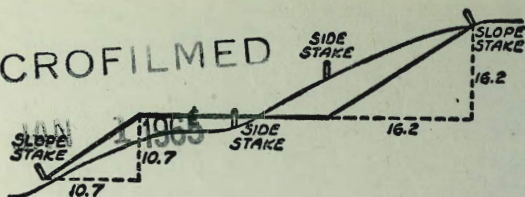






MICROFILMED



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.



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	.89	.99	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	.771	.845	.922	1.01		
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17		
75°	.095	.182	.266	.353	.440	.528	.617	.707	.797	.877	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		

INDEX

	Pg.
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Location 8" Sewer - Frontier Housing	38
Prop. Drain - 29th Island - 28th	54



Clark 4-10-52  
 Shephard W.O. 20960  
 Bruner  
 Bryson

DRAIN - 52nd + HANIMAN Drive

Notes: 2.

Detail INLET:

Type A-2

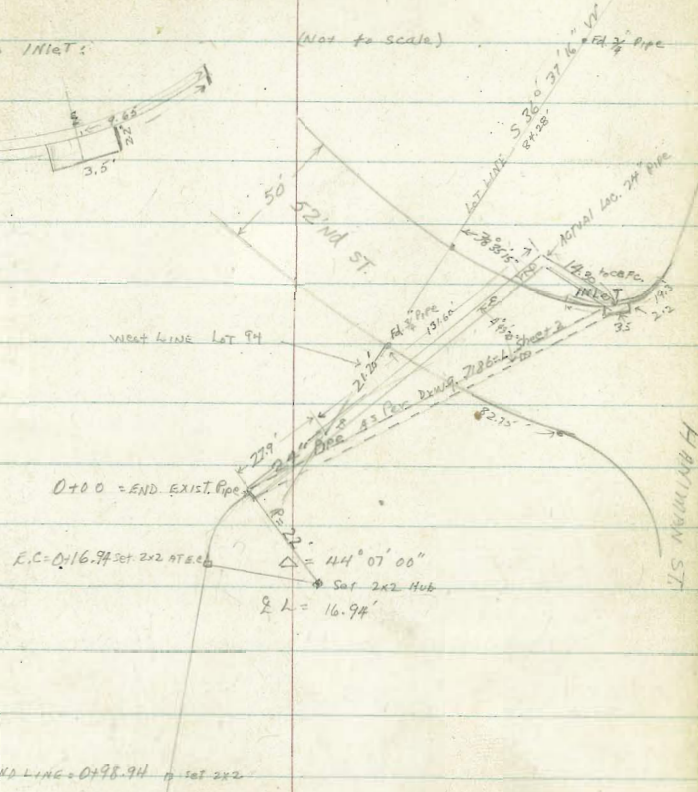
CB R=24'

$\Delta = 71^{\circ}42'$

19.30

3.5'

(Not to scale)



0+0 = END EXIST. PIPE

E.C. = 0+16.94 SET 2x2 AT E.S.C.

$\Delta = 44^{\circ}07'00''$   
 SET 2x2 HUB  
 S.L. = 16.94'

END LINE = 0+98.94 SET 2x2

INDEXED  
*Lew*  
 APR 16 1952







Drain - 52nd, HANIMAN (Cont.)

check: 8.68 223.82 - 223.79 = Elev B.P. SE 5444 + Grape

T.P. 0.34 232.50<sup>↓</sup> 11.73 232.16<sup>↓</sup>

T.P. 11.44 243.89<sup>↓</sup> 0.82 232.45<sup>↓</sup>



Survey for Prop. Drain & Row in Lot 35

La Mesa Colony at N. end of 68<sup>th</sup> St.

See 4572-B + T.P. 29-P. 27

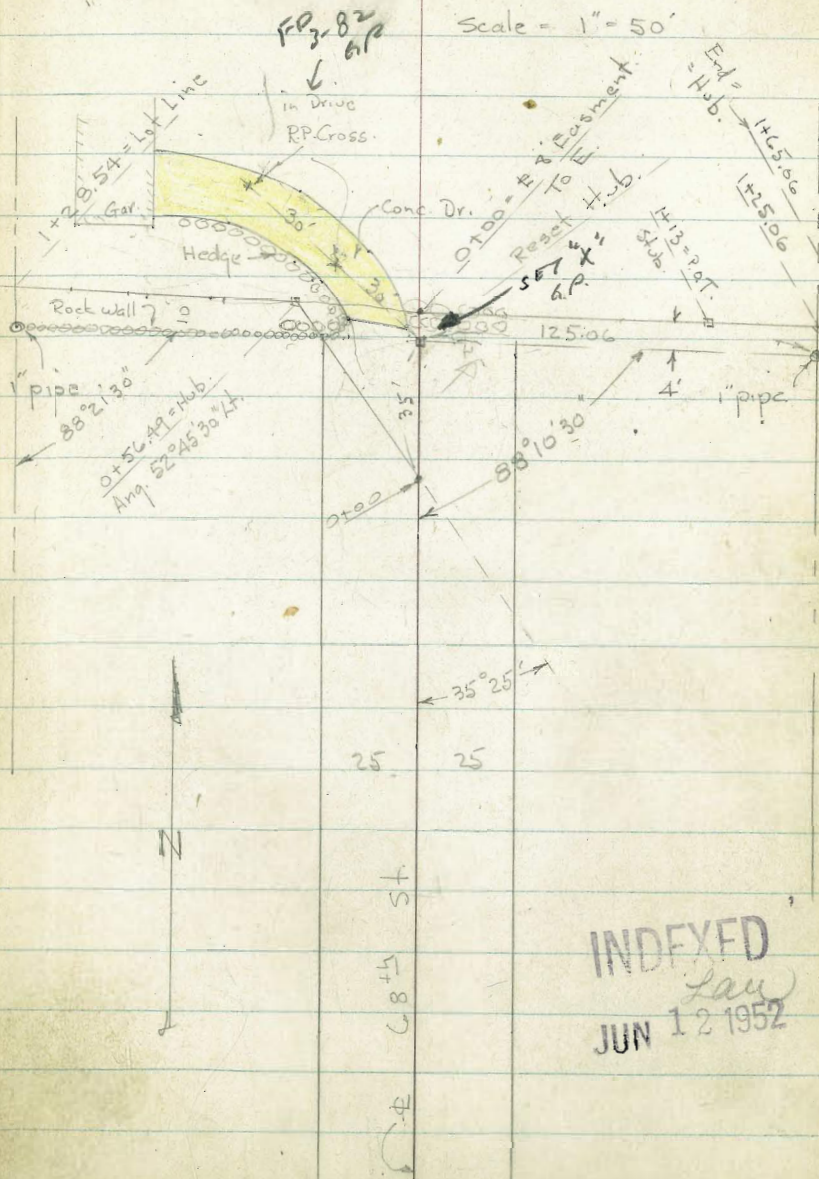
# 6338

6-11-52

W.O. 20628

7.0.

Crock



INDEXED  
Law  
JUN 12 1952



Levels along  $\pm$  of Prop. Drain - sketch - P. 4.

B.M. on pipe - 1+28.54 433.58

1+00

34.9 34.85 34.4 33.9 33.3  
25 10.4 ground.  
Top  
 $\pm$  17.5 = By Gar.

0+95 - 17.5 Rt. = S.E. Cor. of Gar.

33.6 33.61  
17.5 19.7 = Edge Dr.  
at Cor. Dr.

0+90 - 6.2 Lt. =  $\pm$  3" Plum

0+75

7.6 Rt. =  $\pm$  1" Guava

36.84 36.0 35.8 35.05  
10.3 ground  
 $\pm$  wall Top 19.3 = edge Dr.

0+63 - 2.5 Rt. + 2.7 Lt. = Beg.  $\pm$  of Row of Grape Vines

0+56.49 = 90° to Forward tang. - 3.3 Rt. =  $\pm$  1" Guava

37.19 36.21  
10.7 28.8  
(Edge of Dr.)

- 6.4 Rt. =  $\pm$  3' Hedge

0+56.49 = Angl. Pt. - Sect. 90° to Back Tang.

37.20 = Hdb. 38.03 38.23  
7.7 22.8  
(Edge of Dr.)

0+51 - 2.5 Rt. =  $\pm$  2" Guava Tree

0+46.5 = Cross  $\pm$  of 3' Hedge - 4' High  
+ 8.2 Rt. = wly. Cor. of Dr.

0+43.5 = sly. of Rock Wall 12" wide

39.02 38.4 38.88  
Top wall ground 8.2 = Dr.

0+33 - 20' Rt. = Ely. Cor. of Conc. Dr. - See sketch

39.64  
to Dr.

0+30

38.3 38.9 39.9  
25 25

0+00 =  $\pm$  68<sup>th</sup> - approx. Rad. of Turnaround.

40.0 40.3 40.5  
25 25 = 90° to forward Tang.

B.M. = 30 R.P. Cross on Drive 438.10  
(from Const. B.M. at Saranac)

(400' Elev. not noted.)

Actual Elev. shown.



2+37.10 = End. 9.8' Rt. = fence  
Bottom of creek

2+25

2+10

1+90 - 8.7' Rt. = fence

1+50

1+29 = Crosswire fence + 7.9' Rt. = Beg. E. & W. fence

1+29 - 13.5 = £ 30° Euc. Tree

1+28 = End wall 10.2 Lt.

1+25-

1+15 - 16.9 Rt. = Cor. Cor.

16.4 Lt. = £ P. pole # 402748 = H

1+24 - 2' Rt. = £ Deadman

1+11 - 3.9 Lt. }  
3.3 Rt. } = End Row of Grapes

1+03 - 7.2 Lt. = £ 3" Olive

1+01.5 - 6' Rt. = £ 3" Peach

Lt.

25

£

Rt.

11.93 = Hub.

11.5

10

11.6

25

12.9

25

11.7

09.9

25

18.9

25

16.4

12.1

25

26.3

25

24.2

19.6

25

31.3

25

29.7

27.8

25

34.4

25

33.69

102

£ wall

Top ground

32.1

31.8

25



Levels along  $\pm$  of Prop. Drain in  $\pm$   
of 8' Easement - E. from N. end of 68<sup>th</sup>

Sketch - P. 4

W.O. 20628

7-25-52

7.0.

1+40 = Toe

17.3

18.1

19.3

10

10

1+25 - Cross fence - 3.4' Rt. = Cor.

1+15 - 3.8' Rt. = fence

28.4

30.8

32.1

10

10

1+13 = P.O.T. Stub.

431.14

0+80 - 3.6' Rt. = fence

34.4

35.2

36.0

10

10

0+45

38.2

38.9

39.4

10

10

0+40.5 - Cross wire fence - 3' Rt. = Cor. - goes E.

0+26 - 6.2' Lt. =  $\pm$  36" Palm

0+25

39.9

40.1

40.2

10

10

0+24 - 2.8' Lt. = sly. of Picket fence

0+24 - 2' Lt. = end  $\pm$  Hedge

0+00 =  $\pm$  68<sup>th</sup> Prod. 4' Nly.

39.4

39.9

39.6

10

10

0-037 - 1.5' Lt. = Beg.  $\pm$  3' Hedge - 4' High

on lawn

B.M. = 30' R.P. Cross

438.10

400' fig not Noted.

P. 5

Lt.

$\pm$

Rt.



Lt.

±

Rt.

1+65.06 = end = Hub.

21.4  
10

20.47

21.0  
10

1+55 = Toe

18.3

1+48 = ± ± of Creek

15.8  
40  
± Creek

16.8  
10

18.0

18.2  
10

19.0  
30  
± Creek

INDENTED



Clark  
Stephens  
Briner  
Bryson

8-14-52  
W.O. 21014

DATA: F.B. #1679

X-SECT. PAVED - PORTION

FRONTIER ST, bet. ROSECRANS +  
MIDWAY DV.

For sketch see F.B. #1679 Pages 8-21

USED same STATIONING AS F.B. #1679

T.P. 4.46 8.88 3.86 4.42

4+50

4+00

3+50

3+00

2+50

1+96.5. END STATE Pav. opp. CB RT. (F.B. #1679) p. 8

T.P. 4.48 8.28 4.93 3.80

B.M. 5.76 8.73 2.97 S/W.B.P.

Pav. Edges irreg. in places.

all shots RELT to Edge DIST. Pav.

INDEXED  
Sundberg  
AUG 22 1952

LT.

E

RT.

9

8.88

3.84

4.25

3.80

4.44

4.03

4.48

19.4

19.8

3.93

4.27

3.85

4.35

4.01

4.43

19.5

20

3.58

4.14

3.70

4.70

4.14

4.58

21

19.8

E.P.

E.P.

3.27

3.91

3.46

4.01

4.37

4.22

20.8

19.1

E.PAV

E.PAV

3.32

3.81

3.39

4.96

4.47

4.89

21.2

E.PAV

E.PAV.

