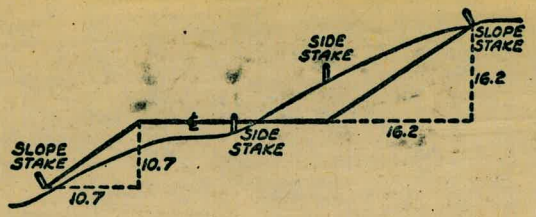

Distances from Side Stakes for Cross-Sectioning

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.

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CITY ENGINEER'S OFFICE

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DIRECTIONS FOR USE OF TABLES

TABLE No. XIV

Distance of slope stake from side or shoulder stake for any width roadway, slope 1½ 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 No. VIII

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections. Degree of curve with a given I may be found by dividing tangent, (or external), opposite I 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.

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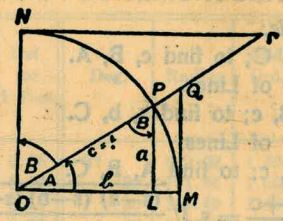

TABLE II

TRIGONOMETRIC FORMULÆ.

$\angle A = \angle MOP \qquad \angle B = \angle PON = \angle OPL$

$R = OB = c = 1$

$$\sin A = \frac{a}{c} = \frac{a}{1} = a = \text{sos } B = LP$$

$$\text{sos } A = \frac{b}{c} = \frac{b}{1} = b = \sin B = OL$$

$$\tan A = \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ$$

$$\cot A = \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT$$

$$\sec A = \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ$$

$$\csc A = \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT$$

$$\text{vers } A = \frac{LM}{OP} = LM = \text{covers } B$$

$$\text{covers } A = \frac{OP - LP}{OP} = OP - LP = \text{vers } B$$

$$\text{exsec } A = PQ = \text{coexsec } B$$

$$\text{coexsec } A = PT = \text{exsec } B$$

$$\sin \tfrac{1}{2} A = \sqrt{\frac{1 - \cos A}{2}} \qquad \cos \tfrac{1}{2} A = \sqrt{\frac{1 + \cos A}{2}}$$

$$\sin 2A = 2 \sin A \cos A \qquad \cos 2A = \cos^2 A - \sin^2 A$$

$$\text{Law of Lines} \quad \frac{\sin A}{a} = \frac{\sin B}{B} = \frac{\sin C^1}{C}$$

$$\text{Law of Cosines} \quad c^2 = a^2 + b^2 - 2ab \cos C$$

$$\text{Law of Tangents} \quad \frac{a+b}{a-b} = \frac{\tan \tfrac{1}{2}(A+B)}{\tan \tfrac{1}{2}(A-B)}$$

Table XIII—Corrections for Tangents and Externals

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

For Tangents Add

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

For Externals Add

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

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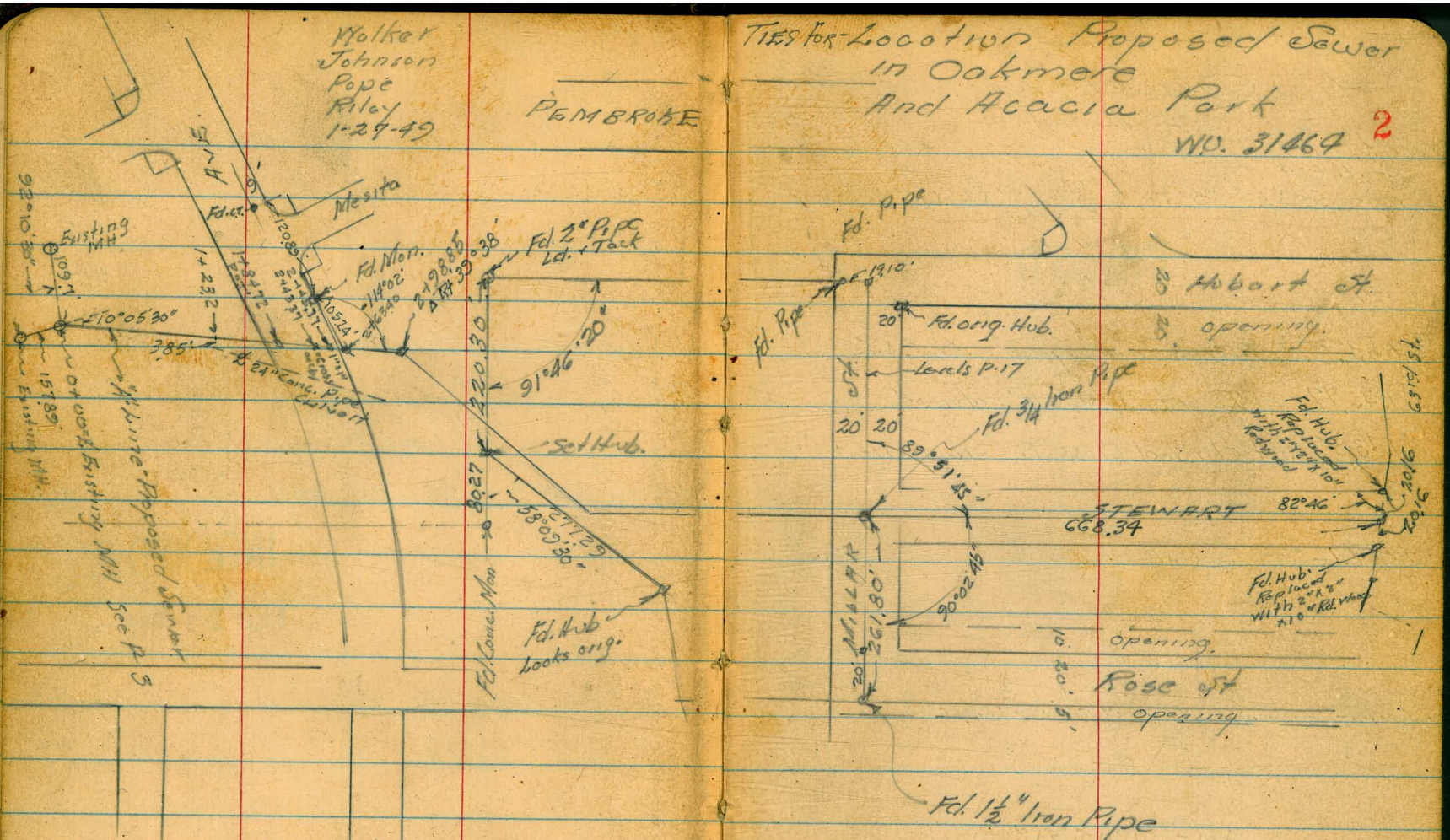
PEMBROKE

Ties for Location Proposed Sewer
in Oakmere
And Acacia Park
W.O. 31469

2



INDEXED
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Prelim. Sewer Location

Oakmere and Acacia Park

"A" Line

3

Stations

Cont. P-4

2+98.85 - Δ Rt 39°38' Set 2" X 2" X 10" Redwood

INDEXED

2+63.40 = Int. Semi tangent Set 1" X 2"

2+45.77 = P.O.T. Set 1" x 1" x 14" Redwood

2+43.37 Set Chiseled Cross E. Curb Line

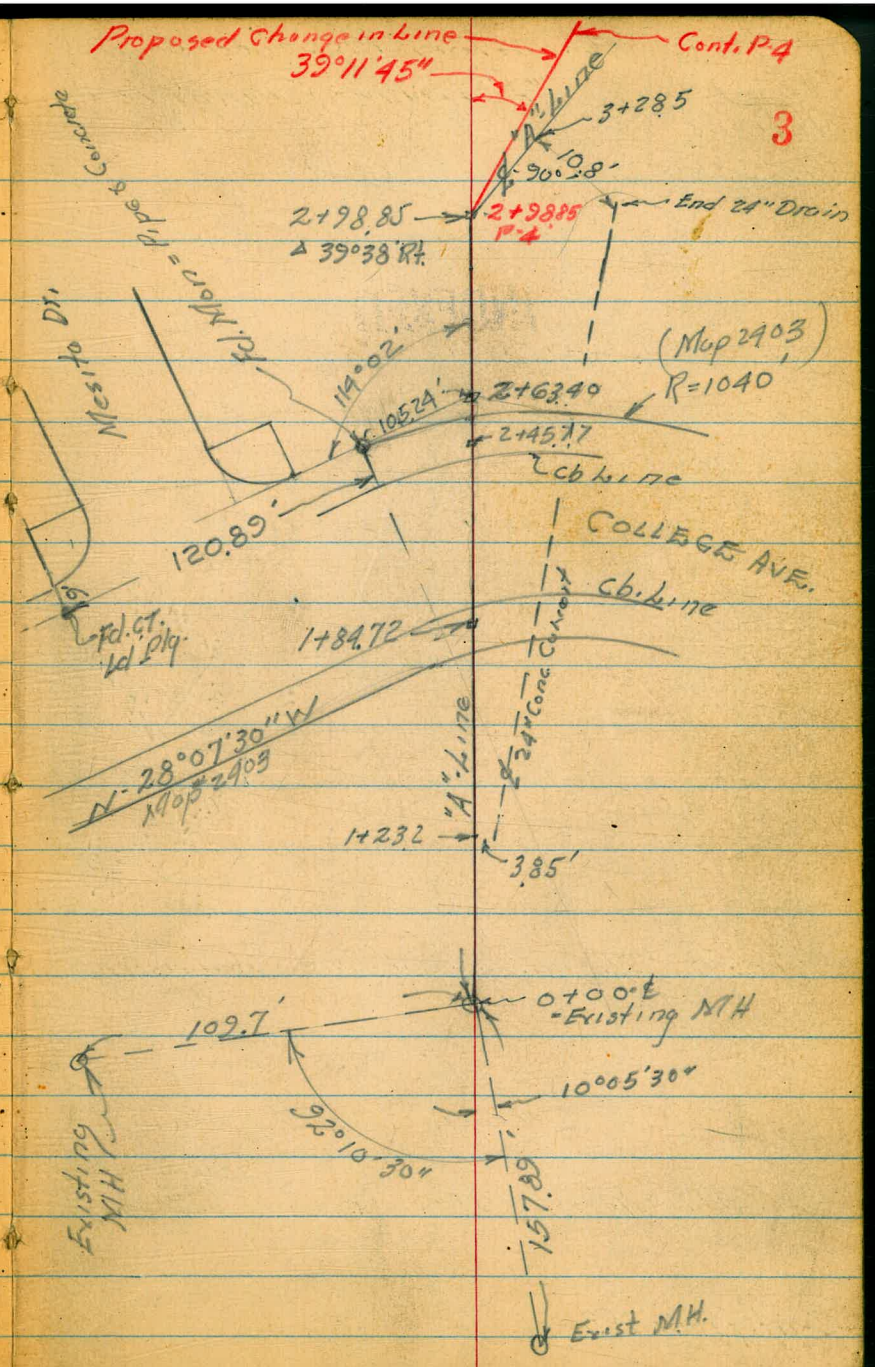
1+84.72 - P.O.T. = 1" x 1" x 14" Redwood

1+23.2 3.85' Rt = ℄ 24" Conc. Culvert

Δ Rt 10°05'30"

0+00 - ℄ Existing M.H.

(Levels P-10-16)



Location Proposed Sewer "A" Line - Oakmere Sub.

Stations

7+32.53 = P.O.T. 1"x1"x14" Redwood

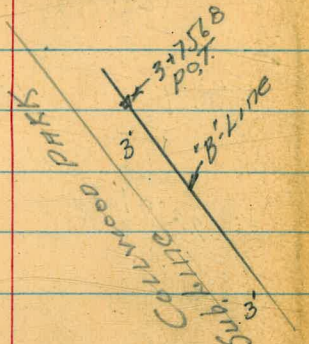
6+58.84 = P.O.T. ½"x½"x7"

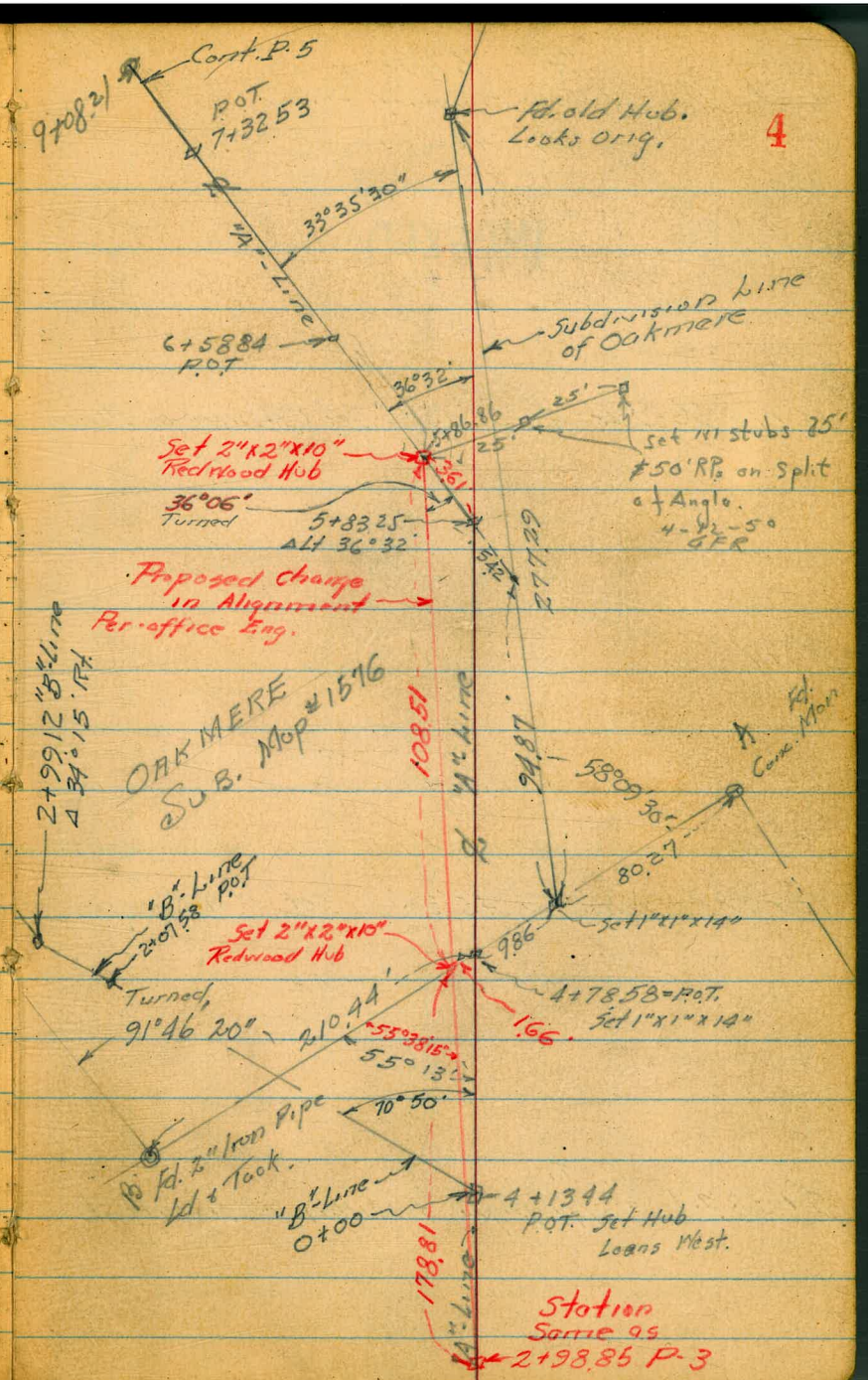
5+83.25 = Δ Lt 36°32' Set 3"x3" Redwood Post

4+78.58 = P.O.T. = Int. W.L. Oakmere Subdivision

4+13.44 = P.O.T. Set 2"x2"x10" Redwood (Hub Leaning West Around Rocks)

