

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING  
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

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

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

MICROFILMED

JAN 14 1965

Please Return to  
City of San Diego Water Dept.  
Room <sup>903</sup> ~~208~~ Civic Center  
Telephone Main 5161

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

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

FOR TANGENTS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.38	.42	.46
15°	.04	.10	.14	.19	.24	.29	.34	.39	.45	.51	.53	.58	.63	.68
20°	.06	.13	.19	.26	.32	.39	.45	.51	.58	.65	.72	.79	.84	.90
25°	.08	.16	.24	.33	.40	.49	.58	.67	.75	.83	.90	.99	1.06	1.14
30°	.10	.19	.29	.39	.49	.59	.69	.79	.89	.99	1.09	1.20	1.29	1.39
35°	.11	.22	.34	.47	.58	.69	.79	.81	.92	1.04	1.29	1.42	1.54	1.66
40°	.13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°	.15	.30	.44	.60	.76	.91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°	.17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°	.19	.38	.57	.76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°	.21	.42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°	.23	.46	.69	.93	1.16	1.40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°	.25	.51	.76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°	.30	.61	.91	1.22	1.53	1.84	2.15	2.46	2.78	3.10	3.44	3.78	4.12	4.46
85°	.33	.66	1.00	1.33	1.68	2.02	2.36	2.70	3.05	3.40	3.77	4.14	4.55	4.89
90°	.36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32
95°	.39	.79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83
100°	.43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34
110°	.51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4.76	5.31	5.86	6.43	7.01	7.60
120°	.62	1.25	1.93	2.52	3.16	3.81	4.45	5.11	5.77	6.44	7.12	7.80	8.50	9.22

FOR EXTERNALS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°	.009	.018	.027	.036	.046	.056	.065	.074	.083	.093	.106	.120	.127	.135
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.711	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.266	.353	.440	.528	.617	.707	.797	.877	.971	1.07	1.18	1.29
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

Profile-21" Brine Line - 1-28

Boxita P.L. Lowering Wahash Canyon

Profile as replaced by Carroll-Fisher 29-30

♀ PROFILE BRINE LINE

alice ✓ 31-79

Level #5140

Levels -

21" Brine Line  
Amherst StKing  
West  
Shipman

2-8-50 Clear

1

Sta.	+	H.I.	-	
B.M.	3.52	442.92		459.40
52+15			3.5	459.4
+50			3.9	459.0
+83			4.5	458.4
+85 <sup>26</sup>			4.5	458.4
53+00			4.8	458.1
+50			5.0	457.9
54+00			5.2	457.7
+50			5.7	457.2
55+00			5.9	457.0

Top D.H. R. 52429 - BK782 P.17

edge of oil

angle point

21" Brinell  
Amherst St

King - Notes  
West X  
Shipman.

2-8-52

2

	+	H <sub>1</sub>	-	
55+50		422.92	6.1	456.8
56+00			6.3	456.6
T.P. +30	1.61	458.26	6.27	454.65
+50			2.0	456.3
57+00			2.1	456.2
+50			2.3	456.0
58+00			2.7	455.6
+50			3.0	455.3
59+00			3.7	454.6
30 +37			4.05	454.21

Sewer Manhole

Sewer manhole

21" Brine Line  
Amherst

King  
West  
Shipman

2-8-50

3

	+	H1	-	
59+50		458.29	4.5	453.8
60+00			5.2	458.1
60+50			5.8	452.5
61+00			5.8	452.5
61+50			6.1	452.2
62+00			6.3	452.0
+34			5.8	452.5
1+50			6.6	451.7
63+00			6.5	451.8
+50			6.7	451.6
64+00			7.2	451.1

Sewer Man Hole

21" Brine Line  
Ol. ve st

King  
West-T  
Shipman  
2-8-50

4

	+	H <sub>1</sub>	-	
64+50		458.26	7.4	450.9

65+00			7.2	451.1
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T.P 65+01.3	3.60	454.71	7.15	451.11	Angle point
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+50			5.5	449.2
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66+00			7.2	447.5
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+50			8.8	445.9
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67+00			9.4	445.3
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67+28			10.6	444.1
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			12.0	442.7
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Top: Pipe - East end 24'

" " West " 32'

67+50			9.4	445.3
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21" Brine Line  
Olivest

King  
West  
Shipman

2-8-50

5

	+	H.I.	-	
68+00		454.71	9.1	445.6
+50			8.1	446.6
69+00			6.0	448.7
+50			3.8	450.9
70+00			2.1	452.6
70+50			0.3	454.4
T. P	8.29	463.00	0.00	454.71
71+00			7.6	455.4
71+50			6.9	456.1
72+00			6.1	456.9



21" Brine Line  
Olive St

King  
West X  
Shipman

2-8-50

6

	+	H.I	-	
72+06		463.00	5.70	<del>457.30</del> - CARV <del>458.30</del>
72+50			5.5	457.5
73+00			4.6	458.4
73+50			3.5	459.5
74+00			2.7	460.3
74+50			2.7	460.3
75+00			3.6	459.4
75+50			4.8	458.2
76+00			6.5	456.5
76+50			7.6	455.4

Sewer M.H.

21" Brine Line  
Olive St.

King  
West-T  
Shipman 2-8-50

7

	HT			
77+00	463.00	8.8		454.2
77+54 T.P.	1.89	455.74	9.15	453.85
77+50		2.1		453.6
78+00		2.5		453.2
78+50		3.0		452.7
79+00		3.7		452.0
79+50		4.3		451.4
80+00		5.1		450.6
80+50		5.9		449.8
80+53 <sup>1/2</sup>		5.99	449.75	

West Edge Sewer Mt.

Sewer Mt. Olive Tower

21" Brine Line  
Olive St

King  
Shipman  
West-T

2-8-50

8

	H.J		
81+00	455.74	7.6	448.1
81+50		8.5	447.2
82+00		8.4	447.3
82+50		7.0	448.7
83+00		5.8	449.9
83+50		5.2	450.5
84+04 T.P.	4.75 455.53	4.96	450.78
84+00		4.6	450.9
84+50		4.5	451.0
85+00		4.6	450.9

Top M.H. Sewer

21" Brine Line  
Olive St.

King 2-B-50  
West X  
Shipman

9

455.53

85450	5.1	450.4
86400	5.4	450.1
86450	5.2	450.3
87400	5.1	450.4
87450	4.9	450.6
87754	4.98	450.55
88400	4.7	450.8
88450	4.6	450.9
89400	4.8	450.7
89450	5.4	450.1

Top Sewer Mt.

21" Brine line  
olvest.