20

3.17

3.51

3.31

3.90

5.11

4.77

4.97

4.38

29.4

33.7

E.PAV

33.7

CD

8.28

Kurtz + Rosecrans



8  
A  
D

7+70.70

See Page 10 FA #1679  
B.C.

7+50

7+00

6+50

6+18.8

Houseing Project St. on RT  
See Page 9 FA #1679

6+00

5+50

5+00

LT.

P.

RT.

4.04  
4.84  
19.8

4.57  
4.31

4.29  
4.59  
19.5

4.10  
4.78  
19.9

4.54  
4.34

4.19  
4.69  
19.6

4.09  
4.79  
19.9

4.56  
4.32

4.19  
4.69  
19.9

4.14  
4.74  
19.8

4.54  
4.34

4.17  
4.71  
20.0

4.11  
4.77  
19.8

4.54  
4.34

4.21  
4.67  
20.2  
3.27  
5.61  
34

4.10  
4.78  
19.8

4.52  
4.36

4.20  
4.68  
20.4

4.14  
4.74  
19.8

4.66  
4.22

4.19  
4.69  
20.2

4.04  
4.84  
19.9  
Edge Ave

4.41  
4.47

3.96  
4.92  
19.8  
Edge Ave

8.88  
A







T.P. 4.92 8.54 4.89 3.62

15+50

15+00

9.43  
1.6  
9.27

14+50

14+00

13+50

13+00

12+50

12+00

11+70.14

chk:

See FB#1679 -10  
E.C.

5.45

3.26 = 3p3 chd av  
73' RT

LT. F RT.

8.54

3.70  
4.81  
20.5

3.67  
4.84  
20.6

3.54  
4.97  
20.6

3.64  
4.87  
20.6

3.65  
4.86  
20.5

3.71  
4.80  
20.4

3.76  
4.75  
20.5

3.79  
4.72  
20.6

3.86  
4.65  
20.5  
Edge Mt.

4.06  
7.45

4.00  
4.51

3.93  
4.58

4.01  
4.50

4.08  
4.43

4.18  
4.33

4.17  
4.34

4.18  
4.33

4.27  
4.24

8.51

3.72  
4.79  
19.2

3.79  
4.72  
19.2

3.61  
4.80  
19.0

3.72  
4.79  
19.0

3.65  
4.86  
19.2

3.85  
4.66  
19.4

3.83  
4.68  
19.6

3.85  
4.66  
19.8

3.83  
4.68  
19.7  
Edge Mt.

WALK  
STA 11+70.14  
FB#1679 B.15



20+00

CHK. 19191 23 RT #89 365=362. CAP ON

19+50

WALL  
FB# 1679-24

19+00

18+50

18+00

17+50

17+00

16+50

16+00

LT.

E.

RT.

4.14

4.51

4.14

~~4.40~~  
19.5

4.03

4.40  
19.0

4.13

4.41

4.08

~~4.41~~  
19.6

4.13

4.46  
19.0

3.98

4.26

3.96

~~4.56~~  
19.6

4.28

4.58  
19.0

3.97

4.30

4.00

~~4.57~~  
20.4

4.24

4.54  
19.3

3.94

4.29

3.96

~~4.60~~  
20.6

4.25

4.53  
19.5

3.80

4.24

4.01

~~4.74~~  
20.5

4.30

4.53  
19.5

3.80

4.17

3.99

~~4.74~~  
20.5

4.37

4.55  
19.0

3.83

4.13

3.88

~~4.71~~  
20.5

4.41

4.66  
19.3

3.59

4.07

3.78

~~4.95~~  
20.5  
Edge Pitt.

4.47

4.76  
19.2  
Edge Pitt.

8.54



23+40

23+20.19

See sketch F.B. 1679-18  
= E Freedom & Frontier

22+00

22+50

22+00

21+71

(Sect. 490° Frontier)  
Approx. E Par. on Fardham & Frontier

21+51.45

See sketch F.B. 1679-18  
= E Frontier & S.E. Co. Line Fardham

21+38

21+00

T.P.

20+50

4.71

8.86

4.39

4.15

4.23

4.63

19.2

4.30

4.56

19.2

4.28

4.58

19.5

4.30

4.56

20

3.60

5.26

34

4.21

4.65

20.7

3.74

5.12

34

4.20

4.66

20.7

4.31

4.55

19.9

3.84

5.02

34

4.33

4.53

19.9

4.25

4.61

19.7

4.25

4.29

19.6

Edge Par.

4.61

4.25

4.70

4.16

4.73

4.13

4.76

4.10

4.73

4.13

4.77

4.09

4.74

4.12

4.69

4.17

4.64

4.22

8.86

4.57

3.97

8.54

P3

4.15

4.71

4.23

4.63

20.4

4.27

4.59

20.4

4.31

4.55

19.6

4.34

4.52

14.2

4.31

4.55

19.2

4.16

4.70

19.2

4.18

4.68

19.1

4.13

4.73

19.1

4.19

4.35

19.0

Edge Par.

14



27+50

27+00

26+50

26+00

25+50

25+00

24+50

T.P.      4.38    8.28      4.96    3.90

24+00

23+50

LT.

E

RT.

3.46  
~~4.82~~  
20.1

3.45  
4.83  
19.9

3.62  
4.66  
19.7

3.8  
4.46  
19.6

3.94  
4.34  
19.6

3.98  
4.30  
19.8

3.94  
4.34  
19.5

4.04  
4.82  
19.3

4.18  
4.68  
19.2  
Edge Pav.

3.92  
4.36

3.96  
4.32

4.03  
4.25

4.05  
4.23

4.20  
4.08

4.37  
3.91

4.40  
3.88

8.28  
4.46  
4.40

4.58  
4.28

8.86

3.55  
~~4.73~~  
20.

3.66  
4.62  
20.0

3.71  
4.57  
20.0

3.69  
4.59  
19.9

3.80  
4.48  
20.1

4.01  
4.27  
20.2

4.10  
4.18  
20.0

4.17  
4.69  
20.2

4.15  
4.71  
20.2  
Edge Pav.



31+00

30+50

30+00

29+78.18

29+50-

29+00

28+50

T.P.

28+00

CHK

27+90, 79 RT

3.93

3.57

3.64  
- .06

CHK

WALK

-28

LT.

E

RT.

3.43

4.07

19.9

3.40

4.10

20.0

3.46

4.04

20.0

2.91

4.59

3+

3.42

4.08

20.

3.35

4.15

19.9

3.34

4.16

19.8

3.42

4.08

20.0

3.78

3.72

3.80

3.70

3.82

3.68

3.85

3.65

3.79

3.71

3.82

3.68

3.80

3.70

7.50

3.52

4.76

20.2

Edge Pav.

8.28

3.15

4.35

19.7

3.38

4.12

19.8

3.30

4.20

19.9

3.30

4.20

19.9

3.34

4.16

20.0

3.31

4.19

20.0

3.27

4.23

20.0

3.47

4.81

20.0

Edge Pav.



LT.      R      RT.

35100

3.34      3.71      3.39  
4.42      4.05      4.37  
19.5           19.3

34750

3.22      3.64      3.28  
4.54      4.12      4.48  
19.5           19.3

34100

3.30      3.64      3.31  
4.46      4.12      4.45  
19.7           19.6

33150

3.36      3.66      3.34  
4.40      4.10      4.42  
20.           19.7

33100

3.28      3.65      3.37  
4.48      4.11      4.39  
20.6           20

32750

3.33      3.72      3.34  
4.43      4.04      4.42  
20.4           19.8

T.P.      2.62      7.76      2.36      5.14

7.76  
X

32100

3.31      3.70      3.32  
4.19      3.80      4.18  
19.9           19.5

31750

3.35      3.73      3.30  
4.15      3.77      4.20  
19.9           19.6  
Edge Par.           Edge Par.

7.50  
X



39+00

38+50

38+00

37+50

T.P. 7.45 7.93 7.78 2.98

37+00

36+50

36+27

36+11.20

See Sketch F.O. # 16.79 - 19  
- 9. Purdue & Frontier

36+00

35+50

LT.ΣRT.

3.15

4.20  
19.3

3.20

4.23  
19.5

3.15

4.28  
19.7

3.16

4.27  
19.9

3.13

4.63  
20.4

3.15

4.61  
20.3

2.46

5.30  
344.62  
20

3.15

4.61  
19.8

3.29

4.49  
19.9

Edge Pav.

3.48

3.95

3.52

3.91

3.55

3.88

3.59

3.84

7.43

3.55

4.21

3.50

4.26

3.53

4.23

3.57

4.19

3.58

4.18

3.67

4.09

7.76

3.06

4.37  
19.9

3.16

4.25  
19.7

3.23

4.20  
19.6

3.32

4.11  
19.4

3.17

4.59  
18.9

3.15

4.61  
19.0

3.11

4.65  
19.2

3.06

4.70  
19.3

3.08

4.68  
19.5

3.34

4.42  
19.4

Edge Pav.



42+6 5.80 = B.C. See sketch F.B. #7679-20

42+57 opp.

42+50

CHK. 42+25 80 RT 5.78 2.74 = 2.76 CHIT ON VIAIK F.B. #7679-33

42+00

T.P. 5.30 8.52 4.21 3.22

41+50

41+00

40+50

40+00

39+63.04 See sketch F.B. #1679-19 - E VALIANT 1/2 Frontier

39+50

2.37	3.67	4.09	3.70
<del>6.15</del>	<del>4.85</del>	<del>4.43</del>	<del>4.82</del>
<del>4.81</del>	<del>2.0</del>	<del>4.04</del>	<del>70.9</del>
G.LINE 2.78	3.57	4.04	3.66
5.74	4.75	7.88	4.86
4.01	2.0		20.8
	3.48	4.00	3.63
	5.04	4.52	4.89
	20.6		20.7

3.30	3.68	3.36
5.22	4.84	5.16
20.5		20.7

3.16	8.52	3.05
4.27	3.45	4.38
20.3	3.98	20.6

3.08	3.47	2.95
4.35	4.01	4.40
20.0		20.6

3.03	3.48	2.94
4.40	3.95	4.49
19.8		20.3

3.06	3.49	3.03
4.37	3.94	4.40
19.7		19.9

3.13	3.46	3.02	2.28
4.30	3.97	4.41	5.15
19.8		20.2	34

3.11	3.45	3.06
4.32	3.98	4.37
19.5		19.8
Edge Par.		Edge Par.

7.43



IMPROVED  
AUG 22 1952

check: 5.78 2.74 = 2.76 (Chd 80 RT) at 42+25  
ON WA IK FB 7679 - 33

44+75.25 = POINT Island

4.14	5.04	5.47	6.10	6.11	5.36	5.28	4.82
4.38	3.48	3.05	2.42	2.41	3.16	3.24	3.70
16.	20	GUT.	TRCB	160	GUT.	20	38.8
G.							E.PAW