Cont. from P-3



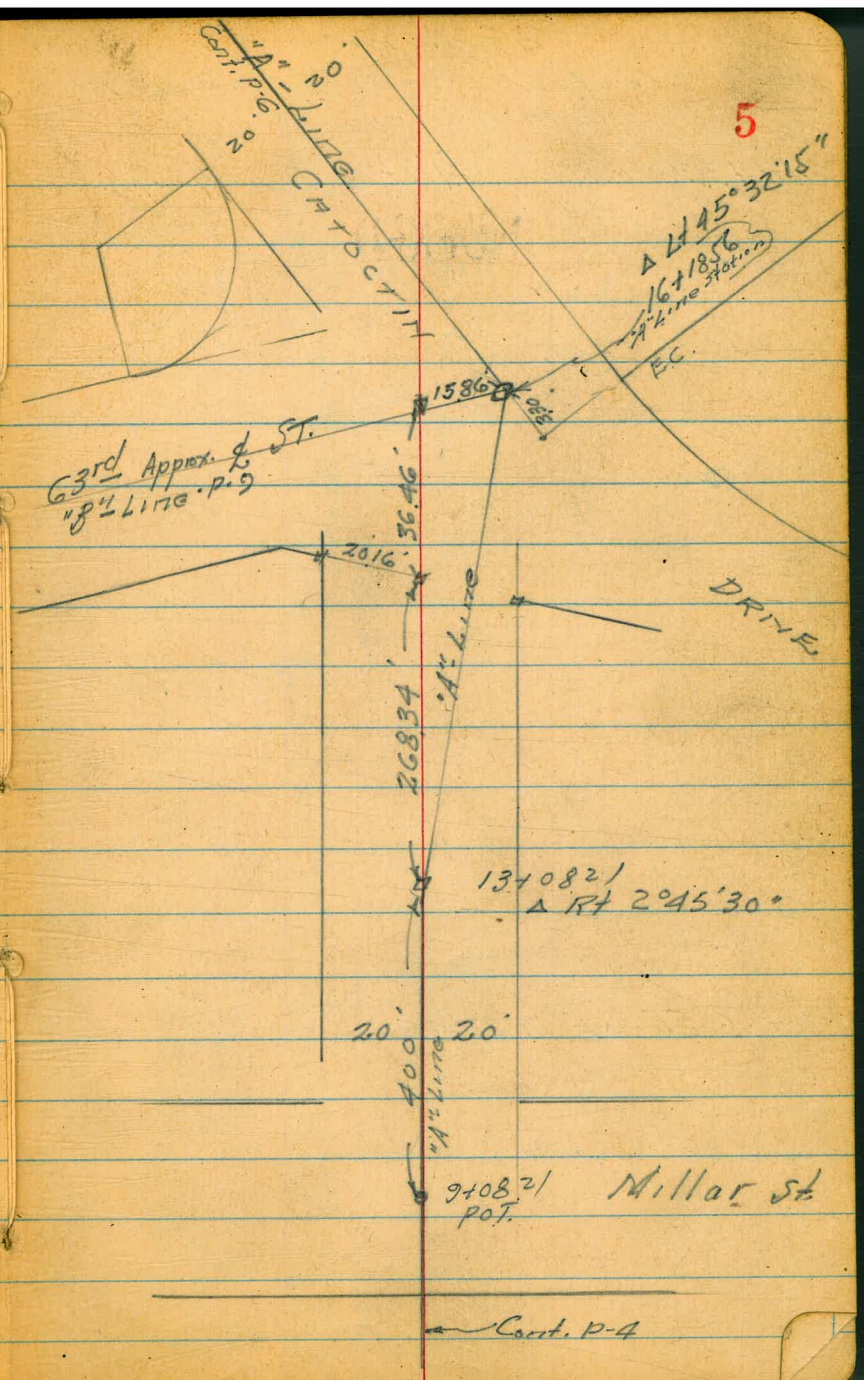


"A" - Line
Location Proposed Sewer
in Acacia Park

16+18.56 = Δ Lt. 45°32'15" Set 1" Redwood in Paving

13+08.21 = Δ Rt 2°45'30" Set 1" X 1" Redwood

9+08.21 = P.O.T. 3/4" pipe @ Millar And Seward St.



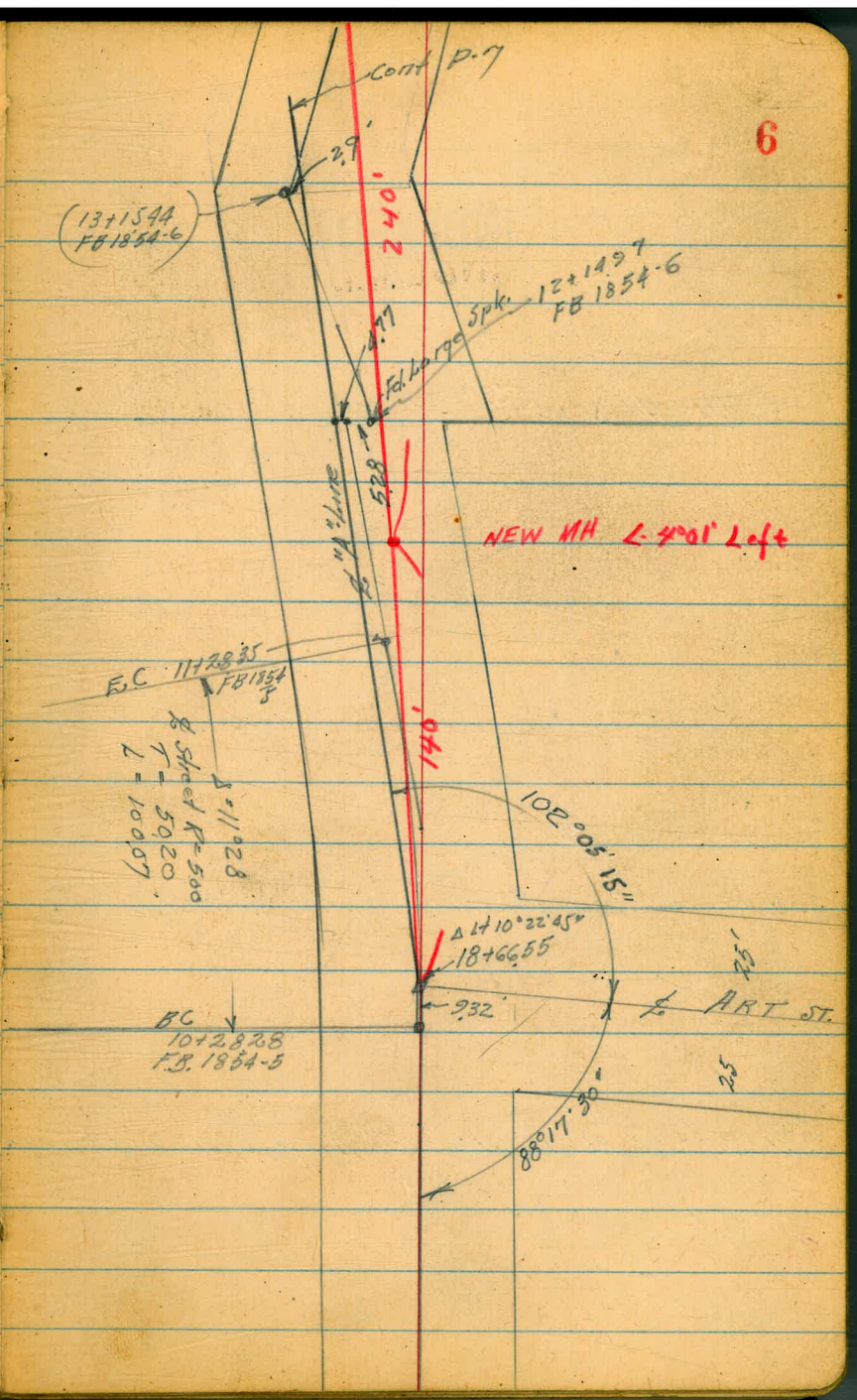
"A" Line
Location Proposed Sewer
in Acacia Park

21+43.3 = P.O.T. 2.9' Lt = Fd. Large Spk.

INDEXED

20+45.76 = P.O.T.

18+66.55 = Δ Lt 10°22'45" Set 1" Redwood on Semi temp.



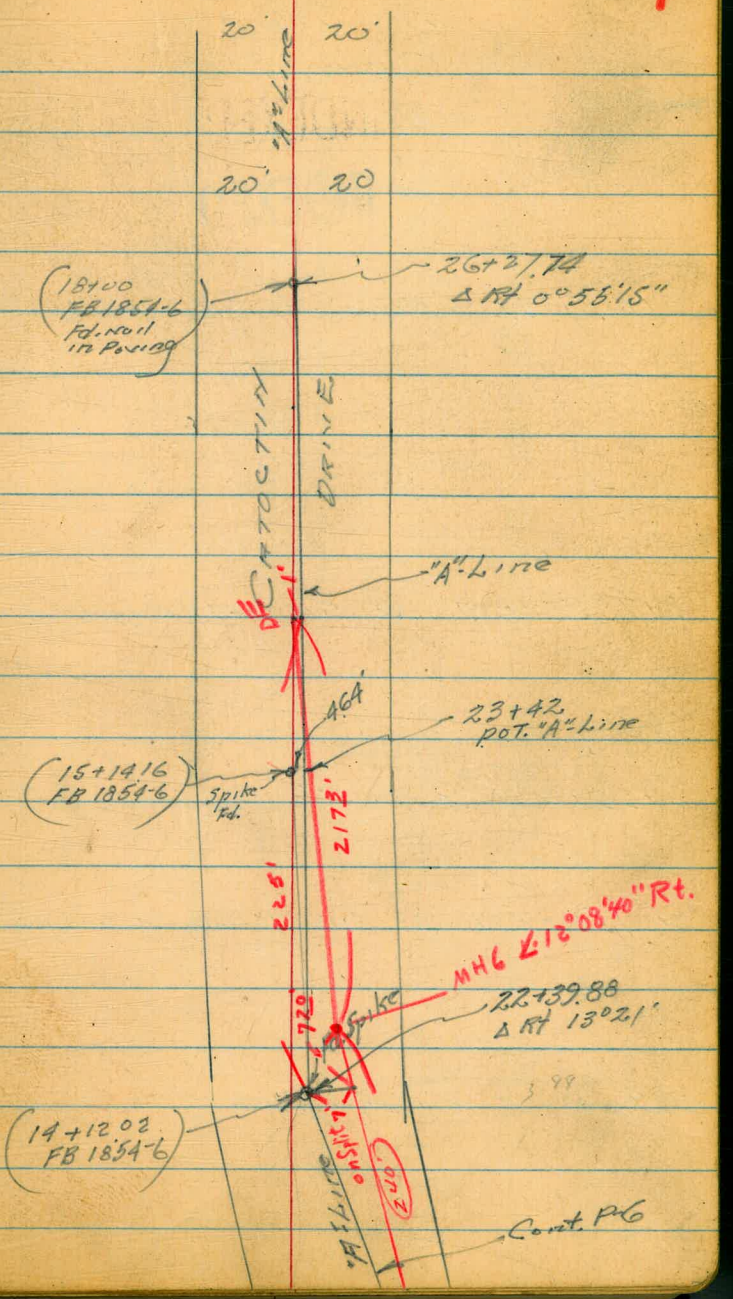
"A" Line
Location Proposed Sewer
in Acacia Park

INDEXED

26+27.74 = Δ Rt. 0°55'15"

23+42 P.O.T. Fd. Large Spike 4.64' Lt.

22+39.88 = Δ Rt 13°21' Fd. Large Spike in Paving



LOCATION - PROPOSED SEWER
"B" LINE
IN OAKMERE SUB.
Levels - P-19

INDEXED

5+14.07 = P.O.T. ℄ Millar St Set 2"x2"x10" R.W. Hub

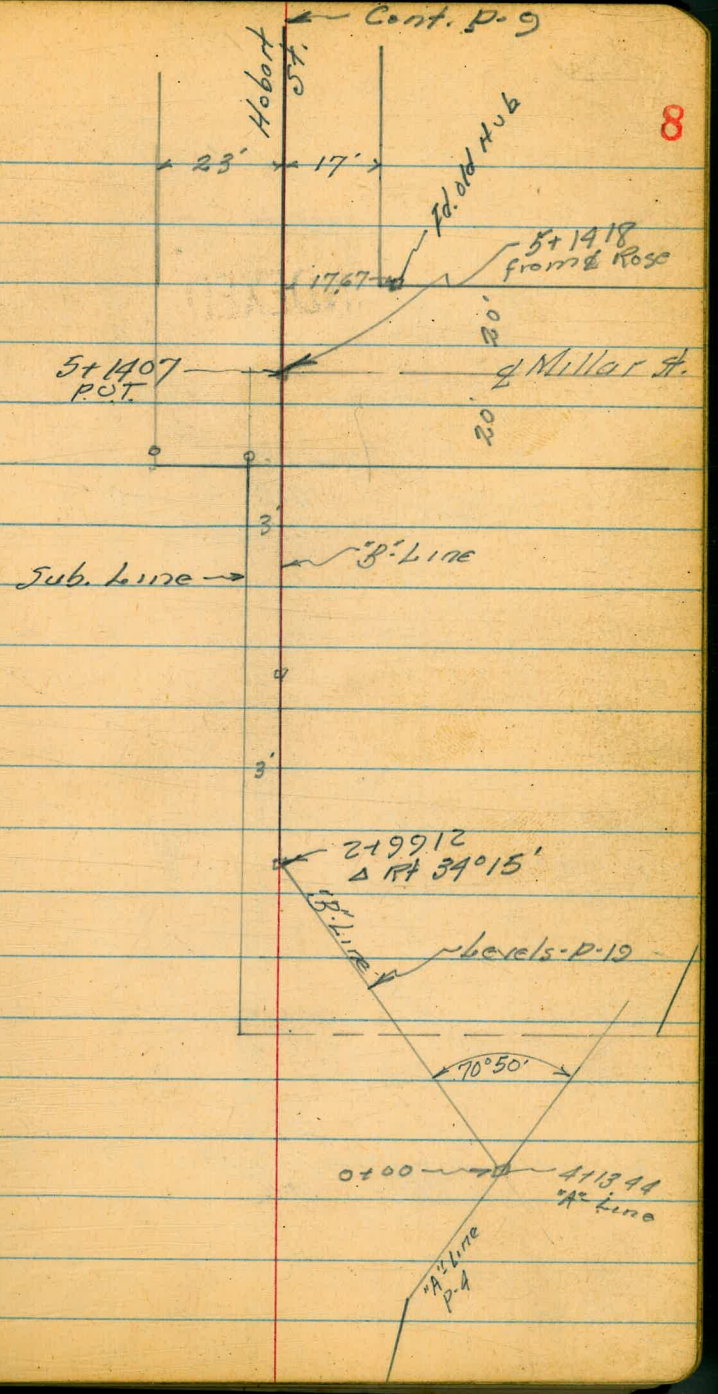
3+75.68 = P.O.T. Set 1"x1"x14" Redwood

2+99.12 = Δ Rt. 34°15'