King  
Shipman  
West. A

2-8-50

78

90400			6.1		449.4
90450			7.0		448.5
91400			8.6		446.9
91450			10.7		444.8
T.P.	0.53	445.33	10.73		444.80
92400			5.7		439.6
92450			10.5		434.8
T.P.	2.49	435.4	12.64	432.69	432.67
93400			5.5		429.7
<del>93450</del>			<del>8.4</del>		

△

21" Brine Line  
Olive St & Center

King  
West  
Shipman

2-8-50

11

	T	H.T			
T.B.M.	12.40	439.58	8.04	427.13	432.95
93439 <sup>36</sup> A			12.3		427.2
93450			11.8		427.7
F.L. 93454			13.4	425.9	
93454			16.7	422.8	
94404			11.0		428.5
94450			8.0		431.5
95100			3.3		436.2
T.P.	11.24	450.77	0.01	439.51	
95450			8.9		441.9
96700			3.5		447.3

P.P.# P17296-14.93477

F.L. End 12" Corr. Pipe

F.L. S. End 12" Corr. Pipe

21" Brine Line  
(Coater 24)

450.77

96+50

0.3

450.5

T.P.

6.29

452.07

0.29

450.48

97+00

4.7

452.1

97+50

3.7

453.1

98+00

2.3

454.5

98+50

2.7

454.1

99+00

4.1

452.7

99+50

6.0

450.8

100+00

8.2

448.6

B.C. 100+30

10.0

446.8

King - v  
West X  
Shipman

2-20-50

12

21" Brine line  
(Center st.)

King  
West T  
Shoppman

2-20-50

13

456.77

100+31					
100+50			11.0		445.8
101+00			12.5		444.3
T.B.M.	0.29	444.83	12.23	444.54	
101+50			3.3		441.5
E.G. 101+56 <sup>3/4</sup>			3.7		441.1
102+00			7.7		437.5
BC 102+48 <sup>72</sup>			12.2		432.6
T.P.	1.03	432.75	13.11	431.72	
103+00			5.3		427.5

Edge 01'

B.P. L-1 Staloc-on curb



21" Brine Line  
(Center of)

King - W  
West T  
Shipman

2-20-50

14

432.75

103+30		7.90	424.85	
103+50		10.2	422.6	
T.P.	<sup>0.32</sup> 420	420.17	12.90	419.85
104+00		2.6	417.6	
104+50		7.6	414.6	
105+00		12.5	407.7	
T.B.M.	0.33	407.60	12.90	407.27
ERC-165+19.30		1.8	405.8	
105+22		2.63	405.57	
105+30		5.0	402.6	

Top  
S.M.H. West Edge

Top  
S.M.H. West Edge

21" Brine Line

KING-N  
West-T  
Simpson

2-20-50

15-

407.60

106+00

10.4

397.2

T.P.

0.61

395.25

12.96

394.64

106+50

3.1

392.2

107+00

8.5

386.8

107+19

10.86

384.39

Top  
S.M.H. West Edge

T.P.

6.31

382.46

13.10

382.15

107+50

0.7

381.8

107+77<sup>70</sup>

3.2

379.3

108+00

4.5

378.0

108+50

6.4

376.1

21" BRINE LINE  
CENTER

KING N  
WEST T  
SKIPMAN

2-20-50

16

382.46

108+52

6.9

375.6

gutter

108+70 AH

108+70 97%

7.1

375.4

109

7.5

375.0

109+50

8.5

374.0

110+00

9.6

372.9

110+32.00

10.3

372.2

110+50

10.7

371.8

111+00

11.9

370.6

111+50

13.0

369.5

T.P.

0.62

370.08

13.00

369.46

2" Brine Line  
7/4 Mo St

King of  
West of  
Shipman

2-20-50

17

370.08

111+50	0.7	369.4
E.C. 72 <sup>32</sup> 111+50	1.1	369.0
112+00	1.7	368.4
112+50	3.0	367.1
113+00	4.2	365.9
113+50	5.3	364.8
114+00	6.4	363.7
114+50	7.4	362.5
115+00	8.8	361.3
115+50	10.0	360.1

21" BRINE LINE  
Flame

King  
Shipman  
West

3-3-50

Clear

18

370.08

116+00		11.0	359.1
T.B.M.	4.98	364.0'	11.05 359.03
116+50		5.5	358.5
M.H. 116+75		5.80	358.21
117+00		5.7	358.3
117+35		5.92	358.1
Δ 117+26		5.8	358.2
117+50		5.2	358.8
117+66		6.2	357.8
117+71		8.9	355.1

Chisled □ 116+12 - ON TOP CURB LT.

Top 11.0

Edge CONC.

21" Brine line  
(uni. 412)

364.01

King  
West  
Slipman

3-3-50

clear

19

F. 1.19" Culv. Rt.

Note: Grade For New Pav. - See Co.

Top. Dred. Rt. 119475<sup>+</sup>

117+71			2.7	355.3
117+78			4.6	359.4
118+00			5.2	358.8
118+50			4.4	359.6
119+00			2.9	361.1
119+58			1.5	362.5
119+75			1.6	362.4
120+00			0.4	363.6
T.P.	4.65	368.39	0.27	363.74
B.C. 120+31.3			4.3	364.1

21" Brine Line  
Uni. Ave

King  
West  
Shipman

3-3-50

Cleev

20

368.39

121+50	3.6	364.8
121+00	3.8	364.6
121+58	3.2	365.2
122+50	3.5	364.9
123+00	4.3	364.1
123+50	4.9	363.5
124+00	5.9	362.7
124+50	5.8	362.6
E.C 724+60 <sup>10</sup>	5.7	362.7
B 125+00	5.7	362.7

21" Brine Line  
Uni. Ave

368.39

125+50			6.3	362.1
126+00			6.3	362.1
126+50			6.9	361.5
127+00			7.3	361.1
T.P	0.97	361.06	8.30	360.09
127+50			1.0	360.1
128+00			2.2	358.9
128+50			3.6	357.5
129+00			5.3	355.8
129+50			6.0	355.1

