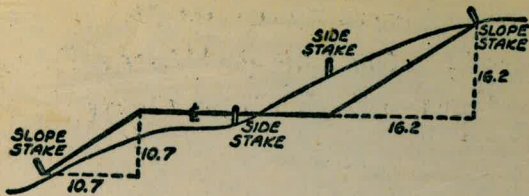


W

844

W. H. W. W.



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 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.

Please Return to  
City of San Diego Water Dept.  
Room 903 Civic Center

MICROFILMED

JAN 10 1965

$$\begin{array}{r}
 1.130 \\
 42.4 \\
 \hline
 4520 \\
 2260 \\
 4520 \\
 \hline
 A 7,9120 \\
 88.57 \\
 \hline
 32537 \\
 23955 \\
 39328 \\
 \hline
 43,532887
 \end{array}$$

82  
 3+40.4  
 42.4

TABLE No. XIV

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IMPROVED TABLES  
 AND  
 INFORMATION

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Distance of slope stake from side or shoulder  
 stake for any width roadway, slope 18 to 1.  
 If ground is level level the cut or fill.

TABLE No. XIII

To find Tangent and External for curve of  
 any other degree divide by degree of curve and  
 add this result to column of tangents.  
 Degree of curve with a given L may be found  
 by dividing tangent (or external) by degree L by  
 given tangent (or external).

The distance from a point on the tangent to  
 the curve is very nearly the square of the tangent  
 length divided by twice the radius.

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	.029	.032	.035	.039	.043	.047	.051	.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	.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

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 alic ✓

San Jacinto CHURCHWARD  
TO IMPERIAL 6" A.C. MAIN

WEST  
WILLIAMS  
VARONFAKIS X  
KELLHOFER †

9/16/54  
WARM

1

STA	+ HI	- EL
B.M.	2.15 191.60	189.45
0+04		1.8 189.8 185.1
+25		1.9 189.7 185.1
+50		2.2 189.4 184.6
+75		3.3 188.3 183.3
E.C.		
+93.62		4.5 187.1 182.3
1+00		5.0 186.6 182.0
+50		7.8 183.8 178.8
+75		10.7 180.9 181.3
1+95		
+95		
2+00		11.3 180.3 175.7 174.5
T.B.M.	1.41 182.72	10.29 181.31
2+50		5.3 177.4 172.5 170.8
+64		6.3 176.4 171.7 169.6
3+00		8.7 174.0 169.5 167.1
+25		10.6 172.1 167.8 165.2
3+36.99 = E.C.		11.7 171.0 166.9 164.3
3+34.82 T.P.		12.94 169.78 165.8 163.4
+50	0.34 170.12	1.6 168.5 169.3
+53		

B.M. AT 2 of CHURCHWARD + San Jacinto  
C4 <sup>7</sup>  
BEGIN WORK  
C4 <sup>6</sup>  
C4 <sup>8</sup>  
C5 <sup>0</sup>  
C4 <sup>8</sup>  
C4 <sup>4</sup>  
C5 <sup>6</sup> C5 <sup>0</sup>  
F.O. 4 W.M.W.  
F.H. TEE  
(5) & F.H.  
C5 <sup>8</sup> C4 <sup>6</sup>  
RH NAIL PP# 573693  
C6 <sup>6</sup> C4 <sup>9</sup>  
C6 <sup>8</sup> C4 <sup>7</sup> 6x6 CROSS  
C6 <sup>9</sup> C4 <sup>5</sup>  
C6 <sup>9</sup> C4 <sup>3</sup>  
C6 <sup>7</sup> C4 <sup>1</sup>  
C6 <sup>4</sup> C4 <sup>0</sup>  
F.O. <sup>8</sup> W.M.W.

SAN JACINTO CONT.

STA	+ HI	- FL				
	170.12					
3+56		0.6	169.5	170.3	F0 <sup>8</sup>	W.M.F. C5
4+00	)	3.6	166.5	162.5 160.7	C5 <sup>8</sup> C4 <sup>0</sup>	5.2 1.9
4+00		4.9	165.2	166.2	F1 <sup>0</sup>	W.M.W. 169.3
+24		5.2	164.9	165.8	F0 <sup>9</sup>	1.3
+29		6.2	163.9	163.8	C0 <sup>1</sup>	W.M.F. 168.0 6.2
+50		7.0	163.1	158.3 159.2	C4 <sup>9</sup> C3 <sup>2</sup>	W.M.W. 5.8
5+00		9.8	160.3	155.7	C4 <sup>6</sup>	163.1
T.P.						
+50	3.11	161.08	12.15	157.97	153.2	C4 <sup>8</sup>
6+00		4.7	156.4	151.2	C5 <sup>2</sup>	
+48		5.7	155.4	151.3	C4 <sup>1</sup>	
CHECK						END WORK
B.M		5.82	155.26	155.18		C.T. & SAN JACINTO & IMPERIAL
	1.27	182.58		181.31	TBM	SEE PAGE 1
2+30 FH TCG		3.9	178.7	173.8	C4 <sup>9</sup>	
(5) FH		3.4	179.2	178.8	C0 <sup>4</sup>	
3+70 WMW			168.0	167.7	C0 <sup>3</sup>	27' south alley
4+26 WMW			163.9	164.1	F0 <sup>2</sup>	
70						
56						
37						
83						

Santa Margarita  
53rd to Churchward

387	185.15	181.31	
1+40		10.0	175.2 168.4
+75		6.3	178.9 172.7
+87 N			
+84 WM N		6.1	179.1 176.8
+84 S			
+87 A++S		4.6	180.6 179.3
2+00		4.4	180.8 174.0
+25		4.1	181.1 175.3
+50		3.4	181.8 175.6
+25		3.1	182.1 176.0
3+00		3.4	181.8 175.6
+25		4.0	181.2 175.2
+43.77		5.0	180.2 173.3
60.57	222	5.7	179.5 172.6
A+00		7.8	177.4 172.0
+50		9.9	175.3 170.6
5+00		11.0	174.2 170.0
+01 <sup>12</sup> B0		11.0	174.2 170.0
363	177.92	1136	173.79
+45 WM N		4.9	172.5 173.3
+50		3.7	173.7 169.4

West  
Williams +  
Varonakis +  
Keller 9/20/54

HOT

3

TBM Nail in Primer Pole	
C6 $\frac{8}{8}$	Begin work
C6 $\frac{2}{8}$	738
C2 $\frac{2}{3}$ $\frac{3}{4}$ W	290
C1 $\frac{3}{3}$ $\frac{4}{3}$	138
C6 $\frac{8}{8}$	152
C5 $\frac{8}{2}$	
C6 $\frac{2}{1}$	
C6 $\frac{2}{0}$	
C6 $\frac{9}{9}$	
C6 $\frac{9}{4}$	
C5 $\frac{7}{2}$	
C4 $\frac{7}{2}$	
C4 $\frac{2}{2}$	
C4 $\frac{2}{2}$	
FO $\frac{8}{3}$	
C4 $\frac{3}{3}$	



## SANTA MARGARITA CONT.

4.

177.42

6+00 4.4 173.0 168.8

C4 <sup>2.</sup>

+50 5.2 172.2 166.9

C5 <sup>3</sup>

+56 WMN 6.2 171.2 172.0

F0 <sup>8</sup>7+02 <sup>12</sup> FC 6.4 171.0 165.0C6 <sup>0</sup>

+17 WMN 7.7 169.7 171.3

F1 <sup>6</sup>

+25 6.7 170.7 165.0

C5 <sup>7</sup>

+50 6.3 171.1 166.1

C5 <sup>0</sup>

+75 WMN 6.4 171.0 173.3

F2 <sup>3</sup>

+75 5.1 172.3 168.0

C4 <sup>3</sup>

8+00 3.2 174.2 169.9

C4 <sup>3</sup>

+25 1.1 176.3 172.0

C4 <sup>3</sup>

9.24 185.44 122 176.20

8+50 6.1 179.3 174.2

C5 <sup>L</sup>

End of work

6.57 191.98 003 185.41

2.54 189.44 =

189.45 @ L+T San Jacinto + Churchway

Franklin Ave  
49<sup>th</sup> to 48<sup>th</sup>  
Stks for 6" AC

West  
Williams  
Varonakis  
Kellhofer

9/22/54

5

BM SWBP 47<sup>th</sup> + Oceanview

1.12	117.61	116.49	
12.20	120.78	9.03	108.58
11.83	132.15	0.46	120.32
12.88	144.91	0.12	132.03
5.74	150.09	0.56	144.35
0+20		3.9	146.2 142.2
+50		4.3	145.8 142.1
1+00		4.4	145.7 142.0
+50		4.6	145.5 141.8
+58 WMS		4.2	145.9 145.3
2+00		5.0	145.1 141.6
+50		5.3	144.8 141.4
+70 WMS		5.3	144.8 144.7
3+00		5.6	144.5 141.2
+50		5.7	144.4 141.0
+73 Tee		5.7	144.4 140.8
4+00		5.7	144.4 140.5
+50		6.1	144.0 140.1
5+00		6.7	143.4 139.8
+50	0.79	143.49	7.39/42.70 138.4

Turn on 4+00

Begin Work

C 4<sup>2</sup>

C 3<sup>1</sup>

C 3<sup>1</sup>

C 3<sup>1</sup>

C 3<sup>1</sup>

C 0<sup>6</sup>

C 3<sup>5</sup>

C 3<sup>4</sup>

C 0<sup>1</sup>

C 3<sup>3</sup>

C 3<sup>4</sup>

C 3<sup>6</sup>

C 3<sup>6</sup>

C 3<sup>9</sup>

C 3<sup>9</sup>

C 3<sup>6</sup>

C 4<sup>3</sup>

143.49

6+00

2.0 141.5 136.2 C5 <sup>3</sup>

+50

4.5 139.0 133.9 C5 <sup>1</sup>

5+91 WMS

+0.3 143.8 140.5 C3 <sup>3</sup>

6+95

8.1 135.4 132.0 C3 <sup>4</sup>

0.12 131.27 12.34 131.15

1.07 119.24 13.10 118.17

9.45 118.01 10.68 108.56

1.56 116.45 = 116.49

6

Q Grade same as (5)

Sycamore Mangold  
to 39<sup>th</sup>  
stks for 6" AC

West  
Williams  
Varonfakis  
Kellhofer

7

	1.06	246.22	245.16		Top east run sewer M119 Mangold	
0+20			1.2 245.0	240.0	C 5 <sup>0</sup>	1.2
+50			3.1 243.1	239.6	C 3 <sup>5</sup>	2.8
1+00			2.2 244.0	238.8	C 5 <sup>3</sup>	3.6
+50			3.9 242.3	238.0	C 4 <sup>3</sup>	4.3
+75			4.2 242.0	237.6	C 4 <sup>4</sup>	4.6
2+00			4.6 241.6	237.5	C 4 <sup>4</sup>	4.9
+50			4.6 241.6	237.2	C 4 <sup>4</sup>	4.9
2+34 WMN			2.9 243.3	242.3	C 1 <sup>0</sup>	
+90 WMS			4.5 241.7	241.1	C 0 <sup>6</sup>	
+90 WMN			3.2 243.0	242.0	C 1 <sup>0</sup>	
3+00			4.7 241.5	236.9	C 4 <sup>6</sup>	
+30			1.2 241.5	240.8	001 STN	4.7
+50			4.6 241.6	236.6	C 5 <sup>0</sup>	
+77			4.7 241.5	241.3		5.0
+51 WMN			1.2 242.0	241.5	C 0 <sup>5</sup> 003	
+77 WMS			4.7 241.5	240.5	C 1 <sup>0</sup>	
4+00			5.9 240.3	236.4	C 3 <sup>9</sup>	5.8
+50			5.0 241.2	237.8	C 3 <sup>4</sup>	4.7
+69 WMS			4.6 241.6	242.0	F 0 <sup>1</sup>	
+85 WMS			3.5 242.7	242.8	F 0 <sup>1</sup>	
5+00			2.7 243.5	239.2	C 4 <sup>3</sup>	2.6

246.22

5+41

+0.2 246.4 239.5

C 6 9

+0.4

end of work

37+14 <sup>704 07</sup> 39<sup>th</sup> 41

+0.9 247.1

0 7 4

2471

70

1.04 245.18 =

245.16

2400

Pepper St  
Tulip to 39th St

West  
Williams  
Varonakis  
Kellhofer

59  
13

9

T.B.M.	5.39	263.20	257.81
0+00		2.5	260.72 255.2
+25		3.4	259.82 254.8
+52 EC		4.3	258.92 254.3
1+00		5.1	258.12 253.6
+50		5.7	257.52 252.8
+78 WM N		6.4	256.82 256.0
+85 WM S		6.3	256.92 256.2
2+00		7.0	256.22 252.1
+51		9.9	253.32 253.2
+30 WM N		7.3	255.92 255.5
+54 <sup>20</sup> BC	<sup>3.5</sup> 51 99	7.8	255.42 251.3
+59 WM S		6.5	256.72 255.1
3+00		7.2	256.02 250.8
<sup>50</sup> +34 WM N		8.7	255.02 254.4
+50	<sup>66</sup> 31 87	6.6	256.62 250.3
+81 WM S		7.1	256.12 253.8
+85 WM N		7.6	255.62 253.8
+90 <sup>23</sup> EC	<sup>1.37</sup> 256.93	7.64	255.56 249.9
4+00		1.8	255.12 249.7
+37 WM S		2.6	254.32 253.2

TBM Nail in P pole 15' L 1.50

See 58732

Page 68

C5 <sup>5</sup> begin work

C5 <sup>0</sup>

C4 <sup>6</sup>

C4 <sup>5</sup>

C4 <sup>7</sup>

C0 <sup>8</sup>

C0 <sup>7</sup>

C4 <sup>1</sup>

C0 <sup>4</sup> F12

C4 <sup>1</sup>

C1 <sup>6</sup>

C5 <sup>2</sup>

C0 <sup>6</sup>

C6 <sup>3</sup>

C2 <sup>3</sup>

C1 <sup>8</sup>

C5 <sup>6</sup>

C5 <sup>4</sup>

C1 <sup>1</sup>

C4  
71  
5.5

PEPPER ST. CONT.

