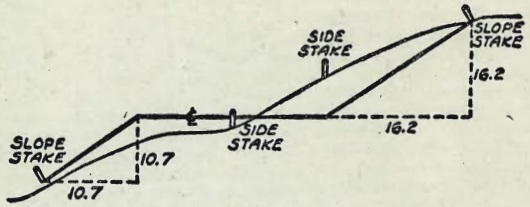
G-272



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.

INDEXED

MICROFILMED

APR 14 1965

IMPROVED TABLES

AND

INFORMATION

Table IX

MIDDLE ORDINATES OF RAILS

Length of Rail (feet)

C °	R Feet	30 Inch	28 Inch	26 Inch	24 Inch	22 Inch	20 Inch	C °	R Feet	30 Inch	28 Inch	26 Inch	24 Inch	22 Inch	20 Inch
0 -20	17189	.08	.07	.06	.05	.04	.03	8	716.8	1.88	1.64	1.42	1.20	1.01	.84
0 -40	8594	.16	.14	.12	.10	.08	.07	9	637.3	2.12	1.84	1.60	1.35	1.14	.94
1—0	5730	.24	.20	.18	.15	.13	.10	10	573.7	2.36	2.05	1.78	1.50	1.27	1.04
1—20	4297	.31	.27	.23	.20	.17	.13	11	521.7	2.59	2.26	1.95	1.65	1.39	1.15
1 - 40	3438	.39	.34	.29	.25	.21	.17	12	478.3	3.83	2.47	2.15	1.81	1.54	1.26
2 -0	2865	.47	.41	.35	.30	.25	.20	13	441.7	3.05	2.66	2.30	1.96	1.66	1.36
2—20	2456	.55	.48	.41	.35	.29	.23	14	410.3	3.30	2.87	2.48	2.10	1.78	1.46
2 - 40	2149	.63	.55	.47	.40	.33	.27	15	383.1	3.54	3.08	2.68	2.26	1.91	1.57
3 -0	1910	.71	.62	.53	.45	.38	.31	16	359.3	3.76	3.28	2.83	2.40	2.04	1.67
3 - 20	1719	.78	.68	.59	.50	.42	.35	17	338.3	4.00	3.48	3.02	2.57	2.16	1.78
3—40	1563	.86	.75	.65	.55	.46	.38	18	319.6	4.21	3.67	3.18	2.70	2.28	1.87
4—0	1433	.94	.82	.71	.60	.50	.42	19	302.9	4.45	3.89	3.36	2.86	2.41	1.98
4—20	1323	1.02	.89	.77	.65	.55	.45	20	287.9	4.70	4.09	3.55	3.00	2.54	2.09
4—40	1228	1.10	.96	.83	.70	.59	.48	22	262.0	5.16	4.44	3.84	3.30	2:80	2.29
5	1146	1.18	1.03	.89	75	.63	.52	24	240.5	5.64	4.92	4.20	3.59	3.04	2.50
6	955.3	1.41	1.23	1.06	.90	.76	.62	26	222.3	6.07	5.29	4.58	3.88	3.29	2.70
7	819.0	1.65	1.44	1.24	1.05	.89	.73								

Table X

SHORT RADIUS CURVES

Radius Feet	Chord Feet	Central Angle	Deflection Angle	Deflection for 1 Foot
35	10	16—26	8—13	49.3
45	10	12—46	6—23	38.3
50	15	17—16	8—38	34.5
60	15	14—22	7—11	28.8
75	15	11—30	5—45	23.0
100	20	11—30	5—45	17.3
120	20	9—34	4—47	14.3
150	20	7—39	3—49	11.5
190	25	7—32	3—46	9.15
200	25	7—10	3—35	8.6
225	25	6—25	3—12	7.7
240	25	5 58	2—59	7.2
250	25	5 44	2—52	6.9
275	25	5—12	2—36	6.2
288	50	9—58	4—59	6.0
300	50	9 -32	4—46	5.7
350	50	8—12	4—06	4.9
376	50	7—40	3—50	4.6
400	50	7—10	3—35	4.3
410	50	7—00	3—30	4.2

To find length of curve divide angle from P. C. to P. T. by central angle of chord, and multiply by length of chord.

2022

Table XI

INCLINED DISTANCE OF 100 FT. REDUCED TO HORIZONTAL.

Slope	Horizontal Distance	Correction	Rise	Slope	Horizontal Distance	Correction	Rise
0°00′	100.000	0.000	0.000	8°00′	99.027	0.973	0.139
15′	99.999	0.001	0.004	15′	98.965	1.035	0.143
30′	99.996	0.004	0.009	30′	98.902	1.098	0.148
45′	99.991	0.009	0.013	45′	98.836	1.164	0.152
1 00	99.985	0.015	0.017	9 00	98.769	1.231	0.156
15	99.976	0.024	0.022	15	98.700	1.300	0.161
30	99.966	0.034	0.026	30	98.629	1.371	0.165
45	99.953	0.047	0.031	45	98.556	1.444	0.169
2 00	99.939	0.061	0.035	10 00	98.481	1.519	0.174
15	99.923	0.077	0.039	15	98.404	1.596	0.178
30	99.905	0.095	0.044	30	98.325	1.675	0.182
45	99.885	0.115	0.048	45	98.245	1.755	0.187
3 00	99.863	0.137	0.052	11 00	98.163	1.837	0.191
15	99.839	0.161	0.057	15	98.079	1.921	0.195
30	99.813	0.187	0.061	30	97.992	2.008	0.199
45	99.786	0.214	0.065	45	97.905	2.095	0.204
4 00	99.756	0.244	0.070	12 00	97.815	2.185	0.208
15	99.725	0.275	0.074	15	97.723	2.277	0.212
30	99.692	0.308	0.078	30	97.630	2.370	0.216
45	99.657	0.343	0.083	45	97.534	2.466	0.221
5 00	99.619	0.381	0.087	13 00	97.437	2.563	0.225
15	99.580	0.420	0.092	15	97.338	2.662	0.229
30	99.540	0.460	0.096	30	97.237	2.763	0.233
45	99.497	0.503	0.100	45	97.134	2.866	0.238
6 00	99.452	0.548	0.105	14 00	97.030	2.970	0.242
15	99.406	0.594	0.109	15	96.923	3.077	0.246
30	99.357	0.643	0.113	30	96.815	3.185	0.250
45	99.307	0.693	0.118	45	96.705	3.295	0.255
7 00	99.255	0.745	0.122	15 00	96.593	3.407	0.259
15	99.200	0.800	0.126	15	96.479	3.521	0.263
30	99.144	0.856	0.131	30	96.363	3.637	0.267
45	99.087	0.913	0.135	45	96.246	3.754	0.271

For each foot take one one-hundredth of each reading.

Table XII

MINUTES IN DECIMALS OF A DEGREE.

0′30″	.00833	10′30″	.17500	20′30″	.34167	30′30″	.50833	40′30″	.67500	50′30″	.84167
1 00	.01667	11 00	.18333	21 00	.35000	31 00	.51667	41 00	.68333	51 00	.85000
30	.02500	30	.19167	30	.35833	30	.52500	30	.69167	30	.85833
2 00	.03333	12 00	.20000	22 00	.36667	32 00	.53333	42 00	.70000	52 00	.86667
30	.04167	30	.20833	30	.37500	30	.54167	30	.70833	30	.87500
3 00	.05000	13 00	.21667	23 00	.38333	33 00	.55000	43 00	.71667	53 00	.88333
30	.05833	30	.22500	30	.39167	30	.55833	30	.72500	30	.89167
4 00	.06667	14 00	.23333	24 00	.40000	34 00	.56667	44 00	.73333	54 00	.90000
30	.07500	30	.24167	30	.40833	30	.57500	30	.74167	30	.90833
5 00	.08333	15 00	.25000	25 00	.41667	35 00	.58333	45 00	.75000	55 00	.91667
30	.09167	30	.25833	30	.42500	30	.59167	30	.75833	30	.92500
6 00	.10000	16 00	.26667	26 00	.43333	36 00	.60000	46 00	.76667	56 00	.93333
30	.10833	30	.27500	30	.44167	30	.60833	30	.77500	30	.94167
7 00	.11667	17 00	.28333	27 00	.45000	37 00	.61667	47 00	.78333	57 00	.95000
30	.12500	30	.29167	30	.45833	30	.62500	30	.79167	30	.95833
8 00	.13333	18 00	.30000	28 00	.46667	38 00	.63333	48 00	.80000	58 00	.96667
30	.14167	30	.30833	30	.47500	30	.64167	30	.80833	30	.97500
9 00	.15000	19 00	.31667	29 00	.48333	39 00	.65000	49 00	.81667	59 00	.98333
30	.15833	30	.32500	30	.49167	30	.65833	30	.82500	30	.99167
10 00	.16667	20 00	.33333	30 00	.50000	40 00	.66667	50 00	.83333	60 00	1.00000

Table XIII—Corrections for Tangents and Externals

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

For Tangents Add

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

For Externals Add

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

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35 City Heights.

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Hancock.

x-28-50

Moore, Begg, Crawford — Sewer Const.

54th & Univ. Ave

W.O. 31536

INDEXED MR. MAY 18 1950

F.B. 2022 "P" LINES

2 — N.W. B.P. 54th & Univ. 310.02

				272.28
				16.39
				5.32
				C 11.07 ✓
+50				271.78
				16.89
				5.82
				C 11.07 ✓
1				271.28
				17.39
				6.25
				C 11.14 ✓
0+50				270.78
				17.89
				6.81
				C 11.08 ✓
0+00 Ex. M.H.?				270.28 = Stub El.
				18.39
				6.88
				C 11.51 ✓
BMBP	730	288.67	281.37	288.67 H.I.
Cub	F.B. 2022-7			

Via Univ. Ave

1+50

1+00

0+50

3+85.64 M.H. #1 = 0+00

+50

3

2+50

288.67

H.I.

297.34

Rod Missed

277.14
11.53
1.44
C 9.89

277.14
20.20
10.41
C 9.79 ✓

276.14
12.53
2.27
C 10.26 ✓

275.14
13.53
2.75
C 10.78 ✓

274.14
14.53
3.47
C 11.06 ✗

273.78
14.89
3.85
C 11.04 ✓

273.28
15.39
4.38
C 11.01 ✓

272.78
15.89
4.86
C 11.03 ✓

0+50

284.09
13.25
3.31
C 9.94 ✓

Stub to North ✓

2+23.07 M.H. #3 = 0+00

282.74
14.60
4.75
C 9.85 ✓

282.94
14.40
4.75
C 9.65 ✓

2

282.19
15.15
5.35
C 9.80 ✓

+50

280.99
16.35
6.70
C 9.65 ✓

1

279.79
17.55
6.71
~~C 10.84~~

279.79
17.55
8.05
C 9.50 ✓

0+50

278.59
18.75
9.28
C 9.47 ✓

278.59
18.78
8.06
~~C 10.69~~

1+62.80 M.H. #2 = 0+00

T.P. 9.95 297.34 1.28 287.39

288.67

277.39
19.95
~~1.28~~
~~C 10.67~~

277.39
19.95
10.30
C 9.65 ✓

297.34 H.1.

4+00

+50

3

+50

2

T.P. 8.26 305.23 0.37 296.97

H.I.