2+07.58 = P.O.T. Set 1"x1"x14" Redwood with Nail

0+00 = 4+13.44 on "A" Line

Cont. P-9



Location - Proposed Sewer in Oakmere And Acacia Park

Cont. from P. 8

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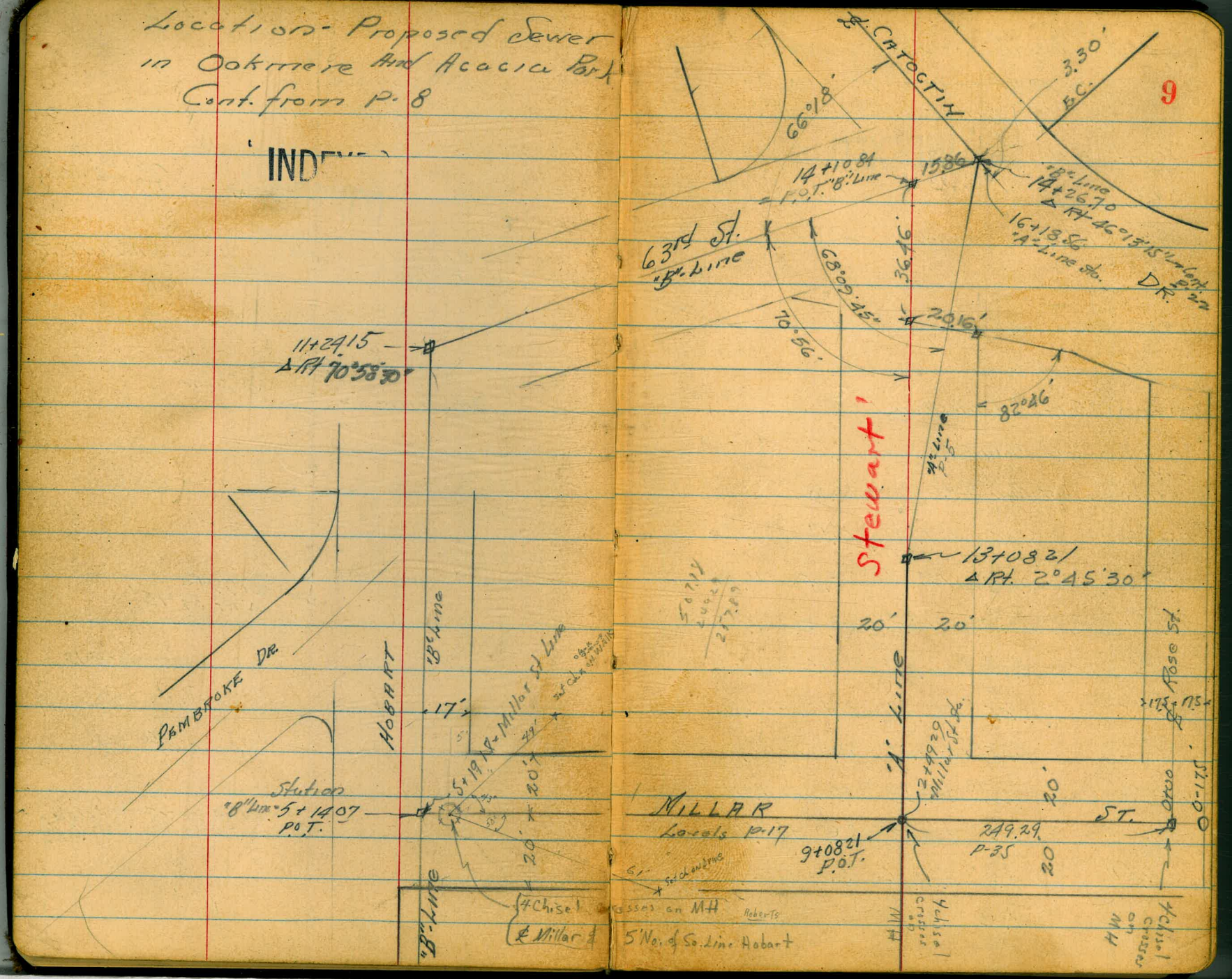

Walker

Profile Levels: Proposed Sewer in Oakmere and Acacia Park "A" Line - Location P-3-7.

Walker
Johnson
Pope
Riley
2-11-49

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INDEXED

Cont. P-11

0+35			11.7	389.30
(0+23) 12' Rt - ℄ channel			16.8	384.20
0+23			13.0	388.00
			16.3	384.70
0+02 on Approx. Flow Sewer from settling tank				
0+05			12.0	389.00
(0+00) 15 Rt - ℄ 4' wide channel			17.9	383.10
0+00 on Flow Exist. Sewer			19.56	381.44
℄ MH = 0+00 (on East Rim MH)			12.88	388.12
T.P. #9	1.06	401.00	12.17	399.24
T.P. #8	0.73	412.11	13.05	411.38
T.P. #7	0.88	424.43	12.93	423.55
T.P. #6	4.82	436.48	11.13	431.66
T.P. #5	0.55	442.81	12.40	442.26
T.P. #4	2.05	454.66	10.72	452.61
T.P. #3	0.92	463.33	4.92	462.41
T.P. #2	4.36	467.33	6.69	462.97
T.P. #1	3.61	469.66	5.50	466.05
	5.89	471.55		465.66

on Rock

on Rock

on Rim MH 109.7' Lt of 0+00

on Mon 105.24' Lt of 2+63.40 "A" Line P-3

on Hub 7+32.53 "A" Line P-4

on ¾" Iron Pipe ℄ Miller and Stewart St.

on 1½" Iron Pipe ℄ Miller 17.5' South of ℄ Rose St P-2

B.M. B.P. NW El Cajon & Cotoctin Dr.
FB 1693-8

"A" Line
Cont. from P. 10

Cont. on Rt. Page			
T.P. #11	11.94	426.60	0.09 414.66
1+52 in Fill		6.3	408.45
T.P. #11	12.03	414.75	0.14 402.72
1+36 in Fill		3.7	399.2
(1+23.2) 38.5 Rt. Flow 24" Pipe		14.57	388.29
1+23.2 in Fill		10.6	392.3
1+21 = Toe Fill - College Way		13.3	389.6
1+05		14.0	388.9
1+00 ℄ channel		15.1	387.8
0+97		14.6	388.3
T.P. #10	11.49	402.86	.963 391.37
0+82 = channel E. side		13.1	387.9
0+75 = ℄ channel		14.4	386.6
0+69 = Int. C.I. Sewer on Top		14.11	386.89
(0+50) 8' Rt = ℄ channel 6' Wide		15.9	385.1
0+50		12.6	388.4
(0+35) 12' Rt channel		16.7	384.3
	401.00		

Cont. P-10

2+63.40 T.P. #13	0.87	421.04	13.12 420.17
2+63.40 on Hub			13.12 420.20
2+63.4			13.6 419.7
2+50			3.0 430.3
Chk. TP #6	1.63	433.29 Corrected	431.66
			1.63 431.69
2+45.77 = P.O.T. on 1"x1"			2.59 430.73
2+43.1 = on cb.			2.37 430.95
2+43.0 on Gutter E. cb College			2.95 430.37
1+87.9 on Gut.			4.53 428.79
(1+87.87) 15.8' Rt = ℄ 15' cb Inlet on Grating			4.49 428.83
1+87.87 = Int. W. cb Line on cb College Way			3.75 429.57
1+84.72 = P.O.T. on 1"x1"			3.62 429.70
1+79			3.3 430.0
T.P. #12	7.85	433.32	.113 425.47
1+74 in Fill			1.1 425.5
1+67 in Fill			6.7 419.9
	426.60		

"A"-Line Cont. from p11

Cont. on Rt. Page		
(5+00) 6' Rt.	2.8	408.7
5+00	1.8	409.7
(4+78.58) 7' Rt. = ℄ ch.	4.6	406.9
Int. Sub. Line		
4+78.58 = P.O.T.	3.18	408.31
(4+50) 5' Rt. = ℄ 3' channel	7.3	404.2
4+50	6.5	405.0
(4+29) 2' Rt. = ℄ 3' wide channel	9.5	402.0
4+29	8.7	402.8
4+13.44 = P.O.T. on Hub in channel	10.35	401.14
(4+00) 2' Rt. = channel	11.8	399.7
4+00	11.3	400.2
(3+50) 4' Rt. = ℄ channel	13.6	397.9
3+50	12.7	398.8
(3+28.5) 10.2' Rt. on Flow 24" pipe	15.54	395.95
3+28.5	12.9	398.6
2+98.85 Δ 39°38' Rt. on Hub in Fill	10.81	400.68 ~~400.7~~
2+93 in Fill = Toe	9.6	402.9
TP #14	2.89 411.49	12.44 408.60

42.104

Cont. on P-13

6+58.84 = P.O.T. on stub	4.97	430.86
(6+27) 17' Rt. = ℄ 4' chan.	19.8	416.0
(6+27) 10' Lt.	4.5	431.3
6+27	10.2	425.6
TP #16 13.27 435.83	0.23	422.56
(6+03) 5' Lt. on side Hill	0.7	422.1
(6+03) 10' Rt. = ℄ 3' chan.	7.4	415.4
6+03	4.3	418.5
5+92 in ch.	7.8	415.0
5+83.25 = Δ Lt 36°32' on High Point 2"R3"	7.65	415.14 in chan.
5+75 ch.	8.6	414.2
5+58	7.2	415.6
(5+50) 7' Rt. = ℄ ch.	10.6	412.2
5+50	8.3	414.5
5+30	9.8	413.0
(5+21) 8 Rt. = ch.	11.7	411.1
5+21	11.2	411.6
TP #15 12.22 422.79	0.92	410.57

411.49

Profile Levels
"A" Line

2 Nails in Pole 14.1 Rt 84+22				
T.P.#19	7.78	467.99	0.97	460.21
8+50			0.8	460.4
8+30			2.0	459.2
8+00			2.8	458.4
7+75 10' Lt & Rt Level			3.7	457.5
(7+47) 10' Rt.			7.0	454.2
(7+47) 10' Lt			4.6	456.6
7+47			5.6	455.6
(7+32.53) 10' Rt.			11.6	449.6
(7+32.53) 10' Lt.			6.6	454.6
Chk T.P.#18 7+32.53=P.O.T.	8.57	461.18 Corrected	8.57	452.61 452.59
T.P.#18	12.88	461.16	0.59	448.28
(6+90) 10' Lt.			5.8	443.1
(6+90) 10' Rt.			11.4	437.5
6+90			8.6	440.3
T.P.#17	13.14	448.87	0.10	435.73
(6+58.84) 10' Lt.			1.5	434.33
(6+58.84) 10' Rt.			9.5	426.3
		43583		

"A" Line

Cont P-14

15+00	5.4	462.7
14+49 10.4' Rt = Pole Anchor P-78485	5.6	462.5
14+284 11.3' Rt - Elec. Pole	5.7	462.4
14+00	5.7	462.4
13+50	5.5	462.6
(13+08) 100' Lt.	6.2	461.9
T.P.#20 5.53 468.13 on Hub	5.39	462.60
13+08.21=Δ Rt 2°45'30"	5.39	462.60
12+50	5.2	462.8
12+00	5.1	462.9
11+50	5.0	463.0
11+00	5.1	462.9
10+50	5.1	462.9
(10+00) 100' Lt	6.5	461.5
10+00	5.0	463.0
9+50 All prop. on Rt above & to catoction	5.2	462.8
9+08.21=P.O.T. chk. Iron Pipe Miller x Stewart	5.60	462.41 462.39
9+00	5.4	462.6
	467.99	

(18+00) 10.3' Lt Edge Pav.	6.44	461.69	
(18+00) 6' Rt. " "	6.35	461.78	
18+00	6.15	461.98	
(17+50) 11' Lt. Edge Pav.	6.01	462.12	
(17+50) 5.6' Rt Edge Pav	5.98	462.15	
17+50 Pav.	5.70	462.43	
(17+00) 10.9 Lt Edge Pav	5.46	462.67	
(17+00) 5.8' Rt " "	5.48	462.65	
17+00	5.21	462.92	
(16+50) 11' Lt Edge Pav.	4.93	463.20	
(16+50) 6' Rt " "	5.28	462.85	
16+50 on Paving 14+26.70 - P-21	4.94	463.19	
16+18.56 = Δ Lt 45°32'15	4.74	463.39	
16+07 = edge Oil + Rock Pav.	4.74	463.39	
16+00	4.9	463.2	
15+79 8' Rt # 76806 Elec. Pole			
15+67 1' Rt. = Pole Anchor	5.7	462.4	
15+50	5.3	462.8	

468.13

(21+00) 12.6' Rt Edge Pav.	4.16	459.47
(21+00) 6.6' Lt. " "	4.62	459.31
21+00	4.34	459.59
(20+50) 5' Lt. Edge Pav.	4.36	459.57
(20+50) 12.6' Rt " "	4.22	459.71
20+50	4.12	459.81
(20+00) 7' Lt. Edge Pav.	4.08	459.85
(20+00) 11.5' Rt " "	3.86	460.07
20+00	3.86	460.07
(19+50) 4' Lt. Edge Pav.	3.33	460.60
(19+50) 12.4' Rt " "	3.35	460.58
19+50	3.13	460.80
(19+00) 7' Lt Edge Pav.	2.78	461.15
(19+00) 9' Rt " "	2.74	461.19
19+00	2.48	461.45
18+66.55 on St-6 T.P. #21 2.19 463.93	6.39	461.74
(18+66) 11.4' Lt	6.70	461.43
18+66.55 Δ Lt 10°22'45"	6.39	461.74
18+50	6.39	461.74

468.13

"A" Line

(24+00) 100' Rt. S.W. Cor House	64	457.53	
(24+00) 4' Rt Edge Pav.	571	458.22	
(24+00) 13' Lt " "	571	458.22	
24+00	557	458.36	
(23+50) 6' Rt. Edge Pav.	570	458.23	
(23+50) 12' Lt " "	555	458.38	
23+50	547	458.46	
(23+00) 10' Rt Edge Pav.	565	458.28	
(23+00) 10' Lt " "	536	458.57	
23+00	528	458.65	
(22+40) 4.5' Lt Edge Pav.	507	458.86	
(22+40) 14' Rt " "	514	458.79	
22+39.88 - Δ Rt 13°21'	495	458.98	
(22+00) 11' Rt. Edge Pav.	488	459.05	
(22+00) 7.4' Lt " "	494	458.99	
22+00	463	459.30	
(21+50) 100' Rt.	45	459.4	
(21+50) 7.7' Lt. Edge Pav.	476	459.17	
(21+50) 11.6' Rt Edge Pav.	491	459.22	
21+50	449	459.44	

463.93

"A" Line

15

27+00	490	455.91
(26+27) 10' Lt. Edge Pav.	468	456.16
(26+27) 7' Rt " "	462	456.19
26+27.74 - Δ Rt 0°55'15"	439	456.42
(26+00) 6' Rt Edge Pav.	442	456.39
(26+00) 10' Lt " "	445	456.36
26+00	425	456.56
TP 22.269 460.81	581	458.12
(25+50) 5.5' Rt Edge Pav.	700	456.93
(25+50) 11 Lt " "	702	456.91
25+50	682	457.11
(25+00) 5' Rt Edge Pav.	638	457.55
(25+00) 7.7' Lt " "	635	457.58
25+00	621	457.72
(24+50) 3.5' Rt. Edge Pav.	581	458.12
(24+50) 12.4' Lt " "	591	458.02
24+50	576	458.17

463.93

~~(30+00) 100' Rt.~~		
(30+00) 50' Rt	8.5	452.3
(30+00) 100' Rt.	8.5	452.3
(30+00) 100' Lt	12.0	448.8
(30+00) 50' Lt	10.5	450.3
(30+00) 11' Lt. Edge Pav.	7.8	452.93
(30+00) 5.5' Rt. Edge Pav.	7.63	453.18
30+00	7.46	453.35
(29+00) 100' Rt. (Uniform to & on ground	8.9	451.91
(29+00) 11' Lt.	7.30	453.51
(29+00) 6.5' Rt. = Edge Pav.	7.28	453.53
29+00	7.00	453.8
(28+10) 58' Rt. opposite Soil Pipe West Side House on Drive.	5.94	454.87
(28+00) 11' Lt	6.23	454.58
(28+00) 5.7' Rt.	6.11	454.70
28+00	6.05	454.76
27+50	5.54	455.27
(27+00) 9' Lt = Edge Pav.	5.26	455.55
(27+00) 7.6' Rt " "	5.11	455.70

46081
7

		.003
		455.57
Check 19+00 FB 1854	5.27	455.54
		.006
		453.33
Check 22+00 FB 1854-26	7.54	453.27
33+50 Lt & Rt Above &	11.9	448.9
33+00 " " "	10.2	450.6
32+50 " " "	9.6	451.2
32+00 (Lt & Rt Above &)	8.7	452.1
(31+33) 100' Lt on ground = NW Cor House	9.2	451.6
31+33	8.2	452.6
(31+10) = West edge Auto Court 99' Rt	7.2	453.6
31+00 = End of Paving.	7.81	456.00

46081
7

Walker
Johnson
Pope
Crawford
2-16-49

PRELIMINARY SEWER IN MILLAR ST.

From ℄ Rose St to ℄ Hobart St.