44+50

3.91	4.83	5.19	5.07	4.63
4.61	3.69	3.33	3.45	3.89
47	20		20	24.6
G.				E.PAW

44+00

3.57	4.45	4.86	4.65	4.48
4.95	4.07	3.66	3.87	4.04
48	20		20	28.7
G.				E.PAW

43+50

3.06	4.15	4.60	4.27	4.21
5.46	4.39	3.92	4.25	4.31
48	20		20	23.7
G.				E.PAW

43+00

2.86	3.86	4.30	4.00
5.66	4.66	4.22	4.52
48	20		20.7
CUTTER			Edge PAW

8.52



CROSS SECTIONS OF FRONTIER ST.  
FOR PROPOSED DRAINAGE DITCH

CURVE DATA

$\Delta = 23^\circ 58'$   $R = 954.93'$   $T = 202.69'$   $L = 399.44'$

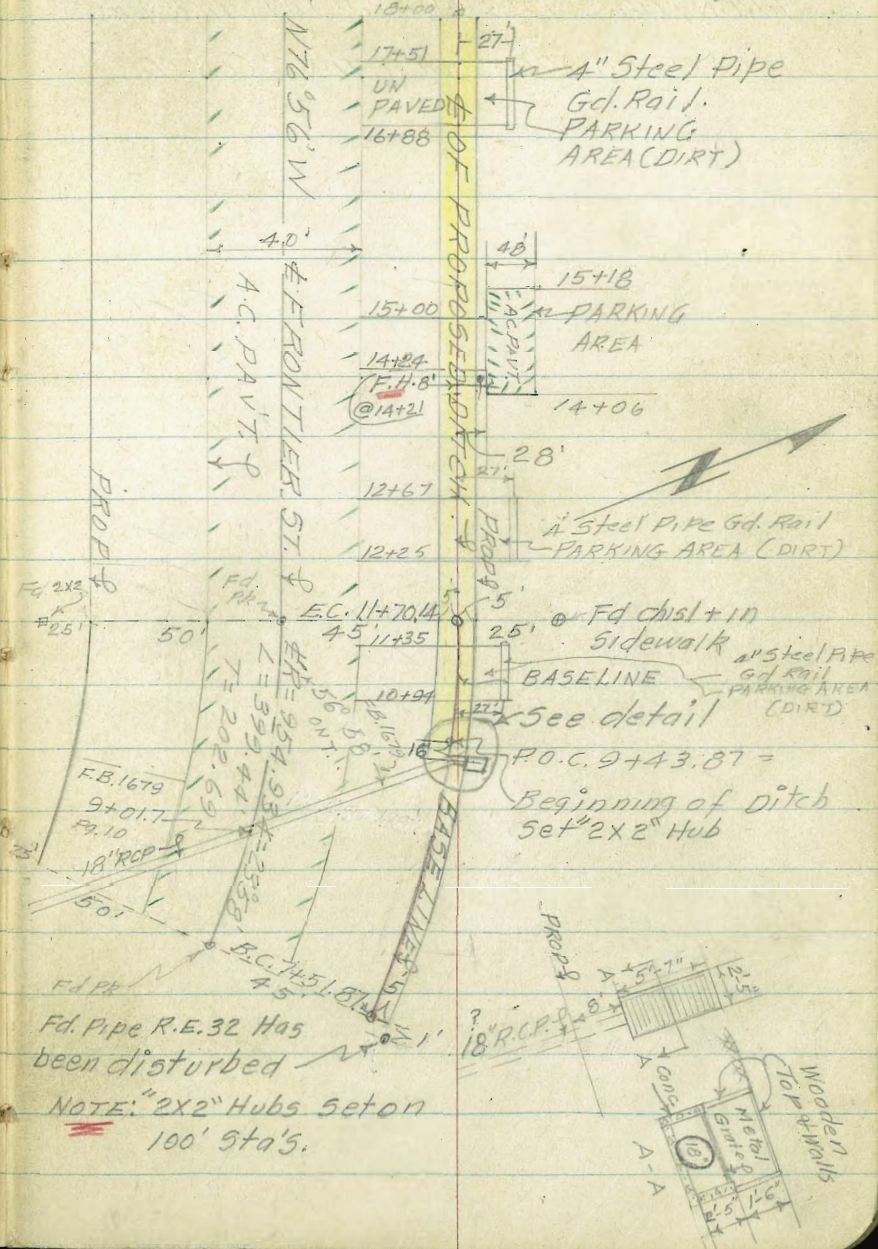
CURVE DATA - PROPOSED DITCH  
 $d = 1.71899372 \text{ Ft.}$

$\Delta = 23^\circ 58'$   $R = 999.93'$   $T = 212.24'$   $L = 418.27'$

Sta.	Def $\Delta$	Chord
B.C. Lt 7+51.87		
Beg. of Ditch 9+43.87	$5^\circ 30' 03'' \checkmark$	191.71 $\checkmark$
10+00	$7^\circ 06' 32'' \checkmark$	56.13 $\checkmark$
+50	$8^\circ 32' 29''$	50.00 $\checkmark$
11+00	$9^\circ 58' 26''$	50.00 $\checkmark$
E.C. +70.14	$11^\circ 59' 00'' \checkmark$	70.14 $\checkmark$
12+00		29.86 $\checkmark$
13+00		100.00 $\checkmark$
14+00		" " $\checkmark$
15+00		" " $\checkmark$
16+00		" " $\checkmark$
17+00		" " $\checkmark$
18+00		100.00 $\checkmark$

INDEXED  
flaw  
OCT 30 1952

10-24-52  
W.O. 21014  
NOTES PG. 24  
T. Stamper  
R. Sisson  
R. Shorey

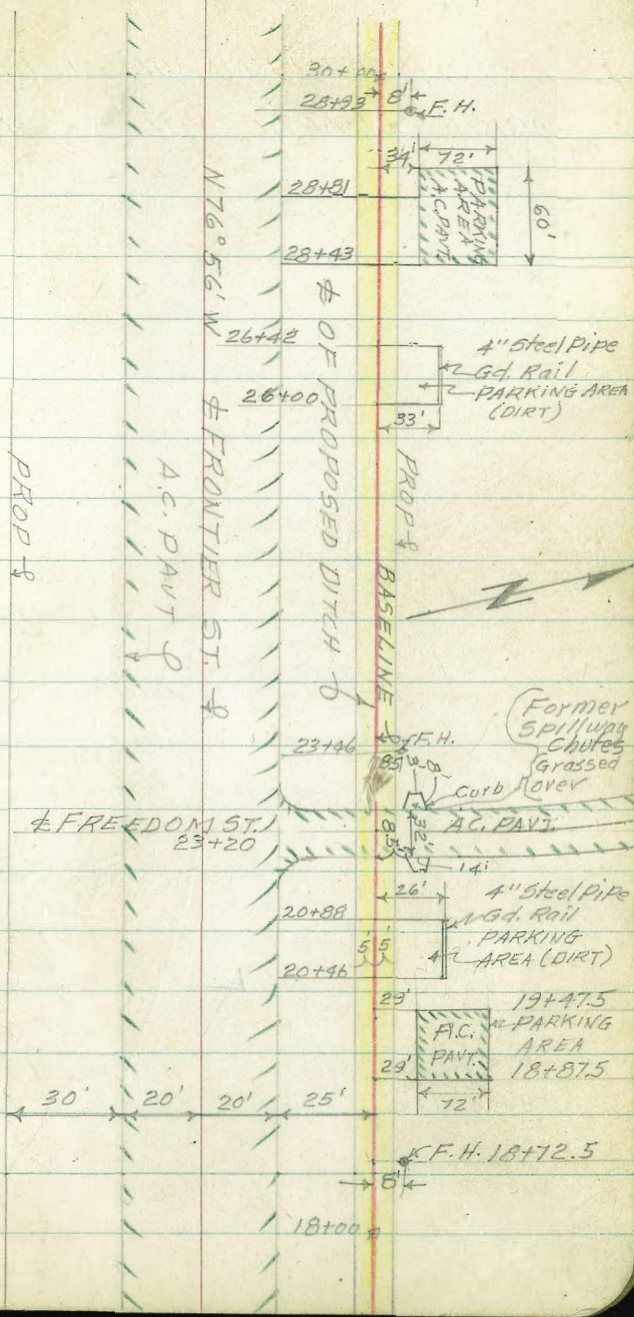


Fd. Pipe R.E. 32 Has  
been disturbed  
NOTE: "2x2" Hubs set on  
100' Sta's.





FRONTIER ST. DRAINAGE DITCH X-SEC'S  
& PARKING AREA LOCATIONS CONTD









CROSS SECTIONS OF PROPOSED DRAINAGE  
DITCH NLY. SIDE OF FRONTIER STREET

STA	ELEV.	Lt.	¢	Rt.
B.M.	3.03			
9+27.87 SEC AT DRAIN BOX INLET	4.00 25		3.0	2.8 5 - 1.09
9+43.87 BEGINNING OF DITCH	4.02 25	3.0 2	2.4	1.8 3.38 5 5
9+24 ¢ TOP SEWER M.H.		3.10 10		
10+00	4.08 25	3.4 6	2.4	1.3 3.2 2.9 2.80 5 6 13 30
10+50	4.07 25	3.5 6	2.6	1.5 3.3 2.94 6 7 30
10+35				1.9 3.65 5 5
11+00	3.99 25	3.2 9 (sewer) TOP M.H. = 11+71	2.4	2.7 2.93 6 30
E.C. 11+70.14	3.80 25	3.46 10	3.2 6	2.4 1.8 3.0 5 6 3.03 30

2  
7 33  
1.09

10-27-52

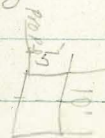
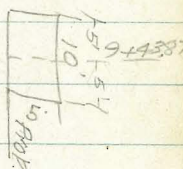
24

NOTE: See sketch Pg. 21-23 Elev's. taken with a direct Reading Rod

Numerators = Elev's, Denominators = Dist. out

Chis. + on S. Walk 30' Rt. Mkd. TP#2 See FB1679 Pg. 15  
FRONTIER ST.  
N. Edge Pavt.

Top Ground Inlet Elev  
COVER 18" R.C.P. 18" R.C.P.





10-27-52

25

Lt.

±

Rt.

X-SEC'S DRAINAGE FRONTIER ST. CONTD.

DTA

12+00

FRONTIER ST.  
(N. Edge Pavt.)

3.81	3.2	2.5	1.6	3.0	S. Walk
25	6		5	6	3.00
					30

13+00

3.79	2.9	2.1	1.5	2.8	S. Walk
25	9		5	5	3.08
					30

+45

S. WALK

14+06 ELY. LINE PARKING AREA

3.63	2.9	2.0	1.4	2.9	Parking TOPCB	TOPAS
25	7		5	5	316	270
					28	28

14+24 ELY. LINE PARKING ENTRANCE

3.55	2.8	2.1	1.6	2.6	Parking TOPAS	2.76
25	7		5	18		28

15+00 WLY. LINE PARKING ENTRANCE

3.75	2.8	2.0			Parking TOPAS	2.80
25	7					28

15+18 WLY. LINE PARKING AREA

		2.3	1.9	2.8	Topcb TOPAS	3.25	2.20
25			5	5		28	28



10-27-52

(26)

X-SEC'S DRAINAGE DITCH FRONTIER ST.

CONTOUR

Lt.

Ct.

Rt.

STA		ELEV.	FRONTIER ST. N. Edge Part						
TR		TOP							
16+00		2.37	2.76 25	3.0 10	2.4	1.7 4	2.9 9	3.27 30	
16+88	ELY LINE PARKING AREA		3.99 25	3.1 11	2.0	1.8 6	2.9 16	3.4 27	5. walk 3.38 30
17+51	WLY LINE PARKING AREA		3.96 25	3.3 11	2.2	1.7 4	3.3 27	3.38 30	5. walk
18+00			3.96 25	3.3 12	2.4	1.8 4	3.0 7	3.45 30	5. walk
18+87.5	ELY LINE PARKING AREA		3.97 25	3.4 12	2.6	2.3 4	3.51 28	3.08 28	Parking Top Cont. Top AC.
19+47.5	WLY LINE PARKING AREA		4.03 25		2.7	2.6 4	3.53 28	2.90 28	Topck Top AC.
19+91	B.M.	3.62	3.62	Chris/O on 25' Ref Pt. North Sec FB 1679 Pg 24					
		3.61		Check Back					



X-SEC'S. FRONTIER ST. DRAINAGE DITCH CONTD.

STA ELEV

20+00

20+46

ELY. LINE PARKING AREA

20+88

WLY. LINE PARKING AREA

21+00

22+00

23+04

ELY. LINE FREEDOM ST.

10-27-52

(27)

Lt.

±

Rt.

FRONTIER ST.  
N. Edge Pavt.

S. Walk

4.16 2.8 2.3 3.4 3.60  
25 4 5 30

4.14 3.6 3.0 2.5 3.6 3.64  
25 13 6 26 30

4.07 3.0 2.7 3.2 3.5 3.64  
25 5 13 26 30

4.11 2.9 2.7 3.4 3.68  
25 4 8 30

S. Walk

4.25 3.3 2.8 2.5 3.6 4.59  
25 5 8 37

Gut curb Gut Curb

4.18 2.86 3.14 3.72 3.02 3.67  
25 8.5 8.5 22.5 22.5



10-27-52

(2B)

X-SEC'S FRONTIER ST. DRAINAGE DITCH CONTD.		FRONTIER ST. (N. Edge Pavt.)		Lt.	±	Rt.						
STA.		ELEV.										
23+20	± FREEDOM ST.			4.16 25	3.94 25		3.05		3.36 23			
23+36	WLY. LINE FREEDOM ST.			4.05 25	3.89 25		2.89	curb gut 3.72	3.08	gut 3.07	curb 3.69	
								8.5	8.5	22.5	22.5	
24+00				4.00 25	3.8 25		2.6	2.5 6	3.6 10	5. Walk 4.46	37	
25+00				3.94 25	3.6 25	3.13 10	2.86	2.4 5	3.8 9	8. Walk 4.00	37	
± Top M.H. 10' Lt. TP. 25+00		3.13										
26+00	WLY. LINE PARKING AREA			3.62 25	3.5 25		2.5	2.5 3	3.2 5	3.6 15	3.7 33	3.61 37
26+42	WLY. LINE PARKING AREA			3.62 25	3.5 25		2.5	2.5 3	2.9 4	3.6 11	3.8 33	3.60 37



10-27-52

X-SEC'S. FRONTIER ST. DRAINAGE DITCH CONTD.

Lt.                      \$                      Rt.

FRONTIER ST.  
N. Edge Pavt.

S. Walk

STA.                      ELEV.