+50

1+00

297.34

H.I.

293.54
11.69
1.85
C 9.84 ✓

292.19
13.04
3.11
C 9.93 ✓

290.84
14.39
4.49
C 9.90 ✓

289.49
15.74
5.93
C 9.81 ✓

288.14
17.09
7.29
C 9.80 ✓

286.79
10.55
0.70
C 9.85 ✓

285.44
11.90
2.00
C 9.90 ✓

1+35.27	M.H. #6 = 0+00			306.83 14.64 .475 C 9.89 ✓	
1+00				304.85 16.62 .711 C 9.31 ✓	
0+50				302.05 19.42 10.32 C 9.10 ✓	5th & 50th
B.M. NW. BP. 5th & Univ.	11.45	321.47	310.02	321.47	
1+54.98	M.H. #5 = 0+00			299.25 13.45 3.58 C 9.87 ✓	299.49 13.21 3.58 C 9.63 ✓
1+53.98 = PLAN	℄ 5th & Univ Ave				
1+00				297.79 14.91 5.05 C 9.86 ✓	
0+50				296.44 16.26 6.49 C 9.77 ✓	5th & 50th
4+57.49	M.H. #4 = 0+00			295.09 17.61 7.82 C 9.79 ✓	295.22 17.48 7.82 C 9.66
T.P. 8.54	312.70	1.07	304.16		
	305.23				

		9.27	310.03	310.02 BM
467	319.30	1275	314.63	

1+10 = Plug End on Univ.

600	327.38	0.09	321.38

0+55

M.H. #6 = 0+00

321.47

312.99
1.39
3.49
C 10.90

327.38
309.91
1.56
1.16
C 10.40

321.47

Sewer Const.
on 5th
Sly to Rex St

0+00
2+43.35 M.H. #15 ℄ Rex St

2

+50

1

+50

0+00 = M.H. #5 El. stub
S. side M.H. #5

651 316.53
~~649~~ ~~316.51~~ 310.02

316.53

30460
1193
3.50
C 8.43 ✓

30369
12.84
4.76
C 8.08

302.64
13.89
6.26
C 7.63

301.59
14.94
7.50
C 7.44 ✓

300.54
15.99
8.40
C 7.59 ✓

299.49
see p5

Sewer
Via Rex

		1082	310.01	
TP	0 31	320.83	12.13	320.52
TP	0 41	332.65	12.98	332.24
1+60 = Plug end on Rex				
	8 00	345.22	0.66	337.22
1+20				
0+80				
	13.25	337.88	0.39	324.63
0+40				
	11.99	325.02		
T.P.		316.53	3.50	313.03
M.H. #15 = 0+00		89°55'30"	Rt.	

Tie out 6 & 14 in line of Rex
& 10 Along 5A to 5

345.22
335.00
10.22
2.72
C 7.50 ✓

337.88 H1
327.40
1.48
2.67
C 7.81 ✓

337.88 H
319.80
18.08
11.81
C 6.27 ✓

337.88

312.20
18.82
5.32
C 7.50 ✓

325.02

304.60

2+00				296.74 10.85 2.63 C 8.22 ✓
1+50				293.29 14.30 4.30 C 9.80
1+00	6.90			307.59 289.84 17.75 8.49 C 9.26
0+50	13.8			307.59 286.39 21.20 13.36 ✓ 7.84
M.H. #3 = 400				307.59 282.94 24.65 14.84 9.81
652	307.59	9.52	301.07	
0.57	310.59	310.02	BM 5A & University	

1 + 00

Westerly Branch

0 + 50

7.70

0 + 00 MH 7

Westerly Branch 79° 34' Left

MH MH

3 + 24 29 #7

3 + 00

2 + 50

11.72 319.01

307.59 030 307 29

319 01

313 20

.81

.76

C 5.05 ✓

309 35

9.66

5 71

C 3.95 ✓

305 50

319 01 HI brt forward

8 24

310.77 TP

1.266

323 43 New HI

see p 11

305.32

13 69

8 24

C 5.45 ✓

West Branch

305 50

13 51

8 24

C 5.27 ✓

303 64

15 37

9 28

6.09 ✓

300.19

18 82

11 72

7.10 ✓

1 + 50

313.27
10.16
3 42
C 6.74

1 + 00

310 62
12 81
7 07
C 5.74

0 + 50

323 43
307 97
15.46
9 94
C 5.52

MH 7
NE Branch 30° 21' R

H1 carried forward 323 43 305.32

1 + 50 ends at
existing Cesspool

9.39 329.64
319.01 0.76 318.25

329 64
317.05
10.59
1 65
C 8.94

1+25

360.97
0.43
360.54 TP
12 72
373.26 HI

1+05

349.62
0.32
349.30 TP
11 67
360.97

0+85

0+65

337.10
0.11
336.99 TP
12 63
349.62 HI

0+45

0+25

332.22 TP
4 98
337.10 HI

2+17.08 NH8 68° 08' 30" P

TP 28 5 332.22

17.29 335.07 0.65 322.78

2+00

323.43

373.26 HI
353.87
19.39
10 87
C 8.52

360.97 HI
348.62
12.35
4 21
C 8.14

349.62 HI
341.41
8.21
2.27
C 5.94

349.62 HI
333.79
15.83
11 39
C 4.44

337.10 TP
327.33
9.77
6 01
C 3.76

337.10
322.03
15.07
11 68
C 3.39

31683 31700
18.24 18.07
10 66 10 66
C 7.58 C 7.41

Nail on eve to left 17.5
at 0+45

323.43
315.92
7.51
6.65
C 6.86

1 + 00

0 + 50

2 19 meas

2 + 20

MHg

2 + 00

1 + 65

Break

1 + 45

Break

373 26

373 26
361 13
12 13
3 89
C 8 30

373 26 H1
360 33
12 93
4 35
C 8 58

373 26 H1
359 33
13 93
4 48
C 9 50

373 26
359 01
14 25
5 50
C 9 25

373 26 H1
358 45
14 81
6 44
C 8 37

373 26 H1
357 14
16 12
7 47
C 8 65

373 26
359 53
13 73
4 43
C 9 30

+ 50	1.6 %		365.48 13.67 6.01 C 7.66
3 + 21 92	MH 10 180 49 15 R.		364.68 14.47 7.53 C 7.24
3 + 00			364.33 14.82 7.54 C 7.28
2 + 50	1.6 %	373 26 H1 3 17 370.09 TP 9.06 379.15 H1	379.15 363.53 15.62 8.18 C 7.44
2 + 00			362.73 10.53 3.17 C 7.36
1 + 50			361.93 11.33 3.45 C 7.88

1+75 Plug	end of Easterly Branch to N from MH 3		379 15 438 374 77 ground	379 15 367.48 11.67 4 38 C 7.29
1+50	1.6%			367 08 12.07 4 27 C 7.80
1+00				379 15 HI 366 28 12 87 4 71 C 8.16

Westerly Branch to North.
from MH 4

Stakes 8' Right of ℄.

2+50			314.95 A 305.97 8.98 1.88 C 7.10
		N.W.B.P. Univ. + 54th 315.02	
2+00		M.H.#4 - P.5 I.E. 295.09 9.79 cut 304.88 EL. cross. 10.07 314.95 A	303.82 11.13 4.09 C-7.04
1+50			301.67 13.28 5.77 C-7.51
1+00			299.52 15.43 7.48 C-7.95
0+50	A 3.10		297.37 17.58 9.06 C 8.52
MH #4 = 0+00 on University			314.95 A 295.22 19.73 10.07 9.66

3 + 50		A - Brt. Fwd 314.95 1.88 313.07 11.01 324.08	329.97 A 321.83 ✓ 6.14 1.85 C 4.29
3 + 00		6.53 317.55 10.42 327.97 A 1.85 326.12 11.47 337.59 A	319.18 ✓ 8.79 2.97 C-5.82
1 + 50			316.53 ✓ 11.44 2.23 C 9.21
1 + 00	5.30		313.88 ✓ 14.09 6.92 C-7.17
0+50			327.97 A 311.23 ✓ 16.74 8.15 C-8.59
3 + 10 62	MH#11 R 15° 20' 35"		324.08 A 308.58 ✓ 15.50 6.53 C-8.97
3 + 00			324.08 A 308.12 ✓ 15.96 7.54 C-8.42

	∠R 5°05'			356.76 π 341.74 15.02 9.30 C- 5.72
3+00.36	MH 13		π	
1+50			337.59 π 1.96 335.63 PR 9.00 344.63 π	356.76 π 338.48 ✓ 18.28 10.53 C- 7.75
1+00	6.50 o/o		0.14 344.49 12.27 356.76 π	344.63 π 335.23 ✓ 9.40 3.13 C- 6.27
0+50				344.63 π 331.98 ✓ 12.65 6.24 C- 6.41
3+80.07	∠Lt 1° 48' 35" MH #12			337.59 π 328.72 ✓ 8.87 0.58 C- 8.29
3+50	5.30 o/o			327.13 ✓ 10.46 4.26 C 6.20
3+00				337.59 π 324.48 ✓ 13.11 9.04 C 4.07

Stobto E

2+57 M.H. #14 (46° - 2+)

356.76 π
0.74
356.02
12.68
368.70 π
0.13
368.57
12.35
380.92 π
0.00
380.52
12.69
393.21 π
1.30
391.91
12.11
404.02 π
2.36
401.66
11.46
413.12