256.93

4+39 WMN 3.0 253.9 253.2

C0 <sup>1</sup>

+41 FH TPO 3.3 253.6 249.3

C4 <sup>3</sup>

⑤ FH 2.6 254.3 253.0

C1 <sup>3</sup>

+50 3.7 253.2 249.2

C4 <sup>0</sup>

+76 WMN 4.7 252.2 250.7

F0 <sup>5</sup>

4 + 57.4 4.1 252.8 253.1

← F0 <sup>3</sup> F0 <sup>3</sup>

+82 WMN 4.4 252.5 252.8

METER CHANGED BY REQUEST

5+00 5.3 251.6 247.4

C4 <sup>2</sup>

+38 WMN 7.8 249.1 252.1

F3 <sup>0</sup>

+50 6.4 250.5 246.8

C3 <sup>1</sup>

+76 7.0 249.9 246.6

C3 <sup>3</sup>

End of work

5.29 261.25 0.97 255.96

4.09 257.16 = 257.21 Nail in Power Pole 12<sup>5</sup>LT 3458

39TH ST. PL AT PEPPER

T.B.M. 0.89 258.10 257.21

NAIL P.P. 12.5 LT 3458

11.61 246.49

TOP G.V. 39<sup>th</sup> ST PL of pepper

12.88 245.22

TOP CON. GATE BLOCK

CHECK

T.B.M. 0.89 257.21 = 257.21

Sand Rock Grade  
 Location of "Y" on Transit Connection

2+12<sup>2</sup> Transit Line 26.6' East to 2" G.V.

Elevations

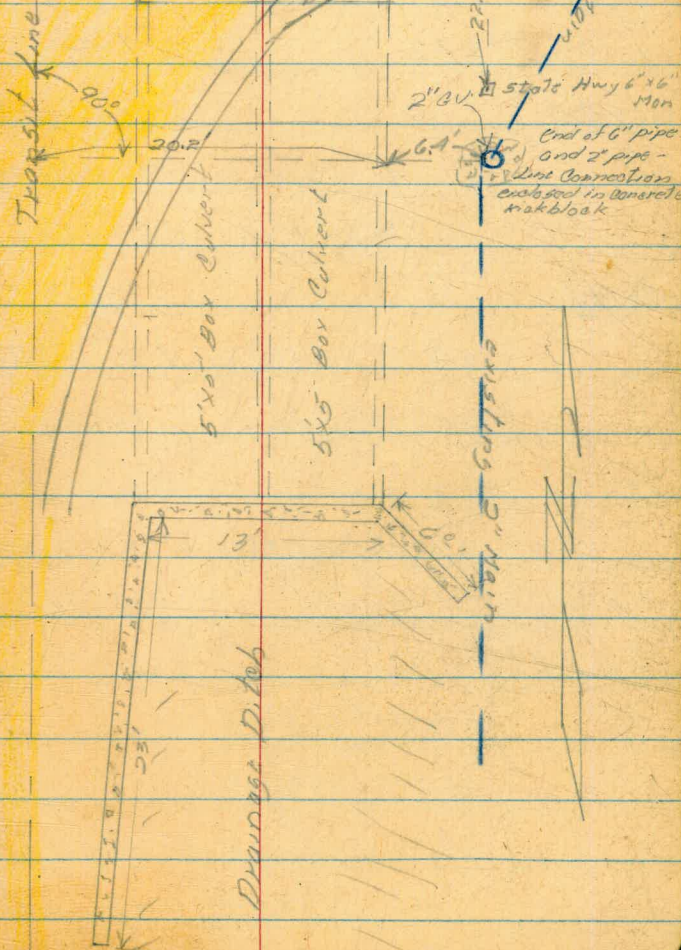
4.88	61.72	56.89	BM Top Sand Hill
		10.69	51.03 Top sand knob
		10.69	51.03 Top 2" G.V.
		6.29	55.43 Ground
		7.88	53.84 Top east side on Top Box Culvert
		6.14	55.58 Ground
4.88		56.89	

West  
 Williams  
 Varonakis  
 Kellhofer

9/27/54

Sand Rock Grade

Transit Line



Roofing Nail  
 Sight on Raised  
 Counter as land  
 2nd Reflector

Roofing Nail  
 Access  
 AC  
 Roofing Nail  
 10.00  
 10.7  
 22.55  
 2" G.V.  
 State Hwy 6x6 Mon  
 End of 6" pipe  
 and 2" pipe -  
 Line Connection  
 enclosed in concrete  
 manblock

Drainage Ditch

existing 2" main



Allegheny St  
 Reo to Sea Breeze  
 51Ks for water meters

West  
 Williams  
 Varonakis  
 Kellhofer

12

	1228	219.17	206.89	
13+44	N	1.5	217.7	216.5 C1 <sup>2</sup>
	9.15	228.15	0.17	219.00
12+97	N	6.7	221.5	220.0 C1 <sup>5</sup>
11+23 (5) FH		1.6	226.6	224.8 C1 <sup>8</sup>
10+43	N	2.5	225.7	223.2 C2 <sup>5</sup>
	11.23	232.50	6.88	221.27
	12.39	244.74	0.15	232.35
4+38	N	6.7	238.0	235.9 C2 <sup>1</sup>
	12.88	257.27	0.35	244.39
	12.72	269.66	0.33	256.94
2+25	N	5.5	264.1	262.7 C1 <sup>4</sup>
	10.18	279.32	0.52	269.14
1+30	N	8.4	270.9	270.5 C0 <sup>4</sup>
0+24	N	2.81	276.51	274.9 C1 <sup>6</sup>
	0.42	266.98	12.81	266.51
	0.03	254.38	12.59	254.35
	0.28	242.01	12.65	241.73
	0.42	229.49	12.94	229.07
	0.45	204.44	5.50	223.99

BM SWBP Allegheny + Reo

224.44

3.4821495 1297 21147

80520690 = 206.89

13

Olivera St 58<sup>th</sup> to Bonita  
Bonita Olivera to 250<sup>th</sup> SW

Olivera St

GIR 282.73      276.61

0+60 E South      3.5 279.2 280.1

0+20 E South      3.4 279.3 278.5

0+27 W South      3.3 279.4 277.5

0+58 W South      4.1 278.6 277.2

Bonita St

0+43 W South      8.9 273.8 273.3

0+91 South      11.1 271.6 271.7

GIR 276.61 =

WEST  
WILLIAMS  
VARONFAKIS  
KELLHOFER

9/30/54

14

BH & L+T Bonita + Olivera

Fo <sup>9</sup>

Co <sup>8</sup>

C1 <sup>9</sup>

C1 <sup>4</sup>

Co <sup>5</sup>

Fo <sup>1</sup>

276.61

Snowdrop Sycamore to 2003W  
6" AO Main + Motors

West  
Williams  
Varonakis &  
Kellhofer +  
10/4/54

15

5.77 289.79 284.02

T.B. Spike in pit - SE  
L Tuberosa  
Car pepper Dr.

4.85 294.18 -0.46 289.33

3.57 290.15 7.30 286.88

0.97 280.70 10.42 279.73

Turn on SE pt nail on S Street

0271 W W 2.8 277.9 277.8

C0 <sup>1</sup>

+58 3.5 277.2 273.6

C3 <sup>6</sup>

Begin work

+79 W W 4.0 276.7 276.6

C0 <sup>1</sup>

+100 5.6 275.1 271.3

C3 <sup>8</sup>

+20 W W 6.1 274.6 274.9

F0 <sup>3</sup>

+50 8.2 272.5 268.8

C3 <sup>7</sup>

+57 W 8.4 272.3 272.1

C0 <sup>2</sup>

+87 E 11.0 269.7 268.6

C1 <sup>1</sup>

+100 12.6 268.1 263.6

C4 <sup>5</sup>

0.39 268.38 12.71 267.99

+36 E 2.7 265.7 264.5

C1 <sup>2</sup>

+50 4.6 263.8 260.0

C3 <sup>8</sup>

+75 6.0 262.4 258.8

C3 <sup>6</sup>

12.28 280.37 0.29 268.09

7.52 287.77 0.12 280.25

3.71 284.06 = 284.12

Manzanita St  
Check on 39<sup>th</sup> St Pl.

041 261.46 261.05

4.63 256.07 10.02 251.44

cut AS on stake

9+00 4.6

9+00 9.0

9.30

5.99 261.47 0.54 255.53

0.42 261.05

8  
5+3  
13.64

16

BM Nail in Power pole

Bottom of ditch

Top 8" stake 39<sup>th</sup> St Pl

DENVER ST. JELLETT TO  
MILTON STKS. FOR WATER METERS

WEST  
WILLIAMS &  
VARONFAKIS  
KELLHOFER †

17.

10/29/54

T.B.M.	5.20	66.66		61.46			
T.P.	0.28	54.10	12.84	53.82			
0+91			4.7	49.4	44.9	C4	5' 2" FH 33' 2" of E of Street 0.700 N. PROP LINE JELLETT FH SE CORN. (ON GROUND) 0.7 To FLANG.
T.P.	6.60	53.43	7.27	46.83			
2+03			7.5	45.9	42.9	C3	0 W.M.W.
+59			8.4	45.0	42.5	C2	5 W.M.W.
+68			5.0	48.4	43.1	C5	3 W.M.E.
T.P.	0.51	47.14	6.80	46.63			
4+38			5.2	41.9	40.9	C1	0 W.M.W.
5+19			8.2	38.9	39.4	F0	5 W.M.W.
5+48			5.4	41.7	39.3	C2	4 F.H. (5') EAST SIDE R.H. 33' 2" of E of St.
+79			9.1				W.M.W. (METER MOVED TO 5+19)
6+11			10.1	37.0	37.4	F0	4 W.M.W.
T.P.							4
+40	2.61	39.85	9.90	37.24	36.8	C0	4 W.M.W.
+89			3.5	36.4	35.7	C0	7 W.M.W.
7+46			5.2	34.7	34.4	C0	3 W.M.W.
8+04			5.7	34.2	33.2	C1	0 W.M.W.
+50			6.4	33.5	32.2	C1	3 W.M.W.
T.P.	1.85	36.90	4.80	35.05			
9+71			3.7	33.2	30.9	C2	3 FH 34' 2" of E of Street F.H. S.E. (ON GROUND) 0.2 To FLANGE

## DENVER CONT.

18.

36.90

9+85 4.4 32.5 30.9

C1<sup>6</sup> W.M.E.

5.3

+87 6.0 30.9 30.4

C0<sup>5</sup> W.M.W.

5.7

10+14 4.4 32.5 31.0

C1<sup>5</sup> W.M.E.

.2

6.0

+20 6.1 30.8 30.5

C0<sup>3</sup> W.M.W.

+78 4.3 32.6 31.3

C1<sup>3</sup> W.M.E.

+96 5.7 31.2 30.8

C0<sup>4</sup> W.M.W.

T.P. 4.97 36.98 4.89 32.01

11+34 3.8 33.2 31.6

C1<sup>6</sup> W.M.E.

+43 5.3 31.7 31.0

C0<sup>7</sup> W.M.W.

+61 3.5 33.5 31.8

C1<sup>7</sup> W.M.E.

+82 5.3 31.7 31.2

C0<sup>5</sup> W.M.W.