27+00	3.59 25	3.4 25		2.4	2.3 2	2.6 5	3.4 9	3.54 37
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S. Walk

28+00	3.39 25	3.2 25		2.1	2.2 3	3.6 8		3.50 37
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28+43	ELY. LINE PARKING AREA ENTR.	3.22 25	3.0 25	2.1 8	2.5		curb Gut 3.41 34	2.93 34
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28+81	WLY LINE PARKING ENTRANCE	3.24 25	3.0 25	2.5 16	2.6		curb Gut 3.44 34	3.15 34
-------	---------------------------	------------	-----------	-----------	-----	--	------------------------	------------

29+03	WLY. LINE PARKING AREA	3.25 25	3.0 25	2.2 11	1.9	2.0 4	3.5 10	curb Gut 3.43 34	2.95 34
-------	------------------------	------------	-----------	-----------	-----	----------	-----------	------------------------	------------

29+45	\$ SEWER M.H.			2.34 10				S. Walk
-------	---------------	--	--	------------	--	--	--	---------

30+00		3.18 25	3.0 25		1.9	2.2 5	3.3 9	3.16 37
-------	--	------------	-----------	--	-----	----------	----------	------------



10-27-52

X-SECS. FRONTIER ST. DRAINAGE DITCH CONT'D.

STA.	ELEV.
30+28 ELY. LINE PARKING AREA C&G 37' RT. TR. 30+28	3.32

30+70 WLY. LINE PARKING AREA	
------------------------------	--

31+00	
-------	--

32+00	
-------	--

32+15 ELY. LINE PARKING AREA	
------------------------------	--

32+75 WLY. LINE PARKING AREA	
------------------------------	--

FRONTIER ST. N. Edge Pavt.	Lt.	±	Rt.	S.Walk				
3.28 25	3.0 25	2.1 8	2.1 4	2.2 8	3.0 33	3.4 37	3.50 37	
3.22 25	3.0 25		2.0 7	2.4 13	3.2 33	3.3 33	3.31 37	S.Walk
3.09 25	2.9 25	2.1 5	1.9	2.1 6	3.2 9		3.30 37	S.Walk
3.23 25	3.0 25	2.1 6	1.8	1.8 5	3.1 8		3.28 37	S.Walk
3.30 25	3.0 25	2.1 5	1.9	2.6 15	Curb 34	Gut 34	2.81 34	
3.22 25	3.0 25	2.2 5	1.9		Curb 34	Gut 34	2.74 34	



10-27-52

X-SEC'S. FRONTIER ST. DRAINAGE DITCH CONTD.

STA  
33+00

ELEV.

Lt. FRONTIER ST.  
N. Edge Pavt.

±

Rt.

3.30	3.0	2.2	1.9	2.0	3.0	S.Walk	
25	25	5		4	7	3.18	38

33+90 ELY. LINE PARKING AREA

3.25	3.0	2.3	2.0	1.8	3.0	3.3	3.19	S.Walk
25	25	5		4	10	33	36	

34+30 WLY. LINE PARKING AREA

3.19	3.0	2.4	1.9	1.5	2.4	2.7	3.0	3.10	S.Walk
25	25	5		3	4	11	33	36	

35+00  
TOP "2X2"  
TR. 35+00

1.86

3.35	3.0		1.9	1.8	2.9	S.Walk	
25	25			5	9	3.05	36

35+87 ELY. LINE PARKING AREA

3.05	2.8	2.1	1.9	1.5	2.9	3.00	2.55	Curb Gut
25	25	5		5	10	34	34	

36+00 ± TOP SE

2.30  
10

36+08.5 ELY LINE PARKING ENTRANCE

3.01	2.7	2.3	2.0	2.0	3.30	Curb Gut	
25	25	5		5	18	2.94	18

Curb Gut	
3.20	2.76
34	34



10-27-52

X-SEC'S. FRONTIER ST. DRAINAGE DITCH CONTD.

STA	ELEV.	LT.	±	RT						
		FRONTIER ST. N. Edge Pavt.					Corb	Gut		
							Corb	Gut		
36+24.5	WLY LINE PARKING ENTRANCE	3.01 25	2.8 25	2.4 5	2.0	2.4 10	3.32 18	2.97 18	3.08 34	2.77 34
36+47	WLY LINE PARKING AREA	3.05 25	2.7 25		1.9	1.7	3.0 4	2.97 8	2.31 34	
37+00		3.09 25	2.9 25		1.6	1.7 5	2.9 9		S. Walk 28.5 36	
38+00		3.16 25	3.0 25		1.7	1.5 5	2.8 8		S. Walk 2.97 36	
39+00		3.00 25	2.6 25	2.0 8	1.7	1.6 4	2.9 8		S. Walk 3.56 36	
39+48	ELY LINE VALIANT ST.	2.95 25	2.71 23	1.88 3	1.08	2.45 17.5	2.66 32.5		Corb 2.02 32.5	Gut 2.77 34



10-27-52

X-SEC'S FRONTIER ST. DRAINAGE DITCH CONTD.

STA.

ELEV.

Lt. E Rt.  
FRONTIER ST.  
(N. Edge Pavt)

39+64 E VALIANT ST.

2.94 2.74 1.88 2.45 2.57  
25 23 17.5 33

39+80 WLY. LINE VALIANT ST.

2.95 2.66 1.84 2.2 2.15 2.49 2.70 2.03  
25 23 5 17.5 17.5 32.5 32.5

Corb Gut

40+00

TOP 2x2

TP 40+00

1.78

2.83 1.80 1.4 2.7 2.4 1.6 2.2 3.3 3.25  
25 5 9 14 16 18 33 36

Spillway  
Ditch

S. note

41+00

2.87 2.6 2.3 1.7 1.0 1.7 2.4 3.0 3.40  
25 25 11 5 7 20 25 36

S. Walk

42+00

3.28 3.1 1.9 1.2 1.9 2.8 2.66  
25 25 5 7 25 36

S. Walk

PROFILE ALONG E @

42+65.80 Pt. OF DITCH BEARS RT. SEE SKETCH

3.58 3.4 - 2.1 1.1 1.0 0.4 0.3 0.6  
25 25 34 84 134 155 159

80' N. OF 42+25

B.M. # 6 F.B. 1679

2.655

?? chis.  
2.86 # 02 WALK F.B. 1679 Pg 33

0.5 0.1 0.6  
174 184 Pt.

Lowest Pt.







INDEXED

flow  
OCT 30 1952LOCATION & PROFILE OF PROPOSED  
STORM DRAIN FROM FRONTIER TO HANCOCK ST.& Sherman - Kurty to Hancock  
STA ELEV.

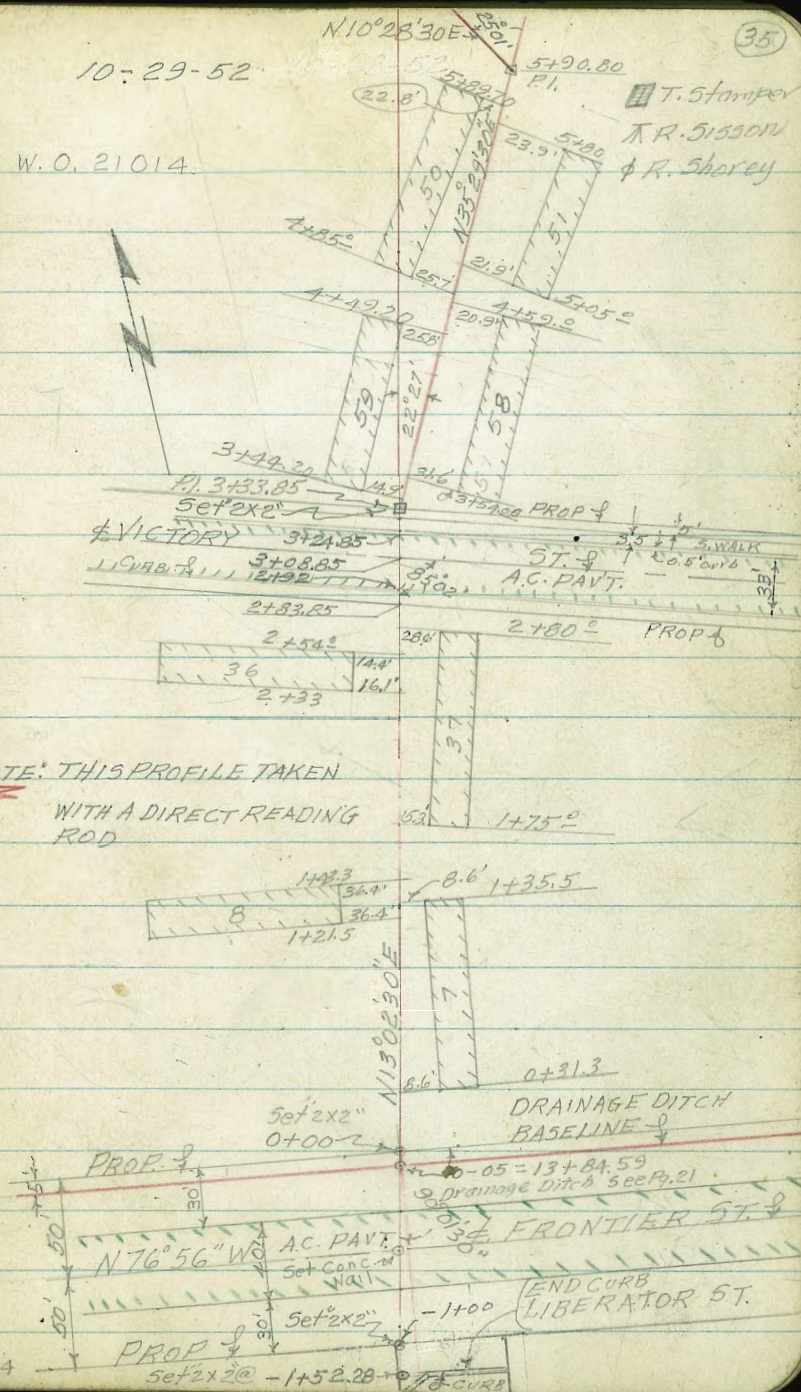
3+00		3.36
2+92.8	Gutter S. LINE VICTORY	2.96
2+92.8	Top curb	3.59
TP.		
2+00	TOP "2x2" (Flush)	4.15
1+00	TOP 2x2 (Flush)	3.75
0+24.5	4 2.5' S. Walk.	3.13
0+02		2.6
0+00	PROP	1.4
-0-09		2.6
-0+30	N. Edge Pavt.	3.61
-0+50	4 FRONTIER ST.	3.97
-0+70	S. Edge A.C.	3.50
-1+00	Gutter	2.28
-1+00	PROP TOP CONC. Slab	2.73
-1+02.5	S. Edge Conc. Slab 20' Long x 2.5' wide	2.80
-1+30	4 2' wide S. Walk	3.30
-1+52.8	Top "2x2" (Flush)	3.52

B. M.

3.03 See Pg. 24

10-29-52

W. O. 21014

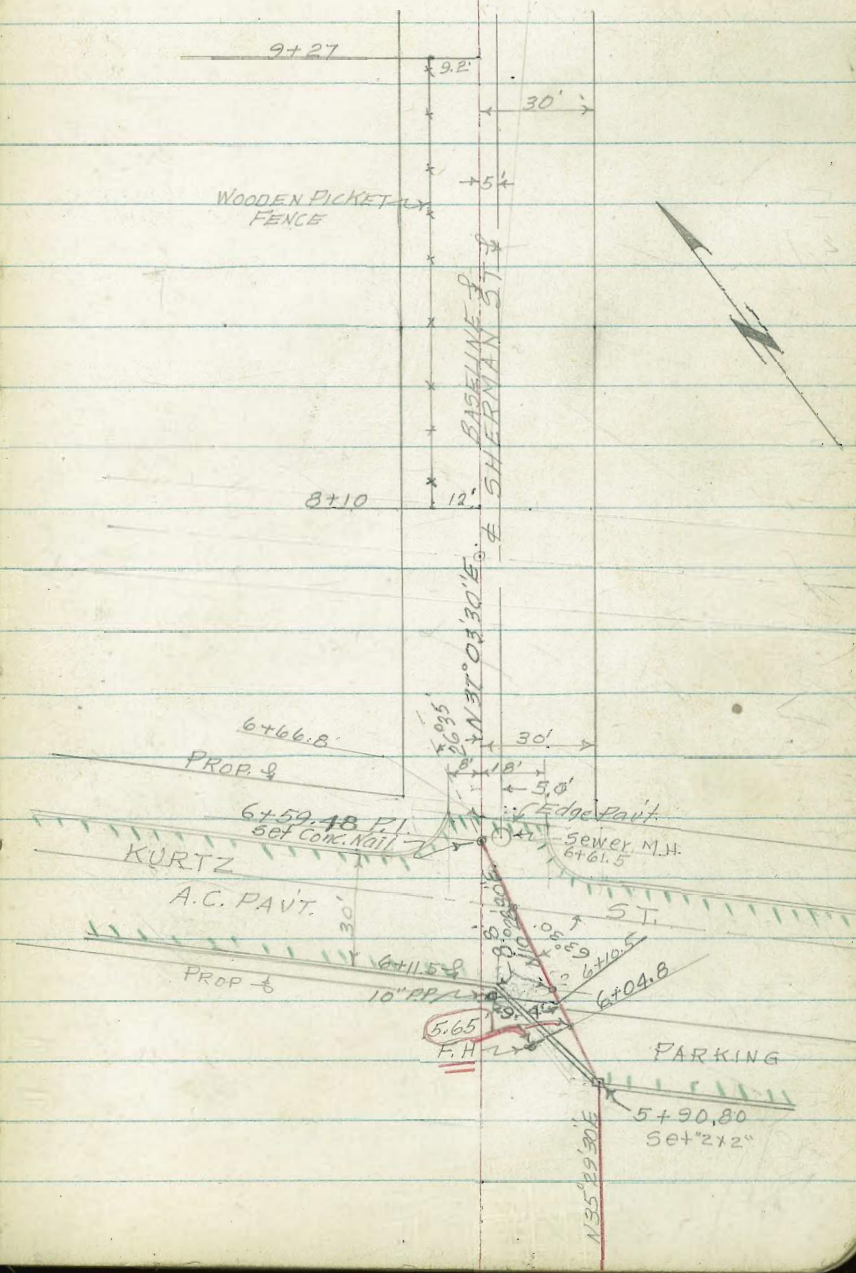




10-29-52

PROFILE FRONTIER TO HANCOCK ST CONTD.