2+36

2+15 Break

2+00

30

1+70

30

1+40 Break

1+00

0+50

140
72
21.5

380.92 π
1+70 365.11 ✓
15.81
7.90
C - 7.91

413.12 π
397.61 ✓
15.51
7.70
C - 7.81

404.02 π
386.60 ✓
17.42
10.23
C - 7.19

393.21 π
375.60 - 2+15 Brk. ✓
17.61
10.00
C 7.61

380.92 π
372.10 2+00 ✓
8.82
2.10
C 6.72

369.70 π 1+40
358.12 Brk. ✓
10.58
3.11
C - 7.47

368.70 π
353.44 ✓
15.26
7.67
C - 7.59

356.76 π
347.59 ✓
9.17
1.45
C 7.72

1 + 00 Plug end of line

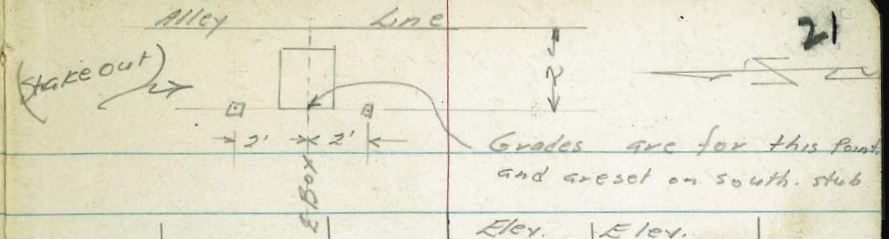
413.12
399.61 ✓
13.51
2.70
C-10.81

0 + 50

413.12
398.61 ✓
14.51
5.10
C-9.41

5-23-50
Hendricks
McCoy
Greer
Crawford
NO #31771

Stake Water Services
Alley Block 35 City Hts.
Dwg. 7782-L



Sta +	H.I.	- H.	Elev. Stake	Elev. Grade	Corr.	Sta	- H.	Elev. Stake	Elev. Grade	Corr.
5+78			366.38	365.98	CO 40	5+76		366.36	365.95	CO 41
5+25			365.82	365.37	CO 45	5+35		365.88	365.82	CO 33
5+22			365.60	365.33	CO 27	4+89		364.96	364.90	CO 06
4+10			364.56	363.82	CO 74	4+56		364.97	364.45	CO 52
3+60			363.57	363.15	CO 42	4+00		364.28	363.69	CO 59
3+11			363.08	362.49	CO 59	3+40		363.36	362.88	CO 48
2+69			362.80	361.95	CO 85	2+79		362.60	362.07	CO 53
1+99			361.56	361.23	CO 33	2+19		362.00	361.43	CO 57
1+50			361.10	360.74	CO 36	1+65		361.22	360.89	CO 33
1+03			360.80	360.27	CO 53	1+28		360.53	360.52	CO 01
0+29			359.44	359.28	CO 16	0+75		360.53	359.98	CO 55
						0+03		358.63	358.53	CO 10
BM (With Self-Reading Rod)				359.54		NWBP University & 36th. St.				

INDEXED
MR
JUL 10 1950

6-12-50
Hendricks
Johnson
Greer
Crawford
WO# 31771

Stake Alley Blk 35
(City Hts.)
for Paving
(Elev's. Taken with a self-Reading Rod.)

Sta.	Elev. Stake Pt	Elev. Grade	Cut or Fill	Offset	Elev. Stake Pt	Elev. Grade	Cut or Fill	Offset
3+71	363.67	363.36	CO 31	1'	363.90	363.36	CO 54	0.20'
3+44	363.41	363.00	CO 41	0.70	365.47	363.00	C 2.47	0.83'
3+17	367.34	362.63	C 4.71	0.50	362.89	362.63	CO 26	0.30
2+90	367.33	362.27	C 5 06	0.50	362.72	362.27	CO 45	0.30
2+70	362.75	362.02	CO 73	2'	362.45	362.02	CO 43	0.40
2+50	362.24	361.80	CO 44	2'	363.38	361.80	C 1 58	1'
2+16	361.65	361.46	CO 19	1'	361.85	361.46	CO 39	2'
1+82	361.31	361.12	CO 19	1'	361.13	361.12	CO 01	2'
1+48	361.00	360.78	CO 22	2'	361.13	360.78	CO 35	1'
1+14	360.99	360.44	CO 54	2'	361.36	360.44	CO 92	0.82'
0+80	360.51	360.10	CO 41	2'	360.70	360.10	CO 60	2'
0+60	360.17	359.86	CO 31	1'	360.67	359.85	CO 82	0.40
0+40	360.55	359.56	CO 99	0.14'	360.49	359.50	CO 99	0.14 inside
0+20	360.25	359.18	C 1 07	0.10'	360.65	359.05	C 1 60	0.13' "
0+00 N.L. Univ.	358.73 Ex.	358.72				358.49		
BM				359.54	NWBP 36th & University			

INDEXED
JUL 10 1950

Alley Block 35
City Hts. Cont'd.

Sta.	Elev. Stake Lt.	Elev. Grade	Cut or Fill	Offset	Elev Stake Rt	Elev. Grade	Cut or Fill	Offset
6+00 ±	368.83 30 Line Pole	365.95			365.64	365.76		
5+80	366.75	366.06	CO 0.69	2'	366.24	366.02	CO 0.22	2'
5+60	367.00	365.92	CI 0.80	0.34'	367.72	365.92	CI 1.80	Line
5+33	365.67	365.55	CO 0.12	2'	365.83	365.55	CO 0.28	1'
5+06	365.41	365.19	CO 0.22	2'	364.97	365.19	FO 0.22	2'
4+79	365.15	364.82	CO 0.33	2'	364.70	364.82	FO 0.12	1'
4+52	364.70	364.46	CO 0.24	2'	365.63	364.46	CI 1.17	0.36' inside
4+25	365.23	364.09	CI 1.14	0.89'	364.40	364.09	CO 0.31	2'
3+98	364.21	363.73	CO 0.48	1'	364.06	363.73	CO 0.33	2'

6-16-50
Hendricks
Johnson
Greer
Crawford

Stake Eastside Loring St.
Lamont to P.L

INDEXED
JUL 10 1950

				Cb. Grades	
4+50		6^{6}	233.8	227.25	$C10^{5}$
4+00		6^{0}	234^{4}	223.00	$C11^{4}$
3+50		8^{4}	232^{0}	222.75	$C9^{3}$
3+00		6.7	233^{7}	222.50	$C11^{3}$
2+80		5^{7}	234^{7}	222.40	$C12^{3}$
2+40		6^{0}	234^{4}	222.00	$C14^{4}$
2+00		9^{1}	231.3	220.50	$C10^{8}$
TP	11.29	240.41	0.93	229.12	
1+60		3.8	226.5	217.90	$C8^{6}$
1+20 TP		230^{05}	1.82	220.75	214.62	$C6^{1}$
0+80	3^{0}		7.1	215.5	212.10	$C3^{4}$
0+40			8.5	214.1	210.55	$C3.5$
0+00	S. Line Lamont		9^{3}	213.4	210.80	$C2^{6}$
BM	15.72	222.57			206.85	SE 7' ct 3' S of SL Loring St. on Lamont.

6-22-50 State Alley Blk 54
Hendricks Fairmount Add
Johnson
Crawford Dwg 7713-L
WO #31376

With self-Reading Rod

Sta.		Elev. State	Elev. Grade	Cut or fill	offset	Elev. State	Elev. Grade	Cut or fill	offset
4+15		353.18	352.54 ~~352.64~~	CO 64 ~~CO 54~~ ✓	0.80'	353.25	352.54 ~~352.64~~	CO 71 ~~CO 61~~ ✓	2'
3+84		353.50	352.37 ~~352.49~~	CI 13 ~~CI 01~~ ✓	0.08'	353.68	352.37 ~~352.49~~	CI 31 ~~CI 19~~ ✓	0.17'
TP 3+53		353.00 352.54	352.20 ~~352.34~~	CO 34 ~~CO 20~~	2'	353.55	352.20 ~~352.34~~	CI 35 ✓	0.21
3+22		352.73	352.03 ~~352.19~~	CO 70 ~~CO 54~~ ✓	2'	353.24	352.03 ~~352.19~~	CI 21 ✓	0.26
2+91		352.39	351.86 ~~352.04~~	CO 53 ~~CO 35~~ ✓	2'	352.92	351.86 ~~352.04~~	CI 06	2'
2+60		352.59	351.69 ~~351.89~~	CO 90 ~~CO 70~~ ✓	2'	353.23	351.69 ~~351.89~~	CI 54 ✓	0.11
2+40		351.99	351.66 ~~351.86~~	CO 33 ~~CO 13~~ ✓	1'	352.95	351.66 ~~351.86~~	CI 29 ✓	2'
2+20		353.20	351.73 ~~351.93~~	CI 47 ~~CI 27~~ ✓	0.07	352.41	351.73 ~~351.93~~	CO 68 ~~CO 48~~ ✓	2'
1+95		352.37	351.94 ~~352.09~~	CO 43 ~~CO 28~~ ✓	0.50'	352.67	351.94 ~~352.09~~	CO 73 ~~CO 58~~ ✓	1
1+70		352.60	352.15 ~~352.25~~	CO 45 ~~CO 35~~	2'	352.64	352.15 ~~352.25~~	CO 49 ~~CO 39~~ ✓	2'
1+45		352.55	352.36 ~~352.41~~	CO 19 ~~CO 14~~ ✓	2'	353.20	352.36 ~~352.41~~	CO -84 ~~CO 79~~ ✓	(0.58 in)
1+20		352.63	352.57	CO 06 ✓	2'	353.17	352.57	CO 60 ✓	(0.2 in)
1+00		352.83	352.73	CO 10 ✓	2	353.36	352.74	CO 62 ✓	0.21
0+80		353.05	352.87	CO 18 ✓	2'	353.55	353.03	CO 52 ✓	0.5
0+45		353.48	353.17	CO 31 ✓	0.50'	353.75	353.34	CO 41 ✓	2'
0+10		353.90	353.46	CO 44 ✓	0.60'	353.83	353.66	CO 17 ✓	1'
0+00	N. Line Poir	353.51	353.54	Ex Pav		353.74	353.78	Ex. Pav.	
BM				354.16	NWBP Orange & Highland				

INDEXED
W.K.
JUL 10 1950

Alley Block 54 Cont'd.

Sta.		Elev. Stake	Elev. Grade	Cut or fill	Offset	Elev. Stake	Elev. Grade	Cut or fill	Offset
5+77.28	S Line Orange	353.40	353.40	Grade		353.40	353.40	Grade	
5+70		353.59	353.38 ~~353.38~~	CO 21 ✓	2'	353.61	353.38	CO 23 ✓	2'
5+39		353.60	353.22 ~~353.24~~	CO 38 ✓ CO 36	2'	353.54	353.22 ~~353.24~~	CO 32 ✓ CO 30	2'
5+08		353.66	353.05 ~~353.09~~	CO 61 ✓ CO 57	0.30'	353.39	353.05 ~~353.09~~	CO 34 ✓ CO 30	2'
4+77		353.41	352.88 ~~352.94~~	CO 53 ✓ CO 47	1'	353.67	352.88 ~~352.94~~	CO 79 ✓ CO 73	2'
4+46		353.05	352.71 ~~352.79~~	CO 34 ✓ CO 26	1'	353.25	352.71 ~~352.79~~	CO 54 ✓ CO 46	2'

6-27-50
Hendricks
Johnson
Crawford
Bunch
W.O# 6206G

Stake 18" Conc. Drain
Block 6 Paradise Hills
Dwg. 3389.B

INDEXED
MK
JUL 10 1950

2+24.4 Ex Pipe		4.60	212.02	212.02	Ex. Pipe
2+00		3.08	213.54	210.53	C3 01
1+60.9 L. Lt.		5.66	210.96	208.23	C2 73
1+40		6.35	210.27	206.96	C3 31
1+05		7.58	209.04	204.84	C4 20
0+70		8.58	208.04	202.73	C5 31
0+35		11.46	205.16	200.61	C4 53
0+00		15.00	201.62	198.50	C3 12
CK 0+00		20.22	196.40	196.18	
BM	13.17	216.62		203.45	SW-BP Potomac & Rancho

