1
+50				4.3	36.7
46				2.9	38.1
23.18				3.95	

+50	2.1	38.9
47	0.8	40.2
T.P.	11.19	51.04
48	9.9	41.1
49	8.1	42.9
+50	5.8	45.3
49	3.5	47.5
+50	1.1	49.9
T.P.	11.35	62.21
50	10.0	52.2
+50	8.1	54.1
+92	5.4	56.8
51 + 50	2.6	59.6
504 N.W. Cor. Allen's fence B. Mt.	0.95	61.26
52	1.6	60.6
T.P.	1.50	62.84
+50	1.0	61.8
24.04		2.24

+55				0.1	62.7	
53				2.6	60.2	
+50				5.4	57.4	
54				8.1	54.7	
+50				10.8	52.0	
T. P.	0.06	50.90	12.00		50.84	
55				1.5	49.4	
+50				4.7	46.2	
56				8.0	42.9	
+50				11.2	39.7	
T. P.	0.68	40.29	11.29		39.61	
57				5.3	35.0	
+50				12.4	27.9	
T. P.	2.47	31.14	11.62		28.67	
58				6.1	25.0	
+50				7.4	23.7	
59				9.0	22.1	

33.21

34.91

+50				11.2	19.9	
T. P.	1.24	21.41	10.97		20.17	
60				5.7	17.7	
+50				5.1	16.3	
61				5.9	15.5	
+50				5.1	16.3	
+70				4.7	16.7	
+82				8.0	13.4	
62+03				8.1	13.3	
+50				8.7	12.7	
63				8.9	12.5	
+50				9.4	12.0	
64				9.5	11.9	
+50				9.4	12.3	
65				9.1	12.3	
+50				9.0	12.4	
66				8.6	12.8	

Alt.	+	0	-	Red	Blue
------	---	---	---	-----	------

66	Plug +43	3.90	17.33	7.98	13.43 ✓
----	----------	------	-------	------	---------

67				2.7	14.6 75
----	--	--	--	-----	---------

	+50			3.4	13.9 +50
--	-----	--	--	-----	----------

68				3.0	14.3 76
----	--	--	--	-----	---------

	+50			4.2	13.1 +50
--	-----	--	--	-----	----------

69				4.6	12.7 77
----	--	--	--	-----	---------

	+50			4.9	12.4 Plug +47
--	-----	--	--	-----	---------------

70				4.8	12.5 78
----	--	--	--	-----	---------

	+50			5.0	12.3 +50
--	-----	--	--	-----	----------

71				5.1	12.2 +78
----	--	--	--	-----	----------

	+50			5.0	12.3 79
--	-----	--	--	-----	---------

72				4.8	12.5 +50
----	--	--	--	-----	----------

	+50			4.4	12.9 80
--	-----	--	--	-----	---------

73				4.1	13.2 +50
----	--	--	--	-----	----------

	+50			3.6	13.7
--	-----	--	--	-----	------

74				2.5	14.8 81
----	--	--	--	-----	---------

Plug	T. P. +26	8.43	24.57	1.19	16.14
------	-----------	------	-------	------	-------

12.33

9.17

Alt.	+	0	-	Red	Blue
------	---	---	---	-----	------

				7.2	17.4
--	--	--	--	-----	------

				4.0	20.6
--	--	--	--	-----	------

				2.9	21.7
--	--	--	--	-----	------

				2.7	21.9
--	--	--	--	-----	------

				3.1	21.5
--	--	--	--	-----	------

				3.9	20.7
--	--	--	--	-----	------

				5.58	18.99
--	--	--	--	------	-------

				9.3	15.3
--	--	--	--	-----	------

				12.0	12.6
--	--	--	--	------	------

				12.4	12.2
--	--	--	--	------	------

				12.6	12.0
--	--	--	--	------	------

				11.7	12.9
--	--	--	--	------	------

				11.4	13.2
--	--	--	--	------	------

				11.0	13.6
--	--	--	--	------	------

					13.61
--	--	--	--	--	-------

				5.6	13.6
--	--	--	--	-----	------

				5.4	13.8
--	--	--	--	-----	------

T. P. 5.62 19.23 10.96

Sta.	+	-	Pod	Elav.
82			5.3	13.9
+50			5.1	14.1
83			5.4	13.8
+50			6.0	13.2
84			6.6	12.6
+50			6.7	12.5
85			6.4	12.8
+50			5.8	13.4
86			5.2	14.0
+50			5.2	14.0
87			4.8	14.4
+50			4.5	14.7
88			3.8	15.4
+50			3.7	15.5
T. P.	4.72	20.55	3.40	15.83
89			5.3	15.3
+50			4.8	15.8

Sta.	+	-	Pod	Elav.
90			5.4	15.2
+50			5.3	15.3
91			5.2	15.4
+50			5.0	15.6
92			4.8	15.8
+50			4.7	15.9
93			4.4	16.2
+50			4.3	16.3
94			4.0	16.6
+50			3.8	16.8
95			3.9	16.7
+50			3.7	16.9
96			3.4	17.2
T. P.	4.86	22.15	3.26	17.29
+50			5.1	17.1
97			4.8	17.4
+50			5.0	17.2