Cont. on Rt. Page

(1+00) 50' Lt.	.81	459.1
1+00	6.6	460.6
.3+50	6.1	461.1
(3+00) 100' Lt.	8.3	458.9
(3+00) 50' Lt.	6.6	460.6
3+00	5.4	461.8
2+49.29 on Pipe ~~2+44.7~~ = Δ Rt 0°05'30"	4.85	462.39
(2+00) 100' Lt.	8.9	458.3
(2+00) 50' Lt	6.1	461.1
2+00	4.3	462.9
1+50	4.3	462.9
(1+00) 75' Lt	7.8	459.4
(1+00) 50' Lt.	6.2	461.0
1+00	5.2	462.0
0+50	4.6	462.6
(0+00) 50' Lt	6.0	461.2
0+00 ℄ Rose Street (Rose St. = 35' wide)	3.7	463.5
427 467.24		462.97

Millar Street
Prelim. Sewer Levels

17

5+19.18 - Int "B" Line	12.23	455.01
(5+00) 100' Lt.	13.3	453.9
(5+00) 50' Lt.	11.6	455.6
5+00	10.3	456.9
4+50	8.1	459.1
(4+00) 100' Lt	9.9	457.3
467.24		

B.M. on Iron Pipe = T.P. #2 P.10

Walker Johnson Pope Crawford 7-16-99

PRELIMINARY SEWER LEVELS

on ℄ ROSE ST.

from Miller to Catoctin Drive

Location P-35

4+50	7.0	464.2	
(4+00) 100' Lt.	8.1	463.1	
4+00	6.9	464.3	
3+50	6.7	464.5	
(3+00) 100' Lt	7.4	463.8	
(3+00) 40' Lt.	7.1	464.1	
3+00	5.8	465.4	
2+82	5.6	465.6	
2+63	5.1	466.1	
2+50	5.6	465.6	
(2+00) 100' Lt	7.0	464.2	
2+00	5.7	465.5	
1+50	5.9	465.3	
(1+00) 100' Lt.	7.8	464.2	
1+00	6.5	464.7	
0+50	6.8	464.4	
0+00 = ℄ Miller St.	7.6	463.6	
8.23	471.20	462.97	

Rose Street

Prelim. Sewer Levels

18

6+10.03 = Int. of "B" Line Sketch P-35		
6+20 = (Edge Pave)	7.60	463.6
6+13. (℄ Pave)	7.26	463.94
6+02.80 (Edge Pave.)	7.09	464.11
5+87.5 (R.L.)	7.2	464.0
5+50	7.0	464.2
(5+00) 100' Lt	8.6	462.6
5+00	6.8	464.4
B.M. Pipe		

Preliminary Sewer Levels

Walker
Johnson
Pope
Crowford
2-16-49

"B" Line.
Location Pages 8, 9,

INDEXED

Station	Rt. Page		
Cont. on			
1+74	11.2		414.5
on Top 1"x2" 1+50			
T.P	12.43	425.67	0.66	413.24
(1+50) 10' Lt		+ 1.5	415.9
(1+50) 7' Rt = ℄ 3' Channel	3.8		410.1
1+50	1.3		412.6
(1+00) 10' Lt.	2.3		411.6
(1+00) 6' Rt. = ℄ 4' Channel	6.3		407.6
1+00	4.4		409.5
0+84	6.5		407.4
(0+35) 10' Lt.	7.6		406.3
(0+35) 4' Rt = ℄ Channel	10.4		403.5
0+35 = N Bank Channel	8.9		405.0
0+25 = ℄ Channel	11.9		402.0
0+22 = S Bank Channel	11.3		402.6
(0+00) 13' Lt. = ℄ Channel to NE.	13.6		400.3
0+00	12.76		401.14
12.76	413.90		401.14

"B" Line Levels

19

Cont. P-20

T.P 12.74	438.35	0.06	425.61
3+02 E. side chan. on Hub in ch.		4.6	421.1
2+99.12 = ΔRt 34°15'		4.80	420.87
2+75		6.6	419.1
2+63		3.5	422.2
(2+50)		1.0	424.7
℄ 6' Chan.			
(2+50) 9' Rt		7.1	418.6
2+50		5.2	420.5
2+25		3.9	421.8
2+07.58 = P.O.T. on 1"x1"x14" Redwood ℄ 5' Chan.		5.25	420.42
(2+00) 17' Rt		12.7	413.0
(2+00) 10' Lt.		4.6	421.1
2+00		7.3	418.4
1+89		10.8	414.9
1+77		13.6	412.1
	425.67		

B.M. on Hub 4+13.44 P-12

"B" Line - Cont. from P 19

Cont. Rt Page			
4+41		12.1	450.7
T.P.	12.36	0.16	450.42
(4+25) 10' Lt.		6.2	444.4
(4+25) 10' Rt.		+2.0	452.6
4+25		2.8	447.8
4+09		4.6	446.0
(3+75) 10' Rt		6.8	443.8
(3+75) 10' Lt.		13.4	437.2
3+75.68 = P.O.T. on 1"x1"x14" Redwood		9.81	440.77
T.P.	12.83	0.60	437.75
3+60		0.4	438.0
(3+50) 10' Lt.		6.1	432.3
(3+50) 10' Rt.		+0.1	438.5
3+50		2.9	435.5
(3+25) 10' Rt		5.1	423.3
(3+25) 10' Lt.		11.5	426.9
3+25		8.0	430.4
Cont. from P 19	438.35		

Cont. P-21

(6+50) 10' Lt.	11.2	451.6
(6+50) 10' Rt.	7.9	459.9
6+50	8.1	459.7
(6+28) 10' Lt	8.1	459.7
(6+28) 10' Rt	5.6	457.2
6+28	5.8	457.0
(6+00) 10' Lt = Rim Canyon	5.7	457.1
(6+00) 10' Rt.	4.3	458.5
6+00	4.5	458.3
(5+50) 10' Lt.	5.9	456.9
(5+50) 10' Rt	4.0	458.8
5+50	4.7	458.1
5+19.07 = P.O.T. = 5+19.18 P.I.	7.75	455.01 - P.I. 455.03
(5+00) 10' Lt.	11.4	451.4
(5+00) 10' Rt.	6.7	456.1
5+00	8.3	459.5
4+81	10.5	452.3
4+64	10.8	452.0
	467.78	

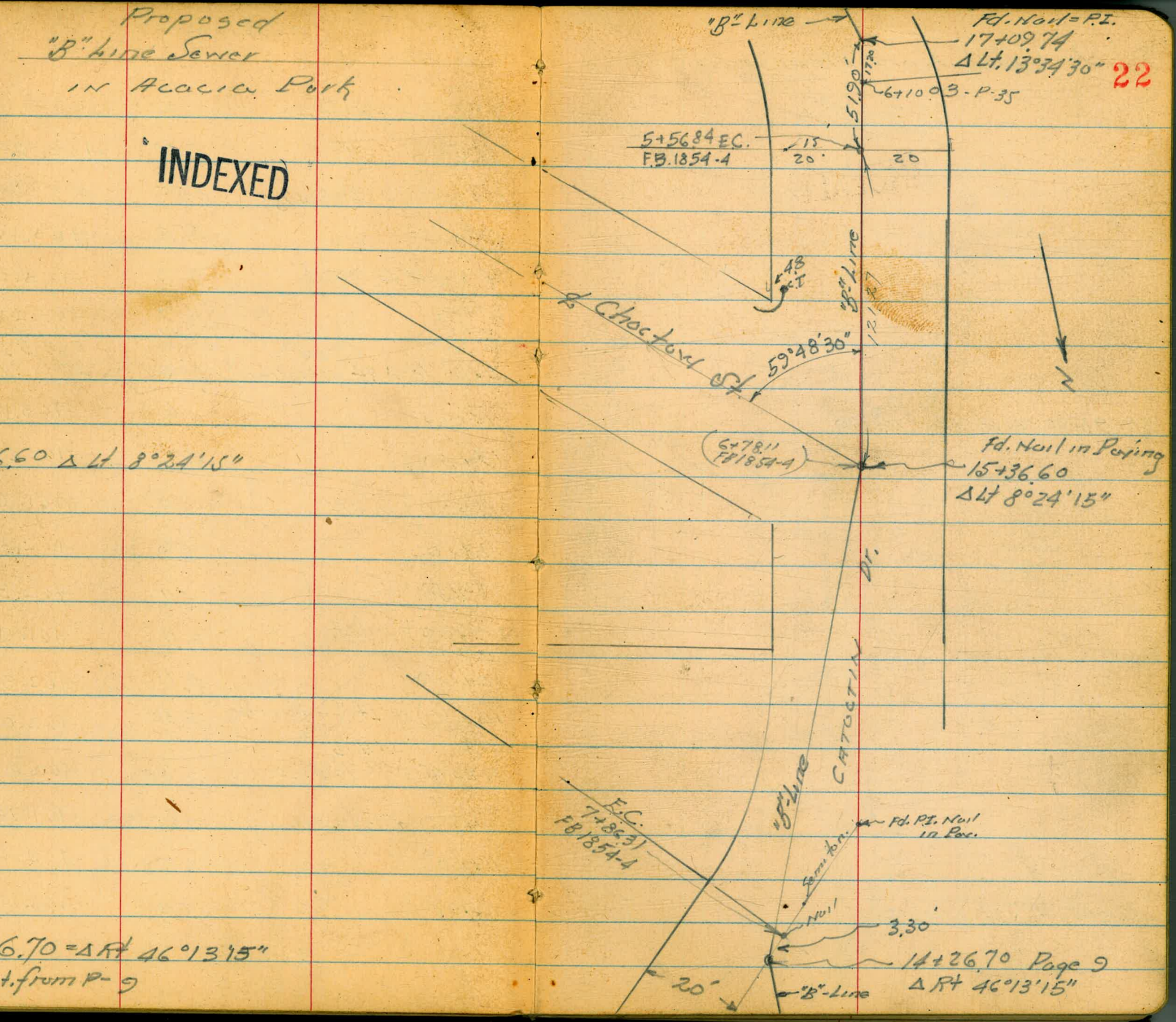
(10+00) 3'Lt on Paving	6.08	461.3
10+00	5.9	461.5
9+50	6.0	461.4
(9+00) 3'Lt. on Paving	6.65	460.79
9+00	6.7	460.7
(8+58) 17.5'Lt. on Flow Line M.H.		
(8+58) 17.5'Lt = Existing Sewer MH on Rim	6.93	460.46
8+58		
T.P. 6.56 467.39	1.95	460.83
(8+22) 3'Lt. on Paving.	2.50	460.3
8+22 = Beg. Por. 3'Lt	1.9	460.9
8+00	1.7	461.1
7+50	1.8	461.0
(6+94) 10'Lt	2.0	460.8
(6+94) 10'Rt	45	458.3
6+94 = Top of Fill	2.5	460.3
(6+78) 10'Lt.	22	453.6
(6+78) 10'Rt	88	454.0
6+78 = Toe Fill	89	453.9
462.78		

Cont. on P. 29

16+00	5.98	463.64
15+3660 = Δ Lt 8°24'15"	5.55	463.57
15+00	5.96	463.16
(14+62) 7'Lt. on cb	6.09	463.03
14+62	5.88	463.24
T.P. 5.71 462.12		463.39 (P.I. 16+18.56)
14+26.70 = Δ Rt 46°13'15"	3.98	463.41
14+00	4.3	463.1
13+50	4.9	462.5
(13+00) 100'Lt.	5.8	461.6
13+00	5.0	462.4
12+50	5.1	462.3
(12+00) 100'Lt.	6.0	461.4
12+00	5.1	462.3
(11+24) 3'Lt on Paving.	5.32	462.07
11+24.15 = Δ Rt 70°58'30 on Hub	5.38	462.01
(11+00) 3'Lt. on Paving	5.61	461.78
11+00	5.2	462.2
10+50	5.4	462.0
467.39		

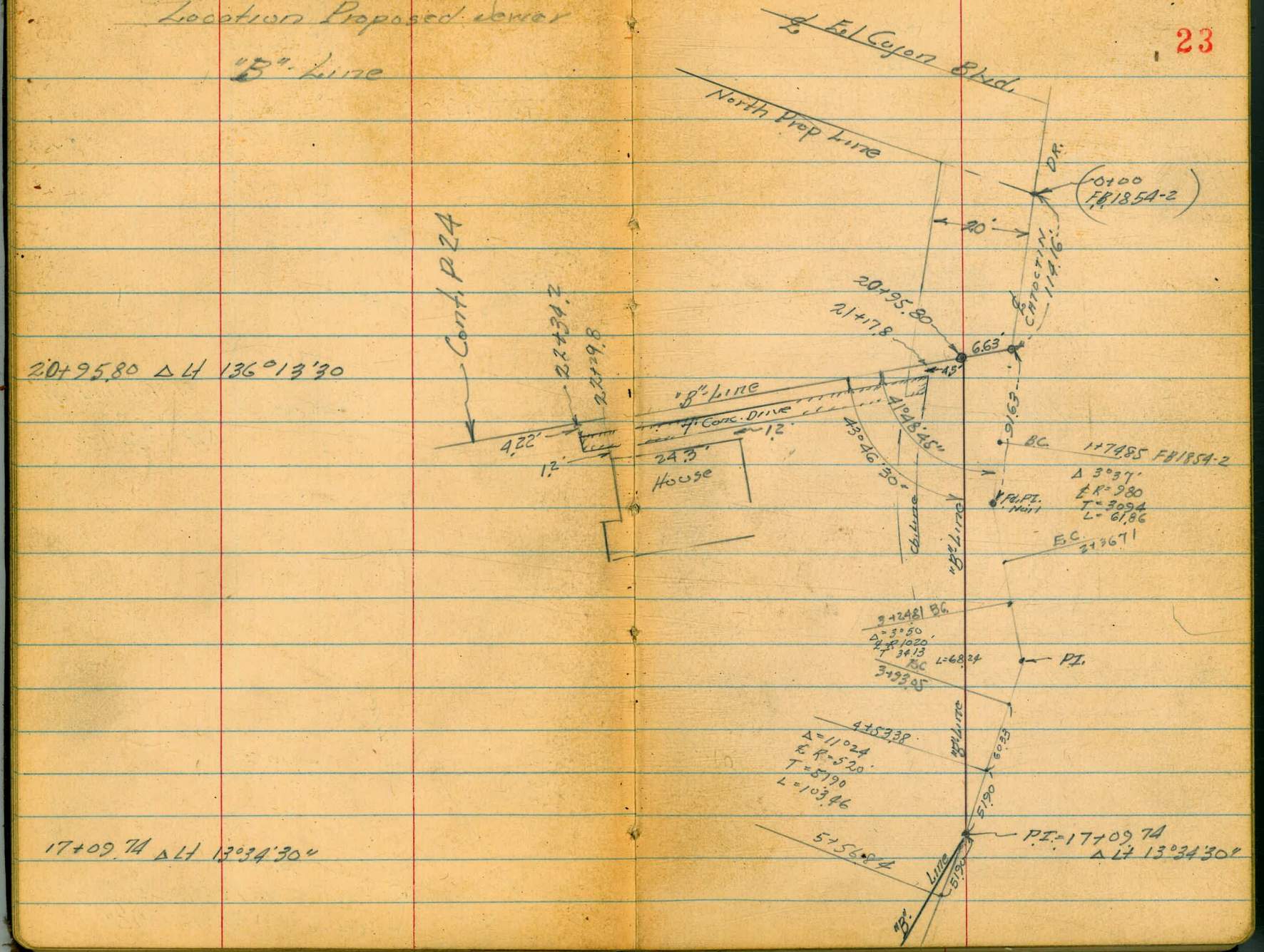
Proposed
"B" Line Sewer
in Acacia Park.