9-19-50
Hendricks
Cota
Greer
Crawford
VVO#/31220

Stake. Cb. Rets
25th. & G Sts.
Owg. 7783-E

APR 10 1951

EC on G St.		3.63	171.55	171.40	$CO^{1.5}$
#1	HE	3.53	171.65	171.80	$FO^{1.5}$
BC on 25th		2.97	172.21	172.21	Ex Cb.
EC on G.		5.91	169.27	169.90	$FO^{6.3}$
#1	SE Ret.	5.64	169.54	170.00	$FO^{4.6}$
BC on 25th		5.26	169.92	169.92	Ex Cb.
BM. 300		175.18		172.18	

8-20-50 Stake Water Services
Hendricks Alley Block 99 City Hts.
Greer Dwg. 8029-L
Cota
WO# 31833

INDEXED
APR 10 1951

		Elev. (South Stake)	Elev. Grade			Elev. (South Stake)	Elev. Grade
(CKCb. 6+01.18	Lt. Sta 6+01.18 FB 1773 P.77)		335.91	335.92	Rt.		
5+56		335.91	335.50	CO 41			
5+43		335.77	335.37	CO 40	5+74	336.19	335.59	CO 60
4+98		335.31	334.92	CO 39	5+04	335.33	334.98	CO 35
4+29		334.35	334.23	CO 12	4+78	335.07	334.72	CO 35
3+98	T.P.	334.17	333.81	CO 36	4+36	334.66	334.30	CO 36
3+37		333.45	332.93	CO 52	4+22	334.42	334.16	CO 26
3+08.5		332.95	332.58	CO 37	3+50.5	333.77	333.18	CO 59
2+66.5		332.25	331.97	CO 28	3+06	332.82	332.57	CO 25
2+25		332.11	331.32	CO 79	2+49	332.31	331.79	CO 52
1+75		331.29	330.46	CO 83	1+59	330.60	330.30	CO 30
1+37		330.34	329.70	CO 64	1+22	330.05	329.58	CO 47
0+79		328.97	328.53	CO 44	0+75	328.99	328.56	CO 43
0+33		327.60	326.56	CO 104	0+50	328.36	327.67	CO 69
0+00 N. Line Myrtle							
	T.P.	325.96					
BM			326.11		HYDP. Myrtle & Van Dyke		

9-20-50 Stake Crows feet.
Hendricks west side Santa Barbara
Greer Pescadero to Bermuda (BM) (out) 200.83 SWBP Bermuda & Santa Barbara
Cota

EC		200.25	
#2		201.57	
#1		202.53 ✓	
2+94 BC Cb Ret.		203.33 ✓	
2+75		204.53 ✓	
2+50		206.10 ✓	
2+25		207.93 ✓	
	TP. 208.72		
2+00		209.76 ✓	
1+62 EC Alley Ret.		212.37 ✓	
BC Alley South		212.60 ✓	
PL Alley South		212.98 ✓	
PL Alley North		214.35 ✓	
EC Alley "		214.14 ✓	
1+38 BC Alley Ret.		214.21 ✓	
1+00		216.58 ✓	
	TP. 217.26		
0+66.67		218.83 ✓	
0+33		221.08 ✓	
0+00		223.33 ✓	
#1		223.35 ✓	
PL SWly side Santa Barbar.	(223.05) EX.	223.08	
BM		226.55	SE Top Hydt. Santa Barbara & Pescadero

INDEXED
APP 11

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9-21-50 Stake Crows feet.
Hendricks
Santa Barbara
Orchard to Pescadero

		Rt		Lt
		(226.51) 226.88	SE Tup Hydt. Santa Barbara & Pescadero	
P.L.	(224.30)	224.33 ✓		
#1		225.21 ✓		
2+98 BC Ret.		226.08 ✓		
2+65		228.40 ✓		
2+30		230.86 ✓		
	TP. 232.62			
1+95		233.33 ✓		
1+62 EC Alley Ret.		235.65 ✓		236.65 ✓
BC Alley Ret		235.94 ✓		236.89 ✓
P.L. Alley South		236.56 ✓		237.30 ✓
P.L. Alley North		237.60 ✓		238.62 ✓
EC Alley Ret.		237.38 ✓		238.36 ✓
1+38 BC Alley Ret.		237.50 ✓		238.45 ✓
1+05		240.26 ✓		241.02 ✓
			TP 242.04	
0+70		243.19 ✓		243.75 ✓
0+35		246.12 ✓		246.49 ✓
0+00 So. Line Orchard		249.05 ✓		249.23 ✓
#V		249.32 ✓		
P.L. Orchard		249.22 ✓		
BM.		250.08	SEBP Orchard & Santa Barbara	

9-21-50

Crows feet
Santa Barbara & Orchard
Between Del Mar & Venice

INDEXED
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0+78.34 Orchard	(247.77 Ex) 249.10		(P.L orchard)	250.85
0+50	250.60		#1	251.11
0+20	251.01		3+00 BC	251.26
EC - 0+10 Orchard	251.20		℄ 2+80	251.56
#2	251.32		subgrade ~~251.55~~ 251.98	251.94
#1	251.43		sub ~~251.89~~ 252.24	252.32
3+00 BC cb Ret Santa Barbara	251.63		~~252.41~~ 252.61	252.70
2+80	251.88		~~252.52~~ 252.52	253.08
2+55	252.13			253.36
2+30	252.38			253.45
2+05	252.63			253.70
1+80	252.81			253.95
1+62 EC Alley Ret	252.87			253.49
BC Alley Ret	253.03			253.34
PL Alley on south	253.00			
1+38 PL Alley on North	252.58			
EC Alley Rets	252.44			
1+38 BC Alley Ret				
BM	250.08		SKBP Orchard & Santa Barbara	

9-21-50
Hendricks
Cota
Greer
WO#31629

Stake Cbs westside
Santa Barbara
Del Monte to Santa Cruz
Orig 7666-L

INDEXED
APR 11 1951

0+86	244.30	244.19	CO 11
0+56	242.60	242.45	CO 15
0+28	240.86	240.83	CO 03
0+06 EC Cb Rd	239.52	239.56.	CO 00
0+00 So Line Del Monte		239.21	~~CO 01~~
#2	239.16	239.17	FO 01
#1	239.05	238.98	CO 07
BC		238.60	Ex Cb.
-20'		237.57	
(17)		237 NEX	NEBP Santa Barbara & Del Monte

9-22-50 State Cb Rets.
Hendricks Alleys Block 199 & 200
Cota Mission Beach
WO# 20640

RECEIVED
APR 10 1951

			Elev. Stakes	Elev Grade	
		Dwg. 79412			
Sewer MH	FL	7.54	-1.94		
	Rim.	Block 196 5.35	0.23		
	FL	7.46	-1.88		
Sewer MH	Rim	Block 199 5.58 5.43	0.15		
		Alley Block 200			
Grate for Type "D" Catch Basin			6.46	-0.88	Grade
BC 3' Radius on North			5.86	-0.28	$CO^{0\frac{4}{}}$
P.L on North			5.93	-0.35	$FO^{0\frac{4}{}}$
P.L on South			5.95	-0.37	$FO^{0\frac{9}{}}$
BC of 3' Radius on South			6.21	-0.63	$FO^{3\frac{4}{}}$
		Alley Block 199			
BC 3' Radius on North			5.23	0.35	$CO^{1\frac{0}{}}$
P.L on North			5.25	0.33	$FO^{0\frac{7}{}}$
BC 3' Radius on South			5.46	0.12	$FO^{1\frac{2}{}}$
P.L on South			5.30	0.28	$FO^{0\frac{4}{}}$
T.P	5.34	5.58	8.08	0.24	
BM	1.24	8.32		7.08	BP Sea Wall & San Jose Pl.

INDEXED
APR 11 1951

9-22-50
Hendricks
Cota
Greer

Crows feet
Santa Barbara
Bermuda to Pt. Loma Ave.
Dwg: 7669-L

BM		182.76	SVVBP Pt. Loma & Santa Barbara	
2+73.52		188.43 ✓		
2+61.13		188.33 ✓		187.33 ✓
2+43.62		188.83 ✓		188.01 ✓
2+13.61		190.45 ✓		189.56 ✓
1+83.65		192.08 ✓		191.09 ✓
1+53.70	EC Alley Rets	193.20 ✓		192.62
	BC Alley Rets	193.91 ✓	TP 94.4	192.82
	P.L. on South	194.30 ✓		193.20
	P.L. on North	195.16 ✓		194.13 ✓
	EC Alley Ret.	194.94 ✓		193.91 ✓
1+29.70	BC Alley Ret.	195.00 ✓		193.97 ✓
1+01.21		196.55 ✓		195.60 ✓
0+72.71		198.09 ✓		197.22 ✓
0+44.21		199.64 ✓		198.85 ✓
0+15.71	(Et 201.10)	201.18		200.47 ✓
0+06	BC Et.			200.75 ✓
#1			(4)	200.72 ✓
	EC P.L. Bermuda			200.28 Ex Pav.
BM				

9-24-50 Crows feet Venice
Hendricks Del Mar to Orchard
Johnson
Greer
Shepard

INDEXED
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	BC Alley	218.75	220.94
	P.L on South	219.10	220.75
	P.L on North	219.35	221.05
	EC Alley Rot	219.03	220.69
1+38	BC Alley Rot		220.65
1+12			221.12
0+88			221.62
0+50			222.12
0+28			222.62
0+00	So Line Del Mar		223.12
BM.		216.36	L&D Disc. N E Orchard & Venice

& Grades Orchard
Venice to Catalina

4+13.21	27			198.95		
3+86.30	27			199.42		
3+59.39	27			199.89		
3+32.48	27			200.36		
3+05.57	27			200.83		
2+72.57	33			201.93		
2+46.09	26.51			203.28		
T.P.	1.67	20.99	12.85	204.30		
2+19.58	26.51			204.63		
1+93.07				205.98		
1+66.56				207.33		
1+40.05				208.68		
1+13.54				210.03	5+53.84 BCR	196.36
0+87.03				211.78	5+20.92	196.96
0+60.52				212.73	4+88.01 33	197.57
0+34.01	26.51			214.08	4+55.10 33	198.18
0+20	14.01			214.80	4+40.10 Alley	198.48
0+00				215.79		
B.M.	0.79	217.15		216.36	L&D Disc. N E Cor. Venice & Orchard	

Stake & Grades
Del Monte
Santa Barbara to Guizot

BM		7.46	218.05 218.03	SW BP Guizot & Del Monte
6+60.10			217.79	
6+30.10			218.75	
6+00.10			218.82	
5+60			217.08	
5+30			217.95	
5+00			218.82	
~~4+90~~			—	
4+50			220.37	
4+40			220.73	
3+98			222.40	
3+56			224.07	
T.P.	0.10	225.51 12.40	225.41	
3+14			225.74	
2+72			227.41	
2+30			229.08	
1+88			230.75	
1+46			232.42	
1+04			234.09	
0+62			235.76	
0+20			237.43	
0+00			237.82	
BM	0.32	237.81	237.49	NE BP Santa Barbara & Del Monte

℄ Venice St.