KING  
West  
Shipman

3-3-50

21

ON Hg. 127+50



21" Brine Line  
Uni Ave

361.06

King  
West  
Ship Max

3-3-50

22

129+47 Pipe xing

12.7

348.4

Fl. 36" Culu Rt

From pipe xing

129+47

18.5

342.6

Fl. 36" Culu Lt 93' From pipe xing

130+00

4.2

354.9

130+50

5.4

355.7

130+97

4.8

356.3

Edge oil

131+00

4.7

356.4

131+04

4.55

356.51

Top Bas M.H. 11' Rt S.E. Cor steel

131+50

2.9

358.2

Edge oil

131+60

3.0

358.1

132+00

2.6

358.5

21" Brine Line  
Unit Five

King  
West  
Shipman

3-3-50

23

361.06

132450 2.5 358.6

133400 2.2 358.9

133450 2.6 358.5

134400 3.9 357.2

171 P 0.40 357.32 4.14 352.92  
346.92

134450 0.4 356.9

135400 1.6 355.7

135450 3.0 354.3

136400 4.2 353.1

136450 5.5 351.8

21" Brine line  
4th Ave

King  
West  
Shipman

3-3-50

29

35732

137400 7.0 350.3

137450 8.6 348.7

138400 9.3 348.0

138450 10.9 346.4

139400 12.1 345.2

T.P. 12.7 345.58 13.01 344.21

139450 1.9 343.7

140400 3.1 342.5

140450 4.1 341.5

141400 4.5 341.1

21" Brine line  
UNI Ave

King  
Shipman  
West

3-2-50

clear

25

345.54

141+45

5.6

340.0

Edge Oil

141+50

5.6

340.0

142+00

5.8

339.8

142+50

6.2

339.4

143+00

7.0

338.6

T.P.  
143+47

2.63

340.43

7.78

337.80

M.H 358 + 143+47

143+50

2.9

337.5

144

4.0

336.4

144+50

5.2

335.2

145

6.3

334.1

21" Brine Line

KING  
SHIPMAN  
WEST

3-6-58

26

348.43

145+50 7.4 333.0

146+00 8.8 331.6

146+50 9.4 331.0

147+00 10.2 330.2

147+50 11.2 329.2

148+00 12.2 328.2

T.P. 1 0.73 328.58 12.58 327.85

148+50 1.4 327.2

149+00 2.5 326.1

149+50 3.4 325.2

21" Brine Line

King  
Shipman  
West

3-6-88

27

322.58

150+00

4.8

323.8

150+50

5.3

323.3

E PROFILE REVISED

Revised E PROFILE

151+00

6.1

322.5

B.M.

274

323.47

320.73

County  
B.M.  
9' LT  
151+90

151+50

7.2

321.4

151+00 (P.V.)

1.60

00.01

+21.82 (P.I.)

2.09

00.01

152+00

7.3

321.3

+35

2.50

+37.5

7.62

+44.22 (P.I.)

2.1

Edge of  
Top 16" C.I.  
Pipe

2.52

323.37

7.73

320.85

C. B.M. Iron P.  
USGS 32684  
CIN 32073

151+66.14 BK

151+62.82 AH (P.I.)

2.4

"

2.35

Edge  
C.I.  
Pipe  
10.5 RT

152+50

9.2

320.2

152+00

2.9

152+00

2.86

Edge  
C.I.  
Pipe  
10.70 RT

153+00

3.7

319.7

152+50

3.7

153+00

4.3

Edge  
C.I.  
Pipe  
11.20 RT

+50

4.6

318.8

153+00

4.42

# 1 1/2" Conc. Pipe

8.16

1.3' LT

153+30

# 1 1/2" Conc. Pipe

8.16

2.2 RT

154+00

4.6

318.8

153+50

4.6

21" brime line

King  
West  
Shipman

4-28

29

## REVISED &amp; PROFILE

154+50	323.37	4.9	318.5	154+00	323.47	5.22	11.80 RT Edge Conc PAVT
				154+00		5.0	
				154+50		5.2	
155+00		4.9	318.5	155+00		5.3	
				155+00		5.28	12.50 RT Edge Conc PAVT
155+50		5.0	318.4	155+50		5.3	
				156+00		5.2	
156+00		5.0	318.4	156+00		5.12	13.0 RT Edge Conc PAVT
				156+50		5.3	
156+50		5.0	318.4	157+00		5.2	
				157+00		4.90	13.10 RT Edge Pav.
157+00		4.7	318.7	157+50		4.8	
				157+80 <sup>76</sup> RI		4.3	
157+50		4.6	318.8	158+00		4.7	
				ck BM Top of Curb		4.62	318.85 = 318.98
T.B.M.		4.39	318.98	Top end. curb return - west side 158+12			

Checked & Reduced  
Pg. 1-28 6/2/50 R.M.

Wabash  
Canyon

Bonita P.h. Lowering  
Profile R - DIRT as put back  
by Carrol Foster

Krup  
Shipman  
West

4-28-50

Rain - cold - 29

57.2

T.B.M	1.20	58.40	57.20
386+00		8.4	50.0
386+50		9.4	49.0
387+00		9.6	48.8
+50		8.8	49.6
388+00		7.7	50.7
+50		7.6	50.8
389+00		7.2	51.2
+50		9.0	49.4
390+00		7.1	51.3



Wabash  
Canyon

Bonita Pl. Lowering  
Profile ♀ - Dirt put back by  
Carrol Foster

King  
Shipman  
West

4-28-50

Cold-Palm

30

58.40

390+50

5.2

52.6

391+00

3.8

54.6

+50

5.7

52.7

392+00

6.3

52.1

392+50

7.8

50.6

393+00

5.5

52.9

393+50

2.1

56.3

393+83

394+00

2.5

55.9

♀ ♀ 35<sup>2</sup>

T.B.M

1.26

57.20

♀  
PROFILE  
BRINE LINE

FEB. 13 1951

DEATY N.  
LEONARD T.  
WELKER ♀

31

TBM	8.54	327.39 <del>327.52</del>	318.85 <del>318.98</del>	See pg. 28
157+80 <sup>81</sup>	(P1)	8.3		
+95		7.9		
158+00		8.8		
+04.5		8.8		
+12.5		9.5		
+15		7.5		
+18		7.2		
+20		7.3		
+36		9.7		
+50		9.5		
159+00	(12.5 RT Top Curb	8.06		
	♀	9.9		
+05		7.8		
+50		7.4		
160+00	Top Curb	6.76		
	♀	6.8		
+50		7.1		
161+00	Top Curb	6.69		
		8.2		
CK BM		5.82	321.57 <del>321.70</del>	= 321.60
+05		8.9		

End of Curb (2.5 RT 158+125)  
(See pg 28)

8.71 on Conc  
3.0

7.33 on Conc Gutter  
2.5

11" LT 158+63

17.65  
11.0

30" RCP.  
SIDE DRAIN  
STORM

16.94  
12.50

12" RT  
158+76

#  
NAIL IN PP. 271291

2-13-51

32

♀  
PROFILE  
BRINE LINE

161+18		327.52 327.39	8.1	
+50			7.7	
+60 <sup>39</sup>	(P.L.)	Top Curb	7.50	
			7.8	
162+00		Top Curb	8.19	
			8.6	
+50			9.1	
		Top Curb	9.82	
163+00			9.9	
+50			10.8	
163+72 <sup>73</sup>	(P.L.)		10.5	
↑				
Top Curb	1.53	317.76	11.16	316.23
		317.89		316.36
CK	USGS BM No-K-61 1927		1.34	316.42 =
				316.55
		Top Curb	2.01	
164+00			1.5	
CK BM			1.10	316.66
				316.79 = 316.67
+23			1.5	
+50			2.0	
165+00			3.6	
+50			4.9	
166+00			6.3	
+07			6.4	
+10			8.7	