83

Sta.	+	-	Pod	Ellen
98			5.2	17.0
+50			5.2	17.0
99			5.2	17.0
+50			5.2	17.0
100			5.0	17.2
+50			4.6	17.6
101			4.4	17.8
+50			4.3	17.9
102			4.2	18.0
+50			3.8	18.4
103			3.5	18.7
+50			3.4	18.8
T.P.	5.10	24.08	3.17	18.98
104			5.2	18.9
+50			5.0	19.1
105			4.7	19.4
+40			4.9	19.2

84

Sta.	+	-	Pod	Ellen
106			4.8	19.3
+50			5.6	18.6
107			5.3	18.8
+50			5.0	19.1
108			4.8	19.3
+50			4.6	19.5
109			4.4	19.7
+50			4.4	19.7
110			4.3	19.8
+50			4.2	19.9
111			4.1	20.0
T.P.	4.93	25.28	3.73	20.35
+50			5.1	20.2
112			5.0	20.3
+50			4.9	20.4
113			4.5	20.8
+19			4.8	20.5

Sta. + - Rod Elev.
 U.S.G.S. B.M.
 At Fork of Road
 Near County Hospital

+50

114

+50

115

+50

116

+50

+84

117 +50

118

+50

119

+50

120

+50

121

Rod Elev.
 (28)

2.92 22.36

5.0 20.3

5.5 19.8

5.8 19.5

5.0 20.3

5.8 19.5

5.8 19.5

5.7 19.1

5.8 19.5

5.6 19.7

5.4 19.9

5.1 20.2

5.0 20.3

4.8 20.5

5.0 20.3

4.8 20.5

5.0 20.3

Sta. + - Rod Elev.
 T.P. +6.3 25.48 4.43

+50

122

+50

123

At Point of Fork,
 Near Cor. Knoxville
 and Putney Roads

+50

124

+50

125

+50

126

+50

127

+50

128

T.P.

10.78

Rod Elev.

20.85

5.0 20.5

5.1 20.4

5.2 20.3

4.7 20.8

2.87 22.61

4.6 20.9

4.7 20.8

5.3 20.2

5.3 20.2

5.1 20.4

4.9 20.6

4.8 20.7

4.7 20.8

4.4 21.1

4.3 21.2

21.59

8.32

Sta.	+	-	Pod	Alar.
+50			6.4	21.3
129			6.2	21.5
+50			6.0	21.7
130			5.9	21.8
+50			5.7	22.0
131			5.5	22.2
+50			5.4	22.3
132			5.1	22.6
+50			4.9	22.8
133			4.9	22.8
+50			4.5	23.2
134			4.2	23.5
+50			3.8	23.9
135			3.9	23.8
+50			3.4	24.3
T. P.	5.13	30.15	2.72	25.02
136+00			5.6	24.6

Sta.	+	-	Pod	Alar.
+50			5.7	24.5
137			5.4	24.8
+50			5.1	25.1
138			4.9	25.3
+50			4.9	25.3
139			5.0	25.2
+50			5.0	25.2
140			5.0	25.2
+50			5.0	25.2
141			5.0	25.2
+50			4.9	25.3
142			4.4	25.8
+50			4.2	26.0
T. P. (sp)	5.06	50.86	4.35	25.80 [✓]
143+12			4.8	26.1
144			4.6	26.3
+50			4.8	26.1

22/2/02

Sta.	+	0	-	Pod	Elev.
145				5.2	25.7
+50				5.2	25.7
146				5.2	25.7
+48				4.9	26.0
Spk in foot S angle of fence, opp. St. 146+60					
147+48				3.45	27.41
148				4.8	26.1
T.P.	4.96	31.57	4.25		26.61
+50				5.4	26.2
149				5.3	26.3
+50				5.2	26.4
150				5.4	26.2
151				5.3	26.3
+50				5.3	26.3
152				5.1	26.5
+50				5.0	26.6
153				4.9	26.7

Sta.	+	0	-	Pod	Elev.
				4.8	26.8
				4.7	26.9
				4.7	26.9
				4.9	26.7
				5.0	26.6
	6.40	33.32	4.65		26.92
				6.6	26.7
				6.6	26.7
				6.5	26.8
				6.2	27.1
				5.4	27.9
				4.9	28.4
				5.0	28.2
				4.8	28.5
				4.7	28.6
				4.6	28.7
				4.4	28.9

Sta.	+	-	Red	Elav.
+50			4.3	29.0
163			4.3	29.8
+50			4.2	29.1
164			4.1	29.2
T.P.	5.58	35.34	3.56	29.76
+50			5.8	29.5
165			5.8	29.5
+50			5.8	29.5
166			5.9	29.4
+50			5.7	29.6
167			5.6	29.7
+50			5.6	29.7
168			5.6	29.7
+50			5.5	29.8
169			5.2	30.1
+50			5.1	30.2
170			5.1	30.2

Sta. + -
 8th Ave. West
 Gate post, School House
 B.M.