Del Mar to Orchard. Dwg 7674

1+62	Ex Pav	219.26
1+40	— — —	218.99
1+10	— — —	218.67
0+80	— — —	218.36
0+50	— —	218.04
0+20	— —	217.73
0+00	So Line Orchard	217.45
3+00	No Line Orchard	217.28
2+80		217.64
2+72		~~217.79~~
2+44		218.31
2+16		218.83
1+88		219.35
1+62		219.83
1+38		220.21
1+12		220.65
0+84		221.13
0+56		221.61
0+28		222.09
0+00	So. Line Del Mar	222.57
BM		216.36

12 Disc Orchard & Venice N.E.

℄ Grades Santa Barbara
Orchard to Pescadero

	1+60 Ex Pav.		236.62 Ex Pav.	
	1+38 BC		238.37	
	1+05		241.04	
C	0+70		243.87	
C	0+35		246.70	
	0+20			
C	0+00 So. Line Orchard		249.54	
	BM 0.65	250.73	250.08	SEBP Orchard & Santa Barbara

Stake SE Cb Ret
Orchard & Santa Barbara

EC			249.95	Meet
#2 1/2	4.61	250.07	250.13	FO 0.6
#2	4.63	250.25	250.15	CO 1.0
#1	4.37	250.31	250.12	CO 1.9
BC on Orchard			250.01	Meet
BM. 4.60	254.68		250.08	SEBP Or

Stake & Santa Barbara

Pescadero to Ber Muda

				Finish Grade	Finish	Subgrade	Subgrade (Rerun)		
3+80	To Line		13.14	201.59	201.80	$FO^{2.1}$	$CO^{1.1}$	201.47	
3+66			12.75	201.98	202.30	$FO^{3.2}$	$CO^{0.1}$	201.97	
3+53			12.48	202.25	202.54	$FO^{2.9}$	$CO^{0.4}$	202.21	
3+40	L		12.25	202.48	202.80	$FO^{3.2}$	$CO^{0.1}$	202.47	
3+27			12.04	202.69	202.95	$FO^{2.6}$	$CO^{0.7}$	202.62	
3+14	No. Ch. Line Bermuda		$11^{8.8}$	202.85	203.18	$FO^{3.2}$	$CO^{0.0}$	202.85	202.83
3+00 2+94			11.07	203.66	203.97	$FO^{3.1}$	$CO^{0.0}$	203.64	203.63
2+75			10.04	204.69	205.11	$FO^{4.2}$	$FO^{0.9}$	204.78	204.64
2+50	B.L		8.23	206.50	206.59	$FO^{0.9}$	$CO^{2.4}$	206.26	206.47
2+25			6.50	208.23	208.32	$FO^{0.9}$	$CO^{2.4}$	207.99	208.21
2+00	B.L		4.80	209.93	210.04	$FO^{1.1}$ ~~$FO^{0.7}$~~	$CO^{2.2}$ ~~$CO^{2.4}$~~	209.71	209.91 $CO^{2.0}$
1+62			2.19	212.54	212.76	$FO^{2.2}$	$CO^{1.1}$	212.43	212.53
1+38	TP.059	214.73	13.13	214.14					
			13.11	214.16	214.62	$FO^{4.6}$	$FO^{1.3}$	214.29	214.16
1+00	B.L		10.49	216.78	216.90	$FO^{1.3}$	$CO^{2.1}$	216.57	216.78
0+66.67			8.15	219.12	219.20	$FO^{0.8}$	$CO^{2.5}$	218.87	219.12
0+33.33			5.77	221.50	221.51	$FO^{0.1}$	$CO^{3.2}$	221.18	221.51
0+00			3.69	223.58	223.82	$FO^{2.4}$	$CO^{0.9}$	(223.49)	223.61
BM	0.72	227.27			226.55				

9-29-50 Stake C65
Hendricks Saphire St.
Johnson
Shepard Bayard to Cass
Bunch Dwg. 7891-K
W O # 31623

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#2	11.57	112.89	113.10	F 0.21 ✓	10.29	114.17	114.02	CO 0.15 ✓
#1	11.21	113.25	113.40	F 0.15 ✓	10.18	114.31	113.92	CO 0.39 ✓
3+65	11.07	113.39	113.50	F 0.11 ✓	10.17	114.29	114.00	CO 0.29 ✓
3+34	10.48	113.98	114.00	F 0.02 ✓	9.78	114.68	114.50	CO 0.18 ✓
3+04	9.95	114.51	114.47	C 0.04 ✓	9.37	115.09	114.97	CO 0.12 ✓
2+74	9.68	114.78	114.95	F 0.17 ✓	8.89	115.57	115.45	CO 0.12 ✓
2+44	9.11	115.35	115.42	F 0.07 ✓	8.52	115.94	115.92	CO 0.02 ✓
2+20	8.74	115.72	115.64	CO 0.08 ✓	8.26	116.20	116.14	CO 0.06 ✓
2+10	8.35	116.11	116.00	CO 0.11 ✓	7.85	116.61	116.51	CO 0.10 ✓
1+90	7.84	116.62	116.46	CO 0.16 ✓	7.38	117.08	116.99	C 0.09 ✓
1+70	7.56	116.90	117.00	F 0.10 ✓	7.03	117.43	117.56	F 0.13 ✓
1+50	7.09	117.37	117.63	F 0.26 ✓	6.18	118.28	118.24	CO 0.04 ✓
1+33	6.52	117.94	118.21	F 0.27 ✓	5.58	118.88	118.85	CO 0.03 ✓
1+02	5.41	119.05	119.26	F 0.21 ✓	4.25	120.21	119.99	CO 0.22 ✓
0+71	3.92	120.54	120.31	CO 0.23 ✓	3.18	121.28	121.13	CO 0.15 ✓
0+40	2.91	121.55	121.36	CO 0.19 ✓	2.15	122.31	122.27	CO 0.04 ✓
0+26	2.61	121.85	121.83	CO 0.02 ✓	1.89	122.57	122.78	F 0.21 ✓
0+06	EC Ret 2.39	122.07	122.16	F 0.09	1.13	123.33	123.50	F 0.17
0+00	2.21	122.25	122.32	Ex Cb	0.72	123.74	123.70	Ex Cb
BM 0.30	124.46		124.16		NW 7'L&T Saphire & Cass			

℄ Santa Barbara
Del Mar to Orchard.

1+80		253.25	
1+62		253.28 ✓	
1+38		253.29 ✓	
1+20		252.98 ✓	
0+90		252.17 ✓	
0+60		251.37 ✓	
0+30		250.56	
0+00	So. Line Del Mar	249.76	
BM		250.36	SWBP Del Mar & Santa Barbar

R Santa Barbara

Coronado to Del Mar

3+00 N. Line Del Mar		247.50 E+Pav.
2+80		246.92
~~2+72~~		~~246.69~~
2+44		245.88
2+16		245.07
1+88		244.26
1+62		243.51
1+38		242.80
1+17		242.15
0+97		241.53
0+77		240.91
0+57		240.29
0+20		239.74
0+00 So. Line Coronado		239.30 E+Pav.
BM		240.10

INDEXED
APR 11 1951

10-6-50 Levels for Topograph.
Hendricks Wabaska Freeway
Bunch
Shepard

Transferred to FB 2085

BM.		1.18	33.65	33.68	B.P.W. Co. Castellar & Etiwanda
TP.	3.11	34.83	10.19	31.72	
TP.	0.30	41.91	9.62	41.61	(on Stub Fence Corner)
TP.	10.38	51.23	0.57	40.85	
TP.	12.37	41.42	0.26	29.05	
TP.	12.73	29.31	12.40	16.58	on Hub 34+29.22
TP.	1.35	28.98	12.58	27.63	
TP.	0.38	40.21	10.71	39.83	on Hub 30+99.29
TP.	2.17	50.54	13.16	48.37	
TP	0.78	61.53	5.20	60.75	on Hub 28+29.83
TP.	10.71	65.95	1.70	55.24	
TP.	12.78	56.94	0.81	44.16	
TP	12.74	44.97	7.06	32.23	on Hub 25+42.44
TP.	2.27	39.29	9.66	37.02	on Hub 23+85.19
TP.	0.15	46.68	12.97	46.53	
TP	0.43	59.50	12.57	59.07	on Stub 21+14.31
BM.	1.03	71.64		70.61	SW 7' L&T Wells & Voltaire

Stake ℄ Santa Barbara
Santa Cruz to Coronado

3+00	No. Line Coronado	239.70 ✓
2+80		240.64 ✓
2+72		~~240.96~~
2+44		242.10 —
2+16		243.24 ✓
1+88		244.38 ✓
1+62		245.44 ✓
1+38		246.82 ✓
1+12		248.26 ✓
0+84		249.80 ✓
0+56		~~251.35~~ ✓
0+28		~~252.90~~
0+20		253.32 ✓
0+00	So Line Santa Cruz	254.18
BM.		240.10 24 OP Coronado & Santa Barbara

℄ Santa Barbara
Del Monte to Santa Cruz

		237.49	NEBP Del Monte & Santa Barbara
3+00 Ho Line Santa Cruz		255.14	✓
2+80		254.24	✓
2+44		252.30	✓
2+16		250.80	✓
1+88		249.30	✓
1+62		247.91	✓
1+38		246.62	✓
1+12		245.22	✓
0+84		243.72	✓
0+56		242.22	✓
0+20		240.29	✓
0+00 50 Line Del Monte		239.00	✓
BM		254.12	SEBP Santa Cruz & Santa Barbara

State & Santa Barbara
Narragansett to Del Monte

BM			218.70	SW/BP Narragansett & Santa Barbara
3+00	No line Del Monte		237.09	
2+80			235.84	
2+44			233.71	
2+16			232.05	
1+88			230.39	
1+62			228.85	
1+38			227.43	
1+10			225.77	
0+80			223.99	
0+50			222.21	
0+20			220.43	
0+00	So Line Narragansett		219.16	
BM	3.96	241.45	237.49	NE BP Del Monte & Santa Barbara

℄ Santa Barbara

Cape May to Saratoga
Dwg 7663-L

B.M	0.20	176.46	176.26	NWBP Saratoga & Santa Barbara
3+00	No. Line Saratoga		175.93	
2+80			174.73	
2+40			172.26	
2+00			169.80	
1+60	alley		167.34	
1+40	alley		166.10	
1+00			163.63	
0+60			161.17	
0+20			158.71	
0+00	So Line Cape May		157.52	✓
B.M.			157.27	SEBP Cape May & Santa Barbara