Top. Curb

2.01  
12.5

Nail in PP # 271290

3.66  
12.510.9 9.3 6.8  
5 2 13.45  
12.5

2-13-51

32

♀  
PROFILE  
BRINE LINE

166+22		317.89 317.96	10.1				
+50			7.0				
+68			6.1				
167+00			7.0				Top Curb 7.19 12.5
+12			8.5				
OK BM			6.61	311.15 311.28 = 311.17			NAIL IN POLE
+50			9.5				
168+00			9.2		15.5 11.5	8.5 2	8.52 12.5
+50			8.9				
169+00			9.4				10.05 12.5
OK BM	0.53	307.32 307.45	10.97	306.79 306.92 = 306.81			NAIL IN POLE
+50			0.7				
170+00			2.0		7.1 14.	* 1.4 1	12.7 12.5
+50			2.1				
171+00			3.0		8.6 "	*	2.95 12.5
+50			3.7				
172+00			3.8			*	4.78 12.5
+50			5.5				
173+00			6.4			*	6.42 12.5

PROFILE  
BRINE LINE

2/13/51

34

CK BM	<del>307.45</del> 307.32	5.79	301.53 301.66 = 301.56	Nail in P.P.	
173+50		7.2			
174+00		7.8			Top Curb 7.73 12.50
+50		8.6			
175+00		9.4			9.30 12.50
+50		10.2			
176+00		10.9			11.01 12.50
CK BM	0.55 297.40 297.53	10.47	296.85 296.98 = 296.87	Nail in P.P.	
+50		2.0			
177+00		2.8			2.83 12.50
+50		4.3			
178+00		5.0			4.65 12.50
+50		5.6			
179+00		6.3			
CK BM		5.51	291.89 292.02 = 291.92	NAIL IN P.P.	6.25 12.50
+50		7.0			
180+00		8.0			7.50 12.50
+50		8.1			
181+00		8.3			8.22 12.50

2-13-51

35

♀  
PROFILE  
BRINE LINE

181+50	247.53 297.40	8.7	
182+00		9.5	
182+54 <sup>84</sup> (P.1)		10.1	
IP Top Hub	291.39 291.52	10.09	287.31 287.44
+75		4.9	
183+00		-4.3	
+12		-5.0	
+27		-13.0	
+31		-13.8	
+33		-13.8	
+34		-11.8	
+47		-5.9	
+50		-5.5	
+55		-3.8	
+65		-5.0	
184+00		-5.8	
+09		-7.3	
+25		-7.9	
+35		-7.8	

Top Curb

9.17  
12.509.53  
20.3

2-13-51

36

2  
PROFILE  
BRINE LINE

	291.52 291.39		
184+42		-9.7	
+50		-10.2	
+75		-11.4	
T.P. - Rock		-12.84	278.55 <del>278.68</del>
+1.09	279.58 279.41		
185+00		-5.4	
+50		7.1	
186+00		7.6	
+25		7.8	
186+58.15 BK 178+80.37 AH } EQVA		9.0	
179+00		9.4	
179+02.37 P.I.		9.0	
P Run M.H. 1/12	272.74 272.87	7.96	271.62 271.75
+16		3.5	
+26		4.8	
+50		4.9	
180+00		6.4	
+50		6.7	
+85 Edge Channel		7.8	

ORIG STA 174+62.00  
SEWER M.H. 440<sup>37</sup> EAST  
278.18 Rim  $\frac{1}{2}$  -10.85  
1.40 EL. 267.33

271.62 Rim  $\frac{1}{2}$  -10.70  
7.96 Elev. 260.92  
15.25

7.8 7.9 6.7  
18 channel 8 5

2-13-51

37

 E  
 PROFILE  
 BRINE LINE

181+00	E Channel	272.87 272.74	7.6
+32			7.2
+50			7.4
182+00			8.1
+50			8.6
+51			8.6
+52			10.3
182+82 <sup>74</sup>	(P.I.)		11.2
183+00			10.7
+50			11.5
+72			12.0
184+00			11.2
+50			11.3
+75			10.7
185+00			10.8
P TOP STAKE	1.84	264.32 264.45	10.26
+54			3.7
+86 <sup>5</sup>	Sew M.H. 15' RT		
186+00			3.5
+50			4.3

30' LT To edge of Channel

11.57  
15

Run M.H.

2.02  
15

Run M.H.



2-13-51

38

♀  
PROFILE  
BRINE LINE

187+00	<del>264.43</del> 264.32	4.3
+50		5.3
188+00		6.0
+50		7.0
188+90 <sup>17</sup> P.1		7.5
189+00		7.4
+50		7.4
+92		8.4
190+00		9.9
+50		11.8
+65		12.0
+72		10.8
191+00		11.5
+50		12.5
192+00		13.4
TP Top STAKE	1.80	253.52 253.65
		12.60
		251.72 251.85
+50		2.6
193+00		3.1
+10		3.4

7.42 Rim M.H.  
15.

2-13-51

39

2  
PROFILE  
BRINE LINE

		253.65 253.52		
193+25			5.7	
+50			6.6	
+52	(SEW M.H. 15' RT)			
194+00			8.0	
+50			8.8	
195+00			9.3	
+30			10.2	
+50			10.2	
+85			10.8	
196+00			10.2	
+50			10.9	
197+00			11.3	
+50			9.6	
+80			8.8	
198+00			7.8	
+50			7.4	
TBM Top FH.	1.13	252.00 252.13	2.65	250.87 251.00
ck BM.	4.06	252.03	4.06	247.94 248.07 = 247.97

1.86  
15.0

Rim MH

FH 70' RT 198+61

2-13-51

40

E  
 PROFILE  
 BRINE LINE

252.03

19	199+00		6.0	
	+15		5.7	
	199+24.8		5.07	on edge conc part
19	+44.98		4.97	Intersection with E 54 <sup>th</sup> St
	+64.54		5.13	on edge conc part
19	+77		5.7	
	200+00		7.3	
	+50		10.2	
	+70		9.9	
19	+89		10.3	
	201+00		11.9	
19	+25		14.8	
	11 (STAKE 201+00)	1.28	242.02	11.29 240.74
	+50		6.5	
19	+68		7.3	
	202+00		6.5	
T.B.	+33		6.0	
ck	+50		7.1	
	+79	15.5 RT SEN MH		
	203+00		8.9	

235.15  
 6.87: RISE  
 15.5 MH-

2-13-51

2 PROFILE  
BRINE LINE

41

242.02

14	203+50	10.0	
	204+00	10.0	
	+35	11.2	
14	+50	11.0	
	205+00	11.3	
14	↳ STEP STAKE	10.56	231.46

FEB. 20, 1951

BETTY, LEONARD, WELKER

+4.35 235.81

14	CREEK Rim N.H. 202+77	-0.67	235.14 = 235.15
	205+00	-6.3	
19	+70 EDGE CREEK	-7.7	
	+83 CENTER CREEK	-8.9	
	+93 EDGE CREEK	-8.4	
19	206+00	-6.4	
	+07	-4.6	
72	+15	-3.6	
CK	+17	-1.5	
	+27	-6.5	

+1.0  
13.0-1.8  
4.0-8.5  
3.5

BANK ON LEFT.