STA		Elev.
7+00	Top "2x2" (Flush)	3.63
6+66.85	End AC, Kurtz	3.84
6+51.5	Rt. 5' $\phi$ Top Sewer M.H.	3.90
6+59.43	Pl. 2' Wide Conc.	3.87
6+48.6	N. Gutter Kurtz	3.61
6+28.8	$\phi$ Kurtz St. AC	3.90
	AC. PAVT.	
6+17	S. Gutter Kurtz St.	3.58
6+17.5	Curbline AC	3.82
6+00	Top of Conc. Nail in AC (Flush)	4.13
5+91.2	Gutter	4.22
	TR. Kurtz St.	
5+91.2	Top Curb Parking Area	4.55
5+00	Top of 2x2 (Flush)	4.55
4+00	" " "	4.40
3+33.85	Pl. Top of 2x2 (Flush)	4.11
3+28.4	N. Edge S. Walk	3.65
3+24.85	Top Curb.	3.57
3+24.85	Gutter	2.93
	Top AC.	
3+08.85	$\phi$ Victory St.	3.55





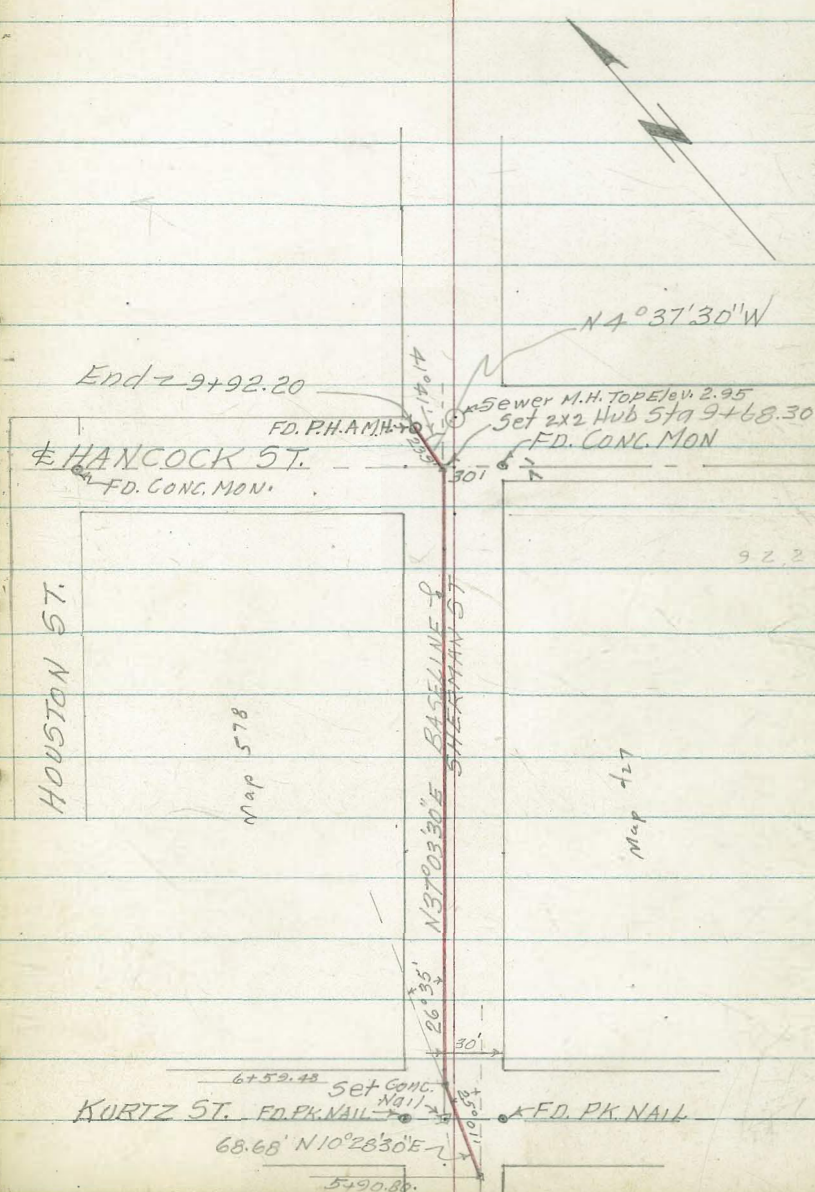
PROFILE FRONTIER TO HANCOCK ST CONTD

10-29-52

STA

ELEV.

B.M.	3.04 - 3.03
TR.	4.125
9+92.20 F.L. Elev.	- 3.45
9+92.20 ± TOP P.H.A. M.H. (Flush)	3.39
9+68.30 P.L. TOP of 2x2 (Flush)	2.90
9+00 TOP of 2x2 (Flush)	3.29
8+00 TOP of 2x2 (Flush)	3.29





Location of 8" sewer between  
13 bldgs No. 50 + 59 - in Cal 4679  
Frontier Housing

Allen  
Parks  
Taylor  
Perkins  
11-17-52  
WO# 21014

Ref.

PHA Drawing E-1699.

FB-2237- Page 35 (this book.)

BM = 2" x 2" stub of 3433.85 Page 36  
elev 4"

IF- Ely Manhole = -0.99

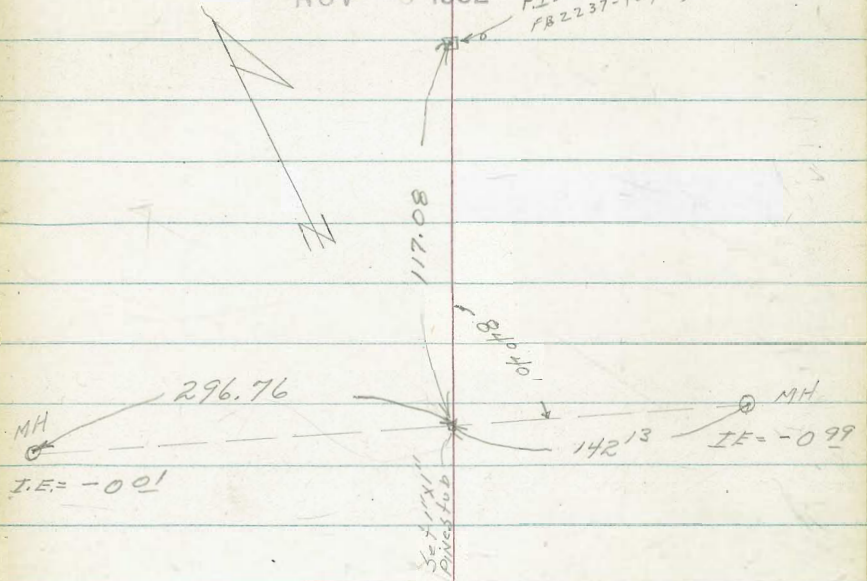
IF- W14 Manhole = -0.01

INDEXED

Law

NOV 18 1952

P.I. 5790.80  
FB 2237- Page 35



P.I. 3433.85  
FB 2237- Page 35  
(THIS BOOK)



X-Sect. Broadway - at "15<sup>th</sup> St.

# 7506      2-17-53      7.0

w.o. 21069'

2+00 = w.L. of 15<sup>th</sup>

1+99 = opp. P.C. of Prop. 15' Rad.

1+94.7 = wly. of Box Inlets

1+75

1+60 = Brk in 3' gut.

1+50

1+00

0+50

0+00 = 200' w. of w.L. 15<sup>th</sup>

B.M. = S.W. BP. - 16<sup>th</sup> + Bdwy.

55.89

lt.      E      RT

INDEXED  
Law  
FEB 19 1959

57.76	56.64	57.60	57.30	57.44	57.57	57.26	56.69	56.50	55.75	56.65
Top	26 gut.	25 Top wall	20	10	on M.H.	10	20	25	gut.	26 Top

57.75	56.96	57.27	57.47	57.52	57.10	56.57	56.09	56.66
Top	26 gut.	18	9		13	20	26 gut.	Top

57.18	57.38
gut.	26 in Dr.
	18

56.82	56.41	56.84
20	26 gut.	Top

58.03	57.28	57.52	57.70	57.32	56.42	56.92
Top	26 gut.	18		13	26 gut.	Top

58.27	57.56	57.71	57.93	57.60	56.63
Top	26 gut.	19		13	26 gut. in Dr.

58.46	57.74	58.09	58.13	57.93	56.94
Top	26 gut.	13		13	26 in Dr.

58.69	58.01	58.27	58.35	58.07	57.15	57.69
Top	26 gut.	13		13	26 gut.	

Actual Elev. Shown.



2+66 - Cont

2+66 = E. cb.

2+64.5 - To show pave at outside of inlets

3+56.5 - 19.7 Lt. =  $\pm$  Tel. MH.

2+53

2+40 =  $\pm$  15<sup>th</sup>

Set BM = N.E. 7' ct.

2+27

2+15.5 = To show pave at outside of inlets

2+14 - Cont.

2+14 = W. cb. of 15<sup>th</sup>

$\pm$  of Prop. 15' Rad. - Exist. Ret. at New cb. line

LT

$\pm$

RT

(40)

60.83 Top 50 gut.	60.22 Top 55 gut.	58.63 Top 55 gut.	57.98 Top 44.7 gut.	57.97 Top 44.7 gut.	57.12 at end.	55.46 45 gut.	56.52 Top 60 gut.	55.49 Top 60 gut.	56.20 Top 90 gut.	54.80 Top 90 gut.	55.49 Top
----------------------------	----------------------------	----------------------------	------------------------------	------------------------------	------------------	---------------------	----------------------------	----------------------------	----------------------------	----------------------------	--------------

57.72 Top 41 gut.	56.63 26 gut.	57.41 26 on lid.	57.42 19.7 on lid.	57.33 13 on lid.	57.35 13 on lid.	57.12 13 mid.	56.95 19.5 mid.	56.75 26 gut.	55.55 41 gut.	56.65 Top
----------------------------	---------------------	------------------------	--------------------------	------------------------	------------------------	---------------------	-----------------------	---------------------	---------------------	--------------

57.34 44.7 at end	57.60 39.6 = Top	56.68 40.1 Top	55.64 45 at end
-------------------------	---------------------	----------------------	-----------------------

60.87 90	58.55 55	57.80 40	57.56 26	57.42 13	57.45	57.16 13	56.91 26	56.69 40	56.09 60	55.41 90
-------------	-------------	-------------	-------------	-------------	-------	-------------	-------------	-------------	-------------	-------------

58.71 55	57.74 40	57.57 26	57.47 13	57.46	57.18 13	57.12 16 on MH.	56.91 26	56.77 40	56.71 60	55.69 90
-------------	-------------	-------------	-------------	-------	-------------	-----------------------	-------------	-------------	-------------	-------------

58.63 55	57.82 40	57.61 26	57.50 13	57.45	57.13 13	56.87 26	56.71 40	56.05 60	55.41 90
-------------	-------------	-------------	-------------	-------	-------------	-------------	-------------	-------------	-------------

57.64 45.5 end.	57.84 40 Top	56.57 40 Top	55.67 45
-----------------------	--------------------	--------------------	-------------

60.94 Top	60.43 90	58.75 Top	58.12 55 gut.	56.72 45 Top at end of Inlet.	55.43 60 gut.	56.31 Top	54.87 90 gut.	55.68 Top
--------------	-------------	--------------	---------------------	---	---------------------	--------------	---------------------	--------------

57.53 45.5 end inlet gut.	57.91 Top 41 gut.	56.78 26 gut.	57.67 26 13	57.48 13	57.53	57.12 13	56.80 26	55.38 41 gut.	56.82 Top	55.31 45 gut.
---------------------------------------	----------------------------	---------------------	-------------------	-------------	-------	-------------	-------------	---------------------	--------------	---------------------

N.W. Top Ret.	57.79	S.W. Top Ret.	56.79
---------------------	-------	---------------------	-------



Lt. ← Rt.