Sta.	+	-	Red	Elav.
			3.93	31.41
			5.0	30.3
+48			4.5	30.8
171			4.1	31.2
+50			4.0	31.3
172				
T.P.	4.44	35.91	3.87	31.47
+50			4.4	31.5
173			4.6	31.3
+50			4.3	31.6
174			4.3	31.6
+50			4.3	31.6
175			4.3	31.6
+50			4.6	31.3
176			4.8	31.1
+50			4.9	31.0
177			5.0	30.9

Me.	+	-	Red	Eller
+50			4.7	31.2
178			4.2	31.7
+50			3.9	32.0
Plu				32.11
8.75	8.33	40.44	3.80	
179	+50		7.0	33.4
180			6.1	34.3
+50			5.1	35.3
181			4.2	36.2
+22			3.6	36.8
+50			3.9	36.5
182			4.5	35.9
+50			5.4	35.0
183			5.9	34.5
+50			6.7	33.7
184			6.9	33.5
+50			6.6	33.8
185			6.1	34.3

Me.	+	-	Red	Eller
+50			6.1	34.3
186			5.9	34.5
T.P.	5.59	40.58	5.45	34.99
+50			5.8	34.8
187			5.7	34.9
+50			5.4	35.2
188			5.3	35.3
+50			5.3	35.3
189			5.2	35.4
+50			4.7	35.9
190			2.7	37.9
T.P.	8.19	48.09	0.68	39.90
+50			8.0	40.1
191			5.8	42.3
+50			4.5	43.6
192			4.0	44.1
+50			3.0	45.1

Sta.	+	0	-	Pod	Claw
193				5.2	44.9
+50				4.6	43.5
194				5.8	42.3
+50				6.2	41.9
195				6.9	41.2
T. P.					
Phy +56	4.75	45.61	7.23	40.86	203
196				3.7	41.9
+50				3.1	42.5
Sol. in 4"x4" Oct. 5.5. Cr. 1108 B.M.				6.67	38.94
197				2.7	42.9
+50				4.0	41.6
198				5.6	40.8
+50				6.6	39.8
199				6.8	38.8
+50				6.8	38.8
200				6.5	39.1

Sta.	+	0	-	Pod	Claw
				6.2	39.4
Phy +95	4.00	43.90	5.71		39.90
				4.2	39.7
				4.5	39.4
				4.7	39.2
				4.7	39.2
				4.9	39.0
				5.1	38.8
				5.3	38.6
				5.6	38.3
				5.6	38.3
				5.3	38.6
				5.1	38.8
				4.6	39.3
				3.9	40.0
				3.1	40.8
				1.7	42.2

Sta.	+	-	-	Red	Elav.
+50				0.7	49.2
T.P.	6.70	49.76	0.84	48.06	
209				6.2	43.6
+50				5.4	44.4
210				5.3	44.5
+50				4.8	45.0
211				4.3	45.5
+50				3.2	46.6
212				3.8	46.0
+50				5.0	44.8
213				5.1	44.7
+50				4.6	45.2
214				4.6	45.2
+50				5.0	44.8
215				5.1	44.7
+50				5.1	44.7
216				5.3	44.5

Sta.	+	-	-	Red	Elav.
T.P.	11.26	55.79	5.23		44.53
+50				11.0	44.8
217				7.4	46.4
+50				7.5	48.3
218				4.5	51.3
+50				1.7	54.1
T.P.	11.25	65.80	1.24		54.55
219				8.9	56.9
+50				6.9	58.9
220				5.6	60.2
+50				4.4	61.4
+96				1.3	64.5
T.P.	4.97	70.21	0.56		65.24
221+50				4.3	65.9
222				5.1	65.1
+50				5.3	64.9
+97.5 City limits				5.9	64.3
Shown in road map, N. side					64.28
End of City limits					
B.M.					
593					

34/12/62

099

Levels from sta. 26+12 to sta. 39+65

Straight Line

400

Sta.	+	-	Pod	Elav.	Sta.	+	-	Pod	Elav.
0 = 26+12	5.94	15.87		9.43	T.P.	11.04	21.64	4.77	10.60
+50			6.1		+50			10.5	
1			5.3		9			10.8	
+50			5.3		+50			10.8	
2			4.8		10			10.5	
+50			5.1		+50			10.4	
3			4.9		11			10.0	
+50			5.3		+50			10.7	
4			5.2		12			10.3	
+50			6.1		+50			9.4	
5			5.9		13			6.4	
+50			5.7		+16			5.0	16.6
6			4.9		39+65				
+50			5.0						
7			4.7						
+50			4.3						
8			4.9						

Abandoned

Abandoned

10125/2/02

201

450	5.4	14.6
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+50		5.7	14.3
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12.58