℄ Santa Barbara

Saratoga to Santa Monica

Dwg. 7664-2

BM		194.21	N.W.BP Santa Monica & Santa Barbara
3+10	Ex Par.	194.70	
3+00	No Line Santa Monica	194.63	
2+80		194.22	
2+40		193.54	
2+00		192.86	
1+80		192.30	
1+60	Gully	191.42	
1+40		190.21	
1+20		188.94	
1+00		187.10	
0+60		183.26	
0+20		179.42	
0+00	So. Line Saratoga	177.23	
BM		176.26	N.W.BP Saratoga & Santa Barbara

℄ Santa Barbara
Santa Monica to Newport

Br7.	8.96	198.98	190.02	NWBP Newport & Santa Barbara
3+00	No. Line Newport		190.58	
2+80			190.99	
2+40			191.50	✓
2+00			192.00	
1+60 } alley			192.51 ✓	
1+40			192.76 ✓	
1+00			193.27	
0+60			193.77	✓
0+20			194.28	✓
0+00	So Line Santa Monica		194.44	✓
0-10	Ex pav.		194.55	✓
~~Br7.~~			~~194.21~~	NWBP Santa Monica

℄ Santa Barbara

Newport to Niagara

		198.54	(SWL&E Disc RE484(9))
3+00		196.75	
2+80		196.43	✓
2+40		195.51	✓
2+20		195.05	✓
1+90		194.36	✓
1+62		193.71	✓
1+38		193.22	✓
1+07.67		192.60	✓
0+77.33		191.98	✓
0+47		191.36	✓
0+20		190.81	✓
0+00		190.23	
		190.02	NYNBL Newport & Santa Barbara

℄ Santa Barbara
Niagara to Narragansett

		218.70	Sw BP Narragansett & Santa Barbara
3+00	N. Line Narragansett	217.15	
2+80		216.04	
2+44		213.71	✓
2+16		211.91	✓
1+88		210.11	✓
1+62		208.44	✓
1+38		206.83	✓
1+12		205.34	✓
0+84		203.73	✓
0+56		202.12	✓
0+28		200.51	
0+00	So. Line Niagara	198.90	
		198.54	Sw L & Disc K (+84)

℄ Niagara

Santa Barbara to Venice

6+00 ⊠ Line Venice	218.41	
5+70	219.00	✓
5+35	219.70	✓
5+00	220.40	✓
4+65	221.04	✓
4+50	220.96	✓
4+20	220.14	✓
4+00	218.94	✓
3+60	216.15	✓
3+20	213.35	✓
2+80	210.55	✓
2+40	207.75	✓
2+00	204.95	✓
1+75	203.49	✓
1+50	202.45	✓
1+25	201.61	✓
1+00	200.89	✓
0+75	200.25	✓
0+50	199.60	✓
0+25	198.75	✓
0+00 ℄ Line Santa Barbara	197.90	
BM	198.54	

10-18-50 Stake Cbs Hancock St
Hendricks Estudillo to Noell
Bunch
Shepard
WOH

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B.M.			10.36	3.32	3.36	NE Q in Cb Noell & Pacific Hwy.
T.P.	1.59	13.68	13.17	12.09		
T.P.	0.94	25.26	5.18	24.32		
3+00	N. Line	Noell	4.00	25.50	25.50	
2+70						
2+40						
2+10						
1+80						
1+50					Face	
1+21						
0+90						
0+60						
0+30						
0+00	So. Line				24.50	Ex Cb
B.M.	5.00	29.50			24.50	

10-18-50 State Cbs
Hendricks So side Estudillo
Johnson Wly from Hancock
Bunch
Shepard Ref: Dwg 6545-L
WO # 62001

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1+54.02	End Cb	11.13	15.50	16.06	FO 54
1+34.45		10.59	16.04	16.54	FO 53
1+14.87		10.14	16.49	17.01	FO 52
0+95.29		9.67	16.96	17.49	FO 53
0+75.52	End Ex. Cb	8.75	17.88	17.96	E.Cb
0+00	W Line Hancock				
BM. 2.13	26.63			2+50	E.C. Cb. Rel. Hancock & Estudillo on Hancock (South West)

10-24-50 Stake 12" v.c. Sewer
Hendricks
Begg
Crawford
Shepard
W.O.# 20697

Midway Dr.
West Pt. Loma Blvd. to Ollie St.
Dwg. 8261-L

(cuts)

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3+50	3.10	-6.46	9.56
3+25	3.31	-6.53	9.84
T.P.	(3.53)		
3+00	3.75	-6.61	10.36
2+75	4.16	-6.68	10.84
2+50	2.98	-6.76	9.74
2+25	1.11	-6.83	7.94
2+07.15 MH #1	1.80	-6.88	8.68
1+75	4.16	-6.98	11.14
1+50	4.61	-7.05	11.66
1+25	4.97	-7.13	12.10
1+00	5.34	-7.20	C12.54
0+75	5.88	-7.28	C13.16
0+50	6.42	-7.35	C13.77
0+25	6.78	-7.43	C14.21
0+00 Ex M.H. ℄ Midway Dr. & West Pt. Loma.	6.76	-7.50	C14.26
Brn		3.00	BP in N.W. cor. Pt. Loma Blvd & Midway Dr.

Cont'd. from p. 58

			Cuts
7+40.17	1.69	-5.28	c 6.97 ✓
	1.74	-4.85 to	Last 6.59 ✓
7+17.17 MH #4	1.74	-5.35	7.09 ✓
7+00	1.46	-5.40	6.86 ✓
6+69.09 Forward Line	2.23	-5.49	7.72
6+69.09 MH #3 Back T.P.	2.17	-5.49	7.66
6+50	1.96	-5.55	7.51
6+25	1.92	-5.63	7.55
6+00	2.24	-5.70	7.94
5+75	2.31	-5.78	8.09
5+50	2.65	-5.85	8.50
5+25	2.75	-5.93	8.68
5+00	2.83	-6.01	8.84
4+75	2.75	-6.08	8.83 ✓
4+50	2.54	-6.15	8.69 ✓
4+25	2.82	-6.23	9.05 ✓
4+00	2.91	-6.30	9.21 ✓
3+89.70 MH #2	2.94	-6.33	9.27 ✓
3+75	2.96	-6.38	9.34 ✓

Cont'd. from p. 59

				(Cuts)
0+58	Ollie St. Stub	1.05	-2.54	3.59 ✓
B.L) 0+40		1.42	-2.65	4.07 ✓
0+00		1.53	-4.00	5.53 ✓
0+56	Nashville St. Stub	0.88	-4.57	5.42
0+28		2.02	-4.71	6.73 ✓
0+00	Midway		-4.85	
C.L) 9+46.25	Meet Ex. Sewer	1.54	-4.66	6.20 (Check Main Rd C 6.21)
9+21.21	MH #5	1.53	-4.74	6.27 ✓
8+89		1.54	-4.84	6.38 ✓
8+64		1.60	-4.91	6.51 ✓
8+39		1.58	-4.99	6.56 ✓
8+14		1.53	-5.06	6.59 ✓
7+89		1.58	-5.14	6.72 ✓
7+64		1.63	-5.21	6.84 ✓

10-25-50
Hendricks
Begg
Shepard
Crawford
WO# 20657

Stake Concrete Ditch
Midway Drive
Dwg. 8214-L

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					Cuts
13+48.32		4.64	-0.95	-6.09	5.14
13+24.87		4.65	-0.96	-6.07	5.11
13+01.41		4.64	-0.95	-6.06	5.11
12+77.95		4.22	-0.53	-6.04	5.51
T.P.	4.18	3.69			
12+54.51 B.C.		8.77	-0.49	-6.03	5.54 ✓
12+25		8.35	-0.07	-6.01	5.94 ✓
12+00		8.77	-0.49	-6.00	5.51 ✓
11+75		8.59	-0.31	-5.98	5.67 ✓
11+50		8.82	-0.54	-5.97	5.43 ✓
11+25		9.13	-0.85	-5.95	5.10 ✓
11		8.22	0.06	-5.94	6.00 ✓
10+80.33 E.C.		7.22	1.06	-5.92	6.98 ✓
10+64.73		7.21	1.07	-5.91	6.98 ✓
10+49.12		7.10	1.18	-5.90	7.08 ✓
10+33.52		7.19	1.09	-5.89	6.98 ✓
10+17.91 P.O.C.	End of pipe	7.25	1.03	-5.88	6.91 ✓
T.P.	6.83	8.28		1.45	
Bm.				1.53	

(on Hol 6' Rt. Sta. 9+21.21 P.C. 60 this Bk)

Cont'd. from P. 61

CK Stub ofoo MH#1 Dwg 16100		6.70	(1.54)	-3.92 Elev. Fl.	Stake mkd. 5.46
T.P. 9.30	8.24	4.78	-1.06		
16+81.30 EC	End Ditch	4.47	-0.78	-6.30	5.52
16+56.86		5.01	-1.32	-6.28	4.96
16+32.43 BC		5.31	-1.62	-6.27	4.65
16+00		5.06	-1.37	-6.25	4.88
15+75		5.26	-1.57	-6.23	4.66
15+50		5.40	-1.71	-6.22	4.51
15+25		5.42	-1.73	-6.20	4.47
15+00		5.30	-1.61	-6.19	4.58
14+89.08 EC		4.82	-1.13	-6.18	5.05
14+65.62		4.86	-1.17	-6.16	4.99
14+42.16		4.82	-1.13	-6.15	5.02
14+18.70		5.24	-1.55	-6.13	4.58
13+95.24		4.34	-0.65	-6.12	5.47
13+71.78		4.23	-0.54	-6.10	5.56

3.69
11

10-26-50
Hendricks
Begg
Shepard
Crawford
W O # 20678

Stake Line to MH #1 (FB 2083 P.41)

Branch Rt of Dwg. 1600 D

2+50 O.E	5.85	0.97	-2.50	C3 47
2+25	6.11	0.71	-2.60	C3 31
2+00	5.79	1.03	-2.70	C3 73
1+75	5.68	1.14	-2.80	C3 94
1+50	5.76	1.06	-2.90	C3 96
1+25	5.76	1.06	-3.00	C4 06
1+00	5.52	1.30	-3.10	C4 40
0+75	5.11	1.71	-3.20	C4 91
0+50	3.57	3.25	-3.30	C6 55
0+25	5.38	1.44	-3.40	C4 84
0+00	5.29	1.53	-3.50	C5 03

B.M. 5.28 6.82 1.54 on stub 6' Rt MH #1 (P.62)

10-26-50 State Sewer North
Hendricks Approach Midway Dr.
Begg Bridge
Crawford Dwg. 1612-D
Shepard
WO # 20678