3+30 = end

57.24	56.57	56.96	57.02	56.72	55.92	56.45
Top	26 gut.	13		13	26 gut.	Top

3+00

57.48	56.77	57.10	57.25	56.93	56.03	56.61
Top	26 gut.	13		13	26 gut.	Top

2+81 = opp. P.C. of Prop. 15' Rad:

57.66	56.96	57.22	57.36	57.05	56.25	56.60
Top	26 gut.	13		13	26 gut.	Top

± of Prop 15' Rad Ret.

N.E. 57.67  
on Ret.

S.E. 56.67  
on Ret.



D. Smith  
J. Roney  
R. Taylor

Elv. C&Gutter @

Connie Dr + Art St.

WO #21091  
3/11/53

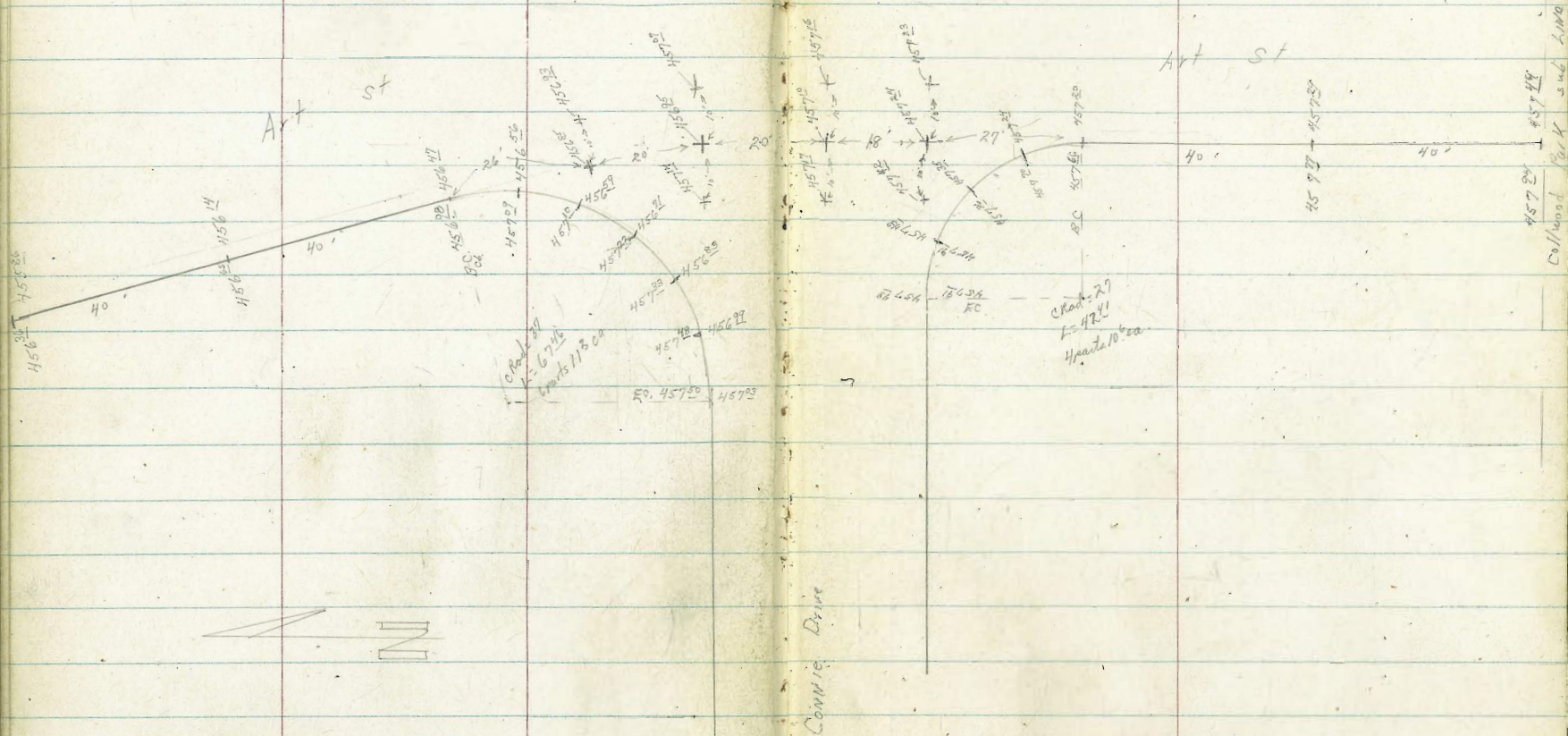
42

scale 1"=30'

INDEXED

Law

APR 2 1953



used direct. elev. rod (tape)

BM 44725 SWBP  
Catoc Mt  
Montezuma Rd







Survey for Prop. Drain - 27<sup>th</sup> + Market.  
Sketch - P. 43 - T.P. sheet 132

W.O. 21190 - 10-27-53 7.0

Lt.

±

Rt.

44.

1+61.37 = out let of 24" RC pipe

05.17  
I.E. of pipe

1+57

10.1 07.5 05.6 07.8 11.2  
10 2 2 10

1+25

07.7 08.1 06.3 14.5  
10 5 ± wash 18 = Top

0+90.54 = Ang. Pt. - Sect. 90° to forward Tang.

07.7 07.7 06.20 = Hub. 11.3  
10 5 ± wash 10 = Top

0+72 - 7' Lt. = E. P. pole # P.A. 2710 BM = 109.03 = spike

0+60

08.1 06.4 06.5 06.2 09.5  
10 7 8 15

0+53 - 16' Lt. = ± 48' Palm

0+30

07.0 05.1 05.6 05.4 07.9  
13 10 6 10

0+05

04.7 05.0 08.5  
8 7 = Top  
± wash

0+00 = inlet of 24" RC pipe

02.91  
I.E. of pipe

B.M. = S.E. B.P. - 27<sup>th</sup> + Island

142.11

100' fig. Not noted  
Actual Elev. Shown



Req. Levels along  $\pm$  of Prop. Drain to  
W. thru Alley - from Sta. 0+90.54 - P. 44  
to outlet of Pipe

Lt.       $\pm$       Rt.

0+63.37 - out let of 18" RC. pipe - + Req. Steel

12.95      15.2 = ground.  
I.E. of pipe

0+.57.5 - 4.9 Lt. = on End. of Conc pipe  
end of 18" Steel pipe Sect. - in bad Cond.

11.70  
I.E. of pipe

0+54 - 1.5 Lt. =  $\pm$  36" Palm

0+50

12.9    11.1    12.6    11.8    11.7  
15      10      7      10

0+25

09.0    10.5    11.5    08.7  
10      8      10

0+15

08.3    08.1    08.0  
10      10

0+05

07.9

0+00 = Hub. = 0+90.54 on Main Line

06.20  
on Hub



Proposed extension of drain in lot 5 10, 11  
 Redland Gardens Block, Q  
 WO # 21228

March 12, 1954

INDEXED  
 MAR 15 1954

C. Allen  
 D. Sisson  
 C. Powell -

Ref T.P. Sheet 3691  
 Dwg 36382L

83



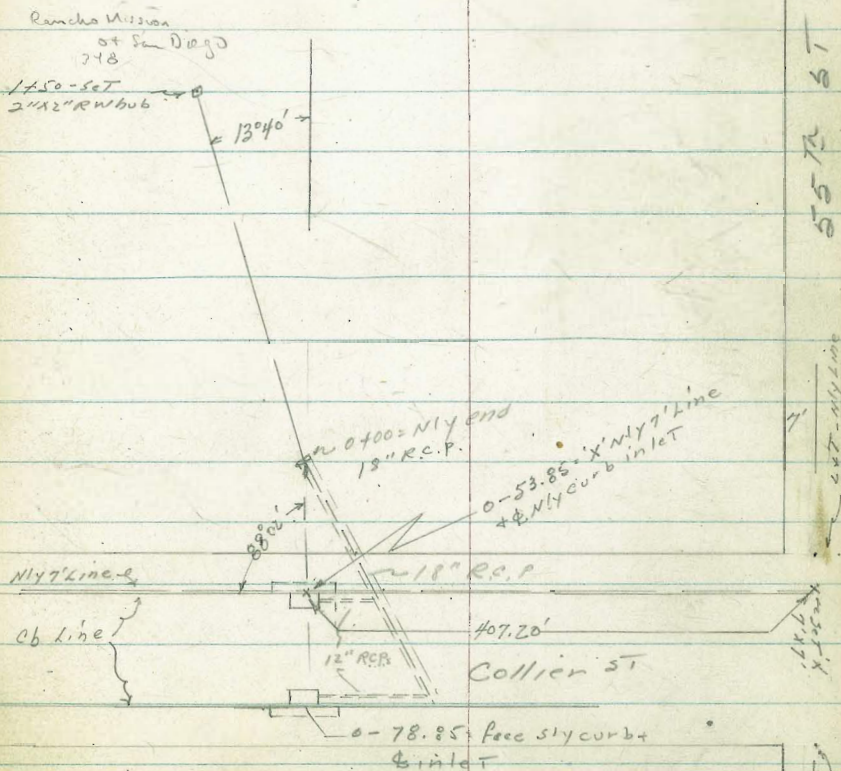
5th St

inlet on flyline 5' 7" on Nly 7' line Collier

75' cbs

40'

75' cbs



There seems to be discrepancies in  
 Dwg 3638-4-

angle 88°02' is from Nly 7' Line Collier  
 to Nly end exist 18" R.C.P.

Inlets are 10' type A-2-

Grates are 3' east-west & 2' N+S-

Rancho Mission  
 of San Diego  
 7-18  
 1450-Set  
 2" x 2" R.W. 6"

13°40'

0-400 = Nly end  
 18" R.C.P.  
 0-53.85 = Nly 7' Line  
 + Nly curb inlet

18" R.C.P.

407.20'

Collier St

0-78.85 = face 5' curb  
 & inlet

5th St

4' 6" cbs

4' 6" cbs



Levels Proposed extension of 18" R.C.P

LT = W L Y

Proposed extension

RT = City 47

(CITY DATUM)

TP<sub>4</sub> 1.84 391.90 12.78 390.06

TP<sub>3</sub> 0.35 402.84 12.75 402.49

0-43 = Top Fall

0-53<sup>9</sup> = Face Nly curb Collector & Type A-2 inlet

(10')

412.46 411.96  
2<sup>78</sup> 3<sup>28</sup>  
50 50  
cb 90T

411.89 410.77 405.50 412.40 412.66  
3<sup>35</sup> 4<sup>47</sup> 9<sup>44</sup> 2<sup>84</sup> 2<sup>58</sup>  
4 Top 9 grate 18 Box 50 50  
cb 90T cb

414.05 414.53  
1<sup>19</sup> 0<sup>21</sup>  
75 75  
90T cb

0-78<sup>5</sup> = 10' Type A-2 inlet - 35 x 22 grate

412.96 412.49 412.77 411.74 407.47 412.87 413.34  
2<sup>28</sup> 2<sup>75</sup> 2<sup>47</sup> 3<sup>50</sup> 7<sup>87</sup> 2<sup>37</sup> 1<sup>20</sup>  
50 50 Top 9 grate 1 E. Box 50 50  
cb 90T cb

415.24 x

3.35 415.24 8.67 411.89

TP<sub>2</sub> 0.73 420.56 12.42 419.83

TP<sub>1</sub> 0.37 432.25 12.49 431.88

BM 10.72 444.37 433.65

on chisel 'x' & Nly inlet collector ST and intersection of Nly 7" line collector (0-

SE BP. 55<sup>th</sup> & Adams



Levels Proposed extension cont

TP6 6.73 374.00 11.82 367.27

1+00

0+75

0+50 - 4' LT - bottom channel

TP5 0.25 379.09 13.06 378.84

0+25 - 5' LT - bottom channel

0+00 = Nly end 18" RCP

LT = wly

±

RT = ehy 48

374.00 x

377.5 374.5 372.3 368.3 366.3 371.6 376.6  
 1<sup>6</sup> 4<sup>6</sup> 6<sup>8</sup> 10<sup>8</sup> 10<sup>8</sup> 7<sup>5</sup> 2<sup>5</sup>  
 20 10 4 BOTTOM 4: 10 20

379.0 376.9 371.4 371.7 378.2  
 0<sup>1</sup> 2<sup>2</sup> 7<sup>2</sup> 7<sup>4</sup> 0<sup>9</sup>  
 15 10 4 BOT 4 BOT 10