12+32 4.9 32.1 31.5

C0<sup>6</sup> W.M.W.

2.5 34.5

13+10 2.7 34.3 32.4

C1<sup>9</sup> W.M.E.

0.2 L

FH(8)

2 Hyd

24.17 of

4.5 L

CHECK.

B.M.

0.31 36.67 = 36.67

TOP F.H. N.E. CORN. DENVER + MILTON

Cα<sup>0</sup>

Chicago Joliet to Milton  
Stks for existing meters

West  
Williams T  
Varon Factors  
Kellhofer &

19

10/29/54

9	4.66	41.90	37.24				
-	001	29.56	12.35	29.55			
10	4.22	30.80	29.8	26.58			
	0+92E		0.6	30.2	28.8	C1	⑤ FH 24' 11" of 56
	1+42 ME		0.6	30.2	27.9	C2	<sup>3</sup>
	1+49 MW		2.6	28.2	26.8	C1	<sup>4</sup>
	2+09 MW		4.2	26.6	25.6	C1	<sup>0</sup>
11	1+14 ME		2.3	28.5	26.6	C1	<sup>9</sup>
	1+57 ME		3.5	27.3	25.8	C1	<sup>5</sup>
	1+93 ME		4.9	25.9	25.0	C0	<sup>9</sup>
	3+15 MW		6.4	24.4	23.7	C0	<sup>1</sup>
12	1+43 MW		7.6	23.2	23.2	C0	<sup>0</sup>
13	1+65 ME		7.0	23.8	23.7	C0	<sup>1</sup>
14	1+14 ME		6.9	23.9	22.8	C1	<sup>1</sup>
	1+23 MW		9.8	21.0	21.5	F0	<sup>5</sup>
	5+42 FHE <sup>2.09</sup>	25.54	7.35	23.45	21.4	C2	⑤ 2 24' 11" of 56
	1+60 MW		4.2	21.3	20.4	C0	<sup>2</sup>
	6+07 MW		4.6	20.9	20.0	C0	<sup>9</sup>
	1+02 ME		3.2	22.3	20.9	C1	<sup>4</sup>

}



## Chicago St cont.

25.54

6+45 MW	5.0	20.5	19.7
758 ME	3.7	21.8	20.6
7+09 ME	4.3	21.2	20.2
719 MW	5.7	19.8	19.2
746 MW	6.0	19.5	19.0
757 ME	5.1	20.4	19.8
8+08 ME	4.7	20.8	19.5
719 MW	6.6	18.9	18.4
740 MW	6.6	18.9	18.3
758 ME	4.3	21.2	19.1
9+71 FHE	3.24	25.24	35.4
784 MW	5.9	19.3	19.1
787 ME	3.9	21.3	19.2
10+47 MW	5.5	19.7	18.6
750 ME	4.3	20.9	19.5
782 MW	5.5	19.7	18.8
796 ME	3.9	21.3	19.7
11+37 ME	3.9	21.3	20.0
749 MW	5.3	19.9	19.4

$C_0^8$   
 $C_1^2$   
 $C_1^0$   
 $C_0^6$   
 $C_0^5$   
 $C_0^6$   
 $C_1^3$   
 $C_0^5$   
 $C_0^6$   
 $C_2^1$   
 $C_2^9$   
 $C_0^2$   
 $C_2^1$   
 $C_1^1$   
 $C_1^4$   
 $C_0^9$   
 $C_1^6$   
 $C_1^3$   
 $C_0^5$

20

LPH 24.311685

2524

11+97 MW	4.9	20.3	19.7
+99 ME	3.0	22.2	20.3
12+23 MW	4.7	20.5	19.9
+27 ME	2.9	22.3	20.5
+92 MW	4.2	21.0	20.4
+95 ME	2.7	22.5	20.9
13+00	2.3	22.9	20.9
1280	3754	0.50	24.74
		0.87	36.67

C0 <sup>6</sup>C1 <sup>9</sup>C0 <sup>6</sup>C1 <sup>8</sup>C0 <sup>6</sup>C1 <sup>6</sup>C2 <sup>0</sup>

⑤

2424 1

Milton

= 36.67 TBM Top FA NE Cap Denver

24 24

193

45<sup>th</sup> St Siks for Motors  
T<sup>st</sup> to Oceanview

West  
Williams  
Varon Fakis†  
Kellhofer X

22

11/4/59

B.M.	2.83	90.82 90.00	87.99 87.17	85.8	85.5	
0+60 M.W.				5.0	85.8	85.5
+85 M.E.				5.2	85.6	85.6
+96 M.W.				5.0	85.8	85.5
1+25 M.E.				4.9	85.9	85.8
+33 M.W.				4.7	86.1	85.8
+97 M.W.				4.3	86.5	86.4
2+16 M.W.				4.3	86.5	86.6
+82 M.E.				3.0	87.8	87.3
3+46 M.W.				2.4	88.4	87.8
T.P.	5.33	93.88 93.06	88.55 87.13	2.27		
+84 M.E.				4.8	89.1	88.5
4+00 M.W.				5.7	88.2	88.6
+37 M.E.				4.4	89.5	89.1
+85 M.E.				3.7	90.2	89.6
5+07 M.W.				4.4	89.5	89.5
5+39 M.E.				4.3	89.6	89.5
+40 M.W.				4.7	89.2	89.3
+80 M.W.				5.5	88.4	88.6
+93 M.E.				5.2	88.7	88.6
6+50				6.6	87.3	87.2

See pg.  
23 for  
check  
Levels.

T. STREET 45<sup>th</sup> S.E. Top F. Hyd.

F.H. (5)

45<sup>TH</sup> ST  
Cont'd

11/4/54

23

		93.06			
		93.88			
T.P.	2.43	89.95	5.54	88.34	
CHECK		90.77		87.52	
B.M.			2.80	88.97 = 88.99	
				87.15 = 87.17	

CHECK LEVELS

11/5/54 BEATTY & PARTS

BM	1.14	117.63		116.49	
	1.27	105.68	12.22	104.41	
	3.98	97.70	11.96	93.72	
L & T of 45 <sup>TH</sup> & Oceanview			12.22	85.48 = 85.44	
L & T of 45 <sup>TH</sup> & Oceanview			11.95	85.75	

SW. BR. 47 & Oceanview

BM	7.15	92.63		85.48	
OK BM	0.75	88.74	4.64	87.99 = 87.17	
BM			8.89	79.85	

Tap FH SE Cor 45<sup>TH</sup> & T.

chis II cont. curb ret SE Cor Elizabeth &

ELIZABETH ST.  
OCEANVIEW TO T ST  
② GRAD'S & STAKES FOR WATER MET

11/5/56

BEATTY  
SHOREY  
MARTELL  
ALEXANDER.

24

BM	0.40	80.25	79.85		chis to center curb ret. SE Cor Elizabeth & T.	(See pg. 23)
6+10 } 6+11 } W. 2 METS.			2.2	78.1	78.3	FO2
6+10 E		0.1	80.2	79.1		C1
5+96 ③ FH		0.55	79.7	78.2		C15 Flang <sup>1.90</sup> 78.35
5+75 E		2.82	77.4	77.4		CO2
5+75 W		3.85	76.4	76.9		FOE 5 FO2
5+37 W		5.30	75.0	75.3		FO2
4+78 E		5.47	74.8	73.7		C1
4+19 E		6.36	73.9	72.9		C12
4+19 W		7.57	72.7	72.4		CO3
3+70 E		6.53	73.7	72.5		C1
3+70 W		8.10	72.2	72.1		CO1
3+32 W		8.30	72.0	71.9		CO1 FO2
3+26 E		7.45	72.8	72.4		CO4
2+96 W		8.57	71.7	71.8		FO1
2+80 E		7.52	72.7	72.1		CO6
-2+38 W		9.00	71.3	71.3		COE FO1
2+34 E		7.65	72.6	71.8		CO8
1+82 W		9.24	71.2	71.0		COE FO1
D1+71 E	4.53	76.45	8.33	71.92	71.4	CO5
1+38 W		5.56	70.9	70.7		CO2 CO1
1+35 E		4.60	71.9	71.2		CO7
0+80 W		6.07	70.2	70.4		COE FO2
0+79 E		4.67	71.8	70.9		CO2
0+10 ③ FH		4.35	72.1	70.8		C13 Flange <sup>0.8 high</sup> 71.61 71.80
II	11.69	86.13	2.01	74.44		
CR BM.		0.66	85.47	-85.48		L & T 45th & Oceanview

695 Elizabeth

690 "

636 "

627 "

619 "

620 "

611 "

612 "

604 "

603 "

544 "

543 "

536 "

535 "

516 "

519 "

514 "

517 "

510, 512, 514 "

511 Elizabeth

WINONA AVE. POLK TO  
ORANGE STKS. FOR METERS

WEST  
WILLIAMS  
VARONFAKIS X  
KELLHOFER †

25

11/16/54 CLOUDY

B.M.	4.95	335.10		330.15
T.P.	12.45	346.69	0.86	334.24
T.P.	6.49	352.05	1.13	345.56
0+83 E			3.3	348.8 347.9
1+22 E			2.8	349.3 348.4
+81 E			3.4	348.7 348.7
2+12 E			4.0	348.1 348.5
T.P.	0.84	349.13	3.76	348.29
T.P.	0.76	337.32	12.57	336.56
T.P.	3.91	334.51	6.72	330.60
CHECK				
B.M.			4.43	330.08 = 330.15

S.W.B.P. 50TH + UNIVERSITY

CO <sup>9</sup>  
CO <sup>9</sup>  
CO <sup>0</sup>  
FO <sup>4</sup>

TOP FH. WINONA + POLK

50<sup>TH</sup> ST. OAK CREST DRIVE TO  
UNIVERSITY STKS. FOR METERS

WEST  
WILLIAMS T  
VARONFAKIS †  
KELLHOPER

11/16/54

26

B.M.	11.03	341.18		330.15	
T.P.	9.24	350.09	0.33	340.85	
0-30 W			2.1	347.0	346.4
0+25 W			3.9	346.2	345.5
0+67 W			4.7	345.4	344.6
1+52 W			6.6	343.5	342.9
T.P.					
+81 E	0.33	344.05	6.37	343.72	343.0
2+36 E			1.4	342.7	341.8
+69 E			3.2	340.9	340.6
3+01 E			5.2	338.9	339.1
+83 E			9.4	334.7	334.6
T.P.	5.68	336.87	12.86	331.19	
CHECK					
B.M.			6.72	330.15 =	330.15
0-83				347.5	346.9

S. W. B. P. 50<sup>TH</sup> + UNIVERSITY

CO<sup>6</sup>

CO<sup>7</sup>

CO<sup>8</sup>

CO<sup>6</sup>

CO<sup>7</sup>

CO<sup>9</sup>

CO<sup>3</sup>

FO<sup>2</sup>

CO<sup>1</sup>

347.0  
- .47  
346.53  
- 4.2  
342.33

CO<sup>6</sup>

Oakcrest Polk to University  
Stks. for Meters

8.50	352.22		343.72		
5.70	353.83	4.09	348.13		
0-191 S		5.4	348.4	346.6	
0-1450 S		5.0	348.8	347.0	
0-65 NE		5.1	348.7	347.8	
0-59 NE		5.1	348.7	347.7	
0-10 NE		5.7	348.1	347.5	
0+19 NE		5.5	348.3	347.3	
0+24 SW		5.6	348.2	347.8	
	9.53	351.12	6.24	347.59	
0+71 SW			3.0	348.1	347.4
0+72 NE			3.3	347.8	346.9
1+34 NE			3.7	347.4	346.4
+80 NE			4.1	347.0	346.0
2+05 NE			4.5	346.6	345.8
+55 NE			4.7	346.4	345.4
3+24 NE			5.6	345.5	345.0
+80 NE			5.6	345.5	344.5
A +36 NE			6.3	344.8	344.0
	0.54				
+80 NE	344.84	6.82	344.30	343.6	