+4.0  
11.0  
3.5  
11.0-1.6  
6.0  
-4.5  
2.0-6.5  
5.0

7/20/51

42

2. PROFILE  
DRAIN LINE

206+50	235.81	-6.8	
+51		-7.7	
207+00		-8.5	
+07		-8.3	
+11		-7.2	
+50		-7.4	
208+00		-8.5	
+20		-8.3	
+50		-10.0	
209+00		-11.1	
+25		-10.5	
+50		-11.7	
+80		-13.2	
210+00		-12.5	
T.P.	2.15 225.96	-12.00	223.81
210+11		+0.8	
+26		0.6	
+30		2.8	
+50		3.4	

+2.8  
5      1.8  
3

2/20/51

43

♀ PROFILE  
BRINE LINE

225.96

210 + 75 4.8

211 + 00 5.3

+ 27 5.1

+ 34 6.2

+ 50 6.5

212 + 00 6.4

+ 00<sup>62</sup> P.1 6.4

+ 50 7.8

213 + 00 8.8

+ 10 9.0

+ 50 8.0

214 + 00 7.9

+ 20 8.1

+ 25 7.1

+ 45 8.1

$\frac{4.6}{3} = \frac{9.7}{3}$

HP 4.00 223.12 6.84 219.12

215 + 00 5.9

+ 50 5.3

215 + 40<sup>9</sup>

$\frac{3.09}{15}$  Rim. MH

$\frac{3.93}{15}$  Rim. M. H

2  
 PROFILE  
 BRINE LINE

2/20/51

44

	223.12	
215+65		4.4
+85 <sup>4</sup>		5.3
TOP 36" STEEL PIPE		8.50
216+00		7.1
+10		8.0
+50		8.7
+79		8.8
+89		8.1
+94		9.1
217+00		9.2
+50		10.2
+72		11.0
218+00		12.2
+50		12.6
+82		12.7
219+00		13.0
+08 <sup>39</sup> (P.L.)		13.3
P edge Rim. M.H.	1.48	214.64
	9.96	213.16

218+68<sup>3</sup> 10.42 - Rim. M.H.  
 8" SEW 15

9.96  
 15 Rim. M.H.

10.96 - Rim. M.H.  
 8" SEW 9.01  
 80. LEFT 218+62<sup>2</sup>

2/20/51

45

♀ PROFILE  
BRINE LINE

212.62

219+50	51
220+00	6.4
+50	6.9
+78	7.2
221+00	6.9
+50	7.5
+75	7.6
222+00	8.6
+15	9.3
+42	9.6
+54	9.2
223+00	10.4
+50	10.6
224+00	11.6
IP ROCK <sup>↑</sup> NEAR 6.89 209.98	11.55 203.09
+50	7.5
225+00	7.9
+50	8.6
+88	10.3

223+54

6.31  
15.

RIM MH



♀ PROFILE  
BRINE LINE

FEB. 21, 1951

BEATTY  
LEONARD  
WELKER

46

	209.98		
226+00		9.9	
+50		10.3	
+79		10.1	
+91		4.5	
+96		4.3	
227+00		4.3	
+08		6.4	
+18		10.9	
+22		11.5	
+50		11.9	
+75		12.2	
227+9548 (P.1)		12.2	
228+00		12.3	
+15		13.2	
TP (cont)	3.65	200.66	12.97 197.01
+50		3.8	
+82		3.7	
229+00		5.0	
+28		5.1	

	7.6		10.5	
	6	c	5	
	1.5		5.5	10.5
	5	c	1	5
0.0			5.3	10.5
7.5		c	3	6
	2.0		7.7	10.7
	5	c	3	6
	5.5	11.5	11.6	
	6	2	8	

8.57  
15.9 Rim M.H.

2/21/51

47.

♀ PROFILE  
BRINE LINE

200.66

229+50	6.0
230+00	6.1
+27	5.8
+50	6.3
+80	6.0
+87	6.6
231+00	6.3
+20	6.7
+35	6.3
+50	6.7
+75	6.8
232+00	7.7
+43	6.9
+50	7.6
+57 <sup>7A</sup> (P.L.)	7.7
+66	8.5
+85	8.6
233+00	7.6
+50	8.4

5.42  
15

RIM M.H.

2/21/51

48.

♀ PROFILE  
BRINE LINE

200.66

233 +70 9.5

+93 9.3

234 +00 9.7

+34 11.4

+50 10.6

+60 11.3

235 +00 11.6

+50 12.2

236 +00 12.4

H  $\nearrow$  Rock NEAR 3.99 192.19 12.46 188.20

+39 4.4

+44 2.7

+50 4.8

+54 5.9

+72 4.9

237 +00 5.3

+37 5.2

+50 5.7

237+17

2.99 R.M.M.H.  
15

2/21/51

49.

§ PROFILE  
BRINE LINE

192.19

237 +80	6.2
+82	8.0
238 +00	7.9
+40	9.0
+50	9.4
+70	8.5
239 +00	9.2
+19	8.3
+30	9.2
+40	8.7
+45	9.0
+50	8.9
+74	8.3
+81	4.0
+85	3.8
+90	1.0
+94	2.45
239 +99 <sup>56</sup> Edge Conc Part	2.33
+	2.49
+1948 " " "	2.85

on oil shldr

on conc part

" " "

" " "

2/21/51

50

♀ PROFILE  
BRINE LINE

192.19

240+23			3.21	
+25			3.1	
+26			2.4	
+28			2.4	
+30			3.9	
+50			5.3	
+65			7.2	
+74			11.5	
241+00			12.6	
SET TBM		1.83	190.36	
HP (recc)	2.78	182.37	12.60	179.59
+12			1.9	
+25			2.9	
+50			2.6	
+60			3.4	
+85			2.4	
242+00			2.8	
+50			4.9	

Edge oil stldr

on L&amp;T 15' RT 240+17'