Levels for Road from
to Sta. 39+65, previous

the center of Taylor and Hickory
Survey,

450	2.7	194
-----	-----	-----

10					2.0	2.0
----	--	--	--	--	-----	-----

+50	.	2.1	20.
-----	---	-----	-----

74 1.9 20

11					2.2	19.
----	--	--	--	--	-----	-----

103

101

Stn.	+	-	Pod	Class
13			4.6	10.8
+50			4.9	10.5
14			5.6	9.8
+50			6.9	8.5
T. P.	9.65	17.14	7.91	7.49
15			8.9	8.2
+50			10.0	7.1
16			10.8	6.3
+50			7.8	9.3
17			3.7	13.4
+24			1.1	16.0
T. P.	11.54	28.45	0.23	16.91
+28			5.3	23.2
+41			4.4	24.1
18			3.6	24.9
+08			2.0	26.5
+50			10.7	17.8
21.19		8.14		

101

104

Stn.	+	-	Pod	Class
19			12.2	16.3
T. P.	3.03	20.61	10.87	17.58
+50			5.0	15.6
Aug +80			4.71	15.90
20			5.7	14.9
+50			7.1	13.5
21			6.5	14.1
+50			6.6	14.0
22			4.4	16.2
+50			2.1	18.5
T. P.	7.25	23.10	4.76	15.85
23			3.3	19.8
+50			4.9	18.2
24			7.0	16.1
+50			4.4	18.7
25			5.7	17.4
+50			4.6	18.5
10.28		15.63		

80105

Sta.	+	-	Red	Elev.
	+7.9 Δ		3.5	19.6
26			5.8	17.3
	+5.0		9.5	13.6
27			9.4	13.7
	+5.0		5.5	17.6
28			6.0	17.1
	+5.0		8.9	14.2
29			9.3	13.8
	+5.0		8.2	14.9
30			5.8	19.3
Plug +28 Δ	1.96	22.65 $\checkmark$		20.69
	+5.0		1.0	21.7
31			4.2	18.5
	+5.0		6.5	16.2
32			8.0	14.7
	+5.0		7.9	14.8
33 Plug Δ			5.39	17.26

80106

Sta.	+	-	Red	Elev.
	+5.0		8.5	14.2
34			8.1	14.6
	+5.0		5.9	16.8
	+8.8 Δ		5.9	16.8
	=39+65			

27/2/02
 Bessy
 107
 Davis

Levels on Porray Brad, Mission Valley

108

Sta.	+	0	-	Prod	Elav.
Spk in til. pole N.W. cor. Porray 4.11 end Graniteville Road					
		20.72			22.61
0				5.8	20.9
+50				5.8	20.9
1				6.0	20.7
+50				5.9	20.8
2				6.2	20.5
3				5.9	20.8
+50				5.4	21.3
4				5.7	21.0
+50				5.9	20.8
5				6.4	20.3
+50				6.3	20.4
6				6.5	20.2
+50				5.9	20.8
T.P.	4.69	25.74	5.67		21.05
Stone of Schunkel's Stone High Water Mark 74 + 95					
7				1.25	24.49
+50				4.5	21.2
				5.4	20.3

8.80

Sta.	+	0	-	Prod	Elav.
8				5.8	19.9
+50				6.1	19.6
9				5.6	20.1
+50				5.0	20.7
10				4.6	21.1
+50				4.0	21.7
T.P.	4.19	26.02	3.91		21.83
11				4.3	21.7
+50				4.4	21.6
12				5.9	22.1
+50				4.5	21.5
13				4.2	21.8
+50				4.3	21.7
14				4.3	21.7
S. Bank River					
+13				4.8	21.2
+21				7.2	18.8
+35				8.3	17.7

Sta.	+	0	-	Pod	Elav.
+50				7.9	18.1
15				8.4	17.6
+50				8.8	17.2
16				8.1	17.9
+14				8.5	17.5
N. Bank River					
+20				7.5	18.5
+50				7.1	18.9
17				6.9	19.1
T. P.	5.95	25.22	6.75		19.27
+50				5.3	19.9
18				5.7	19.5
+50				5.8	19.4
19				6.1	19.1
+50				4.8	20.4
20				5.8	19.4
+50				4.8	20.4
21				4.6	20.6

Sta.	+	0	-	Pod	Elav.
+50				4.1	21.1
22				4.0	21.2
+50				5.0	20.2
+72				7.0	18.2
+82				4.7	20.5
23				4.0	21.2
+50				4.4	20.8
24				2.6	22.4
T. P.	4.27	27.00	2.49		22.73
+50				4.7	22.3
25				6.2	20.8
+50				6.8	20.2
26				8.62	34.50
27				1.12	25.88
+79				5.7	28.8
28				5.2	29.3
T. P.	11.13	39.90	5.73		28.77
+50				5.9	34.0

24.02

9.34

Sta.	+	0	-	Red	Blav.
27				1.9	38.0
T. P.	10.77	49.52	1.15		38.75
+50				5.5	44.0
28				2.1	47.4
+50				3.8	45.7
29				9.3	40.2
T. P.	6.90	44.48	11.94		37.58
+50				8.4	36.1
30				8.1	36.4
+50				7.6	36.9
31				7.4	37.1
+50				7.1	37.4
32				7.2	37.3
+47.6				9.0	38.5
Sax in tel. pile					
Near Road, at last station				6.33	38.15 ^v

17.67

19.42

3/5/02

113

Level for Road, from the end
of Old Town Bay, to MoranaSta. + -
Top 4" x 4" Post
N.W. Cor. Lot 285

B. 176. 1.80 25.04

Plug at foot of

Post, U.S. G.S. B.M.