West  
Williams X  
Varonfakis  
Kellhofer

11/17/54

27

Turn on ginkgo 80' st 1+81E

C1 <sup>8</sup>

0+00 EC of Curve 200' E of  
Monona

C1 <sup>8</sup>

C0 <sup>9</sup>

C1 <sup>0</sup>

C0 <sup>6</sup>

C1 <sup>0</sup>

C0 <sup>4</sup>

C0Z <sup>9</sup>

C0 <sup>9</sup>

C1 <sup>0</sup>

C1 <sup>0</sup>

C0 <sup>8</sup>

C1 <sup>0</sup>

C0 <sup>5</sup>

C1 <sup>0</sup>

C0 <sup>8</sup>

C0 <sup>2</sup>

53



Oakerost Cont

28

349.8A

11/17/54

5+17	NE	0.7	349.1	343.2	Co	$\frac{9}{6}$
+31	SW	0.7	349.1	343.3	Co	$\frac{8}{6}$
+87	NE	1.5	343.3	341.7	Cl	$\frac{6}{4}$
6+14	NE	2.1	342.7	341.3	Cl	$\frac{9}{4}$
+13	SW	2.3	342.5	341.6	Co	$\frac{4}{4}$
+23	NE	4.1	340.7	340.3	Co	$\frac{6}{6}$
+96	SW	4.7	340.1	339.5	Co	$\frac{6}{6}$
7+02	NE	4.9	339.9	339.3	Co	$\frac{6}{6}$
+41	SW	7.1	337.7	336.1	Cl	$\frac{6}{6}$
+61	NE	8.4	336.4	335.8	Co	$\frac{6}{6}$
6.39	350.49	0.74	344.10			
		6.79	343.70	=	343.72	

Frankfort 56  
Milton to Gardena

sinks For Meters

West  
Williams X  
Varentakes +  
Kellhofer

29

11.18/54

125  
10

not agree with benches on Frankfort

BM SWOP Erie + Milton

11.04

53.17

42.13

7.54

60.62 0.09 53.08

0700 south prop line Milton

1+44 E

5.0 55.6 54.0

C1

6

2+14 E

4.9 55.7 54.5

C1

2

3+02 E

3.5 57.1 55.2

C1

9

4 5.07 42.97 272 57.90

4+33 (2) FH

2.6 60.4 55.9

C4

5

B FH 28° LT at 2 st

5+04 E

5.0 58.0 56.1

C1

2

+40 E

5.1 57.9 56.2

C1

7

6+39 E

5.1 57.9 56.6

C1

3

+87 E

5.2 57.8 56.8

C1

0

7+70 E

4.8 58.2 57.2

C1

0

8+76 E

4.2 58.8 57.6

C1

2

9+13 E

4.3 58.7 57.6

C1

1

+75 E

3.9 59.1 57.6

C1

5

10+36 E391 61 58 5.30 57.67 57.6

C0

1

+72 E

4.3 57.3 57.5

F0

2

11+45 E

4.7 56.9 57.2

F0

3

+68

4.7 56.9 57.1

F0

2

61.58

11/18/54

12+38

5.0 56.6 56.8

Fo <sup>2</sup>

+98

5.1 56.5 56.6

Fo <sup>1</sup>

13+36

5.1 56.5 56.5

Co <sup>0</sup>

+86

5.1 56.5 56.3

Co <sup>2</sup>

14+69

6 wt  
Mets

3.9 57.7 56.0

Co <sup>1</sup>

8.08 65.52 4.14 57.44

15+39 E

9.6 55.9 55.6

Co <sup>3</sup>

15+42

Hyd  
File

55.7

C. FH 27' Lt opp 51

+72 E

9.6 55.9 56.2

Fo <sup>3</sup>

16+05 E

9.2 56.3 56.8

Fo <sup>5</sup>

+66 E

8.3 57.2 57.9

Fo <sup>1</sup>

17+15 E

7.4 58.1 58.8

Fo <sup>1</sup>

+65 E

6.4 59.1 59.7

Fo <sup>6</sup>

18+13 E

5.5 60.0 60.5

Fo <sup>5</sup>

+94 E

4.1 61.4 61.9

Fo <sup>5</sup>

19+44 E

2.9 62.6 62.6

Co <sup>0</sup>

+91 E

2.5 63.0 62.9

Co <sup>1</sup>

20+41 E

2.5 63.0 63.3

Fo <sup>3</sup>

1.41 64.11

= 64.12 BP West of Frankfort to Gardonia

64.12 Gardonia  
+0.34  
64.96  
-9.32  
55.59

## Milton St

## Morena to Milton St

B.M.	1.42	43.45		42.03	
T.P.	0.22	31.42	12.25	31.20	
T.P.	2.27	21.07	12.62	18.80	
0-					
2+18.5			5.2	15.9	13.0
0-					
2+17 N.			7.6	13.5	13.0
T.P.	11.23	31.98	0.32	20.75	
T.P.	8.64	40.15	0.47	31.51	
3+10 N.			10.0	30.2	29.9
T.P.					
6+09 N.	11.65	50.76	1.04	39.11	38.4
+45 N.			10.8	40.0	39.5
+75 N.			9.7	41.1	40.4
9+53 N.			1.9	48.9	48.6
T.P.	10.10	60.40	0.46	50.30	
10+16 N.			9.7	50.7	50.8
11+59 N.			5.0	55.4	54.8
T.P.	11.86	71.86	0.40	60.00	
T.P.	12.08	83.74	0.20	71.66	
14+81 N.			4.9	78.8	77.1
+92 N.			3.3	80.4	78.5

WEST  
WILLIAMS X  
VARONFAKIS P  
KELLHOFER

11/22/54

31

S.W.B.P. ERIE + MILTON

0+00 West Line Chicago St

C 22

C 02

C 03

C 03

C 05

C 07

C 03

BLUE KEEL

N.W. IRON GRATE MILTON + FRANKFORT  
KELLHOFER X

F 05

11/29/54 VARONFAKIS P

C 06

C 12

C 19

## MILTON ST CONT

83.74

T.P. 12.21 95.74 0.21 83.53

14+98 S. 10.9 84.8 79.8

T.P. 12.69 108.24 0.19 95.55

16+26 N. 8.0 100.2 100.3

T.P. 12.15 120.25 0.14 108.10

17+26 N. 4.9 115.4 115.6

T.P. 12.57 132.77 0.05 120.20

18+40 N. 1.8 131.0 130.3

+10 S. 4.6 128.2 126.8

T.P. 5.98 137.06 1.69 131.08

CHECK

B.M. 2.07 134.99=135.06

WEST

WILLIAMS

VARONFAKIS †

KELLHOFFER T

11/29/54

32

GALVESTON

C59 F.H. (5) S.E. CORN. MILTON †

FO2

FO3

FO2

FO3

S.W. P.C. HARTFORD MILTON



Alley BIK 66

N of Landis

E of 38th

stks for 6" AC Main

West  
Williams  
Varonakis X  
Kellhofer 4

39

11/19/54

B.M.	7.72	339.55	331.83	East Edge Sewer MH 5' R1 1+00
0+80		9.3	330.3	326.3 C4 <sup>0</sup>
+98 E		6.5	333.1	330.9 C2 <sup>2</sup>
1+00		6.5	333.1	327.0 C6 <sup>1</sup>
+05 E		6.4	333.2	331.5 C1 <sup>2</sup>
+19 W		6.9	332.7	332.4 C0 <sup>3</sup>
+49 W		6.1	333.5	333.8 F0 <sup>3</sup> / <sub>5</sub>
+50		4.9	334.7	330.2 C4
+57 W		5.8	333.8	334.0 F0 <sup>2</sup>
+58 E		3.9	335.7	334.3 C1 <sup>4</sup>
+93 W		5.3	334.3	334.3 C0 <sup>0</sup>
+95 E		4.2	335.4	334.6 C0 <sup>8</sup>
2+00		4.2	335.4	330.4 C5 <sup>0</sup>
+50		4.0	335.6	330.8 C4 <sup>8</sup>
+54 E		4.3	335.3	335.0 C0 <sup>3</sup>
+99 E		4.4	335.2	335.1 C0 <sup>1</sup>
3+00		4.5	335.1	331.2 C3 <sup>2</sup>
+50		4.9	334.7	330.4 C4 <sup>3</sup>
+56 E		5.0	334.6	334.6 C0 <sup>0</sup>
+57 W		5.1	334.5	334.3 C0 <sup>2</sup>
T.P	1.01	335.02	5.54	334.01
3+82 E		0.4	334.6	334.2 C0 <sup>4</sup>

0.3

ALLEY BLK. 66 CONT.

335.02

11/19/54

4+00	0.9	334.1	329.6
+05W	1.5	333.5	333.6
+11W	1.5	333.5	333.4
+19E	1.2	333.8	333.6
+50	1.6	333.4	328.9
+83E	2.6	332.4	332.5
5+00	2.8	332.2	328.2
+24W	4.5	330.5	330.8
5+29E	4.4	330.6	330.8
+40W	5.0	330.0	330.0
+50	5.8	329.2	324.7
6+00	9.3	325.7	321.4
+09E	10.4	324.6	324.7
T.P.	5.51	327.70	12.83 322.19
+50	7.7	320.0	314.0
+80	17.6	310.1	306.0
T.P.	12.14	339.38	0.46 327.24
CHECK			
B.M.	7.60	331.78	=331.93

C4<sup>5</sup>

F0<sup>1</sup>

C0<sup>1</sup>

C0<sup>2</sup>

C4<sup>5</sup>

F0<sup>1</sup>

C4<sup>0</sup>

F0<sup>3</sup>

F0<sup>1</sup>

C0<sup>0</sup>

C4<sup>5</sup>

C4<sup>3</sup>

F0<sup>1</sup>

C6<sup>0</sup>

C4<sup>1</sup>





Alley Bk 65

N of Landis  
E of 37th

Stks for 6" main + Meters

1.17	329.18	328.01	
0+80	1.4	327.8	324.1
1+00	1.3	327.9	324.2
+09 MW	1.4	327.8	327.6
+13 ME	1.8	327.4	327.8
+41 MW	2.4	326.8	326.6
+50	2.6	326.6	322.7
+75	2.9	326.3	322.0
+93 MW	1.9	327.3	325.5
2+00	2.5	326.7	320.0
+20	4.0	325.2	316.8
+27 MW	2.9	326.8	324.5
+50	12.7	316.5	312.0
A+80 MW	7.3	321.9	309.6
B+14 MW	8.6	320.6	310.6
3.23	319.66	12.75	316.43
2+83 MW	1.3	315.4	317.8
3+00	8.4	311.3	307.1
+20 ME	11.1	308.6	314.2
+25	5.9	313.8	304.8

West  
Williams X  
Varonfakis  
Kullhofer +

37

11/23/54

0+50	Sec FA 957	P 39
1		
C3	Begin work	
C3	1	48 29
C0	2	
F0	4	
C0	2	
C3	9	
C4	3	
C1	8	
C6	1	
C8	4	4.9 324.3
C1	8	
C4	5	13.5 315.7
C12	3	
C10	0	
F2	4	
C4	2	8.8 310.9
F5	6	
C9	0	11.2 308.5

Alley Bk 65 Cont

319.66

3+50 11.5 308.2 303.7

+51 ME 13.1 306.6 311.9

+75 11.2 309.5 302.7

+83 Low Point Same as 11 60 ft

3+90 MW 4.5 315.2 310.4

4+00 12.0 307.7 302.2

+250 3.6 311.25 11.57 308.09 301.7

+25 1.5 309.8 301.7

+23 ME 6.8 304.5 309.2

+50 4.5 306.8 301.3

4+60  
5+00 3.2 309.1 300.7

+14 9.09 313.09 7.29 304.01

+55 2.2 310.9 301.3

+80 3.0 310.1 303.8

+62 MW +1.9 315.0 313.6

6+05 0.8 312.3 306.6

8.44 319.98 1.55 311.54

+08 MW 4.5 315.5 317.7

+31 MW 1.1 318.9 320.0

11.40 329.67 1.71 318.27

11/23/54

C4 <sup>5</sup> 11.9 307.9

F5 <sup>3</sup>

C5 <sup>8</sup> 12.9 306.8

15.8 303.9

C4 <sup>8</sup>

<sup>5</sup>

14.6 305.1

C6 <sup>4</sup> ✓

<sup>1</sup>

C8 5.2 306.1

<sup>7</sup>

F4

<sup>5</sup>

C5 5.4 305.9

<sup>4</sup>

C7 3.9 307.5

<sup>6</sup>

C9 10.2 302.9

<sup>3</sup>

C6

<sup>4</sup>

C1

<sup>1</sup>

C5 3.1 310.0

<sup>2</sup>

F2

<sup>1</sup>

F1

7.0

3.1

5.9

2.0

ALLEY BLK. 65 CONT

39.

329.67

11/23/54

6 + 50

9.5 320.2314.5

C5 <sup>7</sup>

11.2 318.5

+ 53 M W

6.7 323.0 322.3

C0 <sup>7</sup>

+ 80

5.2 329.5 320.0

C4 <sup>5</sup>

7.62 336.27 1.02 328.65

0.58 327.40 9.45 326.82

7.37 320.03

= 319.99 NW BP 37th + Dwight

3  
Fd Disc  
(Joeger)

Prep. Coris replaced in  
rear Lots 39-42 BLK 65  
City Heights.