241+70

1.34  
14.3

RUD M.H

2/21/51

51

♀ PROFILE  
BRINE LINE

192.57

243+00	-5.1
+50	-5.6
244+00	-6.0
+50	-6.3
+75	-6.2
245+00	-7.5
+25	-6.6
+50	-7.0
246+00	-7.4
+21.59 P.d.	-7.4
" Rim M.H.	-5.24
+40 42	-8.4
+50	-8.3
+68	-6.7
+75	-7.6
247+00	-8.2
+50 15	-8.4
+25	-9.4
+50	-9.5

2/21/51

52

E PROFILE  
BRINE LINE

247+75	192.57	-9.4
T.P.		-9.02 173.35
	+4.89 178.24	
248+00		-6.3
+27		-6.1
+30		-5.2
+40		-6.7
+50		-7.0
+70		-8.1
249+00		-8.0
+25		-7.9
+50		-8.9
+75		-9.8
250+00		-9.7
+38		-9.2
+46		-4.8
+50		-4.8
+65		-5.1
+70		-8.3

2/21/51

53

2 PROFILE  
BRINE LINE

179.24

250+80 8.8

+84 7.7

+88 10.33

+90 8.9

251+00 8.5

251+11.77 P.L. 8.4

+50 8.1

+56 7.8

+59 7.3

+75 8.1

252+00 7.8

+12 8.0

+32 9.8

+50 10.3

+80 10.1

+93 10.2

253+00 11.0

+40 11.0

+50 10.4

Top 4" V.C. Sewer

7.09 Riser M.H.  
15



2/21/51

54

♀ PROFILE  
BRINE LINE

178.24  
254+00 10.4

+50 12.0

+93 12.4

+94 13.1

255+00 13.2

PP Top Sec 4.31 170.00 12.55 165.69

+17 5.6

+19 4.2

+50 6.3

+70 6.7

+72 6.0

+86

255+86

2.96  
14.6

DIM M.H.

256+00 6.2

+50 5.2

257+00 4.8

+22 4.5

+50 5.4

258+00 6.1

+50 6.5

2/21/51.

55

♀ PROFILE  
BRINE LINE

170.00

258+80 6.4

259+00 6.9

+50 7.5

260+00 8.3

+20 8.1

+50 8.8

RP rim of M.H. 0.49 162.27 8.22 161.78

260 +85

8.22  
14.8

Rim M.H.

261+00 2.1

+50 3.2

262+00 3.8

+50 4.9

263+00 7.2

+50 8.6

+85 8.0

264+00 8.7

+50 10.4

+70 9.8

+78 9.9

+79 10.4

264 + 77 <sup>78</sup> 1 1/2" FEN

2/21/51

E PROFILE  
BRINE LINE

16227

265+00		9.8
+50		9.6
+87 <sup>32</sup>	(P.L.)	9.0
266+00		9.8
+50		11.7
267+00		12.7
+50		13.3
P rock	2.48 151.49	13.26 149.01
+78		2.6
268+00		3.4
+46		4.3
269+00		4.1
+14		4.3
+15		4.9
+22		4.9
+24		4.1
+50		4.4
270+00		4.3
+15		4.7
+50		2.0
+70		1.4

7.13 Rim MH  
15.3

1 1/2" FEN 268+979

♀ PROFILE  
BRINE LINE

151.49

271+00	2.7
+46	2.9
+63	5.8
+93	5.3
272+00	5.3
+08	5.2
+50	5.8
273+00	6.8
+35	9.7
+50	10.2
+71	10.9
274+00	7.9
+17	9.6
+50	10.0
+63	10.0
+83	11.3
275+00	11.4
+50	11.6

2/21/51

57

270+89

3.21  
15

Run N.H.

(272+07.92 1/2" Pipe Fen)

E. PROFILE  
BRINE LINE

2/26/51  
Beatty  
Leonard  
Walker

58

	151.49		
275 +66		10.0	
+93 <sup>15</sup>	(P.1)	10.1	
276 +00		10.9	
P rim M.H. 0.25	143.40	834	143.15
+08		3.8	
+50		4.5	
277 +00		4.5	
+50		5.2	
278 +00		5.1	
+35		5.0	
+60		6.4	
+87		4.6	
279 +00		4.9	
+22		4.8	
+50		5.5	
+83		7.1	
280 +00		6.4	
+13		5.5	
+50		6.1	

833  
15.2

Rim M.H.

2/26/51

59.

2 PROFILE  
BRINE LINE

	143.40	
281+00		5.3
+26		6.3
+50		6.0
282+00		6.3
+10		6.5
+16		6.1
+24 <sup>5</sup>		5.41
+31 <sup>22</sup>		5.27
+43 <sup>L</sup>		5.19
+55 <sup>9</sup>		5.34
+60 <sup>6</sup>		5.69
+64 <sup>7</sup>		7.40
+67 <sup>9</sup>		7.45
282+14		2.28
		10.28
		6.71
		14.61
SET TBM	0.49	142.91
282+67		6.0
+75		7.6
283+00		8.2

(280+95

422  
15

Rim M.H.

Edge oil Shldr

Conc pavt

E pavt

Conc pavt

Conc overflow Apron Shldr

" " " " Top/slope

" " " " End (8" Thick)

Rim of Sewer MH } 151<sup>E</sup> Southerly

Invert " " }

Rim of Sewer MH } 18<sup>E</sup> Norththerly

Invert " " }

Top F.H. 147' Southerly

2/26/51

60

♀ PROFILE  
BRINE LINE

	143.40		
2 283+50		8.6	
284+00		8.9	
+17		9.7	
2 +25		9.1	
+50		9.8	
+72		10.1	
285+00		11.2	
Rock	7.59 140.03	10.96	132.44
+25		8.5	
+50		8.0	
+68		8.0	
+91			
286+00		8.7	
+15		9.4	
+22		9.5	
+35		9.1	
+43		5.0	
+50		5.0	

285+95

7.31  
15

Rim MH

♀

Local Mound

5.0	8.6
8	6
7.6	5.0
6	2
	8.6
	5.

2/26/51

61

2 PROFILE  
BRINE LINE

140.03

286+55

8.3

+73

9.7

287+00

9.0

+50

11.0

+60

11.1

288+00

11.5

+25

12.5

+50

11.0

+87

11.3

289+00

11.7

+50

12.6

290+00

13.0

HP (rock)

103

127.87

13.19

126.84

+50

2.6

291

3.3

+50

3.9

292+00

5.0

+50

4.6

290+95

1.88  
15

Rev. M.H.