INDEXED

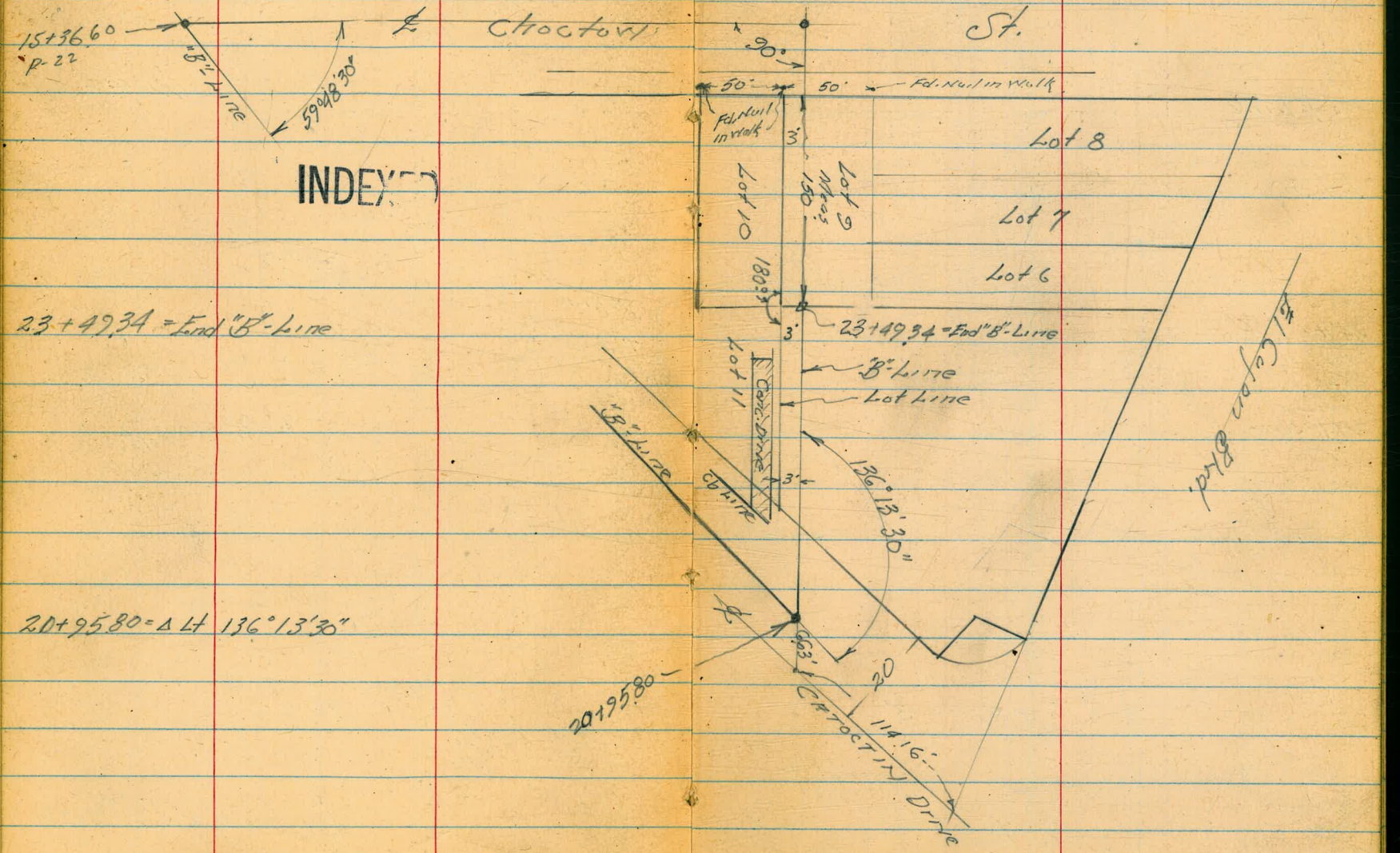


Location Proposed Sewer

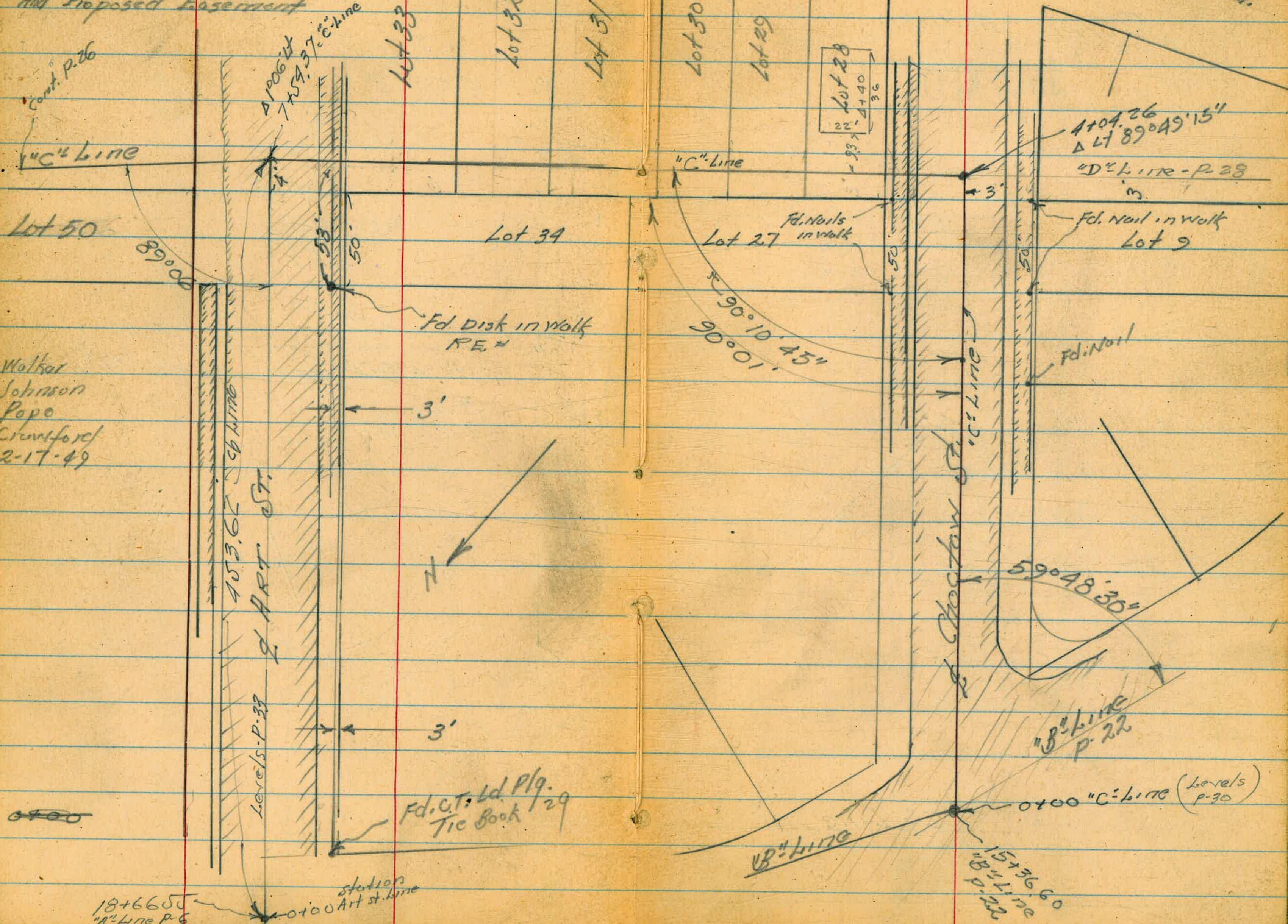
"B" Line



Proposed Location "B" Line Sewer in Acacia Park



"C" Line
LOCATION PROPOSED SEWER
IN CHOCTAW ST.
And Proposed Easement

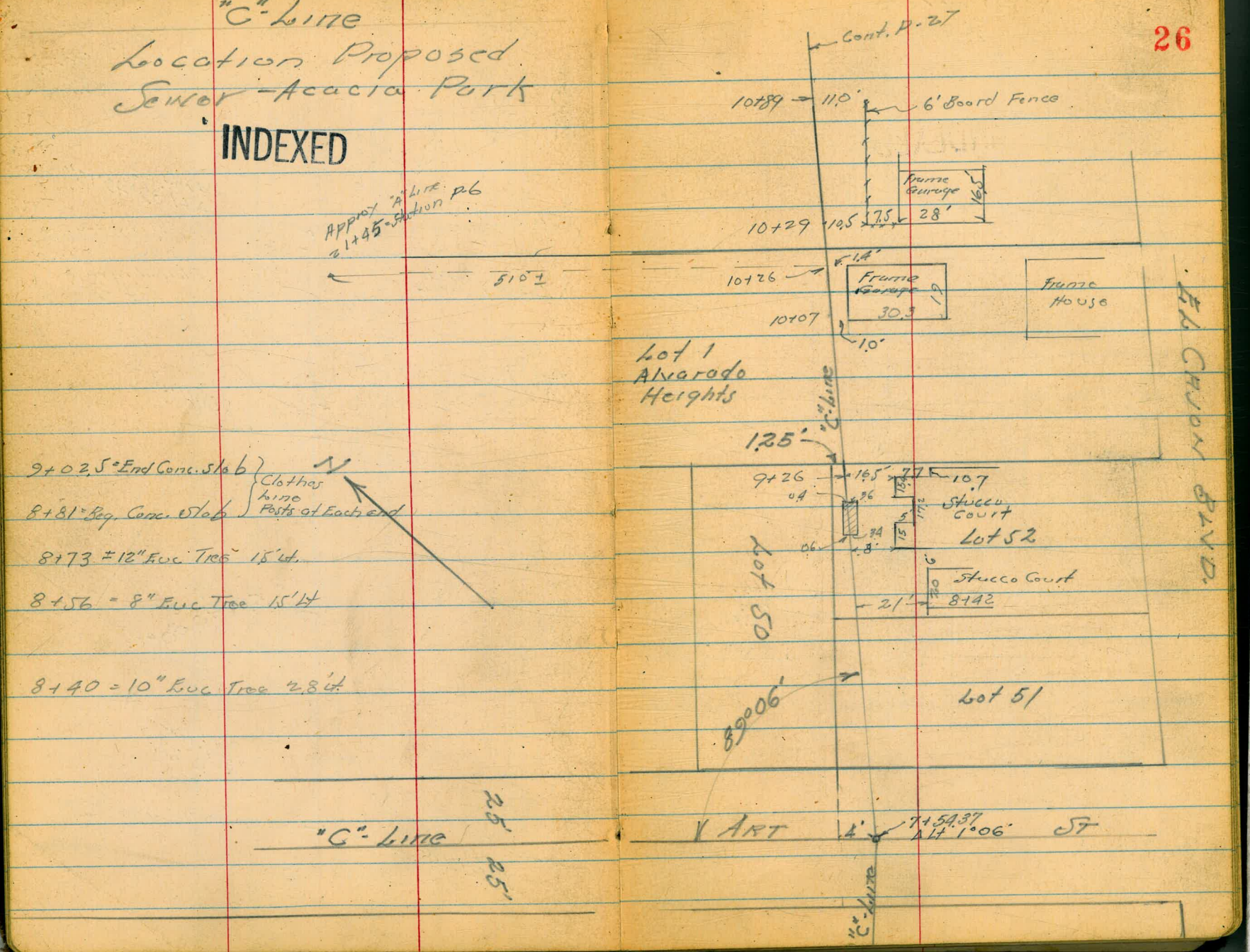


El Cajon Blvd.
Cont. P. 26
"C" Line
Δ 00°6' Lt
7+54.37 "C" Line
Lot 33
Lot 32
Lot 31
Lot 30
Lot 29
Lot 28
"C" Line
4+04.26
Δ Lt 89°49'15"
"D" Line - P. 28
3'
Lot 50
89°06'
Lot 34
Lot 27
Fd. Nails in walk
Fd. Nail in walk
Lot 9
50'
Fd. Disk in walk RE
90°10'45"
90°01'
Fd. Nail
"C" Line
3'
153.62
℄ Art St.
℄ Choctaw St.
N
59°48'30"
"B" Line P. 22
Levels P. 33
Fd. C.T. Ld. Plg. Tie Book 29
0+00 "C" Line
Levels P-30
"B" Line
15+36.60 "B" Line P. 22
18+66.55 "A" Line P. 6
0+00 Art St. Line
Station

Walker
Johnson
Pope
Crawford
2-17-49

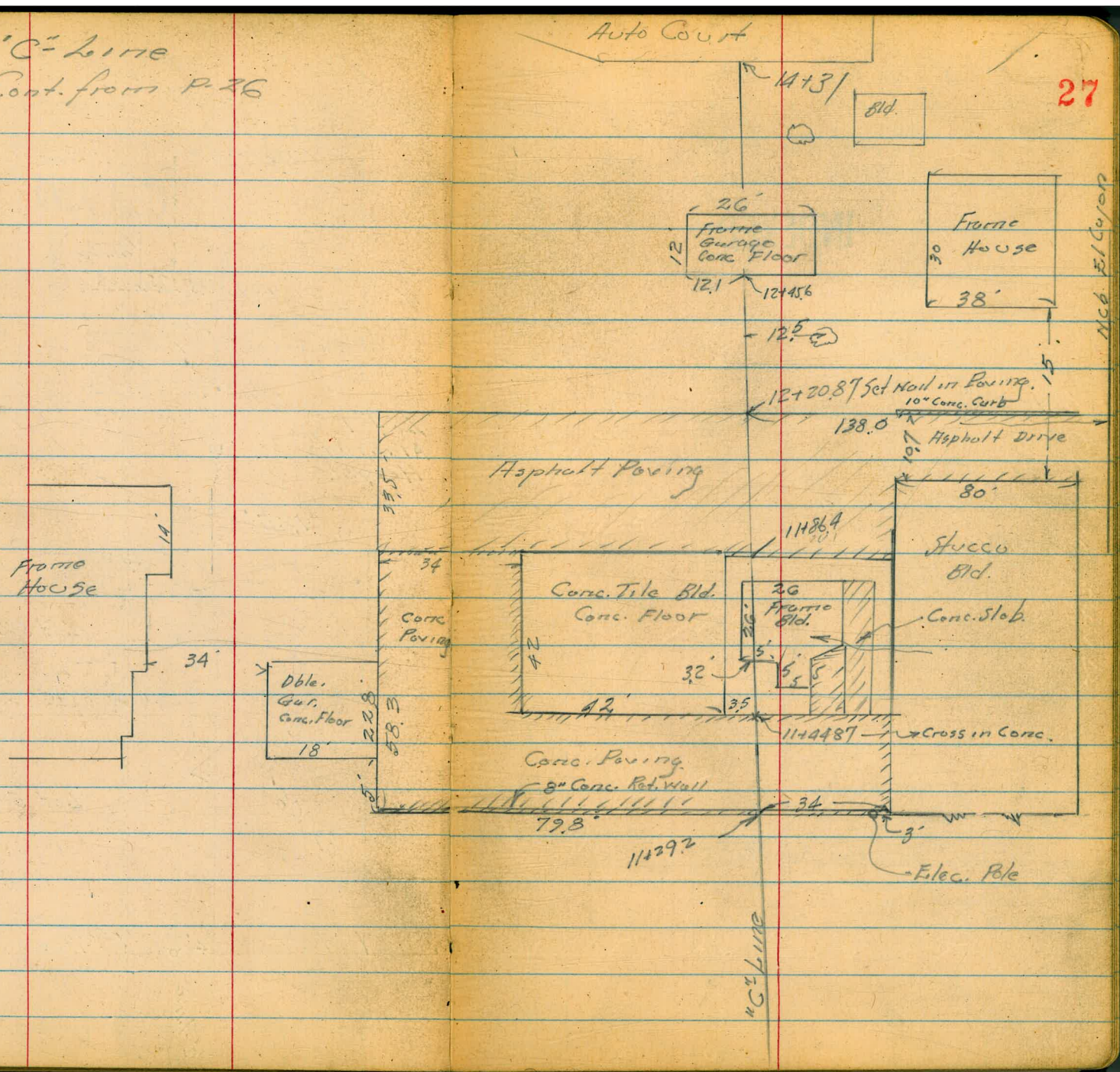
"C" Line
Location Proposed
Sewer - Acacia Park

INDEXED



"C" Line

Cont. from P. 26



Walker
Johnson
Pope
Crawford
2-18-49

"D" Line
Location Proposed Sewer
in Acacia Park
(Levels P. 34)