April 6 1956  
BEATTY  
Kellhofer

In putting in new  
6" AC. main, wet  
weather allowed  
sewer & ditch to  
slough off on down  
hill side & either  
buried prep. Coris.  
or in restoring  
ground to natural  
position Coris  
were knocked out

6" WATER LINE

ALLEY

WIGHTMAN

38TH ST.

Dug 2nd could not  
find Orig. prep Cor.  
Set 1" I.P.

140'

FD 1" I.P.  
(COVER)

Mr  
Caporeletti

Fd 1" I.P.

SET  
1" I.P.

No Cor  
FD

125'

20'

Alleys BIKs 62 + 85  
 N of Dwight E of Wilson  
 Sigs for 6" AC Main

1.04	348.78	347.74	
0+80		1.0	347.8 343.5
1+00		1.4	347.7 343.2
1+50		2.7	346.1 341.4
+56 MW		3.6	345.2 344.8
+80 ME		4.8	344.0 343.8
2+00		5.0	343.9 339.6
+02 M.W.		6.1	342.7 343.3
+36 M.E.		7.3	341.5 341.8
+49 M.W.		7.4	341.4 341.5
+50		7.6	341.2 337.8
+82 ME		7.7	341.1 340.1
3+00		7.9	340.9 335.9
+21 M.W.		7.7	341.1 339.2
+25 ME		9.2	339.6 338.9
+44 M.W.		8.1	340.7 338.8
+50		9.4	339.4 335.2
+78 M.W.		8.7	340.1 338.4
T.P.	1.36	340.22	9.92 338.86
3+91 ME		2.3	337.9 337.9

West  
 Williams +  
 Varon Folist  
 Kellbater

40

11/24/54

0+50 Nail See PB 822 P 15

Begin Work

C4 <sup>2</sup>

C4 <sup>1</sup>

C0 <sup>4</sup>

C0 <sup>2</sup>

C4 <sup>2</sup>

F0 <sup>6</sup>

F0 <sup>3</sup>

F0 <sup>1</sup>

C3 <sup>4</sup>

C1 <sup>0</sup>

C5 <sup>0</sup>

C1 <sup>9</sup>

C0 <sup>1</sup>

C1 <sup>9</sup>

C4 <sup>2</sup>

C1 <sup>1</sup>

C0 <sup>0</sup>

390.22

11/24/54

4+00	2.6	337.6	334.4	C3 $\frac{2}{1}$
+07 ME	2.7	337.5	337.6	F0 $\frac{1}{8}$
+34 MW	2.0	338.2	337.4	C0 $\frac{8}{0}$
+50	2.6	337.6	333.6	C4 $\frac{8}{0}$
+67 ME	2.6	337.6	336.8	C0 $\frac{8}{3}$
+76 MW	2.1	338.1	336.8	C1 $\frac{1}{7}$
5+00	2.7	337.5	332.8	C4 $\frac{5}{3}$
+01 ME	2.4	337.8	336.3	C1 $\frac{8}{3}$
+11 MW	1.6	338.4	336.3	C2 $\frac{8}{5}$
+28 ME	2.5	337.7	335.9	C1 $\frac{2}{8}$
+50	2.9	337.3	332.1	C5 $\frac{8}{5}$
+83 ME	4.3	335.9	335.1	C0 $\frac{5}{3}$
+85 MW	4.5	335.7	335.2	C0 $\frac{3}{6}$
6+00	4.6	335.6	331.3	C4 $\frac{5}{3}$
+39 ME	5.4	334.8	334.3	C0 $\frac{6}{3}$
+46 MW	4.4	335.8	334.2	C1 $\frac{3}{2}$
+50	5.4	334.8	330.5	C4 $\frac{2}{9}$
+77 ME	6.2	334.0	333.8	C0 $\frac{9}{2}$
+80	6.3	333.9	330.0	C3 $\frac{9}{2}$ End of work

## ALLEYS BLK 62 + 85 CONT.

42

390.22

11/24/54

3.59 334.65 7.16 333.06

7+50 FH TCE	3.6	333.1	329.4	C3 $\frac{7}{1}$
+60	3.3	333.4	329.3	C4 $\frac{1}{1}$
+62 ME	3.6	333.1	333.2	F0 $\frac{1}{3}$
+63 MW	3.5	333.2	332.9	C0 $\frac{3}{8}$
8+00	4.1	332.6	328.8	C3 $\frac{8}{0}$
+50	4.6	332.1	328.1	C4 $\frac{8}{8}$
+60 ME	4.9	331.8	332.6	F0 $\frac{3}{8}$
+80 ME	5.5	331.2	332.5	F1 $\frac{8}{6}$
9+00	5.5	331.2	327.4	C3 $\frac{9}{1}$
+30 ME	5.1	331.6	332.2	F0 $\frac{8}{0}$
+50	5.1	331.6	327.7	C3 $\frac{9}{1}$
+65 MW	4.9	331.8	331.7	C0 $\frac{8}{0}$
+80 ME	4.1	332.6	331.8	C0 $\frac{9}{2}$
10+00	4.1	332.6	327.6	C5 $\frac{8}{9}$
+26 MW	4.5	332.2	331.4	C0 $\frac{2}{8}$
+34 ME	4.1	332.6	331.7	C0 $\frac{9}{8}$
+50	4.1	332.6	327.4	C5 $\frac{2}{8}$
+68 ME	4.4	332.7	331.5	C0 $\frac{8}{0}$

Begin work

## ALLEYS BLK. 62 + 85 CONT.

43.

336.65

11/24/54

10+93 MW	4.8	331.9	331.0	C0	<u>9</u>	
11+00	4.8	331.9	327.3	C4	<u>6</u>	
+01 MW	5.0	331.7	331.0	C0	<u>7</u>	
+22 ME	4.7	332.0	331.2	C0	<u>8</u>	
+50 1.01	332.62	5.04	331.61	327.1	C4	<u>5</u>
+69 ME	1.3	331.3	330.9	C0	<u>4</u>	
+72 MW	2.3	330.3	330.5	F0	<u>2</u>	
+75	1.5	331.1	326.9	C4	<u>2</u>	
12+00	2.1	330.5	326.1	C4	<u>4</u>	
+02 ME	2.2	330.4	330.2	C0	<u>2</u>	
+35 MW	3.1	329.5	329.0	C0	<u>5</u>	
+39 ME	3.3	329.3	329.1	C0	<u>2</u>	
+50	3.5	329.1	324.7	C4	<u>4</u>	
+85 ME	4.1	328.5	327.7	C0	<u>8</u>	
+86 MW	4.7	327.9	327.4	C0	<u>5</u>	
13+00	4.4	328.2	323.3	C4	<u>9</u>	
+15 ME	4.9	327.7	326.8	C0	<u>9</u>	
+25	5.1	327.5	322.5	C5	<u>0</u>	
+50	5.6	327.0	321.2	C5	<u>2</u>	
+60 4.98	331.10	6.50	326.12	320.6	C5	<u>5</u>

3.48 327.62

= 327.65

NW OF 36<sup>th</sup> + Dwight



Alley BIK 86  
N of Bowery E of 35<sup>th</sup>  
Stks for 6" AC Main

	790	344.24	336.34
0+00	3.1	341.1	336.8
+50	4.0	340.2	336.6
+68 FH Top	4.9	339.3	336.5
+68 @ 2 FH	4.3	339.9	339.9
1+00	1.7	342.5	336.3
+03 MW	2.1	342.1	340.6
+12 ME	2.3	341.9	340.5
+20 ME	2.5	341.7	340.4
+31 MW	3.2	341.0	340.2
+50	3.7	340.5	336.0
+52 ME	4.1	340.1	339.7
+97 ME	6.2	338.0	337.9
2+00	6.3	337.9	333.7
+01 MW	6.8	337.6	337.6
0.26	336.64	7.86	336.38
+50	8.5	335.2	331.4
+60 MW Trench	7.5	334.5	334.2
3+00	4.9	331.7	

West  
Williams X  
Varonakis  
Kallifoy 11/26/54

44

BM NW BP 35<sup>th</sup> + Landis

C4<sup>3</sup> Begin work

C3<sup>6</sup>

C2<sup>8</sup>

C0<sup>0</sup>

C6<sup>2</sup>

C1<sup>5</sup>

C1<sup>4</sup>

C1<sup>3</sup>

C0<sup>8</sup>

C4<sup>5</sup>

C0<sup>4</sup>

C0<sup>1</sup>

C4<sup>2</sup>

C0<sup>0</sup>

C3<sup>8</sup>

C0<sup>3</sup>

out replaced

336.64

12/2/24

3+07 MW 46 332.0 331.0 C1<sup>0</sup>

+25 66 ~~330.0~~

out replaced

+36 MW 70 329.6 329.0 C0<sup>6</sup>

10.93 340.81 6.76 329.98

Turn on 3/4" 17 15' RL 3+25

2.87 344.45 0.23 340.58

8.09 336.36 = 336.34

2.81 ~~332.69~~ 229.88

3+00 1.0 331.7 327.0 C4<sup>1</sup>

+25 ~~2.8 329.9 322.8~~ C7<sup>1</sup>

+45 ~~5.6 327.8 317.4~~ C10<sup>4</sup>

+50 ~~7.1 325.6 316.0~~ C9<sup>4</sup>

13.3  
2.8  
15.3 30

0.68 321.40 11.97 320.72

3+80 MW 11.7 309.7 309.7 C0<sup>0</sup>

+82 ~~15.4 306.0 304.0~~ C2<sup>0</sup>

End of work

11.57 ~~332.29~~ 0.68 320.72

2.41 329.89

Alloy Bk 115  
N of Bullingham  
E of 36<sup>th</sup>  
Stake for 6' AO Mark + Meters

0.35 311.37 311.02

0+40	0.8	310.6	306.6
+50	0.9	310.5	305.9
+61 ME	1.3	310.1	310.5
+82 ME	2.5	308.9	308.4
1+00	3.0	308.4	302.0
+41 ME	5.8	305.6	303.0
+50	6.4	305.0	297.7
+83 ME	8.7	302.7	299.2
2+00	9.6	301.8	293.4
+09 ME	11.2	300.2	297.0
+16 MW	12.9	298.5	295.5

0.50 298.80 1307 298.30

2+50	1.6	297.2	289.2
+76 ME	5.0	293.8	290.8
3+00	6.8	292.0	284.9
+08 ME	6.7	292.1	287.8
+50	8.3	290.5	280.5
+52 ME	8.3	290.5	284.6

West  
Williams X  
Vorontakis +  
Kullhofer

46

11/26/54

Top east rim sewer MH F0823 P68

C4	<sup>0</sup>	Begin work
C4	<sup>6</sup>	
F0	<sup>4</sup>	
C0	<sup>5</sup>	
C6	<sup>4</sup>	
C2	<sup>6</sup>	
C7	<sup>3</sup>	
C3	<sup>5</sup>	
C8	<sup>4</sup>	
C3	<sup>2</sup>	
C3	<sup>0</sup>	
C8	<sup>0</sup>	
C3	<sup>0</sup>	
C7	<sup>1</sup>	
C4	<sup>3</sup>	
C10	<sup>0</sup>	
C5	<sup>9</sup>	

Alley BIK 115. Cont

47.

298.80

11/26/54

3+85 ME

11.6 287.2 283.2

C4<sup>0</sup>

276 289.79 11.7 287.03

4+00

4.5 285.3 276.0

C9<sup>3</sup>

+35 0

16.9 272.9 271.0

C1<sup>9</sup>

END WORK

12.6 301.80 0.00 289.19

11.87 313.60 0.07 301.73

2.60 311.00 = 311.02

Sycamore  
Violet to Tulp  
STKS FOR METERS

BM	3.51	272.26	268.75
0+07 S		3.3	269.0 269.8
+70 S		3.5	268.8 268.6
+78 S		3.6	268.7 268.6
1+58 S		5.2	267.1 266.6
+78 S		4.9	267.4 266.2
T.P.	0.21	264.46	8.01 264.25
3+43 N.		+0.1	264.6 264.2
4+26 N.		0.8	263.7 263.0
5+10 N.		0.7	263.8 262.6
+73 N.		2.5	262.0 262.3
6+46 N		+0.2	264.7 261.9
CHECK			
B.M.		2.39	262.07 = 262.07

WEST  
WILLIAMS X  
Varonakis +  
Kellhofer

48

12/17/54 Cloudy

SPK. POLE N SIDE SYCAMORE + SHAMROCK

	<u>8</u>	
FO		4145
	<u>2</u>	
CO		4141
	<u>1</u>	
CO		Block WALL
	<u>5</u>	
CO		FH (5)
	<u>2</u>	
CI		4143
	<u>4</u>	
CO		4122
	<u>7</u>	
CO		4117
	<u>2</u>	
CI		4112
	<u>3</u>	
FO		4108
	<u>8</u>	
C2		4102
		SPK. POLE NE CORN. TULIP + SYCAMORE

SHAMROCK, SYCAMORE TO S. LINE  
 LEXINGTON PARK STKS. FOR METERS

WEST T  
 WILLIAMS  
 VARONFAKIS  
 KELLHOFER P

49.