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10.78

33+95.41	6.67	4.11	0.99	3.12 ✓
33+75.41 BVC	5.92	4.86	1.56	3.30 ✓
33+67.25 P.R.C	-5.60	5.18	1.81	3.37 ✓
33+44.70	4.77	6.01	2.51	3.50 ✓
33+22.16	4.01	6.77	3.21	3.56 ✓
32+99.61	3.07	7.75	3.91	3.84 ✓
32+77.07 B.C	2.13	8.65	4.61	4.04 ✓
32+45 T.P. 10.24 19.97	1.05	9.73	5.60	4.13 ✓
32+10	8.86	11.11	6.68	4.43 ✓
31+75	7.50	12.47	7.77	4.70 ✓
31+40	6.45	13.52	8.85	4.67 ✓
31+05	5.36	14.61	9.94	4.67 ✓
30+70	4.40	15.57	11.02	4.55 ✓
30+35	3.73	16.24	12.11	4.13 ✓
30+00	2.98	16.99	13.19	3.80 ✓
29+82.41 ℄ Bearing No. End Bridge			13.74	
BM	8.09	11.88	20.95	(State Datum)

11.88
- 9.07

Cont'd. from P-64

B.M. 9.03	10.78			1.75	Nail in SW Cor. Valve Box 35' Rt. Sta. 36+64 (FB 2083 P-50)
					Cuts
36+45.41		10.32	0.46	-2.32	2.78
36+25.41		10.66	0.12	-2.17	2.29 ✓
36+05.41 BVC		9.57	1.21	-1.96	3.17 ✓
35+82.93 EC		11.25	-0.47	-1.68	2.15 ✓
35+70		10.95	-0.17	-1.52	1.69 ✓
35+35		9.03	1.75	-1.10	2.85 ✓
35+00		7.57	3.21	-0.68	3.89 ✓
34+75.41		6.92	3.86	-0.40	4.26 ✓
34+55.41 EVC		6.43	4.35	-0.16	4.51 ✓
34+35.41		7.53	3.25	0.13	3.12 ✓
34+15.41		7.42	3.36	0.51	2.85 ✓

10-27-50
Hendricks

Stake Alternate
Branch Line
(FB 2083 P-41)

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		Elev. Stubs	Elev. Grade	Cuts.
2+76.41 DE		0.96	-2.81	3.77
2+50		1.11	-2.92	4.03
2+25		1.02	-3.02	4.04
2+00		1.18	-3.12	4.30 ~~4.40~~
1+75		1.17	-3.22	4.39
1+50		1.18	-3.32	4.50
1+25		1.10	-3.42	4.52
1+00		1.13	-3.52	4.65
0+75		1.70	-3.62	5.32
0+50		1.81	-3.72	5.53
0+37	Front	1.71	-3.77	5.48
0+37	L. Lt. Back	1.97	-3.77	5.74
(0+27)			(-0.89)	(TOP Ex. 16" Water Main pipe)
0+00	(Ex MH #1 DWG 1610 D)		-3.92	
BM			1.54	on Stub (P-63)

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11-3-50 Stake Storm Drain
Hendricks
Sherman
Shepard
Crawford
W O # 20697

Midway Drive
Dwg. 8213 L-
New Location of Pipe
this Book P-

			Cuts	offset
3+50	3.91	- 5.41	9.32 ✓	8' Lt.
3+25	3.92	5.39	9.31 ✓	"
3+00	3.85	5.37	9.22 ✓	"
2+75	3.81	5.36	9.17 ✓	"
2+50	3.90	5.34	9.24 ✓	"
2+25	3.86	5.32	9.18 ✓	"
2+00	3.93	5.30	9.23 ✓	"
1+75	3.61	5.29	8.90 ✓	"
1+50	3.80	5.27	9.07 ✓	"
1+25	3.92	5.25	9.17 ✓ ~~9.17~~	"
0+92.74 EC	3.99	5.23	9.22 ✓	8' Lt.
0+86.62 EC Equa.	3.91	5.22	9.14 ✓	14 Rt.
0+69.96	4.15	- 5.22	9.37 ✓	"
0+43.31 P.R.C	4.07	- 5.20	9.27 ✓	"
0+21.65	4.55	- 5.19	9.74 ✓	"
0+00 Beg 60" Pipe	4.90	- 5.17	10.07	"
		3.00	Top Hwy Midway Dr. & W. Pt Loma Blvd.	

Storm Drain Cont'd

		Flow Line		
7+50	1.87	-5.69	7.56 ✓	8' Lt.
7+25	1.67	5.68	7.35 ✓	"
7+00	1.28	5.66	6.94 ✓	"
	1.44	-5.65	7.09 ✓	5' Rt.
6+89.22 ℄ Cleanout #2	1.17	-5.65	6.82 ✓	5' Lt.
6+75	0.80	5.64	6.44 ✓	8' Lt.
T.P. 6+50	2.85	5.62	8.47 ✓	"
6+25	2.79	5.60	8.39 ✓	"
6+00	2.73	5.58	8.31 ✓	"
5+75	3.03	5.57	8.60 ✓	"
5+50	3.64	5.55	9.19 ✓	"
5+25	3.55	5.53	9.08 ✓	"
5+00	3.36	5.51	8.87 ✓	"
4+75	3.63	5.50	9.13 ✓	"
T.P. 4+50	3.55	2.38 5.48	Chisel ⊠ in wh. ch. Midway & Nashville Produced 9.03 ✓	"
4+25	3.55	5.46	9.01 ✓	"
4+00	3.65	5.44	9.09 ✓	"
3+75	3.71	-5.43	9.14 ✓	8' Lt.

Storm Drain Cont'd

22' West	1.17			
6' West of West Line Midway	0.93			
Cb. Inlet Ollie & Midway				
CC Stub	1.03	(1.03)	(Stub 15' Rt 10+17.91 P-61)	
10+17.91 POC End Pipe	1.28	-5.88	7.16 ✓	10' Rt
10+04.07	-0.78	5.86	6.64 ✓	"
9+90.22	-0.06	-5.85	5.79 ✓	"
9+76.37	1.70	5.84	7.54 ✓	"
9+62.52 P.R.C.	1.28	5.83	7.11 ✓	"
9+46.55	1.08	5.82	6.90 ✓	"
9+30.56	1.20	5.81	7.01 ✓	"
9+14.50	1.25	5.80	7.05 ✓	"
8+98.50				
8+98.71 P.C. Equation	1.19	5.79	6.98 ✓	10' Rt
8+75	2.38	5.78	8.16 ✓	8' Lt
8+50	2.05	5.76	7.81 ✓	"
8+25	2.06	5.75	7.81 ✓	"
T.P.	(2.05)			
8+00	2.03	5.73	7.76 ✓	"
7+75	1.59	5.71	7.30 ✓	"

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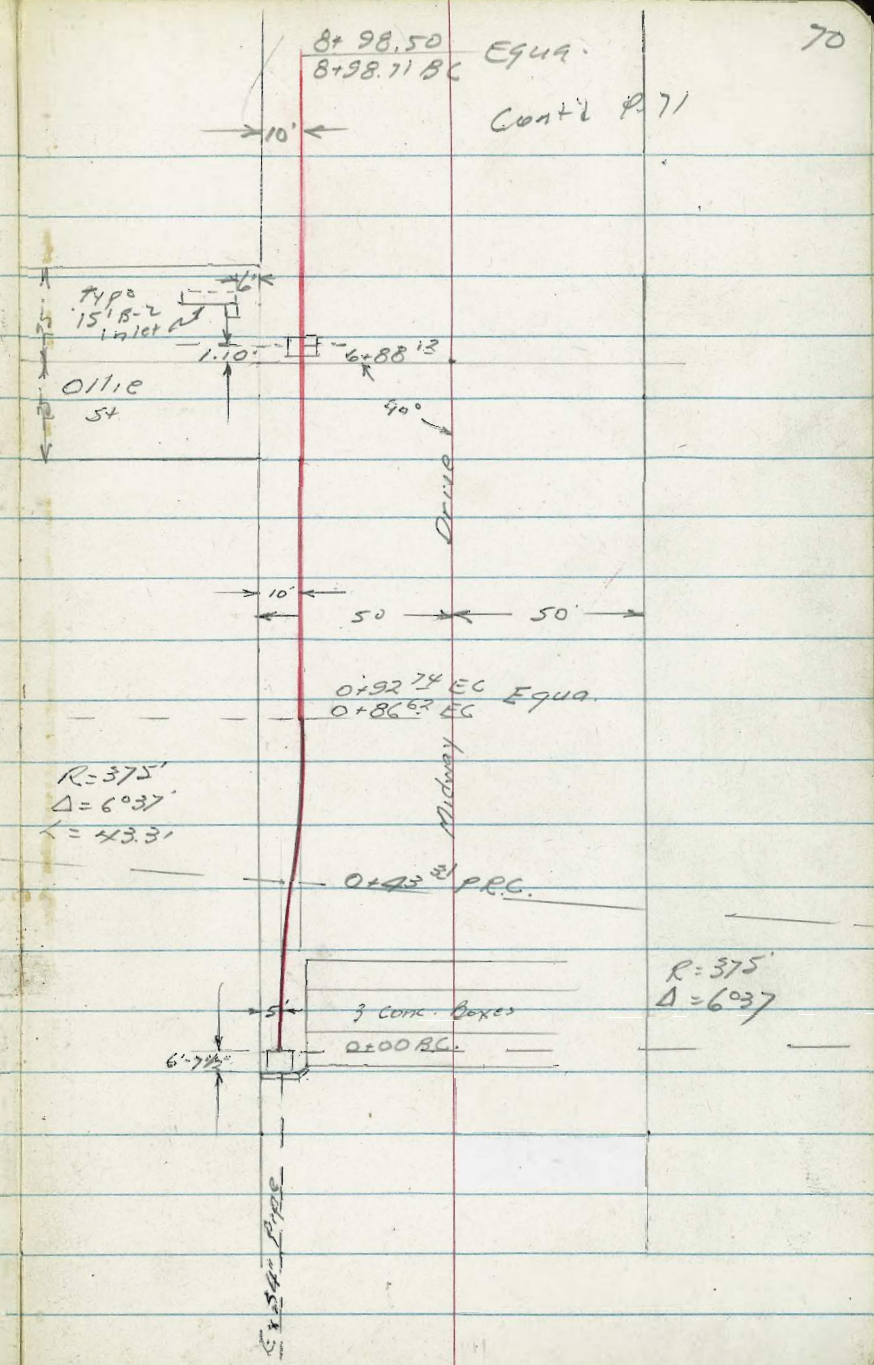
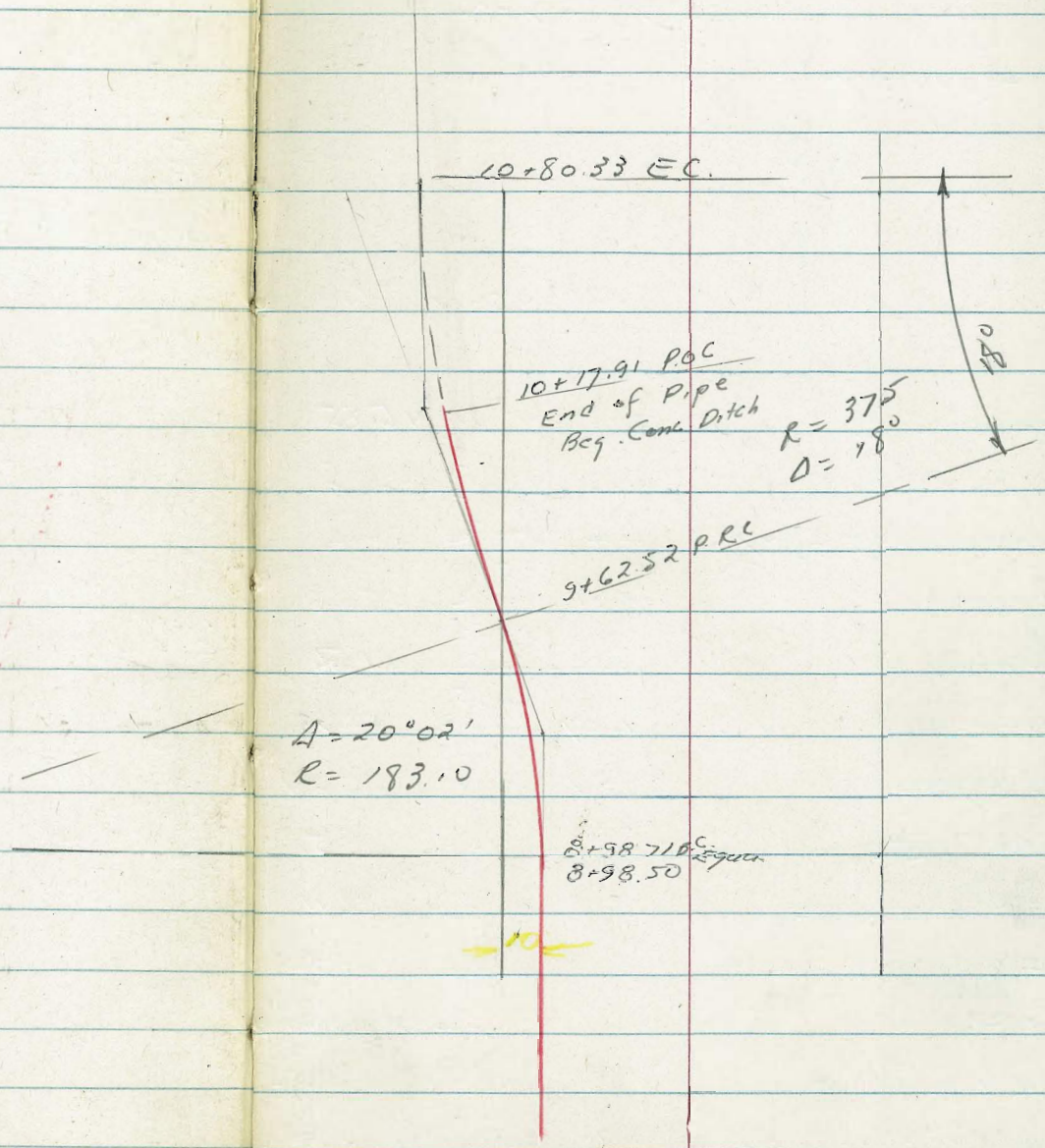
New Location Storm Drain
Midway Drive
W. Pt. Loma Blvd to West
See FB 2050 P-12
& Dwg 8213-L