E PROFILE  
BRINE LINE

2/26/51

62

127.87

292 +55	5.5
+65	5.5
+69	5.0
293 +00	4.6
+50	5.0
+77	5.3
294 +00	7.8
+14	8.4
+15	9.1
+50	9.3
+62	8.6
+65	7.6
+87	9.0
295 +00	8.9
+50	8.5
+74	8.4
+78	6.1
+85	6.2
+87	7.3

5.9  
5

3.5  
2

3.7  
2

g. PROFILE  
BRINE LINE

2/26/51

69.

296+00	127.87	7.9
+08		8.4
+15		9.8
+50		10.3
+82		10.7
297+00		12.2
+08		11.3
+50		10.8
298+00		12.2
+50		13.3
TP (rock)	2.44 117.05	13.26 114.61
+66		2.6
299+00		4.0
+19		4.3
+50		3.4
300+00		4.1
+15		3.6
+50		4.3
+57		4.6

295+95

6.53 Rim N.H.  
15

E PROFILE  
BRINE LINE

2/26/51

64.

117.05

300+59	5.2
+63	5.1
+65	4.1
301+00	4.6
+25	5.1
+50	4.9
302+00 (rot.)	6.0
+50	7.5
+56	7.4
+70	8.4
+75	7.7
303+00	7.3
+50	8.4
+80	8.4
304+00	9.3
+08	8.9
+14	9.6
+14	10.7
+30	10.8

300+95

2.10  
15

RIM M.H.

♀ PROFILE  
BRINE LINE

2/26/51

65.

	11705		
304+31		9.6	
+50		9.4	
305+00		11.2	
+20		11.9	
+30		11.4	
+41		11.5	
+50		12.4	
+55		12.4	
PP (rock)	6.35 111.17	12.23	104.82
+62		7.7	
+72		7.4	
+82		6.3	
306+00		6.3	
+33		6.8	
+50		7.4	
+61		7.7	
+85		7.7	
307+00		7.3	

305+95

2.25 M.H. Rim  
.15.

♀ PROFILE  
BRINE LINE

2/26/5.

66.

307+27	111.17	7.6
+44		6.9
+50		7.3
+90		7.3
308+00		6.1
+40		3.7
+50		4.1
+58		4.3
+65		4.0
309+00		4.2
+31		5.2
+50		5.1
+80		5.3
310+00		5.9
+12		6.8
+29		6.9
+50		6.7
+65		7.7
+80		10.1

♀ PROFILE  
BRINE LINE

2/26/51  
2/28/51  
Bosty.  
LEONARD.  
WELKER.

111.17

311+00			10.7	
311+02 <sup>23</sup>	P.1			
+27			11.4	
+50			12.8	
P (Rem. 00.4)	114	105.26	7.05	104.17
+82			6.3	
312+00			6.2	
+30			6.0	
+36			5.7	
+50			5.9	
313+00			7.8	
+05			9.4	
+28			8.6	
+50			8.3	
+52			7.6	
+77			8.0	
314+00			8.9	
+15			9.0	
+22			9.6	

7.05 Rem NH  
13.7

Beginning of gravel pit. (Fentons)  
Ground very irregular & rough.

2/28/51

68.

2 PROFILE  
BRINE LINE

105.26

314+50		8.8		
+75		8.1		
+83		7.4		
315+00		10.6		
+23		11.6		
+25		12.4		
+50		12.9		
+77		12.6		
+80		11.5		
+92		9.6		
316+00		11.4		
+04		13.3		
+31		13.2		
+40		12.0		
+45		10.0		
+50		10.0		
+83		12.6		
TP (Rock)	1.18	94.51	11.93	93.33
+95		4.8		

Bottom of  
Channel → 14.0 12.9 \* 9.2 9.2  
10 2 4 10

316+35 7.54 Rim M.H.  
15.  
14.4 14.6 \* 10.0  
10 3 5

♀ PROFILE  
BRINE LINE

2/28/51

69

94.51

317+00	5.0	4.0	5.0	7.0	0.0
+50	6.6	10	6	11	14
318+00	5.4	3.4	5.4	2.4	+2.6
+23	5.8	10	6	5	8 9
+25	3.4				
+40	3.8				
+50	6.2	5.0	5.1	6.6	1.7 +1.8
+78	6.8	15	9	7	4 10
+80	5.5				
319+00	5.9	5.9	7.1	7.7	7.1 6.1 +0.6
+30	5.8	15	12	9	6 5 11
+41	5.4				
+50	5.5				
+75	4.9				
320+00	5.4	6.2	5.0	5.0	3.0
+06	5.3	10	1	6	10
+08	6.7				
+50	6.6	6.6	6.0	2.9	2.9
+77	6.1	10	6	8	12



2/28/51

70

♀ PROFILE  
BRINE LINE

94.51

320+81	5.4
+97	6.2
321+00	7.2
+20	7.7
+4.1	7.2
+50	6.4
+80	3.6
+87	3.1
+93	1.2
322+00	2.3
+04	3.7
+14	3.8
+20	1.5
+33	0.7
+42	4.8
+50	4.7
+86	5.2
323+00	6.8
+10	8.3

321+75

2.88  
15

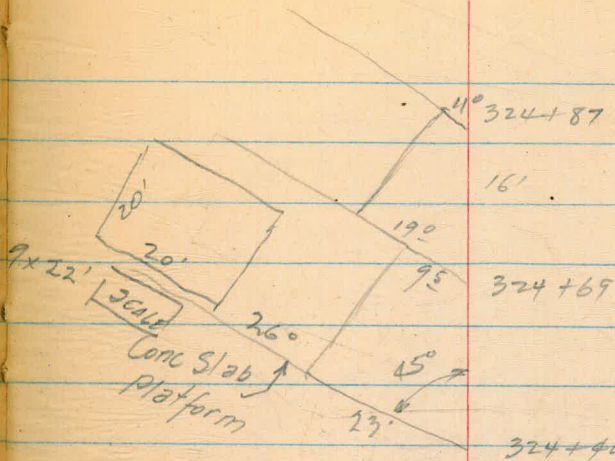
Rm M.H

2/28/51

71.

E PROFILE  
BRINE LINE

	94.51		
323+17		7.8	
+20		6.0	
+38		5.6	
+50		4.4	
+63		4.5	
+66		6.7	
+80		6.7	
324+00		4.8	
+13		4.4	
+50		4.8	
325+00		5.2	
+50		5.4	
326+00		5.1	
HP (eack)	290	92.05	5.36 89.15
+25		2.8	
+30		4.1	
+50		5.3	
+57		5.6	
+61		4.3	



323+94 Edge oil road

324+40 " " "

} very poor 1/2 thick  
covered with concrete  
dripping

2/28/51

72.