12/7/54

Station	1.22	269.97	268.75	Notes
B.M.				SPX. POLE N. SIDE SYCAMORE + SHAMROCK
0+06 W.	2.7	267.3	265.2	C2 (0+00 B.C. WEST SIDE SYCAMORE)
+73 W.	3.9	266.1	265.0	C1 <sup>1</sup>
+91 W.	4.3	265.7	264.9	C0 <sup>8</sup>
+98 E.	3.6	266.4	265.4	C1 <sup>9</sup>
+147 E.	4.3	265.7	264.8	C0 <sup>9</sup>
+59 W.	5.5	264.5	264.3	C0 <sup>4</sup>
+87 E.	5.4	264.6	264.2	C0 <sup>2</sup>
3+204 W.	6.6	263.4	263.2	C0 <sup>6</sup>
4+23 E.	6.0	264.0	263.4	C0 <sup>2</sup>
5+58 W.	7.7	262.3	262.1	C0 <sup>1</sup>
+65 E.	6.5	263.5	262.4	C1 <sup>4</sup>
6+3+08 W.	8.7	261.3	260.9	C0 <sup>4</sup>
B.M. +45 W.	9.6	260.4	260.0	C0 <sup>1</sup>
+78 W.	10.7	259.3	259.4	F0 <sup>1</sup>
+79 E.	10.1	259.9	260.0	F0 <sup>1</sup>
4+107 E.	10.0	260.0	259.3	C0 <sup>1</sup>
+40 E.	10.0	260.0	258.5	C1 <sup>5</sup>
T.P.	5.11	263.82	258.71	
+52 W.	5.5	258.3	257.7	C0 <sup>6</sup>

## SHAMROCK CONT.

26382

4+72 E 5.0 258.8 257.7

5+11 E 6.92 256.9 256.4

+16 W 7.59 256.2 255.8

T.P. 7.09 270.62 0.29 263.53

CHECK  
B.M. 1.85 268.77 = 268.75WEST  
WILLIAMS  
VARONFAKIS  
KELLHOFER

50.

12/7/54

C1 <sup>1</sup>C0 <sup>5</sup>C0 <sup>4</sup>

Ally BIK 86  
N of Bowery  
E of 35

B.M.	5.01	334.89		329.88
+250		4.54	330.35	
+250		4.04	335.3	330.4
+275		7.07	327.82	
+75		1.30	333.59	327.8
3+00		12.00	322.9	
3+00		3.40	331.49	324.2
+25	0.46	327.37	7.98	326.91 320.6
+25		6.82	320.55	
3+50	0.39	316.95	10.81	316.56 313.8
+50		3.12	313.83	
3+75		11.44	305.51	
+75		9.97	306.98	305.5
3+82		13.5	303.45	
+82		13.4	303.6	303.5
	11.26	327.82	0.39	316.56
	9.49	334.29	1.02	326.90
		6.41	329.88	=329.88
2+00			337.9	333.2

West  
Williams  
Vayonfakis  
Kellhofer

12/15/54

51

PAGE 45

Butt of Ditch  
C4<sup>1</sup> Ginney  
Butt Ditch  
C5<sup>8</sup> Ginney  
Butt Ditch  
C7<sup>3</sup> Ginney  
C6<sup>3</sup> Ginney  
Butt ditch  
C2<sup>8</sup> Ginney  
Ditch  
Ditch  
C1<sup>5</sup> Ginney  
Ditch  
C0<sup>1</sup> Ginney

243



Alleys Blks 2 + 55  
N of University  
E of 94th

2.36 360.85

358.49

0+00	4.4	356.5	352.1
+50	4.6	356.3	352.2
+68 FH Tee	4.7	356.2	352.3
+68 (S) FH	4.7	356.2	356.2
1+00	3.5	357.4	352.3
+06 ME	3.5	357.4	356.6
+06 MW	3.8	357.1	356.8
+11 ME	3.7	357.2	356.6
1+21 MW	4.1	356.8	356.7
+50	4.0	356.9	352.4
+56 MW	4.0	356.9	356.6
+72 ME	4.4	356.5	356.4
2+00	4.5	356.4	352.5
+00 ME	4.5	356.4	356.1
+02 MW	4.5	356.4	356.4
+50	5.3	355.6	352.4
+55 ME	5.2	355.7	356.1
+76 MW	4.9	356.0	356.2

West  
Williams T  
Kellhofer †

52

12/27/54 CLEAR WINDY COLD

NW BP 44th + Orange

C4	<sup>4</sup>	Begin work N prop line Orange
C4	<sup>1</sup>	
C3	<sup>9</sup>	
C0	<sup>0</sup>	
C5	<sup>1</sup>	
C0	<sup>8</sup>	
C0	<sup>3</sup>	
C0	<sup>6</sup>	
C0	<sup>1</sup>	
C4	<sup>5</sup>	
C0	<sup>3</sup>	
C0	<sup>1</sup>	
C3	<sup>9</sup>	
C0	<sup>3</sup>	
C0	<sup>0</sup>	
C3	<sup>2</sup>	
F0	<sup>4</sup>	
F0	<sup>2</sup>	

340.85

12/27/54

4.58 360.79 4.64 356.21

3+00		4.8	356.0	352.3	C3 <sup>7</sup>
+00 mw		4.8	356.0	356.1	F0 <sup>1</sup>
+32 mF		4.5	356.3	355.9	C0 <sup>4</sup>
+50		4.8	356.0	352.2	C3 <sup>8</sup>
+62 mF		5.0	355.8	355.7	C0 <sup>1</sup>
+66 mw		4.7	356.1	355.8	C0 <sup>3</sup>
4+00		4.9	355.9	352.1	C3 <sup>8</sup>
+28 mF		4.9	355.9	355.6	C0 <sup>3</sup>
+30 mw		4.6	356.2	355.7	C0 <sup>5</sup>
+50		4.8	356.0	352.0	C4 <sup>0</sup>
+60 mF		5.0	355.8	355.6	C0 <sup>2</sup>
+72 mw		4.8	356.0	355.5	C0 <sup>5</sup>
5+00		4.7	356.1	352.0	C4 <sup>1</sup>
+05 mF		4.9	355.9	355.4	C0 <sup>5</sup>
+18 mw		5.1	355.7	355.3	C0 <sup>4</sup>
+28 mF		5.0	355.8	355.3	C0 <sup>5</sup>
+50		5.0	355.8	352.0	C3 <sup>8</sup>
+87 mF		5.0	355.8	355.2	C0 <sup>6</sup>

ALLEYS 2 & 55 CONT.

54

360.79

12/27/54

5+87 MW	5.2	355.6	355.1	C0	<u>5</u>	
6+00	5.1	355.7	351.0	C4	<u>7</u>	
+25 MW	5.9	355.0	354.5	C0	<u>5</u>	
+28 ME	5.3	355.5	354.6	C0	<u>9</u>	
+51	6.5	354.3	350.2	C4	<u>1</u>	
+57	6.9	353.9	350.0	C3	<u>9</u>	
+97	7.0	353.8	350.0	C3	<u>8</u>	End of work Polk St. Begin work
7+13 ME	6.8	354.0	353.3	C0	<u>7</u>	
+31 MW	7.0	353.8	353.2	C0	<u>6</u>	
+47 ME	7.2	353.6	353.1	C0	<u>5</u>	
+50	7.2	353.6	349.0	<del>C4</del>	<u>6</u>	349.5 C4 <u>1</u>
+66 MW	7.1	353.7	353.0	C0	<u>7</u>	
+80 ME	6.8	354.0	352.9	C1	<u>1</u>	
9+00	6.8	354.0	348.7	<del>C5</del>	<u>8</u>	349.2 C4 <u>8</u>
+18 MW	7.5	353.3	352.6	C0	<u>7</u>	
+23 ME	7.1	353.7	352.8	C0	<u>9</u>	
	4.74	357.61	7.92	352.87		
+50	4.4	353.2	349.6	<del>C5</del>	<u>6</u>	349.0 C4 <u>2</u>
+54 ME	4.5	353.1	352.4	C0	<u>7</u>	

## ALLEYS 2 &amp; 55 CONT.

55.

35761

12/27/54

8+73 MW	5.0	352.6	352.2	C0 <sup>4</sup>	
9+00	5.1	352.5	347.1	<del>C5</del> <sup>4</sup>	348.7 C3 <sup>8</sup>
+16 MW	5.5	352.1	351.8	C0 <sup>3</sup>	
+26 ME	5.1	352.5	351.8	C0 <sup>7</sup>	
+50	5.2	352.4	346.7	<del>C5</del> <sup>7</sup>	348.5 C3 <sup>9</sup>
+69 MW	5.4	352.2	351.6	C0 <sup>6</sup>	
+86 ME	4.7	352.9	351.5	C1 <sup>4</sup>	
10+00	5.1	352.5	346.3	<del>C6</del> <sup>2</sup>	348.1 C4 <sup>4</sup>
+04 ME	5.1	352.5	351.4	C1 <sup>1</sup>	
+13 MW	4.9	352.7	351.4	C1 <sup>3</sup>	
+47 ME	5.0	352.6	351.6	C1 <sup>0</sup>	
+50	4.9	352.7	346.4	<del>C6</del> <sup>3</sup>	348.1 C4 <sup>6</sup>
+61 MW	4.8	352.8	351.7	C1 <sup>1</sup>	
+77 ME	4.8	352.8	351.8	C1 <sup>0</sup>	
11+00	4.8	352.8	346.5	<del>C6</del> <sup>3</sup>	348.1 C4 <sup>7</sup>
+09 ME	4.9	352.8	352.0	C0 <sup>8</sup>	
+22 MW	4.6	353.0	352.1	C0 <sup>9</sup>	
+50	4.6	353.0	347.8	<del>C5</del> <sup>2</sup>	348.5 C4 <sup>5</sup>
+73 ME	4.1	353.5	353.0	C0 <sup>5</sup>	
+73 MW	4.5	353.1	352.8	C0 <sup>3</sup>	

ALLEYS 2 & 55 CONT

357.61

117 97

4.23534 349.2

1.2635669

2.1835543

7.12349.57

56.

12/27/54

C<sup>2</sup><sub>4</sub>

End of work

= 349.56 NW OR 95th & University

Ast  
Edgemont to 32<sup>nd</sup>  
strks for 6" AC

2.99	230.84	227.90
0+00	3.1	227.7 225.0
+79 mN	1.9	228.9 229.0
+87.5	3.2	227.6 225.0
1+00	3.3	227.5 224.5
+39 mN	3.0	227.8 228.0
+50	4.9	225.9 222.7
+75	5.7	225.1 221.8
+83 mN	4.9	225.9 225.6
2+00	6.2	224.6 218.8
+16 mN	8.1	222.7 217.8
3.76	224.29	10.31 220.53
2+31 mS	2.0	222.3 213.4
+40	3.2	221.1 207.0
+50	5.7	218.6 204.0
+75 029	12.02	212.27 196.8
3+00	9.8	202.7 189.6
027	199.69	1309 199.42
3+50	11.9	187.8 175.0

West  
Williams X  
Kullhofer 9

12/28/54

57

Cloudy Cold  
see Fb 877 page 12

Top east rim Senger MH 10' 21' 0+26

C <sub>2</sub> <sup>7</sup>	begin work
F <sub>0</sub> <sup>1</sup>	
C <sub>2</sub> <sup>6</sup>	
C <sub>3</sub> <sup>0</sup>	
F <sub>0</sub> <sup>2</sup>	
C <sub>3</sub> <sup>2</sup>	
C <sub>3</sub> <sup>3</sup>	
C <sub>0</sub> <sup>3</sup>	
C <sub>5</sub> <sup>8</sup>	
C <sub>4</sub> <sup>9</sup>	
C <sub>8</sub> <sup>9</sup>	
C <sub>14</sub> <sup>1</sup>	
C <sub>14</sub> <sup>6</sup>	
C <sub>15</sub> <sup>5</sup>	
C <sub>13</sub> <sup>1</sup>	
C <sub>12</sub> <sup>8</sup>	