Graded Road

50

+ 50

1

+ 50

2

+ 50

+ 85

3

+ 25

+ 50

4

+ 50

5

+ 50

6

Road Elev.

23.24

Sta.

+ 50

3.30

21.74

7

10.5 ✓

14.5

+ 50

9.5 ✓

15.5

T.P.

7.25

31.06

1.23

5.6 ✓

19.4

8

4.0 ✓

21.0

+ 50

5.8 ✓

19.2

9

6.1 ✓

18.9

+ 50

6.5 ✓

18.5

10

7.5 ✓

17.5

+ 25

7.2 ✓

17.8

+ 50

7.8 ✓

17.0

11

6.5 ✓

18.5

+ 50

6.3 ✓

18.7

12

6.4 ✓

18.6

+ 50

6.0 ✓

19.0

13

4.9 ✓

20.1

+ 50

114

114

Road Elev.

4.6 ✓ 20.4

4.3 ✓ 20.7

2.7 ✓ 22.3

23.81

6.7 ✓ 24.4

5.3 ✓ 25.8

4.5 ✓ 26.6

2.8 ✓ 28.3

0.9 ✓ 30.2

0.6 ✓ 30.5

1.7 ✓ 29.4

6.1 ✓ 25.0

7.6 ✓ 23.5

7.9 ✓ 23.2

7.6 ✓ 23.5

7.8 ✓ 23.3

8.6 ✓ 22.5

115

Sta.	+	0	-	Red	Claw
14				11.0 ✓	20.1
T. P.	1.33	21.40	10.99		20.07
+50				4.8 ✓	16.6
15				6.1 ✓	15.3
+50				7.3 ✓	14.1
16				8.3 ✓	13.1
+50				9.0 ✓	12.4
17				9.9 ✓	11.5
+20				11.2 ✓	10.2
T. P.	5.31	15.64	11.07		10.33
^{1/2} x 2 Bot				12.0 ✓	3.6
+50				11.4 ✓	4.2
+65				6.0 ✓	9.6
+85				5.0 ✓	10.4
18				3.4 ✓	12.2
+50				3.2 ✓	12.4
19				2.3 ✓	13.3
+50					
	6.64		22.06		

116

Sta.	+	0	-	Red	Claw
20				1.8 ✓	13.8
+50				2.0 ✓	13.6
21				2.5 ✓	13.1
+25				3.5 ✓	12.1
+50				8.1 ✓	7.5
T. P.	2.99	7.17	11.46		4.18
22				7.0 ✓	0.2
+18				7.6 ✓	0.4
Level bet. these stations				✓	0.39
Aug 26 + 93	6.94	6.55	7.56		
27 + 50				6.8 ✓	-0.25
28 apt. R.R. bridge 189				6.4 ✓	0.2
+50				6.4 ✓	0.2
29				6.3 ✓	0.3
+50				5.7 ✓	0.9
spike in the Pile.				4.71	1.84
until Mule Park, 263					
10:00				5.3 ✓	1.3
30				5.0 ✓	1.6
+50					
	9.93		9.02		

Sta.	+	0	-	Prod	Elav.
31				4.6	✓ 2.0
+50				4.0	✓ 2.4
32				3.8	✓ 2.8
+50				3.6	✓ 3.0
33				3.4	✓ 3.2
+50				3.4	✓ 3.2
34				3.0	✓ 3.6
T.P.	4.02	7.69	2.88	3.67	
Opp. R.R. Bridge 158					
+50				3.9	✓ 3.8
35				4.9	✓ 2.8
+18				3.8	✓ 3.9
+50				4.1	✓ 3.6
36				4.6	✓ 3.1
+50				4.7	✓ 3.0
37				4.7	✓ 3.0
+50				5.2	✓ 2.5
38				6.2	✓ 1.5

Sta.	+	0	-	Prod	Elav.
+50				6.1	✓ 1.6
39				6.4	✓ 1.3
+50				6.5	✓ 1.2
Opp. R.R. Bridge 157 1/2				6.7	✓ 1.0
T.P.	3.73	4.94	6.48	1.21	
+50				4.0	✓ 0.9
41				4.4	✓ 0.5
+50				4.4	✓ 0.5
42				4.5	✓ 0.4
+50				4.6	✓ 0.3
43				4.5	✓ 0.4
+50				4.7	✓ 0.2
44				3.3	✓ 1.6
+50				0.9	✓ 4.0
T.P.	7.60	11.32	1.22	3.72	
45				4.8	✓ 6.5
+50				3.5	✓ 7.8

Sta. + 0 - Rod Elev.

46 3.2 ✓ 8.1

+50 3.3 ✓ 8.0

47 4.6 ✓ 4.7

+50 6.1 ✓ 5.2

48 7.4 ✓ 3.9

+50 7.2 ✓ 4.1

Plug +75 Δ 5.65 ✓ 5.67

49 5.6 ✓ 5.7

+50 11.0 ✓ 10.3

T. P. 8.88 19.43 0.77 10.55

50 6.1 ✓ 13.3

+50 1.5 ✓ 17.9

T. P. 10.30 28.72 1.01 18.42

+88 Δ 5.7 ✓ 23.0

51 4.9 ✓ 23.8

+50 2.5 ✓ 26.2

52 2.1 ✓ 26.6

Sta. + 0 - Rod Elev.