INDEXED

1+75 = Int. 6' Board Fence

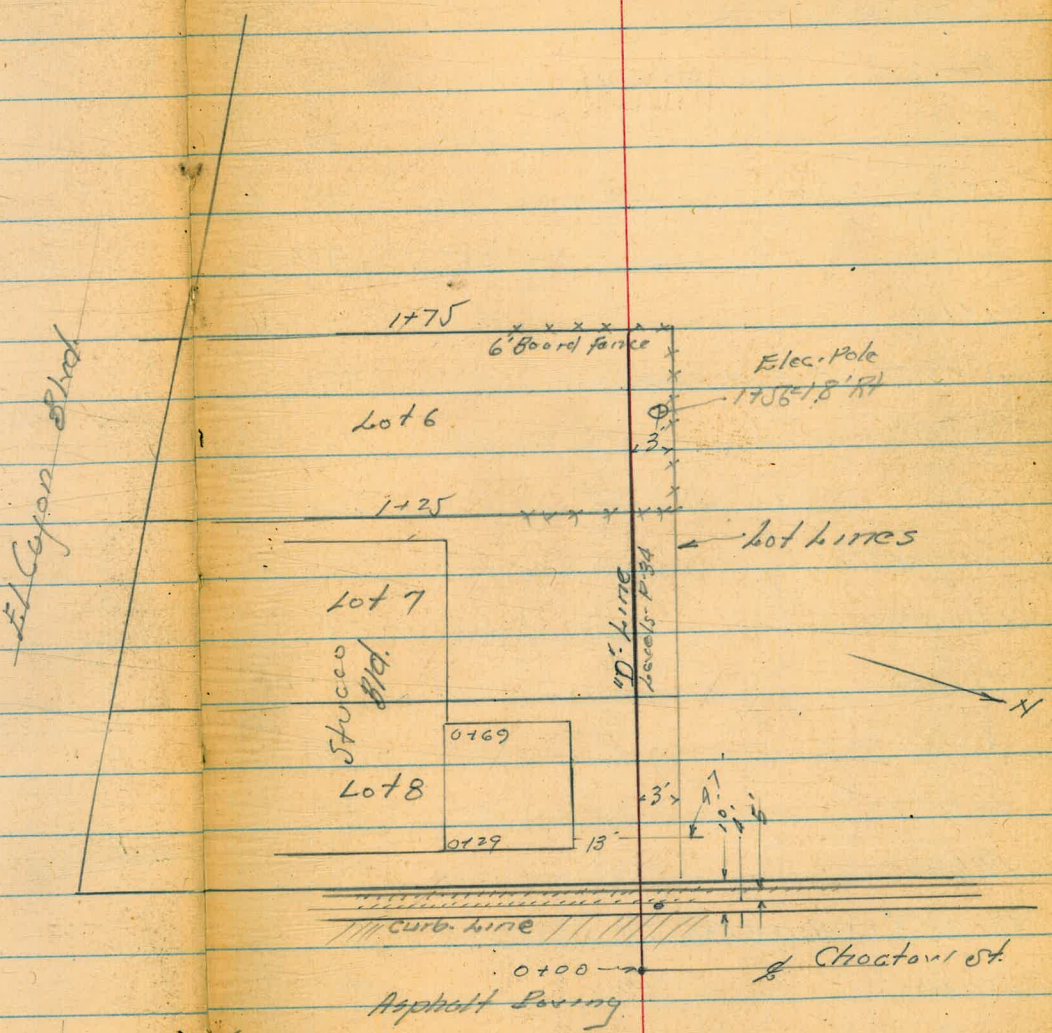
1+56 = Elec Pole 1.8' Rt.

1+25 = Int. 6' Board Fence

0+29.5 - Int. Sheet Iron Fence

0+17.4 = Elec. Pole 2.8' Rt. # P. 77600

0+00 = ℄ Choctaw



"B" Line Cont. from p. 21

(22+34.3) 4.2' Lt on Drive		5.19	464.76
22+00		5.3	464.7
21+50		5.4	464.6
(21+17.8) 4.5' Lt on curb-Drive		5.15	464.80
21+15		4.8	465.2
21+10		5.6	464.4
20+95.80 = Δ Lt 136°13'30"		4.67	465.28
20+50		4.84	465.11
T.P. 4.89 469.95		4.06	465.06
20+00		4.24	464.88
19+50		4.27	464.85
19+00		4.44	464.68
18+50		4.73	464.39
18+00		4.90	464.22
17+50		5.05	464.07
17+09.74 = Δ Lt 13°34'30" Hub + Disk		4.96	464.16
17+00		5.06	464.06
16+50		5.33	463.79
462.12			

"B" Line

B.P. NW. El Capon & Cotaction		.001
		465.66
check starting BM P-10	4.28	465.67
23+49.34 = End on Hub	4.04	465.91 P-34
23+00	4.7	465.3
22+50	5.5	464.5
469.95		

Levels "C" Line Proposed Sewer
Location P-25

Cont. Rt Page			
4+50		4.6	464.4
5+75 = End Loth House 11' Rt			
4+79 = Beg. Loth House 11' Rt.			
4+28.3 = E. edge Walk		4.45	464.59
4+23.3 = West edge Side Walk		4.52	464.52
4+20.7 Guy Pole 5.2' Lt.			
4+19.26 = Gut. in Drive		5.07	463.97
T.P.	4.45	469.04	5.37	464.59
~~4+19.26 = Ely Gut. Chocker~~			
4+04.26 ΔLt 89°49'15"		5.68	464.28
3+50		5.60	464.36
3+00		5.51	464.45
2+50		5.47	464.49
2+00		5.55	464.41
1+50		5.76	464.20
1+00		6.09	463.87
0+50		6.55	463.41
0+17 Gut Line on Por.		7.15	462.81
0+00 = E. Catchbasin & Chocker		6.39	463.57
	6.39	469.96		463.57

"C" Line

Cont P-31

8+00	8.4	460.6
7+75	8.0	461.0
7+70	7.1	461.9
7+66 = E. edge Paving. = E. Ash St.	7.49	461.55
7+54.37 = ΔLt 1°06	7.11	461.93
7+39.37 = W.b. in Drive	7.65	461.39
7+38 = Elec Pole 6.4' Lt.		
7+35.9 = E. Side Walk	6.98	462.06
7+30.9 = West side Walk	6.91	462.13
7+27 = End Wire Fence	7' Rt.	
7+00	6.2	462.8
6+50	5.8	463.2
6+32 = Beg. 5' Wire Fence 6.5' Rt.		
6+00	5.2	463.8
5+50	5.1	463.9
5+00	4.6	464.4
	469.04	
B.M. on Nail 15+36.60	P. 21	

(10+26)	450' Lt.	6.2	459.4
"	400' Lt.	5.9	459.7
"	350' Lt.	6.0	459.6
"	300' Lt.	5.8	459.8
"	250' Lt.	5.2	460.4
"	200' Lt.	5.0	460.6
"	150' Lt.	4.4	461.2
"	100' Lt.	5.4	460.2
"	50' Lt.	5.7	459.9
10+26 - Approx 3' W of E.L. Lot 1		5.6	460.0
(10+07) 1' Rt. Conc. Floor Garage		4.80	460.80
10+00		5.0	460.6
(9+50) 100' Lt.		4.7	460.9
9+50		4.5	461.1
9+02.5 on Conc. Slab		4.40	461.20
8+81 on Conc. Slab		4.31	461.29
8+50		4.8	460.8
T.P.	437 465.60	7.81	461.23
	469.04		

Cont. from P. 30

14+00	4.7	459.6
13+75	3.9	460.4
13+50	4.1	460.2
13+00	4.2	460.1
12+57.6	4.9	459.4
12+45.6	4.8	459.5
12+20.87 = P.O.T. Nail	4.69	459.56
11+86.4 = Beg. Asphalt Pav	4.82	459.43
T.P. 537	464.25	6.72 458.88
11+49.87 = P.O.T. = End. Conc. Slab	6.32	459.28
(11+30) 120' Lt.	7.8	457.8
(11+30) 100' Lt.	7.7	457.9
11+30 on Conc. Slab.	6.37	459.23
11+29.3 on Top Retwall	6.09	459.53
11+29.2	7.2	458.4
11+00	6.9	458.7
10+50	6.2	459.4
(10+26) 510' Lt.	6.12	459.48
(10+26) 500' Lt.	6.2	459.4
	465.60	

"C" - Line

			0.02	
			461.74 = P-14	
Check 18+66.55 P-14			491	461.72
T.P.	6.89	466.63	451	459.74
(12+20.87) 138' Rt = N Gut. E. I Cajon			489	459.36
14+31 = at Back end Auto Court			5.7 Bldg.	458.6
		464.25		

Walker
Johnson
Pope
Crawford
2-18-49

Profile Levels: Proposed Sewer in 6 ART. ST. from Catalina to El Cajon (Location P-25)

INDEXED

6+00		4.09	462.56
5+50		4.40	462.25
5+00		4.62	462.03
4+53.62 = P.O.T. = Int "C" Line 745937		4.74	461.91 (461.93 P-30)
4+00			
3+50		5.00	461.7
3+00		5.12	461.53
2+50		5.19	461.46
(2+00)	200' Lt.	6.6	460.1
(2+00)	100' Lt.	6.0	460.7
2+00		5.22	461.43
1+50		5.40	461.25
1+00		5.55	461.10
0+50		5.56	461.09
0+16 - Gut.		5.94	460.71
0+00		4.91	461.74
	4.91	466.65	461.74

BM. on Hall 18+66.55 P-14

Walker
Johnson
Pope
Crawford
2-18-49

Profile Levels
Proposed Sewer
"D" Line
(Location P-28)

Chk 23+49.3 X P-29	4.19	465.91 P-29
1+75	4.4	465.7
1+50	4.3	465.8
1+00	4.4	465.7
0+50	5.1	465.0
0+29 = W edge Walk	5.52	464.58
0+19 = E. edge Walk	5.58	464.52
0+15 = W Cut in Drive	6.19	463.91
0+00	5.82	464.28
	5.82 470.10	464.28