381.8 378.8 374.4 375.8 379.1 382.1 385.2  
 + 2<sup>7</sup> 0<sup>3</sup> 4<sup>2</sup> 3<sup>3</sup> 0<sup>0</sup> + 3<sup>0</sup> + 6<sup>1</sup>  
 15 8 4<sup>0</sup> 5 10 20  
 BOT

379.09 x

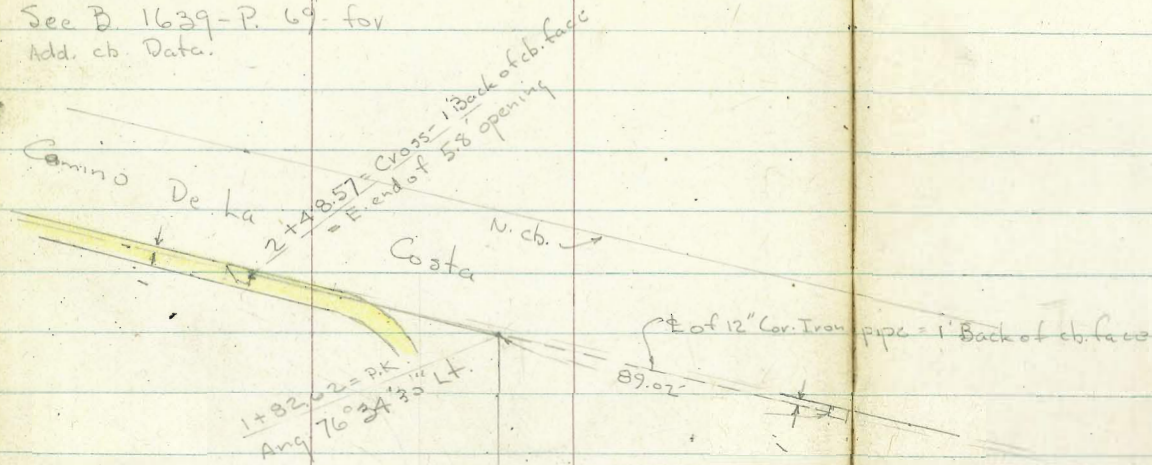
385.0 381.7 378.8 380.7 384.8 386.7  
 6<sup>9</sup> 10<sup>2</sup> 13<sup>1</sup> 11<sup>2</sup> 7<sup>1</sup> 5<sup>2</sup>  
 20 10 5<sup>0</sup> 10 20  
 BOT

390.6 386.6 385.5 382.0 381.96 382.2 382.0 381.9 391.9  
 1<sup>3</sup> 5<sup>3</sup> 6<sup>4</sup> 9<sup>2</sup> 8<sup>9</sup> 9<sup>2</sup> 9<sup>2</sup> 4<sup>0</sup> 0<sup>0</sup>  
 20 10 25 15 15 8 15 10 17  
 FOUND

391.90 x



Sec B. 1639-P. 69. for  
Add. cb. Data.



Prod. from cb. line  
To South - 1' from  
cb. face

Prop. Drain

Electric.

Fd. Lt. + ct

was to opening - N. end  
Closed by Conc. Dr. - 5.4' opening  
3.5' x 2.2' grate

24  
Cor. Iron  
Pipe

261.4' of 12" Conc. pipe  
To Inlet

opening cb. inlet  
3.5' x 2.2' Grate









Cont. on P. 53

5.8' W. along cb. = end of opening

oval Sect. 6" High in T

5.8' opening - 0.4' High - outlet Thru. cb. = end sect. is 4' wide

2 + 48.57 = Cross 1' Back of cb. face - at E. end of

2 + 25 = edge of Dr. Sect.

2 + 15.8 = Cross Ret. on Dr. Sect.

2 + 00

3' opening inlet in S. cb.

89.02' E. of Ang. along E. of 18" Cor. iron pipe to

1 + 82.62 = Ang. Pt.

1 + 67.7 = Beg. Conc. pave on Lt. - AC. to Rt.

1 + 35

1 + 00

Lt.

±

Rt.

52

81.51  
5 = edge  
walk

81.46  
Top cb.

80.81  
got = I.E. of  
outlet.

80.90  
5 from  
cb.

82.05  
4 = edge  
walk

82.00  
on Cross

81.99 81.32 81.36  
Top  
cb. got = I.E. of  
outlet.

84.31  
3.9

84.18  
Dr.

84.12  
Top do.

83.46  
got.

83.56  
6

85.12  
5.5 = edge  
of walk

84.19  
got

84.37  
Dr.

84.26  
5

85.30  
5

85.37

85.60  
5

85.75  
89.02 = I.E. of  
Inlet of  
18" C.F. pipe

86.76  
on P.K.

87.34

5 = 90° To Back Tang.

86.27  
5  
Conc.

86.56  
on Conc.

87.00  
5 = on  
AC.

86.4  
5

85.6  
3

85.6

86.1  
5

86.6  
5

85.8

86.1  
5



Lt.      1' Back of cb. face      Rt.

3 + 01.3 = PC. of Alley Ret. = end.

79.26	79.14	78.59	78.77
4 walk	1 Top	9 out.	6

2 + 75

80.38	80.29	79.61	79.70
4 walk	1 Top	9 out.	6

2 + 57 = Brk.

81.32	81.19	80.58	80.66
4 edge walk	1 = Top cb.	9 out.	6

cont. Sta. - 1' Back of cb. face

Profile of cb. to west. if needed to  
Rebuild outlet.



C/ank  
GARBER  
BRUNER  
PULLER

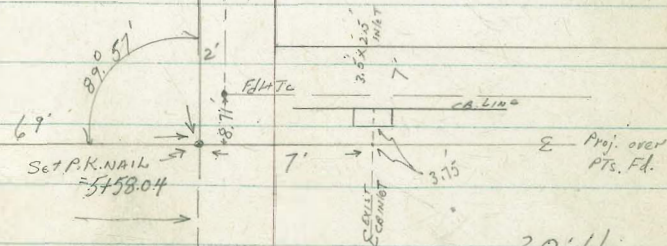
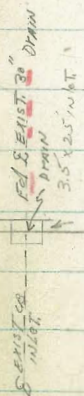
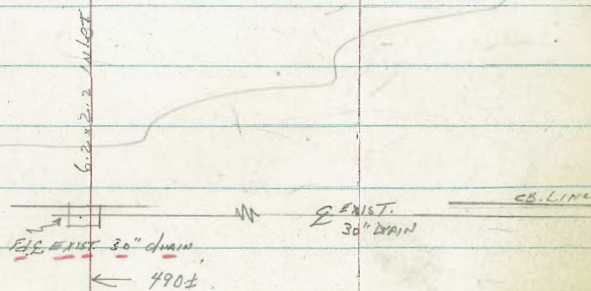
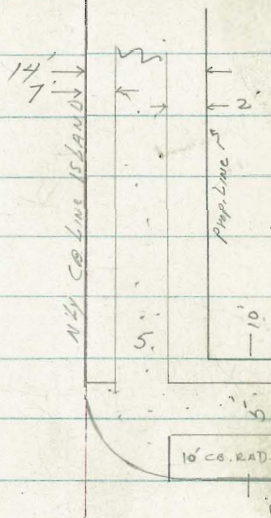
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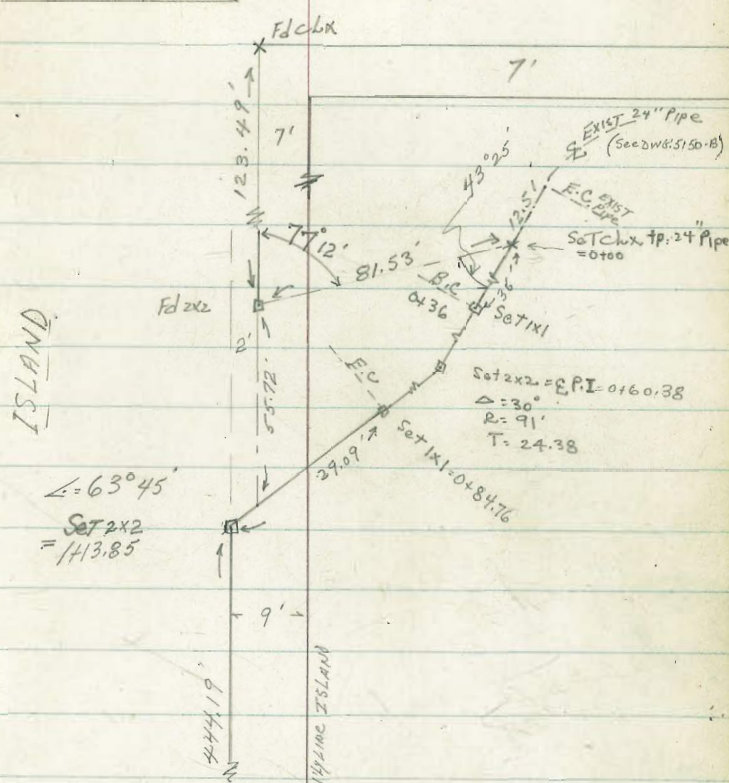
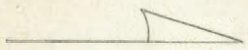
SURVEY TO REPLACE STORM DRAIN:  
ISLAND; 27th to 28th

REF: P 73  
DWG. 5150-B  
T.P.S. #131



28th

27th



(See opp. pg. For details - CB. +  
WALK - this area)



1+00 - B.M.					1142	1182	1200	
					3.1 10	1.6	+0.3 10	
T.P.	3.67	119.76	174	116.09		119.96		
0+84.76 F.C.					1145	1152	1148	
					3.3 10	2.5	3.0 7	Toe Fill
0+60.38 = P.I.	Δ = 30°	R.T.	(Sect 90° B.K. TARG)		1105	1102	1102	
					7.2 10	7.0	7.0 10	7.0 19
								To A.F. 11 Along Island
0+36 B.C.					1095	1090	1094	
					8.7 5	8.8	8.7 6	
0+09 = B.M.					1085	1065	1085	
					9.2 5	9.2	9.3 5	
0+00					1080	1050	1050	
					9.0 10	10.5 5	12.74	12.5 5
							13.90	12.7 10
0-90.88 = g. CLEANOUT, EXIST 24" PIPE (See DWG 5150-B)							TP. EXIST 24" PIPE	
							F.I. Line	
T.P.	1.01	117.83	1300	116.82		117.83		
T.P.	0.25	129.82	1322	129.57				
B.M.	0.68	142.79		142.11				S.E. B.P. 27'4" + ISLAND







Prop. DRAIN - 27 1/2 - ISLAND - 28 1/2 (CONT.)

4474 7.5 CTE end Hedge

100 4

4450

5.5

4445 8' CTE Bay 4' high Hedge, 2' wide

4442.2 7' LT end 2' Hedge  
2' RT END 5' WALK

100 2	100 2	100 20	100 2	57	57
6.2	6.19	6.22	6.2	100	100
9	7	2		5	5
	E. WALK	E. WALK		CB	G

4439.8 = Ely edge Drive

100 26  
6.16

4428 = Wly edge 8' Con Drive  
(AT Prop)

100 26  
5.96

4424 1' RTE 36" (diam.) EUGENIA

100 19

4419 = Ely edge WALK

5.82

4415 = Wly Edge 4' Cross-Walk Conc.

100 19

5.82

4412 1' RT E 36" (diam.) EUGENIA Hedge

106.92

\*



DRAIN (CONT.)

5742.3 { 5' RT = CB. B.C.  
 Beg. Con. Walk - intersection 5' Sidewalks  
 Island & 28th

5739 1.3 RT  $\angle$  30" EUGENIA

5731 1.3 RT  $\angle$  24" EUGENIA

5725 1.3 RT  $\angle$  24" (diam) EUGENIA

5722.2 = Ely edge WALK

5718.2 = Wly edge 4' Cross-WALK

5716.5 1.3 RT  $\angle$  30" (diam) EUGENIA

5709 1.3 RT  $\angle$  30" (diam) EUGENIA

5700

7792 2' LT (sidewalk) Beg 5' Conc. WALK

LT.  $\angle$  RT.  
 7.5 7.72 7.80 7.92 7.99 7.99 7.99  
 9 7 2 2 5 5  
 E. W. E. W. CB. S.  
 W. W. BC.

7.53

7.49

7.3

100.0 7.7 6.99 7.1 7.22 7.70  
 9 7 2 2 5 5  
 Prop. E. W. W. W. CB. S.  
 W. W. WALK

106.92



DRAIN (CONT.)

LT. E RT.

CHK: 0.14 98.06 = S.W.B.P. 28th ISLAND 98.03

5458.04 Shot 490ft S'ly of Pt. Int. with 30" Pipe, on F.L. EXIST. 30" Pipe

- El. of Top of 30" pipe exposed - .22 thick Meas. at opening 69' RT

95.18 92.46 16.23  
Topot. I.E. 490#  
30" pipe (Comp) F.L. EXIST 30" Pipe

81 87

T.P. 0.14 98.20 8.86 98.06

98.20

5458.04 - { 69' RT - E EXIST. 3.5 x 2.5 INLET  
PT. INT EXIST. 30" DRAIN As Proj. across  
2 Pts. Shows sketch - only Pts.  
Where 30" pipe was exposed.