0.6 28.1

0.42 28.30

1.1 27.6

4.3 24.4

8.0 30.7

11.1 17.6

spike
T. P. 3.27 20.98 11.01 17.71

Plug +85 Δ 4.46 16.53

55 4.6 16.4

+50 6.2 14.8

56 6.4 14.6

+50 6.9 14.1

57 +84 Δ 7.8 13.2

+50 8.8 12.2

158 9.3 11.7

+50 8.9 12.1

59 8.8 12.2

Sta.	+	-	Red	Class
+50			8.1	12.9
60			8.7	12.3
T.P.	6.86	19.87	8.47	12.51
+50			7.7	11.7
61			8.0	11.4
+50			7.3	12.1
62			6.9	12.5
+50			6.4	13.0
63			6.3	13.1
+50			6.4	13.0
64			6.3	13.1
+50			6.1	12.3
65			6.8	12.6
+50			6.9	12.5
66			6.9	12.5
+50			8.0	11.4
67			9.6	9.8

Sta.	+	-	Red	Class
T.P.	4.56	14.66	9.27	10.10
+50			6.1	8.6
68			6.6	8.1
1/2 + 2 1304			7.2	7.5
+50			6.5	8.2
69			5.9	8.8
+50			5.7	9.0
70			6.6	8.1
+50			7.0	7.7
71			7.0	7.7
+50			6.9	7.8
72			6.4	8.3
+50			6.1	8.6
73			5.4	9.3
+50			4.1	10.6
74				
T.P.	6.27	17.12	3.81	10.85
+50			5.8	11.3

Sta	+	-	Rod	Claw
75			5.4	11.7
^{1 1/2} Rod +50		1	7.4	9.7
76			6.4	10.7
+50			5.4	11.7
77			5.5	11.6
+50			6.3	10.8
78			6.4	10.7
+50			6.5	10.6
79			6.6	10.5
+50			6.9	10.2
80			7.7	9.4
+50			8.2	8.9
81			8.9	8.2
T. P.	3.66	12.19	8.59	8.53
+50			5.0	7.2
82			5.9	6.3
+50			6.4	5.8

Sta	+	-	Rod	Claw
83			6.4	5.8
+50			6.6	5.6
84			6.8	5.4
+50			7.2	5.0
85			7.1	5.1
^{1 1/2} Rod +50			7.4	4.8
86			7.2	5.5
+50			6.3	5.9
87			5.7	6.5
+50			5.0	7.2
88			4.5	7.7
+50			3.9	8.3
89			2.7	9.5
T. P.	7.66	19.46	2.39	9.80
+50			9.0	10.5
90			8.8	10.7
+20			8.6	10.9
+50			8.4	11.1

125

Sta.	+	-	Red.	Class
91			8.2	11.3
+50			7.1	12.4
92			6.1	13.4
10. M. No 8			6.77	12.69
+50			5.2	14.3
93			4.1	15.4
+35			3.5	16.0
+50			3.4	16.1
94			3.0	16.5
+50			3.1	16.4
95			3.7	15.8
+50			4.0	15.5
96			3.5	16.0
7+18.50 Spk. floor of Bridge			3.40	16.06

6/3/02 Levels along the Center
line of Front St. from Walnut ave. to Laurel St.

126

Sta.	+	-	Red.	Class
Top stone wall S.E. Laurel and Front 13.72	2.53	212.12		209.59
+40			5.2	206.92
0 H. line			4.8	207.32
+50			3.9	208.22
1			3.7	208.42
+50			2.5	209.62
+75			2.3	209.82
2			3.4	208.72
+50			3.7	208.42
3			4.1	208.02
4			2.5	208.62
0°+80			1.1	211.02
T. P.	2.85	214.19	0.78	211.34
+50			2.7	211.49
1			2.6	211.59
+50			2.4	211.79
2			6.0	208.19

5.38

0.78

127

Front St.

No.	+	-	Pod	Elev.
+12			8.0	206.19
T. P.	0.24	203.22	11.21	202.98
+50			10.9	192.32
T. P.	0.73	192.40	11.55	191.67
"	1.20	182.00	11.60	180.80
"	0.80	171.24	11.56	170.44
3			7.3	163.94
T. P.	0.44	160.15	11.53	159.71
"	1.03	149.54	11.64	148.51
+40			7.5	142.04
+47			12.6	136.94
+80			1.0	148.54
T. P.	3.35	152.23	0.66	148.88
+50			0.2	152.03
+83			5.1	147.13
1			5.4	146.83
+50			3.9	148.33
	7.79	69.75		

Front St.