B.M. Nail in Pav. 470.26 P-30

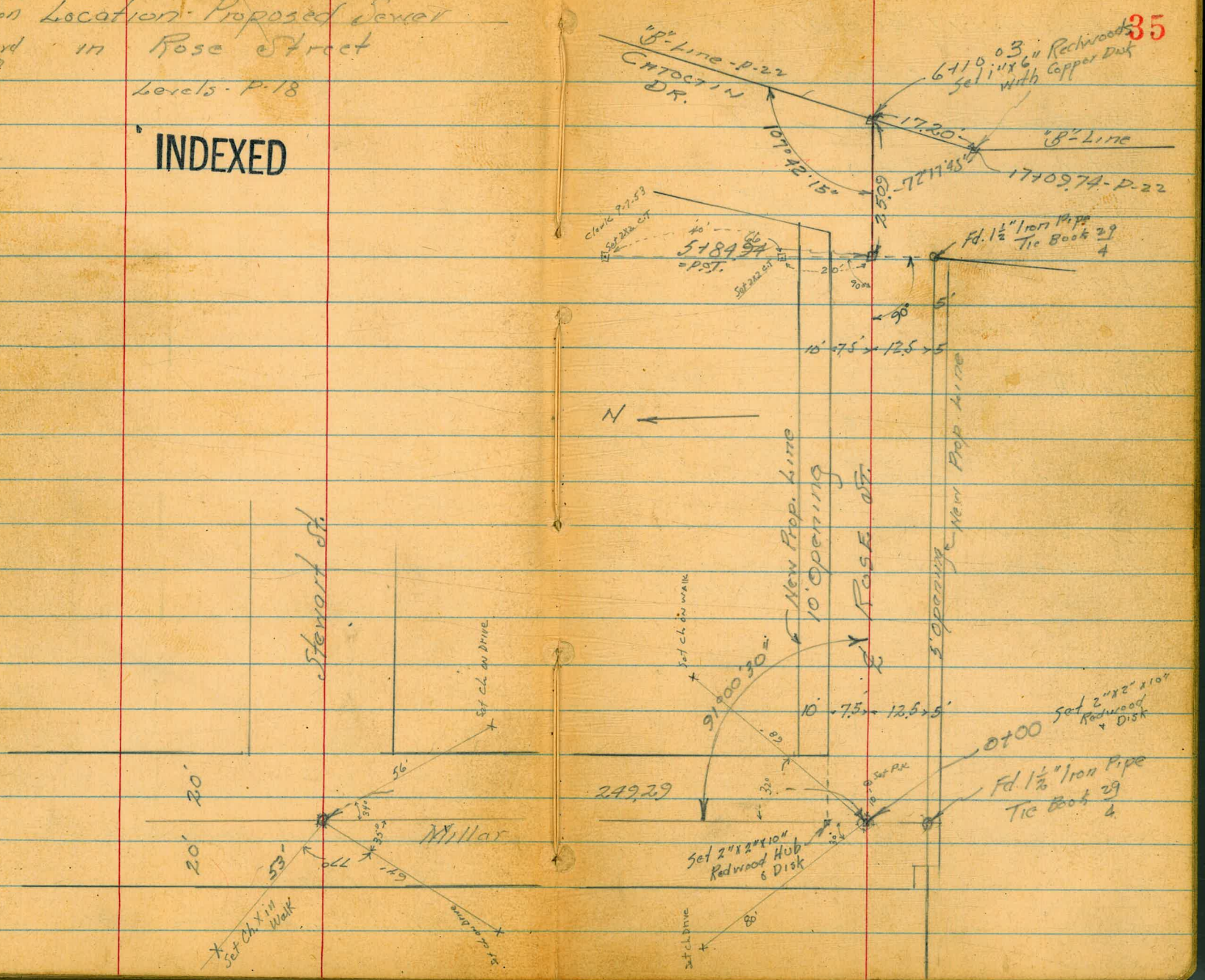
Walker
Johnson
Pope
Crawford
2-16-49

Location - Proposed Sewer
in Rose Street

Levels - P-18

INDEXED

35



Location Existing Sewer With Line of Proposed Sewer as Located P-3

Point "A" on Top 6" C.I. Pipe 4.60 387.11

0+83 Rim Abandoned MH 5.39 386.32

0+72 Top Septic Tank 5.22 386.49

0+68.3 5.04 386.67

(0+60.7) 6' Rt. on Top 8" Riser 4.61 387.10

0+00

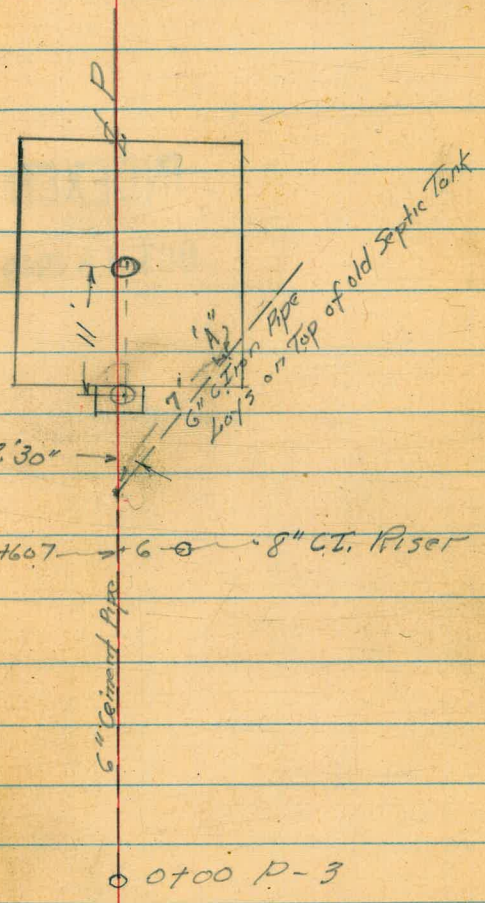
B.M. Rim MH 3.59 391.71 388.12

(0+72) 0.3' Rt. = ℄ Existing M.H. Broken up & Filled With Sand

P.O.T. Proposed Sewer

0+68.3 = Exact ℄ Elbow ∆ 29°52'30" To Existing C

0+00 ℄ Existing M.H. Page 3



D. Smith
C. Sommermeyer
C. Allen
J. Rorer

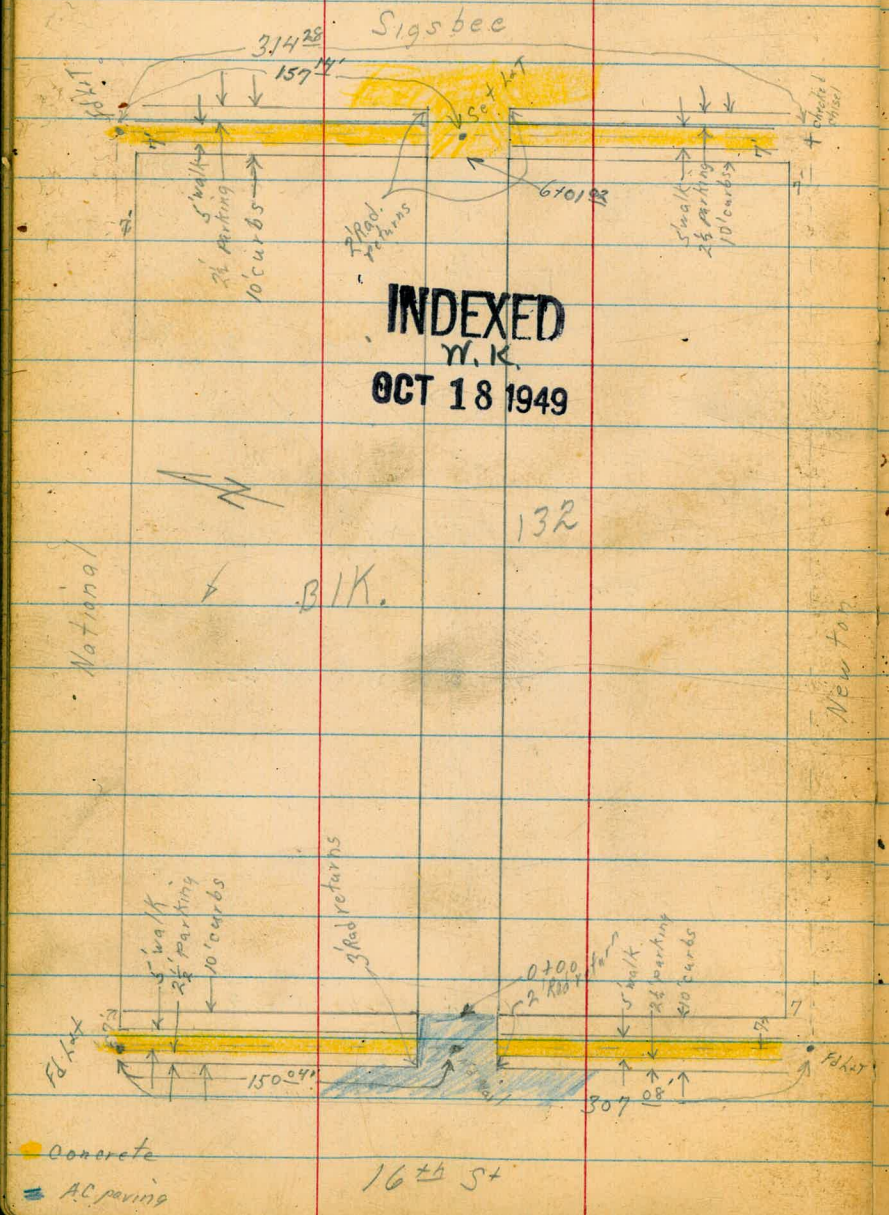
Cross Sec Alley Blk 132

Mannasse & Schillers

WO# 31728
10-11-49

37

NOTES REDUCED by MORGAN 10-26-49



X Sec Alley Blk 132
Mannasse & Schillers

WO# 31728
10-11-49
38

Lt = North ℄ Rt = South

0+65

0+55

0+39 10° Rt NW cor corrigated garage con floor

0+30

0+27 8½ Rt ℄ power pole # PA1616

0+12 7½ Rt ℄ dead man

0+07 8½ Rt ℄ dead man

0+0.0 10½ Lt Begin Bldg, concrete

0+00 East Prop 16th St Edge AC paving -0.3 Pack

0-10 East ℄ Line 16th St

BM 5.44 7.26 1.82 NW BP 16th & Newton

7.26

cont.

1+60

1+50 8^{6} Rt ℄ power pole # PA 1640

TP 12^{44} 17^{77} 19^{23} 5^{33}

1+48 10^{4} Lt Begin 6' board fence

1+25 10^{4} Lt SE cor house

1+17 10^{3} Rt Begin 7' high corrigated fence

1+16 9^{6} Rt Northerly of 36" palm

1+04 10^{2} Lt SW cor Frame House

0+93 East Rail

0+88 6^{3} West rail of spur track

0+75 10^{2} Lt End con bldg.

0+75 99 Rt NE cor corrigated garage

Lt ℄ Rt

7.7 10^{1} 15 | 6.5 11^{3} 10 | 6.5 11^{3} | 7.0 10^{8} 10 | 7.2 10^{6} 15

17^{77}

5.2 2^{L} 10^{4} ground | 5.0 2^{3} | 5.1 2^{2} 7 | 5.7 1^{6} 10

5.59 1^{67} 10^{2} floor | 4.5 2^{8} 10^{3} ground

4.27 2^{98} Rail trail

4.29 2^{97} 20 | 4.27 2^{99} 10 | 4.28 2^{98} West rail | 4.15 3^{11} 10 | 4.17 3^{09} 20

4.2 3^{1} ground

4.4 2^{8} ground

7^{26}

cont.

2+37 2 10 Lt SE cor Frame house

2+35 9 Lt westerly 2' con walk

2+35 9 Rt Begin cyclone 5' fence

2+13 9 Lt west edge 2D con walk & step

2+13 10 Lt SE cor house.

2+01 10 Lt SW cor Frame house

2+00 8 Lt Begin 4' high picket fence

1+78 2 05 Rt & Sewer MH.

1+75 10 Rt End corrigated fence

1+63 9 Lt End 6' high board fence

Lt. ℄ Rt

12.90
4 87
10.6
Floor

11.83 11.48 11.3 10.8 10.8 11.1 12.0 12.4
5 94 6 29 6 5 7 0 7 0 6 7 5 8 5 4
10 2 9 3 9 2 7 7 10 15
walk walk ground

11.55 11.06 10.3
6 22 6 11 7 5
10 6 9 8 9
walk step ground

11.94
5 83
10
Floor

10.5 10.3 9.7 9.5 10.1 10.6
7 3 7 5 8 1 8 3 7 1 7 2
15 10 8 10 15

9.60
9 17
Rim

17 77

cont

3+94 10^{5} Rt ℄ 1½ frame house (abandon)

3+64⁵ 8^{8} Rt ℄ Power pole #PA 1678

3+50

3+25 ℄ took dirt sample

3+19 11^{9} Lt ℄ single garage dirt floor

3+00 10^{3} Lt End cyclone fence

2+76⁵ 9^{0} Rt ℄ power pole No Number

2+75 10^{0} Rt End cyclone fence

2+70

2+50 9^{5} Lt Begin cyclone fence

2+50 9^{L} Lt End picket fence

2+50 10^{2} Lt SW cor house

Lt			℄			Rt
					14.1 / 3^{7} / 10^{6} grnd	15.60 / 2^{17} / 10^{5} floor
13.6 / 4^{2} / 15	13.4 / 4^{4} / 10		13.1 / 4^{2}	13.4 / 4^{4} / 10	13.7 / 4^{1} / 15	
12.9 / 4^{9} / 11^{9} floor						
13.3 / 4^{5} / 15	13.0 / 4^{8} / 10	12.6 / 5^{2} / 8	12.6 / 5^{2}	12.6 / 5^{2} / 7	13.7 / 4^{1} / 10	13.6 / 4^{2} / 15
12.2 / 5^{6} / 15	12.4 / 5^{4} / 10	12.1 / 5^{7} / 8	11.8 / 6^{0}	12.2 / 5^{6} / 8	12.7 / 5^{1} / 10	13.0 / 4^{8} / 15

17^{77}

cont

5+05

5+02 $9\frac{2}{}$ Rt & power pole

5+00 $9\frac{6}{}$ Lt End board fence

TP $9\frac{30}{}$ $24\frac{51}{}$ $2\frac{50}{}$ $15\frac{21}{}$

4+50 $10\frac{3}{}$ Lt Begin 6' board fence

4+28 $10\frac{8}{}$ Rt & $2\frac{1}{2}$' con wall

4+24 $10\frac{5}{}$ Rt NE cor house

4+05 $10\frac{4}{}$ Rt NW cor Frame house on con pillers

4+00

Lt & Rt

18.91 16.61 15.61 15.51 15.61 15.91

$5\frac{6}{15}$ $7\frac{2}{10}$ $8\frac{2}{6}$ $9\frac{0}{}$ $8\frac{2}{10}$ $8\frac{2}{15}$

15.9 15.7 15.31 15.51 16.21

$8\frac{6}{15}$ $8\frac{8}{10}$ $9\frac{2}{}$ $9\frac{0}{10}$ $8\frac{3}{15}$

$24\frac{51}{}$

14.8 14.4 14.3 14.7 15.1

$3\frac{0}{15}$ $3\frac{4}{10}$ $3\frac{5}{}$ $3\frac{4}{10}$ $2\frac{7}{15}$

14.78

$2\frac{99}{10.8}$ Well

14.3

$3\frac{5}{10}$ Ground

14.1 16.29

$3\frac{7}{10}$ $1\frac{48}{10}$

Ground Door

14.1 13.9 13.6 13.7 14.3

$3\frac{7}{15}$ $3\frac{9}{10}$ $4\frac{2}{}$ $4\frac{1}{10}$ $3\frac{5}{15}$

$17\frac{77}{}$

cont.

			Lt.			℄		Rt		
BM.	0.56	23.95 23.94 NEBP National + Sigsbee								
6+11.02	West cb line Sigsbee		19.62 / 5.09 / 50 drive gut	19.36 / 5.35 / 10 curb	18.77 / 5.94 / 10 gut	18.60 / 6.11	18.38 / 6.33 / 10 gut	19.02 / 5.69 / 10 curb	17.72 / 6.22 / 50 gut	18.31 / 6.40 / 50 curb
6+01.03	West Prop Sigsbee St.	6.5 East. Edge con paving curbs to prop		19.45 / 5.16 / 10 curb	19.12 / 5.49 / 10 gut	18.81 / 5.80 rim	18.92 / 5.69 / 10.2 gut	19.26 / 5.35 / 10.2 curb		
5+98.7	westerly con slab around MH 4' wide					18.67 / 5.74				
5+70			19.81 / 4.8 / 15	19.01 / 5.6 / 10	17.61 / 7.0 / 7	17.31 / 7.3	17.21 / 7.4 / 10	18.11 / 6.5 / 15		
5+68.5	10.0 Lt SE cor bldg		19.01 / 5.6 / 10 ground							
5+52.5	10.0 Lt SW cor con foundation garage to service station con floor		19.29 / 4.2 / 10 floor; 18.41 / 6.6 / 10 ground							
5+40			19.71 / 4.8 / 15	18.31 / 6.2 / 10	16.31 / 8.2 / 7	16.21 / 8.3	16.21 / 8.3 / 10	17.41 / 7.2 / 15		

24.51

X Section Everts from Oliver to Thomas

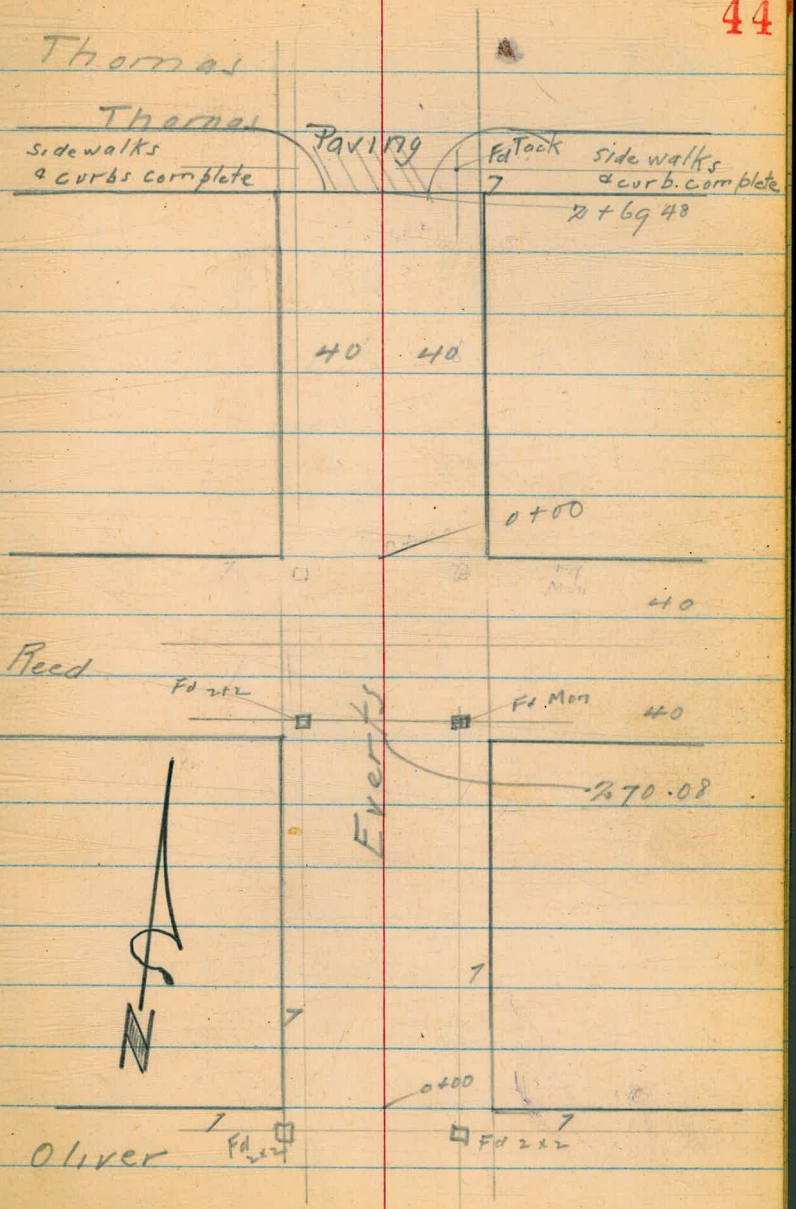
12/20/49 Cold & high wind

Begg

Sherman

Crawford

BM Everts & Garnet BP N.W.	39.53	
Oliver & Dowes N.W. curb	3.10	



Everts

0 + 39	26 Lt Acasia 6"		
0 + 25	Pine 2" 26 Rt		
0 + 19	Acasia ? 25.7 Lt 8"		
0 + 00	NL Oliver	45 R Pine 2"	
- 40	℄ Oliver		
0 - 80	S Line Oliver		
TP 7.72	18.76	0.60	11.04
TP 8.52	11.64	11.61	3.12
TP 1.63	14.73	12.07	13.10
TP 1.12	25.17	8.69	24.05
TP 0.71	32.74	9.93	32.03
7.43	41.96		39.53

Reduced 2-23-50 J.M. Firlaugh

West — East

13.3	13.8	14.0	14.1	14.8	15.1
5.5 / 40	5.0 / 20	4.8	4.7 / 12	4.0 / 15	3.7 / 40
12.6		13.6		14.5	
6.2 / 40		5.2		4.3 / 40	
12.6		12.9		14.0	
6.2 / 40		5.9		4.8 / 40	

18.76

3.10 / 0.02 Oliver & Dawes NW curb

Everts & Garnet N.W. BP

Everts

2 + 00

1 + 87 40·8 Lt bag cypress Hedge end of Fence

1 + 50

1 + 43 Bag fence 40·8 Rt

X + 23 21 Lt P. 4224 Pole

1 + 22 Pine 1" 25·5 R

1 + 15 40·1 Rt 7 Wide Strip conc

1 + 00 25·5 Pine 3"

0 + 98 ℄ 25·5 Conc Walk

0 + 87 25·2 Ac 6"

0 + 77 25·3 R Pine 2"

0 + 68 25·5 Lt Ac 8"

0 + 58 25·4 Lt Ac 8"

0 + 50 26 R 2" Pine

18·76

163 167 164 169 173

2·5 2·1 2·4 1·9 1·5

40 15 15 40

154 159 160 161 169

3·4 2·9 2·8 2·7 1·9

40 15 15 40

148 150 153 158 146

4·0 3·8 3·5 3·0 2·6 4·2

40 15 15 40 40

162

168

2·00

145 147 148 147 149 159

4·3 4·1 4·0 4·1 3·9 2·9

40 20 15 40

18·76

Everts

= 0+00

3.7 S 0°8 W Line Reed

3+31 0°8

3+10 0°8 ℄ Reed

2+90 0°8

2+70 0°8 S Line Reed end of cypress 39.5 Rt

2+50

9.95 27.66 1.05 17.71

1876

19.7	19.5	19.5	20.0	19.9
8.0 / 40	8.2 / 15	8.2	7.7 / 15	7.8 / 40
18.9	18.7	18.8	19.6	19.6
8.8 / 40	9.0 / 15	8.9	8.1 / 15	8.1 / 40
18.5	18.7	18.7	18.9	19.2
9.2 / 40	9.0 / 15	9.0	8.8 / 15	8.5 / 40
18.0	18.0	18.1	18.4	18.7
9.7 / 40	9.7 / 15	9.6	9.3 / 15	9.0 / 40
17.6	17.7	17.6	17.7	18.0
10.1 / 40	10.0 / 15	10.1	10.0 / 15	9.7
17.2	17.3	17.3	17.7	17.7
10.5 / 40	10.4 / 15	10.4	10.0 / 15	10.0 / 40

27.66

Mon. SE cor 7×7 lmc Dawes & Everts

1876

2 + 24 1.2 wide conc walk

2 + 00

0 + 84 ℄ 10.5 conc Apron 40.4 Lt.