♀ PROFILE  
BRINE LINE

92.05

326 +64	5.2
+64	7.2
+74	7.5
+80	5.4
+90	7.7
327 +00	7.0
+05	8.0
+30	8.5
+42	9.2
+50	9.1
328 +00	10.0
+15	10.0
+50	10.4
+82	10.8
329 +00	10.3
+25	11.0
+27	12.8
+43	12.0
+43	10.5

327+08

6.29  
15.

Rim M.H

♀ PROFILE  
BRINE LINE

2/25/51 Cold!

73

92.05

329 +50	10.5		
+60	10.9		
+75	12.4		
330+00	12.1		
+39	12.0		
+50-	10.7		
331+00	11.5		
+17	11.7		
+38	12.6		
+50	12.7		
+84	12.4		
+91	13.7		
332+00	13.9		
+06	13.9		
+08	13.6		
1/2 RIM MH. 047	82.62	9.90	82.15
+20	4.8		
+40	3.6		
332+46 <sup>53</sup> (P.1)	3.8		

14.2	13.7	10.0	10.0
10	2	3	10
12.8	13.5	10.0	10.0
10	3	3	3
13.3	13.1	10.7	10.9
10	3	3	10
	13.5	10.7	
	4	10	

33" STEEL SIDE DRAIN # 54 4.4  
25' LONG 8.70 33.7  
9.90 RIM.MH  
15

♀ PROFILE  
BRINE LINE

2/28/51

74

	82.62	
332+77		4.1
+89		5.0
+96		5.2
333+00		4.4
+15		4.3
+42		4.5
+60		2.8
+83		3.8
+90		5.4
334+00		5.4
+15		5.5
+25		6.1
+37		6.3
+50		5.6
+75		5.9
+85		6.8
335+00		7.0
+16		7.6
+50		7.9

333+93 30" STEEL SIDE # 6.3 6.2  
15' Long. DRAIN 11. 27  
75° SKEN

6.4 7.6 7.6 4.1  
8 2 x 5 8  
channel

E PROFILE  
BRINE LINE

2/28/51

75

335+80	82.62	8.1
336+00		7.6
+22		7.5
+26		5.3
+31		6.1
+50		4.7
+80		4.8
337+00		4.4
+14		4.1
+22		5.3
+40		4.6
+46		6.1
+87		6.5
338+00		5.8
+05		5.2
+31		4.8
+40		3.5
+50		3.3
339+00		3.5

8.1  
10 \* 8.6 8.8 6.9  
2 5 10  
Channel

336+80

78.43  
4.19 Rim Mt.  
15  
67.38  
15.24 Invert  
15

Edge Entrance Road to Pelice Pistol  
" " " " " RANGE  
" " " " "

♀ PROFILE  
BRINE LINE

2/28/51

76

82.62

339+50 3.5

+86 3.4

340+00 3.9

+14 4.4

+22 8.1

+32 8.5

+38 4.8

+50 4.5

341+00 5.3

341+17<sup>90</sup> (P.I.) 5.3

339+97 2.5' RT GUY Anchor  
340+00 23' 0" LT P. # TEL POLE  
EJP 174316

8.20 #  
12

340+27 outlet of  
30" CMP

5.30  
Edge 22.80  
K. PAINT.

77.42  
5.20 Rim M.H.  
15.  
65.25  
11.37 Invert.  
15

CR B.M. 4.64 79.87 7.39 75.23

= 75.35  
= 81.54

CITY DATUM - Elev. }  
PAINTED on Bridge 1595 } P.P. on curb SW Cor Bridge

337+77<sup>62</sup> (P.I.) 3.6

MARCH 9, 1951

+90 3.6

338+00 3.0

+04 2.5

+29 2.2

+41 0.8

+50 0.7

} Entrance to Police Pistol Range

g PROFILE  
BRINE LINE

3/9/51

77

79.87

339+00	0.8
+50	0.6
+89	1.0
340+00	0.8
+14	1.6
+23	5.4
+33	6.3
+40	1.7
+70	2.5
341+00	2.6
+45	2.7
+50	3.1
+54	3.3
+85	9.6
342+00	10.5
+50	11.1
342+90	11.5
342+90 <sup>5</sup>	8.00
343+00	12.0
+41 <sup>52</sup>	8.05
+42	11.7
+53	12.96
+53	11.2
+55 (P.I.)	

Guy Anc 11° LT 339+96

End 30" CMP 27° LT 340+22

340+189

77.42	Rim M.H.	Invert	65.25
2.45			14.62
5.35	*		
3.0		3.1	9.3
10	*	3	13

38	4.1	6.8	10.1	10.3
18	11	6	5	10

Ng Edge Handrail of BRIDGE

E. FACE of CONC BEAM — Elev is Bottom of Beam

W. " " " " " " " " "

Ng Edge HANDRAIL of Bridge

Top 18" C.I. PIPE

11.0	12.0	15.0	15.0	12.6
12	*	8	11	14
				19





♀ PROFILE  
BRINE LINE

67.82

346+90	5.1
347+00	4.1
+25	3.7
+50	5.1
347+90	6.3
348+00 ♀ Crk)	7.5
+32	4.6
+50	5.1
+63	4.5
+77	4.7
349+00	6.4
+04	Edge Crk 7.7
+32	" " 8.1
+39	4.7
+41	4.7
+42	7.5
+50	7.0
+57	6.1

TD Reck

5.52 62.30

— CONTINUED TO BK 788 PAGE 29 —

3/12/51

79.

Edge creek

+23	0.2	0.5	5.3	5.9	3.1
10	7	5	2	8	12

0.0	5.5	5.5	6.0	5.0	5.0	1.0
14	8	5	2	3	4	9

20	30	54	8.1	5.9	4.1
30	22	18	12	10	10

00	40	6.0	7.4	7.9	4.4	+1.1
17	14	13	7	2	10	16

2.1	5.5	5.6	6.8	8.1	8.0	7.0	1.0
10	7	2	3	3	9	10	15

BP 1 1/2 LT & 47+11  
 EL. 65.41

Co. BM  
 320.73  
 6.25  
 326.98

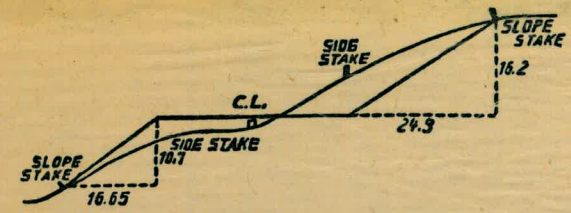
150+81 Sew Xing

24.6  
 19.48  
 44.08

44.3  
 Nap  
 Rim 4.90  
 Inv. 11.37  
 16.07

166'  
 50  
 Rim 5.25  
 Inv. 13.55  
 18.80

Please Return to  
 City of San Diego Water Dept.  
 Room 268 Civic Center  
 Telephone Main 5161



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.  
 SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.25	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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