97.28	98.20	97.00	93.99	91.43
8.14	8.18	8.25	9.92	12.93
10		10	69	69
			gate cut	F. Line Box
				F. Line 30" DRAIN INLET

5452 { 7.0 LT, E 3.5 x 2.5 INLET  
5 LT. CB E.C

97.24	94.22	98.00	99.24
8.98	12.13	8.82	7.88
7	7.0	5	5
gate	FL INLET	G	CB

Note: impossible to OBTAIN FL 30" pipe here

5450.8 E crosses CB

98.86 98.80  
7.96 8.52  
CB G

5449.2 2' RT mid pt. CB. Ret.

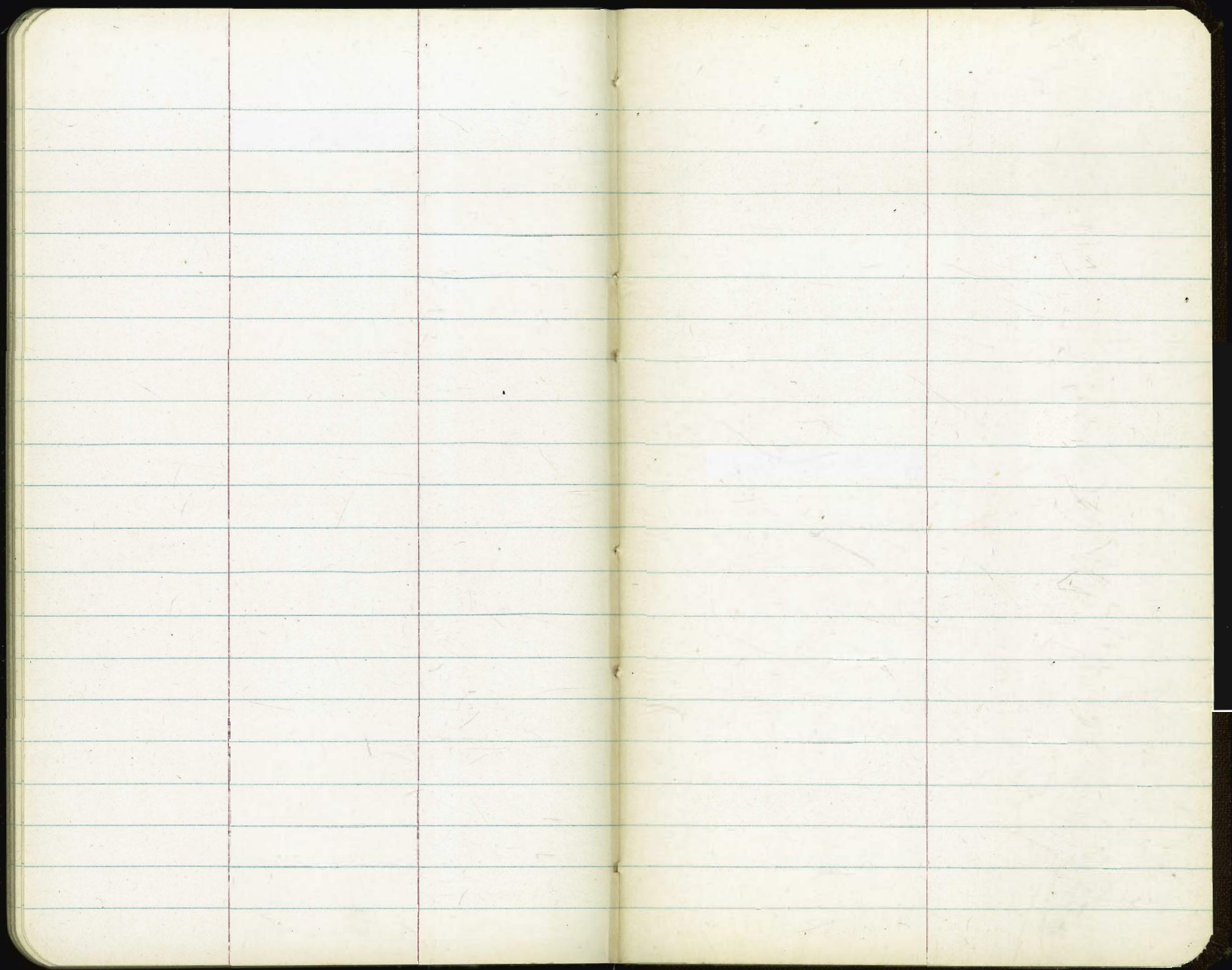
98.84 98.83  
7.98 8.49  
CB G

106.92

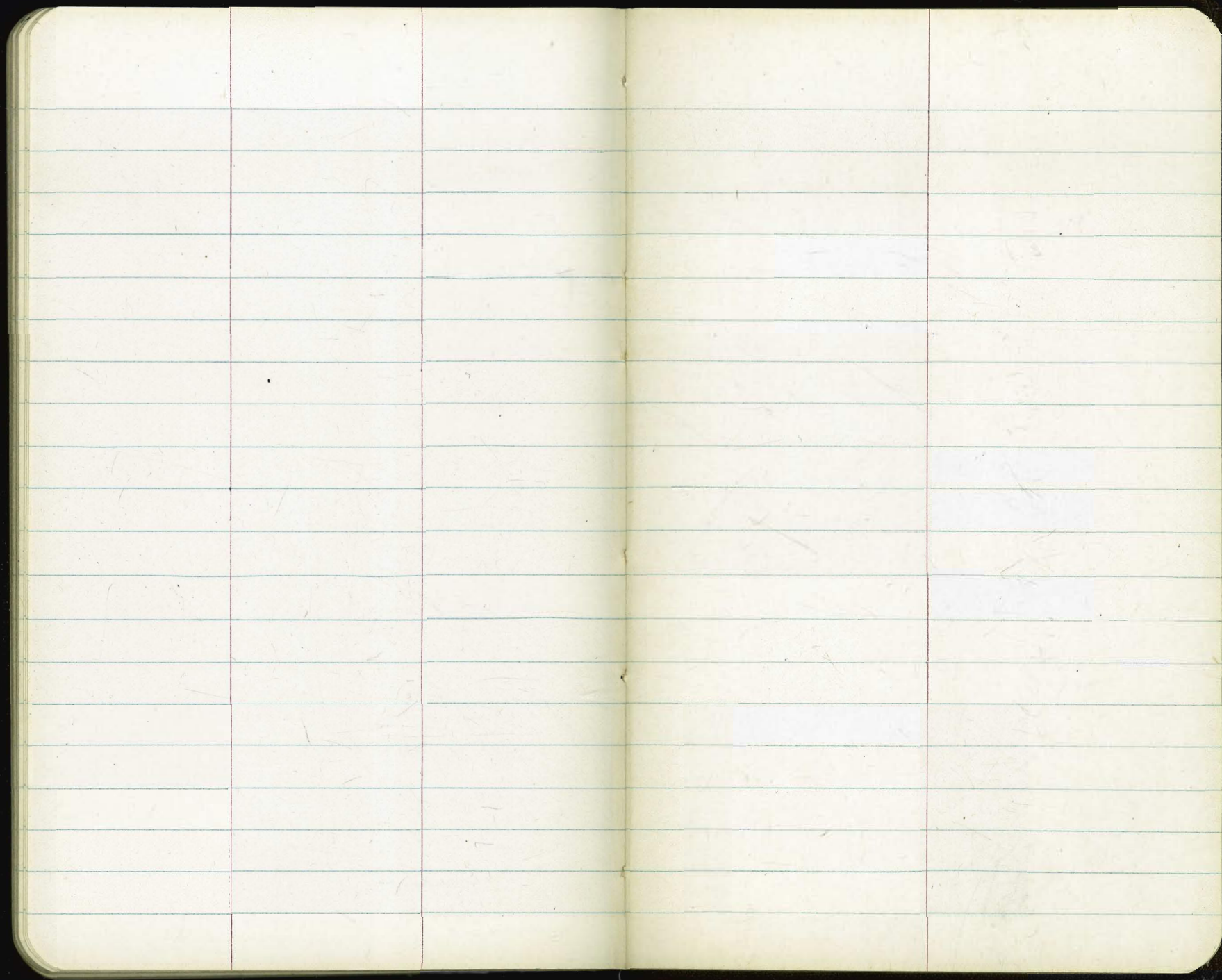




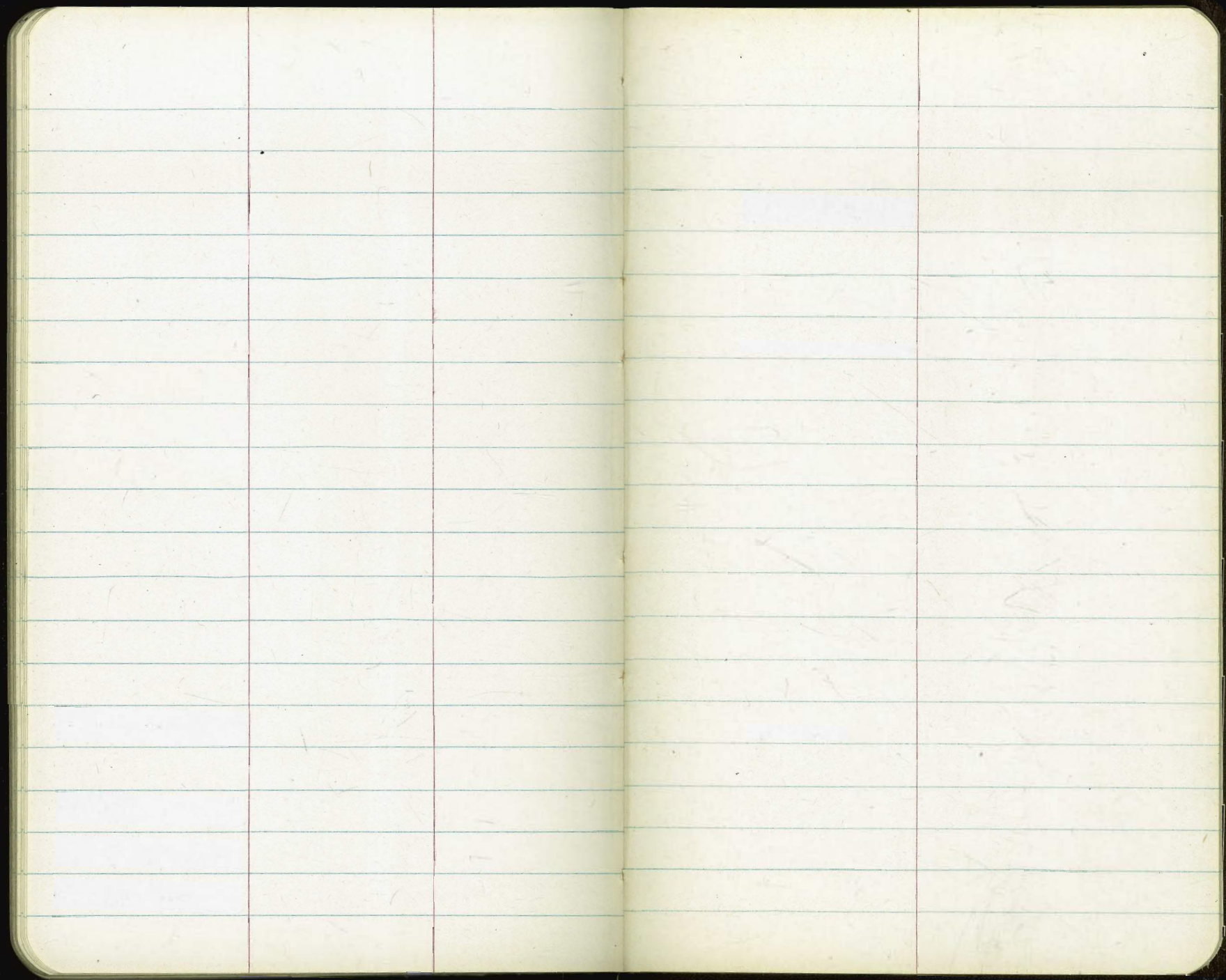




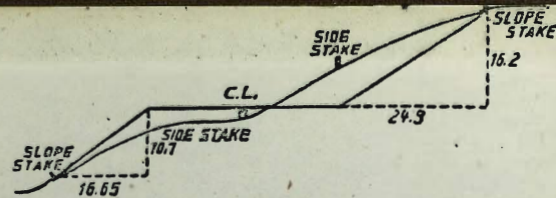












**DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.**

SLOPE 1 1/4 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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