128

No.	+	-	Pod	Elev.
+82			4.6	147.63
2			7.6	144.63
T. P.	0.47	141.05	11.66	140.57
+50			3.0	138.04
+95			10.4	130.64
T. P.	0.95	130.35	11.64	129.40
3			2.2	138.84
+20			9.6	131.44
+40			2.6	138.44
T. P.	11.50	140.99	0.86	129.49
+80			4.9	136.09
T. P.	11.84	152.40	0.43	140.56
+50			7.0	145.40
T. P.	11.60	163.38	0.62	151.78
6.0			157.38	
T. P.	11.60	174.16	0.82	162.56
"	11.26	184.84	0.58	173.58
	59.22	26.61		

129

Front St.

Sta.	+	-	Red	Elev.
+50			5.8	157.58
T. P.	11.54	196.05	0.33	184.51
"	12.00	207.66	0.39	195.66
2			5.0	202.66
T. P.	7.72	215.01	0.37	207.29
"	9.35	224.02	0.34	214.67
+32			8.0	216.02
+50			4.1	219.92
3			1.2	222.82
+40			0.6	223.42
+80			0.9	223.12
+50			2.1	221.92
1			5.5	218.52
+50			11.2	212.82
T. P.	0.20	212.90	11.32	212.70
2			7.2	205.70
T. P.	0.47	201.75	11.62	201.28
	41.28	24.37		

Front St.

130

Sta.	+	-	Red	Elev.
T. P.	0.72	191.10	11.37	190.38
+50			2.2	188.90
T. P.	0.53	179.82	11.81	179.29
3			1.5	178.32
+28			13.6	166.22
+40			11.1	168.72
T. P.	11.77	190.73	0.86	178.96
+80			3.4	187.33
T. P.	11.71	201.22	1.22	189.51
"	11.87	212.45	0.64	200.58
+50			4.3	208.15
T. P.	10.96	221.99	1.42	211.03
+63			6.5	215.49
T. P.	11.32	231.66	1.65	220.34
1			8.6	223.06
+50			5.5	228.16
2			1.2	230.46
	58.88	28.77		

Sta.	+	0	-	Pod	Elav.
+19				2.5	229.16
T. P.	0.98	220.88	11.76		219.90
+50				8.6	212.28
T. P.	0.36	209.67	11.57		209.31
"	0.40	198.42	11.65		198.02
3				9.6	188.82
T. P.	0.64	187.26	11.80		186.62
+40				17.3	169.96
+80				5.5	181.76
T. P.	11.67	198.24	0.69		186.57
"	11.86	209.75	0.35		197.89
+50				6.9	202.85
T. P.	11.69	220.99	0.45		209.30
+80				5.3	215.69
1				0.1	220.89
T. P.	8.23	229.22	0.00		220.99
"	11.58	240.48	0.32		228.90
57.41			48.59		

Sta.	+	0	-	Pod	Elav.
+40				8.8	231.68
+50				9.1	231.38
2				7.6	232.88
+50				7.2	233.28
3				6.7	233.78
+40				7.1	233.38
+80				4.3	236.18
+50				3.4	237.08
1				3.4	237.08
+50				3.3	237.18
2				4.3	236.18
Pop	2.08	238.46	4.10		236.38
+30				4.7	233.76
T. P.	6.78	234.28	10.96		227.50
+70				14.4	229.88
3				6.3	237.98
T. P.	11.85	239.35	6.78		227.50

Front St.

Sta.	+	0	-	Rd	Claw
Thorn +40				5.5	233.85
+80				3.4	235.95
+50				2.6	236.75
T.P. 5.09	Corrected	241.92	2.59		236.76
Chy N.E. Thorn					(238.73)
at Front					238.66
R.M.				3.19	
1				4.8	237.12
+18				6.2	235.72
T.P. 2.50	233.11	11.31			230.61
+50				10.5	222.61
T.P. 1.5.1	223.50	11.12			221.99
+97				12.3	211.20
2				11.8	211.70
T.P. 10.35	233.30	0.55			222.95
11	11.85	243.51	1.64		231.66
+50				10.2	233.31
+58				7.0	236.51
3				4.7	238.81
	31.30		27.21		

Front St.

Sta.	+	0	-	Rd	Claw
Thorn +40				4.2	239.31
+80				3.6	239.91
+50				2.5	241.01
T.P. 11.47	254.70	0.29		1.8	241.71
					243.22
+50				11.2	243.50
+66				4.8	249.90
Ordn. Walnut				3.9	250.30
T.P. 8.02	261.27	1.45			253.25
Ordn.				6.81	254.46

Barker St. from the center
of alley bet 1st and Albation to

2nd St.
St. + - Rod Elev.

T. P.	5.67	260.13			See last Page 254.46
center alley					
0			10.0	250.13	
+50			9.1	251.03	
1			8.0	252.13	
+50			6.2	253.93	
2			4.8	255.33	
+50			1.9	258.23	
T. P.	8.83	267.40	1.56	258.57	
3			6.6	260.80	
+50			7.3	260.10	
4			9.6	257.80	
+32			10.6	256.80	
+50			8.3	259.10	
5			4.6	264.80	
center 2nd St.			2.8	264.60	
+25					

11/15/02

Intersection of 6th + K.