1st Cont

58

199.69

12/28/54

1.38 199.19 11.88 187.81

0.36 176.76 12.79 176.40

A+00

5.5 171.3 161.6

C9 <sup>2</sup>

+20

11.9 165.7 159.2

C6 <sup>2</sup>

End of Work

6.99 169.77 =

169.80 Hair in P.P. 30<sup>th</sup> Ht A+00

Frankfort  
Gardena to Littlefield  
57Ks for water meters

West  
Williams  
Kellhofer

59

1/6/55

263	66.75	64.17
1493 ME	50	61.8
187 ME	36	63.2
2122 ME	20	64.8
	263	64.12

BM BP West of Gardena Frankfort

63.7	F 1 <sup>9</sup>
63.8	F 0 <sup>9</sup>
63.9	0 0 <sup>9</sup>



Alley BIK 3 La Mesa Colony  
Betw 67<sup>th</sup> + 68<sup>th</sup>

Stks for Water Meters

1.20	458.60	457.40
0+48 ms	4.7	453.9
+71 mN	4.2	454.0
1+43 mN	4.8	453.9
2+28 mN	5.2	453.4
2.87	456.55	453.68
3+08 mN	2.2	453.1
+62 mN	2.4	452.9
4+44 mN	3.1	452.5
+79 mN	3.6	452.0
5+36 ms	5.1	451.5
+44 mN	5.0	451.6
6+16 ms	5.3	451.2

2.80 453.75 =

1.34	458.74	457.40
0+05	7.0	453.8
2+63	8.3	453.1
6+53	10.58	451.5

7.77 450.97  
1.34 457.40

West  
Williams +  
Kellhofer +

60

1/7/55 CLOUDY

BM SW BP 68 <sup>th</sup> + El Cajon	Co <sup>0</sup>
	Co <sup>4</sup>
	Fo <sup>L</sup>
	Co <sup>0</sup>
	Co <sup>3</sup>
	Co <sup>3</sup>
	Co <sup>0</sup>
	Co <sup>0</sup>
	Co <sup>0</sup>
	Co <sup>0</sup>
	Co <sup>1</sup>

453.70 SW BP 67<sup>th</sup> + El Cajon

BM SW BP 68 <sup>th</sup> + EL CAJON	L
0+00 West Prop line 68 <sup>th</sup>	2
Top 6" ci	2
" " "	2
" " "	3

Top MH 68<sup>th</sup> + Amberst

Alley Blk 18  
La Mesa Colony  
72<sup>nd</sup> to Harbison

stks for  
meters

West  
Williams X  
Kellhofer

61

247 482.93 480.46

278 478.50 12.21 470.72

0+38 mN 9.3 469.2 469.6

Fo <sup>4</sup>

+72 mN 8.3 470.2 469.9

Co <sup>3</sup>

+79 mS 8.5 470.0 470.3

Fo <sup>3</sup>

1+00 mN 6.8 471.7 471.3

Co <sup>4</sup>

+46 mN 4.1 474.4 474.7

Fo <sup>3</sup>

+50 mS 2.6 475.9 475.2

Co <sup>1</sup>

+54 mN 3.4 475.1 475.0

Co <sup>1</sup>

+83 mN 2.0 476.5 475.8

Co <sup>1</sup>

<sup>555</sup>  
2+12 mS 483.02 103 477.17 476.4

Co <sup>1</sup>

+45 mS 5.7 477.3 476.8

Co <sup>5</sup>

3+24 mN 5.7 477.3 478.0

Fo <sup>1</sup>

257 480.45 = 480.46 BM

1/7/55

BM SW BP 72<sup>nd</sup> + El Cajon

0+00 west prop line Harbison

51<sup>st</sup> St Orange to Trojan  
Stks for Water Meters

187	339.82		332.95
0.11	329.33	560	329.22
0.46	323.50	6.29	323.04
4.34	317.89	9.95	313.55
10.42	325.40	2.91	314.98
1+24 ME		10.5	314.9 315.8
125 MW		10.7	314.7 314.8
182 MW		11.0	314.4 313.8
2+20 MW		10.3	315.1 314.3
3+79 ME		0.9	321.5 321.8
12.20 178 MW	336.77	0.88	321.52 322.1
4+29 MW		7.9	328.9 325.7
12.18 5+34 MW	348.68	0.27	336.8 336.50 338.7
193 (C) FH		2.8	315.9 317.4
0.22	336.71	12.19	336.19
0.27	325.07	12.21	324.50
0.26	319.93	5.34	319.73
10.76	330.52	0.17	319.76
6.54	339.67	2.39	328.13
		1.69	332.98 = 332.98

West  
Williams X  
Vorontakis  
Kellhofer +

Hyd 212 Area 2 31

62

1/10/05 SHOWERS

BM SE RD 49<sup>th</sup> + Orange

Turn in Top FH SE Cor. Wiviana + Orange

Turn " " " " " 50<sup>th</sup> " C

" " " " " " Alameda + "

F 0 2

0+00 North prop line Orange

F 0 1

C 0 6

C 0 8

C 2 7

C 2 4

C 3 3

F 2 2 F 0 3

F 1 5 (C) L FH

2 Fire Hyd 212 Area 2 31

Replaced  
grid stk

Altadena Orange to Trogan  
Stks for meters

Wood  
Williams X  
Varonfokis +  
Kellhofer

63

11/11/55 PARTLY CLOUDY

				TBM	Top	FH	SE Cor Altadena + Orange
1132	324.87	319.55					
0+83 mE		7.4	317.5	316.9	Co	$\frac{6}{6}$	✓
1+14 mW		4.3	320.6	319.3	C1	$\frac{3}{3}$	✓
+36 mE		4.5	320.4	319.5	Co	$\frac{9}{9}$	✓
+71 mW		1.3	323.6	322.0	C1	$\frac{6}{6}$	✓
+ 11.88	335.94	0.91	323.96				
1+79 mE		13.4	322.4	321.3	C1	$\frac{1}{1}$	✓
2+22 mE		11.5	324.3	323.0	C1	$\frac{3}{3}$	✓
+34 mW		10.3	325.5	324.4	C1	$\frac{1}{1}$	✓
+88 mW		8.2	327.6	327.2	Co	$\frac{4}{4}$	✓
+97 mE		8.0	327.8	326.8	C1	$\frac{0}{0}$	✓
3+15 mE		7.0	328.8	328.0	Co	$\frac{8}{8}$	✓
+82 mW		2.2	333.6	334.5	F0	$\frac{9}{9}$	Replaced Grd stk. ✓
1255	347.96	0.43	335.41				Replaced Grd stk. ✓
A+23 mE		10.0	338.0	336.9	C1	$\frac{1}{1}$	✓
+87 mW		2.6	345.4	345.4	Co	$\frac{0}{0}$	✓
+90 mE		2.8	345.2	344.8	Co	$\frac{4}{4}$	✓
1249	360.31	0.14	347.82				
5+36 mE		8.8	351.5	353.0	F1	$\frac{5}{5}$	✓
+68 mE		3.2	357.1	359.1	F2	$\frac{0}{0}$	✓

360.31

4.89 365.85 1.35 358.96

5+91 FHE

4.8 361.1 363.4

F2 3

Φ FH 19.8 From 9 St. ✓

+98 MW

3.2 362.7 365.9

F3 2 ✓

0.65 354.82 11.68 354.17

0.64 342.71 12.75 342.07

6.19 336.52 = 336.56

Turn on genny see page 62

Alley BIK 1A  
Redwood to Quince  
E of Nile

Stks for Meters

1028 289.97 279.69

1050 300.30 0.17 289.80

0+20 MF 0.5 299.8 299.0

+45 MW 1.5 298.8 298.8

+60 MF 1.0 299.3 299.0

+98 MF 1.6 298.7 298.5

1+11 MW 2.4 297.9 298.0

+36 MW 2.6 297.7 297.6

+47 MF 2.0 298.3 297.7

+84 MW 3.2 297.1 296.8

+86 MF 3.1 297.2 297.1

2+36 MW 3.9 296.4 296.0

+65 MF 4.1 296.2 296.0

+70 MW 4.5 295.8 295.5

+98 MF 4.6 295.7 295.4

3+42 MW 5.6 294.7 294.5

+86 MW 6.1 294.2 293.8

4+08 MF 6.1 294.2 293.8

+17 MF 6.3 294.0 293.6

West  
Williams X  
Varonfakus +  
Kallhofer

1/11/35

BM NE BP Nile + Quince

Co <sup>8</sup>

Co <sup>0</sup>

Co <sup>3</sup>

Co <sup>2</sup>

Fo <sup>1</sup>

Co <sup>1</sup>

Co <sup>6</sup>

Co <sup>3</sup>

Co <sup>1</sup>

Co <sup>4</sup>

Co <sup>2</sup>

Co <sup>3</sup>

Co <sup>3</sup>

Co <sup>2</sup>

Co <sup>4</sup>

Co <sup>4</sup>

Co <sup>4</sup>

65

## ALLEY BLK. 14 CONT.

66

300.30

A+41 MW	7.6	292.7	293.0	F <sub>0</sub> <sup>3</sup>	not started
+63 MF	7.3	293.0	293.0	C <sub>0</sub> <sup>0</sup>	
+86 MW	8.2	292.1	292.4	F <sub>0</sub> <sup>3</sup>	
+96 MF	7.9	292.4	292.4	C <sub>0</sub> <sup>0</sup>	
5+35 MW	9.5	290.8	291.0	F <sub>0</sub> <sup>2</sup>	
+42 MF	9.1	291.2	291.0	C <sub>0</sub> <sup>2</sup>	
+77 MW	11.2	289.1	288.1	C <sub>1</sub> <sup>0</sup>	
+84 MF	10.5	289.8	287.9	C <sub>1</sub> <sup>9</sup>	
1.76	289.88	12.18	288.12		
	10.18	279.70	=	279.69	

Alley BIKA  
To Palomah Point Loma Ave  
E of Trieste  
57kg for meters

11.85 270.77 258.92

7.52 277.77 0.52 270.25

12.91 290.58 0.10 277.67

0.92 288.96 2.54 288.04

0+21 mW 0.9 288.1 287.6

1+27 mW 7.9 281.1 281.4

+33 mE 6.9 282.1 281.0

+59 mW 11.5 277.5 278.1

0.50 276.61 12.85 276.11

1+90 mE 1.9 274.7 274.8

2+49 mW 8.0 268.6 267.5

49 mE 9.5 267.1 267.8

+50 mW 9.7 266.9 267.4

0.25 269.00 12.86 263.75

3+16 mE 6.1 257.9 257.6

0.10 257.64 12.46 251.54

4+32 mE 10.0 241.6 240.8

+96 mW 10.4 241.2 240.2

0.36 240.99 11.01 240.63

West  
Williams  
Varontakis  
Kullbacker

11/12/55

67

BM NE BP Santa Barbara + Trieste

CO<sup>5</sup>

FO<sup>3</sup>

CI<sup>L</sup>

FO<sup>6</sup>

FO<sup>L</sup>

CI<sup>L</sup>

FO<sup>7</sup>

FO<sup>5</sup>

CO<sup>3</sup>

CO<sup>8</sup>

CI<sup>0</sup>



240.99

4+68 mE	1.0	24 90	239.2	CO <sup>8</sup>
5+20 mW	4.3	23 6.7	237.1	FO <sup>4</sup>
776 mW	5.4	23 5.6	235.0	CO <sup>6</sup>

1.05 236.83 5.21 235.78

0.36 224.84 12.35 224.48

6.45 218.86 12.43 212.41

12.24 230.76 0.34 218.52

12.69 243.29 0.16 230.60

17.54 255.05 0.78 242.51

12.19 267.12 0.11 254.94

9.60 275.89 0.84 266.29

0.87 264.77 11.99 263.90

5.80 258.97 = 258.92

Point Lema

Turn on Fire Hyd end of Alley

40<sup>TH</sup> ST. OCEANVIEW BLVD.  
TO T. ST. STKS. FOR METERS

- B.M.	0.05	82.23	82.18
- 1+43 M.W.		7.85	74.3 73.0
CHECK B.M.		0.05	82.23 = 82.23

WEST  
WILLIAMS  
VARONFAKIS ?  
KELLHOFER X

1/19/55

69

N.W. L&T OCEANVIEW BLVD + 40<sup>TH</sup>

C1 <sup>3</sup>

32nd St  
 East to Broadway  
 51+5 For 8" AC Main + Meters

053	182.66	182.13	
0+60	2.9	179.8	173.6
1+00	3.5	179.2	173.1
+14 m.w.	10.4	183.1	177.4
+25	5.5	177.2	172.8
+50	7.5	175.2	171.5
+82 m.w.	6.7	176.0	176.4
2+00	12.0	170.7	167.0
+37.5	12.2	170.5	167.0
+50	11.7	171.0	167.2
3+00	11.4	171.3	167.9
2+95 m.w.	5.6	177.1	174.7
3+42 m.w.	6.9	175.8	174.0
+50	11.7	171.0	168.6
+75	11.3	171.4	169.0
4+00	9.5	173.2	169.0
+31 Tee	8.8	173.9	169.0
+50	9.2	173.5	169.0
+62 FH Tee	9.4	173.22	168.6