Drain Cont'd from P-70



Cont'd from P-70

11-9-50 Stake Cbs Wly Side Dickens St.
Hendricks Evergreen to Wly.
Sherman Dwg. 7609-L
Shepard
Crawford
WO# 31437

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CL Ex Cb 3+00 on Rt			2.21	45.47	(45.50)		
3+00 End.			2.17	45.51	46.25	FO 74	(45.50)
1+90			4.13	43.55	43.85	FO 30	
1+70				39.65	39.43	CO 22 ✓	
~~1+65~~	TP 9.16	47.68	~~3.11~~	~~35.54~~	~~39.56~~	~~FI 04~~	
1+50				35.70	35.79	FO 09 ✓	
~~1+40~~			~~7.81~~	~~33.82~~	~~35.08~~	~~FI 27~~ ✓	
1+30				32.53	32.92	FO 37	
~~1+15~~			~~10.74~~	~~30.89~~	~~31.56~~	~~FO 67~~ ✓	
1+10 TP				30.35	30.81	FO 46	
0+90	13.10	41.63	1.07	28.53	~~28.98~~	FO 45 ✓	
0+57.50			3.49	26.11	26.24	FO 13 ✓	
0+25	EC. Nly Line Evergreen		6.14	23.46	23.50	FO 04 ✓	
#4			7.08	22.52	22.41	CO 11 ✓	
#3			8.00	21.60	21.36	CO 24 ✓	
#2			7.08	22.52	20.60	CI 92 ✓	
#1			8.78	20.82	20.50	CO 32 ✓	
BC on Evergreen			8.74	20.86	20.80	Meet.	
BM	11.10	29.60			18.50	SET Disc Emerson & Evergreen	

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Stake Cbs East side
Haines J
Garnet to Hornblend

		Elev. stake	Elev. Cb.	cuts		Cb. Elev.	Cuts	Off
2+59.42 So. line Garnet.		68.13	68.00	EX. CB.	67.77	67.71	Ex Cb	4'
2+39.42 Brk		67.75	67.65	C 0.10	67.30	67.33	FO^{03}	
2+29.30		67.37	67.45	F 0.08	66.95	67.13	FO^{18}	
1+99.10		66.70	66.89	F 0.19	66.54	66.55	FO^{01}	
1+68.90		66.55	66.33	C 0.22	65.83	65.96	FO^{13}	
1+38.71 BC Alley		65.77	65.77	GRADE	65.17	65.38	FO^{21}	
EC Alley		65.77	65.74	C 0.03	65.17	65.34	FO^{17}	
North PL Alley	2' West	66.92	65.90	C 1.02	66.03	65.48	CO^{55}	
South PL Alley		66.56	65.53	C 1.03	66.14	65.09	CO^{05}	
EC Alley		65.38	65.37	C 0.01	65.02	64.95	CO^{07}	
1+10.71 BC Alley		63.38	65.26	C 0.12	65.02	64.82	CO^{20}	
0+83.08		64.99	64.74	C 0.25	64.66	64.29	CO^{37}	
0+55.39		64.39	64.23	C 0.16	64.59	63.76	CO^{83}	
0+27.70		63.72	63.71	C 0.01	64.19	63.23	CO^{96}	
0+00 EC Hornblend			63.20		62.77	62.70	Ex Cb	
TBM.	2.82	62.91		On Hub				
		(Direct - Elev. Rod)		S.E. 30' Radius Hub		Haines & Hornblend		
Brn 5.57	65.73		60.16	E.L.&T.		Ingraham & Hornblend		

Stake Ch Haines St.

Hornblend to Grand

TBM		(56.77)		NW 30' Ch Radius Hub Hornblend & Grand	Elev. Stake	Elev. Ch.	Cuts
#3		54.48	54.85	FO^{37} ✓	53.40	54.03	FO^{63} ✓
#2		53.99	54.87	FO^{88} ✓	54.07	54.32	FO^{25} ✓
#1		54.11	54.98	FO^{87} ✓	55.12	54.64	CO^{48} ✓
2+49.18 BC		55.07	55.20	FO^{13} ✓	55.20	54.90	CO^{30} ✓
2+22.53		56.33	55.86	CO^{47} ✓	56.16	55.66	CO^{50} ✓
1+93.88		56.47	56.53	FO^{06} ✓	56.96	56.41	CO^{55} ✓
1+66.23		57.04	57.19	FO^{15} ✓	57.71	57.16	CO^{55} ✓
1+38.59 BC Alley		57.45	57.86	FO^{41} ✓	58.38	57.91	CO^{47} ✓
EC Alley		57.45	58.00	FO^{55} ✓	58.38	58.06	CO^{32} ✓
South PL Alley (wall)		60.08	58.16	$C1^{92}$	59.62	58.22	$C1^{40}$ ✓
North PL Alley		59.75	58.64	$C1^{11}$	60.64	58.76	$C1^{88}$ ✓
EC Alley Ret.		58.14	58.48	FO^{34}	58.75	58.60	CO^{15} ✓
1+10.59 BC Alley		58.14	58.84	FO^{41}	58.75	58.67	CO^{08} ✓
0+82.95		59.15	59.20	FO^{05}	59.68	59.42	CO^{26} ✓
0+55.30		60.07	59.87	CO^{20}	60.47	60.18	CO^{29} ✓
0+27.65		60.97	60.53	CO^{44}	61.07	60.94	CO^{13} ✓
0+00 EC Hornblend		61.17	61.20	Meet	61.72	61.70	Meet
T.B.M.		(62.91)		S.E. 30' Radius Hub Haines & Hornblend			

INDEXED
APR 11 1957

11-14-50 Stake Rough Grades
Hendricks Plum St
Sherman Fenelon to Garrison
Shepard
Crawford
WO # 31628

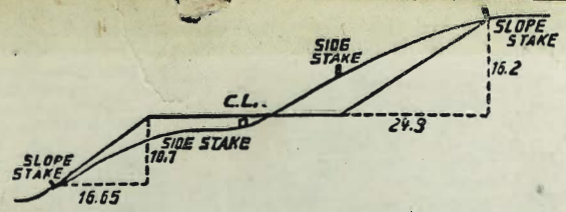
INDEXED
APR 11 1951

2+00 Sly Line Garrison	17.25	87.43	87.39	Ex Cb			86.59	
1+75 BC Cb Rets	6.4	98.3	88.70	C 9.6	6.0	98.7	88.20	C10.3 E5
1+50	4.7	100.00	90.82	C9.2	5.5	99.2	90.32	8.9 E5
1+25	3.1	101.6	92.95	C8.5	7.5	97.2	92.45	4.7 E5
1+05	2.0	102.7	94.50	C8.2	7.2	97.5	93.98	3.5 (2)
0+85	1.4	103.3	95.75	C7.5	7.2	97.5	95.17	2.3 (4)
0+65	0.0	104.7	96.70	C8.0	7.4	97.3	96.01	C1.3 = 2
0+45	0.9	103.8	97.35	C6.4	7.7	97.0	96.52	C0.8 B
0+25 EC Cbs Rets	1.1	103.4	97.85	C5.2	8.4	96.6	96.85	F0.3 E5
0+00 Nly Line fenelon			98.70	Ex	8.1	96.6	96.65	C0.0
BM. 1204	104.68		92.64	SEBP Fenelon & Plum				

New location, Storm drain 70
Midway Drive, W. Pt.
Loma Blvd. to West

Stake curbs Dickens, Evergreen 72
to N'lh

Stake rough grades Plum 75
St. - Fenelon to Garrison



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ TO 1. ROADWAY OF ANY WIDTH.

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

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