S.W. Co. + Granite Cont. - Bituminous Walk
 N.W. " ✓ " " " "
 S.E. " ✓ " " " "
 N.E. " ✓ " " Cement Walk.

6th to 7th,

No. side - all in - Cement b. + Walk.

S.O. " ✓ 1st 100' from 6th, Cement Cont
 and Bituminous Walk.

Int. 7th + K.

N.W. + N.E. Co. Cement Cont and Walk.

7th to 8th - No. side " "

N.E. + N.W. side " "

8th to 9th - No. side " "

N.W. 9th + K. " "

N.E. " Granite " b. "

9th to 10th

W. 1/2 - L. Cont - Cement Walk

E. 1/2 Cement b. + Walk ✓

10th + K. - N.W. + N.E. Cement b. + W.

10th to 11th (No. side) ✓ " "

11th + K. - N.W. + N.E. ✓ " "

N.W. 12th + K. ✓ " "

There should not be any return at 14th + K.

Between 15th + 16th -

No. side E. 100' Cement Walk. E² ofE. 100' Granite Cont. - W² of E. 100'

Cement Cont.

So. side - E. 50' Cement b. + W.

N.W. 16th + K. Granite b. and Cement W.

S.W. " " Cement Walk + b.

Between 16 + 17 - No. side E. 35' b. Walk

N.W. 17 + K. Cement b. + W. exact

4 1/2 at N. Cont.

- N.E. 17 + K. Granite Cont, Cement Walk. ✓

Bed'n 17th + 18 - No. side W. 100'

Granite Cont, Cement Walk

So. side, E. 100' Cement b. + W.

S.W. 18th + K, Cement b. + W. -

N.E. 20th + K, " " "

B. 20 + 21st. No. side all - Cement b. + W. = N.E. + N.W. 6th + A. Cement b. + W.

N.W. + N.E. 21st + K, Cement b. + W.

Bed'n 21st + 22d, Cement b. + W. all on

N.W. - N.E. - S.E. Cement b. + W.

Bed'n 22d + 24th No. side - W 100' - Cement b. + W.

So. side W. 70 1/2 " " "

6th, St. Bed'n Cedar + Beech.

W. side, Cement b. + W. all on bed No. 50'

E. " " " " " No. 75'

N.W. + N.E. Beech + 6th Cement b. + W.

ask to the Adv. for.

N.E. + N.W. 6th + A. Cement b. + W.

Bush A and ash, West side So. 100'

Cement b. + W. -

141

142

143

144

145

146

147

148

149

150

151

152

153

154

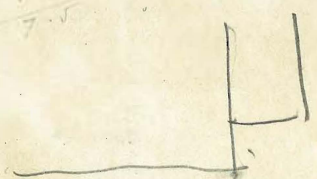
155

156

No.	Elav	
36	378.72	Spikes in tel. pole Left Sta. 80
37	229.46	Spikes in " " Right Sta 80+50
38	208.62	" " tree 50' Left Sta. (1+50)
39	365.63	" " tel pole, 8' Right Sta 18. (Sonente Road)
40	135.75	" " " " Left 64+25 (Sonente Road)
41	25.44	U. S. G. S. B. M. Sonente Sta.
42	16.69	Cop. tack top East pile, North end bridge No. 129 Cal. S. P. R.
43	8.39	Cop. tack top East pile, South end bridge No 128 C. S. P. R.
44	3.51	Cop. tack top East pile, North end bridge No. 127
45	7.78	East cor. Granite Monument on Eastern boundary near Cordeno Sta.
2	23.24	4" x 4" Post, N. W. cor. P. L. 285

260		
28	369.90	spt into Pale head of canon
30	390.79	East Cor. Granite Monument to P.L's 1311, 1312, 1313, 1314
7	13.31	
8	12.66	
9	15.87	
10	5.94	
11	9.55	
12	19.21	U.S.G.S. B.M. at Race Track
Marked Stone 142.64 Mon. Sta. 297+50 (Main Turn)		
14	57.58	
15	98.15	
16	107.73	
1	11.98	Cap Rock at Bridge

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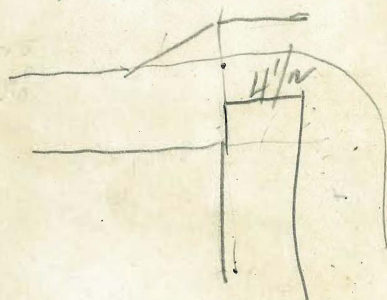


Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

MINUTES	LKS.	MINUTES	LKS.	MINUTES	LKS.
1	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 2/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	60	140

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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
0		0		0		0	
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

Levels on Poway Road
Mission Valley.

Page 108 to 111

Levels for Road from the
end of Old Town Dyke
to Morena.

Page 113 to 125.

Levels along the Center
line of Front St. from
Walnut Ave. to Laurel St.

Page 126 to 134

Brooks St. from the Center
of Alley bet. 1st. ^{and} Albatross
to 2nd St.

Page 135

Sidewalks and Curbing
in on "K" St. from 8th.
to 24th St.

Page 137 to 139.

Sidewalks and Curbing
in on 6th St bet. Cedar
and "F" St. Page 140