West  
 Williams X  
 Varonfarist  
 Kellhofer

70

1/23/55  
 30nd + 1394  
 TAM Spike in Power Pole SW Cor

C6	$\frac{2}{1}$	
C6	$\frac{1}{2}$	
C5	$\frac{2}{4}$	
C4	$\frac{4}{7}$	
C3	$\frac{7}{4}$	8.3
F0	$\frac{4}{2}$	
C3	$\frac{2}{5}$	11.9 170.8
C3	$\frac{5}{8}$	12.1 170.6
C3	$\frac{8}{4}$	11.7 171.0
C3	$\frac{4}{4}$	11.4 171.3
C2	$\frac{4}{8}$	
C1	$\frac{8}{4}$	
C2	$\frac{4}{4}$	11.4 171.3
C2	$\frac{4}{2}$	10.8 171.8
C4	$\frac{2}{9}$	9.4 173.3
C4	$\frac{9}{5}$	
C4	$\frac{5}{6}$	

32nd St Cont

71

020	173.42	173.22		
4+62 (5) FH	1.7	171.7	172.0	F0 $\frac{3}{}$
5+00	1.3	172.1	167.3	C4 $\frac{8}{}$
+50	3.9	169.5	165.5	C4 $\frac{0}{}$
+74 mm	1.3	172.1	168.6	C3 $\frac{5}{}$
6+00	6.7	166.7	161.3	C5 $\frac{4}{}$
+50	10.0	163.4	158.7	C4 $\frac{7}{}$
+84 mm	7.0	166.4	161.6	C4 $\frac{8}{}$
197	163.13	1226	161.16	
7+00	3.2	159.9	155.2	C4 $\frac{7}{}$
+50	6.7	156.7	149.8	C6 $\frac{6}{}$
8+00	10.5	152.6	144.5	C8 $\frac{1}{}$
+06	10.9	152.2	144.0	C8 $\frac{2}{}$
	6.56	156.57	=	156.65

End of work

East Rim January 1914

ORANGE AVE  
 49<sup>TH</sup> ST. TO 50<sup>TH</sup>  
 (2) STR. 5' & GED. 3' FOR WAT. METS.

JAN 31 1958  
 BEATT  
 SHERIDAN  
 MARTELL

72

BM	148	334.43	332.95	3E. BD	19 <sup>TH</sup> & ORANGE	
0100	Ely prop. Line 19 <sup>TH</sup> St					
0405	(39) FH		2.16 332.27	332.20	CO'	
0478	Sly		3.6 330.8	330.80	COO	4921 ORANGE
1452	Nly		4.8 329.6	329.90	FO3	?
2458	Nly		5.1 329.3	329.10	CO2	
CK ON			5.69 328.74	= 328.75		4944 " Nail in P.P. SW Cor. Orange & WINANS
3434	(5) FH		7.13 327.30	327.4	FO1	
OM	1.98	330.73	328.75			
3481	Nly		3.4 327.3	327.5	FO2	4960 "
4414	Sly		5.0 325.7	325.7	COO	4965-67 "
4493	Nly		5.6 325.1	325.2	FO1	4978 "
4412	Sly		4.8 325.9	325.8	CO'	4957-59 "

Pepper Dr  
Tulip to 39<sup>th</sup> St  
Check on Depth of pipe

	1.70	258.46	256.76
2+50	6.43	252.03	
3+00	6.62	251.84	
+50	6.96	252.00	
+80	6.84	251.62	
4+00	7.40	251.06	
+50	8.61	249.85	
	127	257.19 =	

West  
Williams  
Varonfakis  
Kellhofer

2.1.1/55

73

EC Binney 9+69.18 Re. City Eng's

Top of Pipe

" " "

" " "

" " "

" " "

" " "

257.21 TBM Nail in Power Pole

Broadway 32<sup>nd</sup> to 33<sup>rd</sup>  
 5ths for 6" AC Main

cut sheet  
 made

West  
 Williams &  
 Varonakis  
 Kellhofer &

2/8/55

7A

Clear + Warm

0.92 107.47

106.55

NW Plug man 33<sup>rd</sup> + Broadway

0+58 MN

0.7 106.8 105.6

C1  $\frac{2}{2}$

0+58

0.9 106.6 101.6

C5  $\frac{0}{2}$

Begin Work

+67 FH Tee

2.2 105.3 99.1

C6  $\frac{2}{3}$

+67 (2) FH

1.2 106.3 105.0

C1  $\frac{3}{2}$

1+00

10.3 97.2 91.0

C6  $\frac{2}{2}$

9.75 104.57 1265 94.82

+25

11.0 93.6 89.0

C4  $\frac{6}{8}$

+50

11.8 92.8 89.0

C3  $\frac{6}{4}$

2+00

11.0 93.6 89.0

C4  $\frac{4}{4}$

+50

2.8 101.8 97.4

C4  $\frac{8}{8}$

13.01 116.88 0.70 103.87

3+00

3.1 113.8 110.0

C3  $\frac{4}{2}$

12.43 129.28 0.03 116.95

+35 ms

12.1 117.2 116.8

C0  $\frac{2}{8}$

+50

8.4 120.9 114.7

C6  $\frac{8}{1}$

+51 ms

9.0 120.3 118.5

C1  $\frac{8}{8}$

4+00

3.6 125.7 119.6

C6  $\frac{8}{8}$

+50

0.5 128.8 122.0

C6

5.32 134.44 0.16 129.12

BROADWAY 32<sup>ND</sup> To 33<sup>RD</sup>

75

134.44

2/8/55

5+00 4.8 129.6 122.0 C7 <sup>6</sup>/<sub>0</sub>

+50 9.4 125.0 122.0 C3 <sup>0</sup>/<sub>0</sub>

+75 4.5 129.9 124.0 C5 <sup>9</sup>/<sub>0</sub>

6+00 12.03 145.76 0.71 133.73 130.0 C3 <sup>7</sup>/<sub>0</sub>

+25 5.8 140.0 136.4 C3 <sup>6</sup>/<sub>0</sub>

11.42 156.72 0.46 145.30

+50 9.0 147.7 144.0 C3 <sup>7</sup>/<sub>0</sub>

+80 5.1 151.6 144.0 C7 <sup>6</sup>/<sub>0</sub>

end of work

0.25 156.47 = 156.50

See Page 29 EB 877



Jellett + Frank Fort  
12' AC stub  
50' East of  $\varnothing^s$  of streets

11.84 76.58

64.74

12.06 88.53

0.11 76.47

12.70 101.00

123 88.30

0+05

5.22 95.78

+11

1.8 99.2 94.3

C4<sup>2</sup>

5.13 105.59 054 100 A6

+50

2.1 103.5 97.4

6 L

0.23 92.84 1298 92.61

0.49 80.28 1305 79.79

2.18 71.36 1110 69.18

6.63 64.73 = 64.74

West  
Williams  
Varonakis  
Kellhofer

2/10/55

76

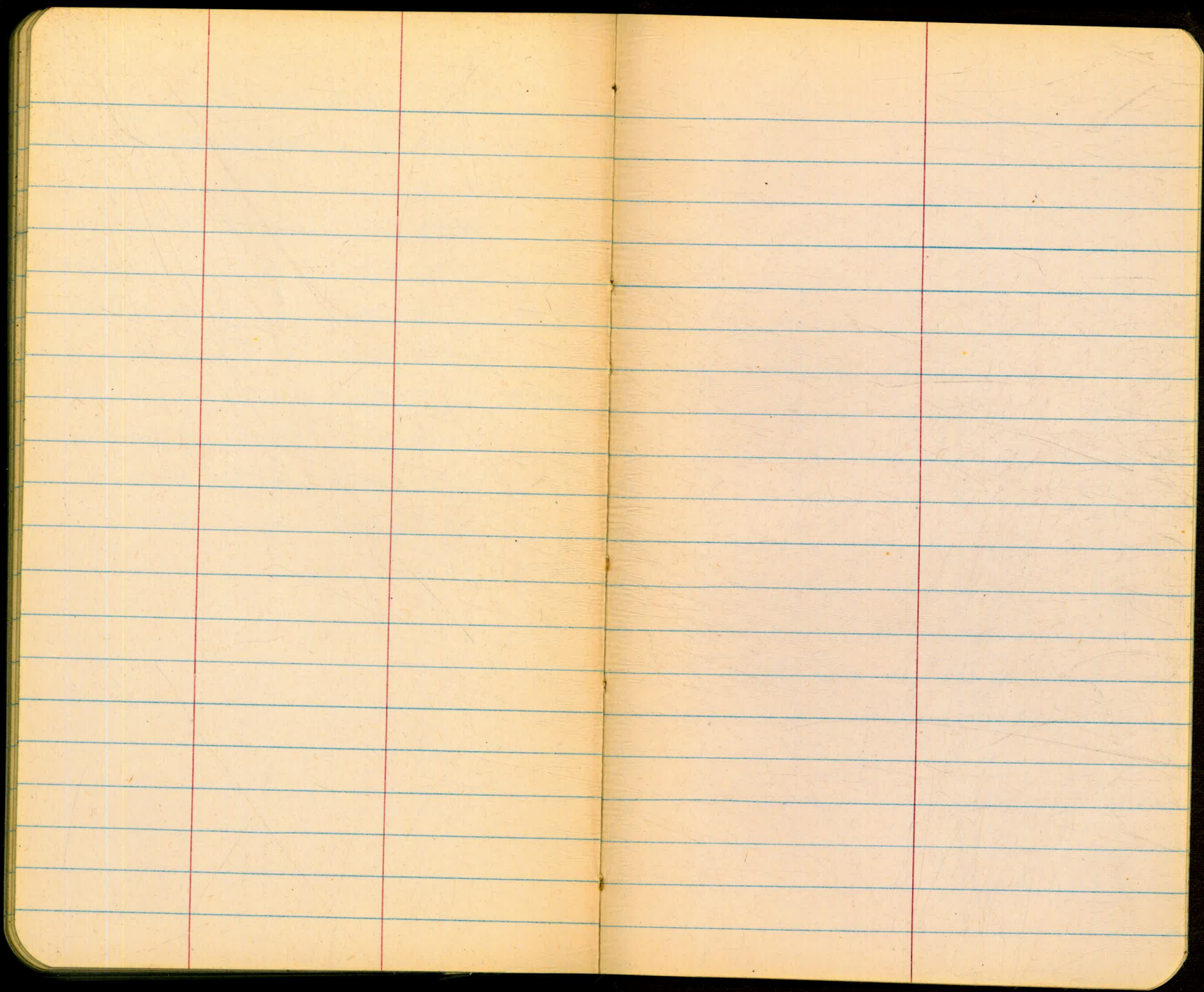
Jellett + Eric

TBM Nail in SW Power pole RS 112274

Top stem 12" BV

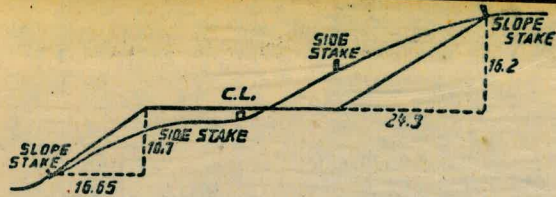
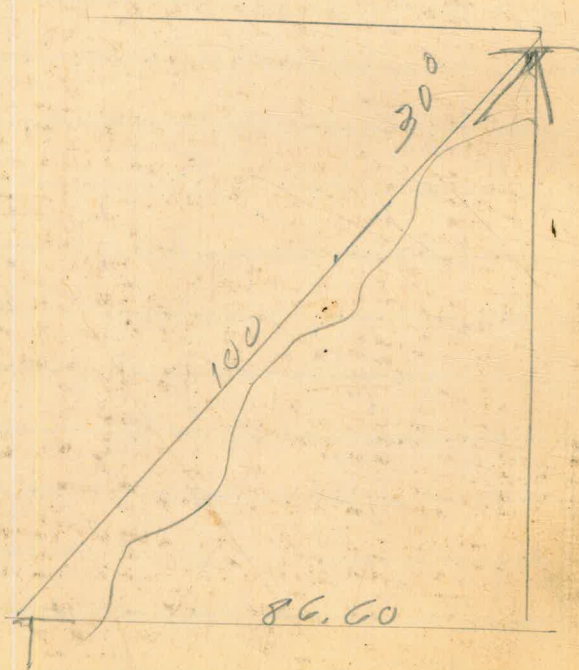
Beginning of work

End of work



Please Return to  
 City of San Diego Water Dept.  
 Room 903 Civic Center

3444  
 1484  
 160



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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