0 + 78.5 40.4 Lt end wall

1 + 50

1 + 45. Beg conc brick wall 40.2 Lt.

1 + 00 ~~6.5 conc Rib~~

0 + 99 41 Lt conc Rib 6.5 wide

0 + 50

27.66

25.30
3.36
40

25² 25³ 25³ 25² 24⁸
2.7 2.4 2.4 2.0 2.9
40 15 15 40

24.53
3.13
40.4

24⁵ 23⁹ 23⁷ 24¹ 23⁷
3.2 3.8 4.0 3.6 4.0
40 15 15 40

22³ 22⁷ 22¹ 22⁵ 22¹
5.4 5.0 5.6 5.2 5.6
40 15 15 40

22³⁶
5.30
41

20⁹ 20⁹ 21⁰ 21¹ 21⁰
6.8 6.8 6.7 6.6 6.7
40 15 15 40

27.66

		1 46	39 ↓2
9 90	40.98	0.30	31.08
		363	34.03
7.35	31.38	~~368~~	~~33.98~~

39 ↓3 ✓
1.01

3+09 48 ℄ Thomas

23.08
4.58
50
cb

2+89 48 Curb line

2+69 48 Sline Thomas

2+59 48

2+35

27.66

BM Everts & Garnet

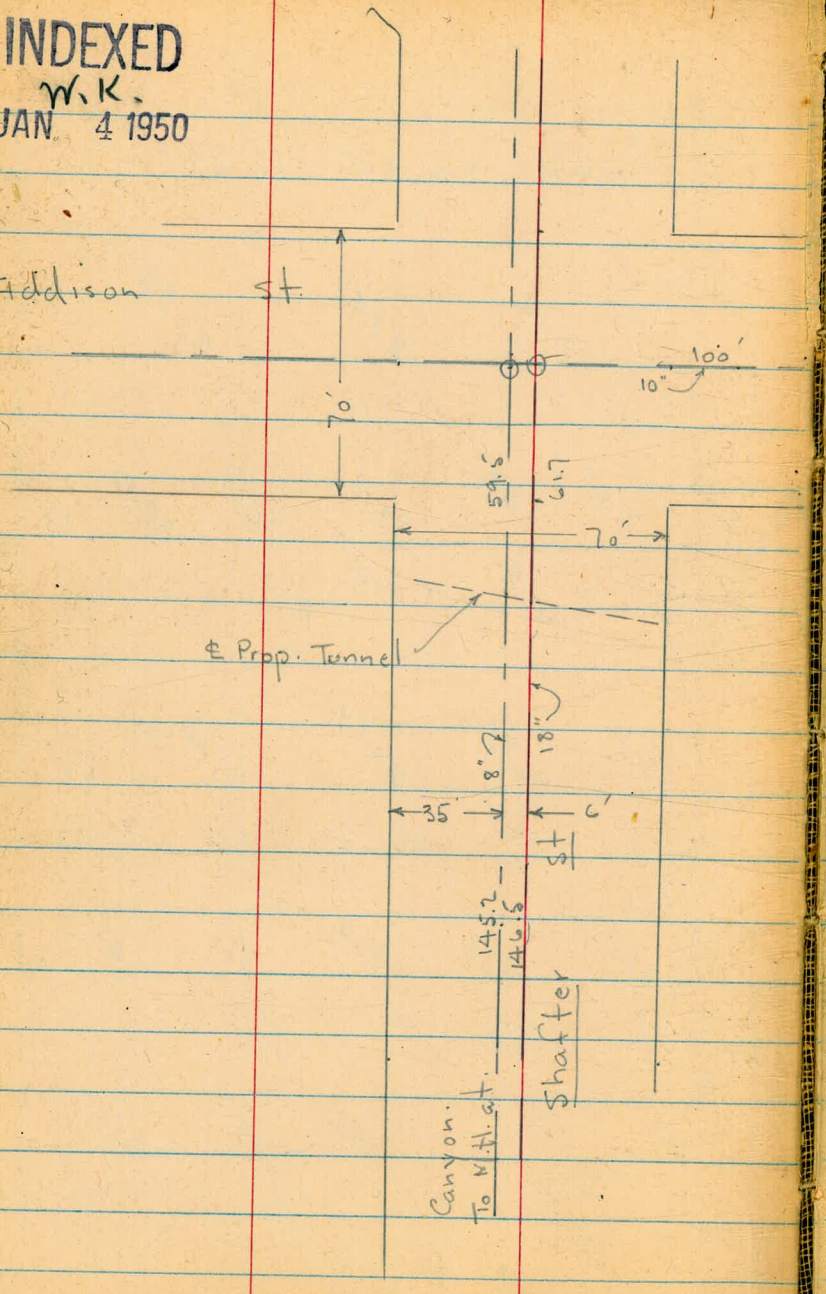
7' Tack SE Thomas & Everts BM

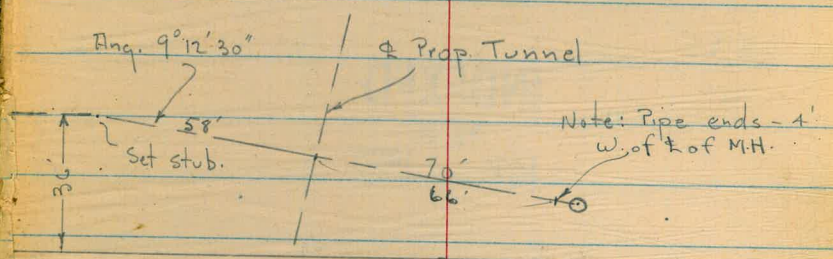
22.82	23.49	23.96				
4.84	4.17	3.70				
50		50				
22.45	22.55	22.92	23.18	23.34	23.40	23.44	24.17
5.21	5.11	4.74	4.48	4.32	4.26	4.22	3.49
50	40	30		20	40	50	cb
BC of curb							50
							BC
23.39	22.73	23.14	23.22	23.82			
4.27	4.93	4.52	4.44	3.84			
cb	21.9		21.8	cb			
	9		9				
25.7	25.9	23.5	23.6	23.8	26.0	26.2	
2.0	1.8	4.2	4.1	3.9	1.7	1.5	
40	27	20		18	25	40	
25.2	25.7	25.9	26.4	25.2			
2.5	2.0	1.8	1.3	2.5			
40	15		15	40			

27.66

INDEXED
W.K.
JAN 4 1950

50





Levels on Existing Sewer lines in Shafter & Addison to check Grade at Prop. Tunnels across St.

3525

W.O. 20006

INDEXED
W.K
JAN 4 1950

1-3-50 - 7.0

S.W. Canyon & Shafter BM	3.97	6.54	2.57
I.E. W. MH. Canyon & Shafter = 8"			- 1.48
" E. " " " " = 18"			- 9.79
I.E. W. MH. Addison & Shafter = 8"			- 2.48
" E. " " " " = 18"			- 10.05
Top (? Bottom) of 10" Pipe in above MH (to E)			- 6.45
Top. of Pipe - 4' W. of ℄ MH. By Bldg.			- 3.29
stub. 10' E. of ℄ of Prop. Tunnel & Sewer.			
stub. Top Sewer			+ 1.07 C 5.29 - 4.22

6.54

51

I.E. of 8" Sewer at ℄ of Prop. Tunnell in shafter - 2.19

Ground + 1.84

I.E. of 18" Sewer at ℄ Prop. Tunnel in shafter

Sewer -9.97

ground + 1.80

See sketch for Dist. & location of Tunnels

Set B.M. = Spike in S.W. Pole - Addison Shafter &

B.M. = - 3.20 3.54

X-Sec. Copley

Mt. View Dr. East to lot #163 Normal Hgts

Sommermeyer
McCoy
Allen.

3-22-50
W.O. 31416

INDEXED
W. C.
MAR 27 1950

G = gutter
tc. = Top of curb
E.G. = outside edge of 3' wide Conc. gutter.

Map #985

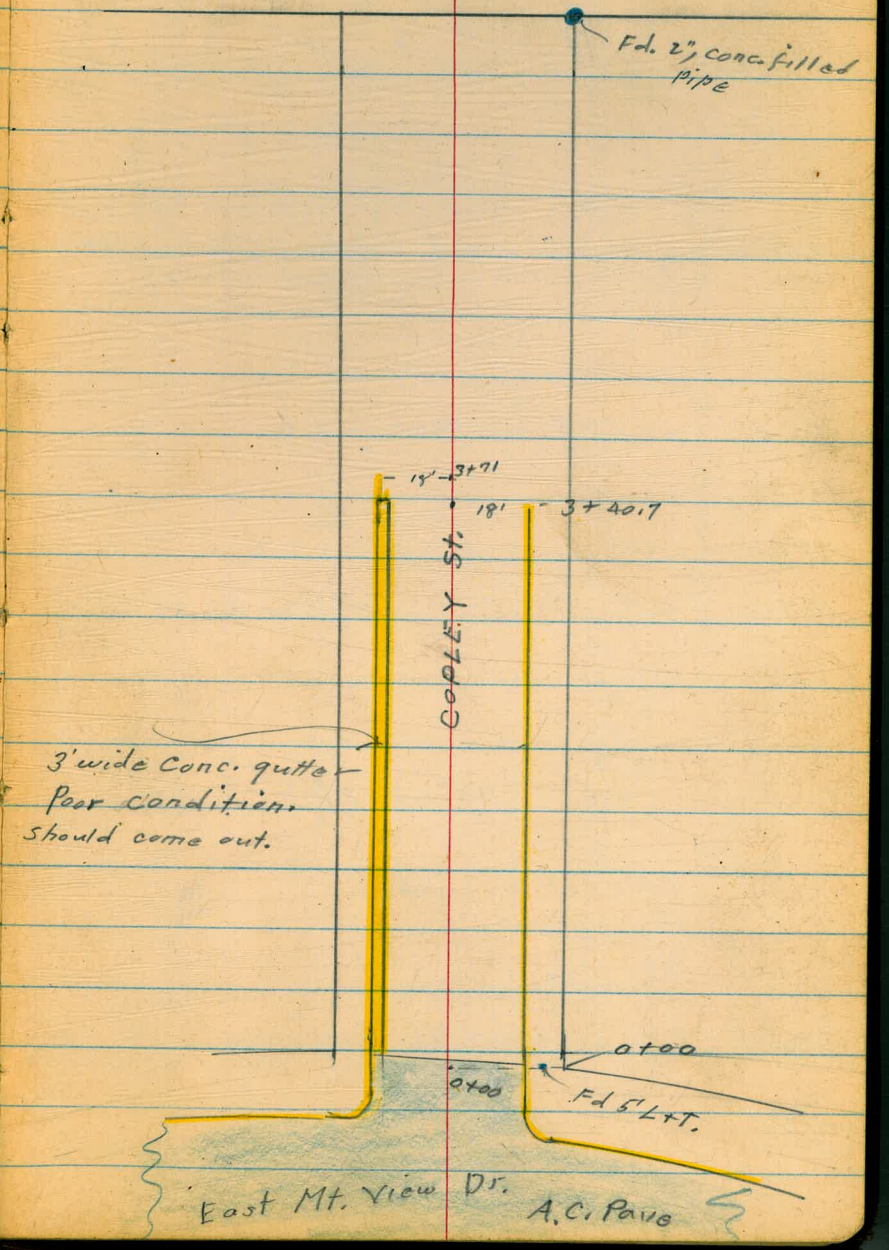
F.B. 1222 - 58
1245 - 56
1404 - 42

3512 - L
5180 - L
Tie sheet 4000

Soil sample 7' Lt. of Sta. 3+00
" " & at Sta. 5+00

See page 60 for check on bench elevation

C.H.S.
3/30/50



0+50

0+01.5 17' Lt. = End A.C. Pave. Also = Face of Cb.
14' Lt. = start 3' wide Conc. gutter.
(this gutter mostly in poor shape)

0+00.9 = End A.C. Pave. on ℄

0+00.7 - 17' Rt. = { Face of Cb. / End A.C. Pave. + }

0+00 = 90° to S.E. Prop. Mt. View Dr. + Copley

0-15 = { 18' Rt. / 18' Lt. } = aprox. E.C. Cb. Ret.

Cb. = Top of Curb
G = gutter

0-25 Ely. Ck. line Mt. View Dr. = { 28' Lt. / 28' Rt. } = B.C. 10' Rad. Cb. Ret.

N.E.B.P. Copley & Mt. View Dr. 3.89 397.70 393.81 B.M.# 1

(389.42 Page 60)

393.31
397.70

5.17 388.14 17' Cb
5.90 387.41 17' G
5.63 387.68 E.G.
5.6 387.7 6
5,6 387.7
5.7 387.6 6
6.1 387.2 17.9
5.17 388.14 17.9 Cb.

3.92 389.39 17' Cb.
4.62 388.69 17' G
4.48 388.83 14' E.G.
4.3 389.0
4.6 388.7 17' G
3.96 389.35 17' Cb.

4.27 389.04

4.56 388.75 G 17'
3.95 389.36 Cb 17'

3.92 389.39 18 Cb. E.C.
4.53 388.78 18 G

4.53 389.22 18 G
3.95 389.36 18 Cb E.C.

4.00 80 G
3.94 389.37 28 Cb
4.53 388.78 28 G
4.42 388.89 18
4.04 389.27
4.31 389.00 18
4.45 388.82 28 G
3.85 389.46 28 Cb
3.87 389.44 80 G

Copley St.

3+40 7 - 18' Rt. = End of Conc. Ch.

3+37 - 17' Rt. = Ctr. 1 Sq. yd. Conc. to come out.

3+00 - 7' Lt. = Soil sample taken

2+50

T.P. 3.89 391.51 10.08 387.62

2+00

1+50

1+00

	5.80	6.56	6.20	5.6	5.9	6.0	5.90	6.3	
	18	18	15		8	18	18	30	
	cb	G	E.G.				cb		
	4.83	5.57	5.32	5.0	1.		4.9	5.6	4.95
	18	18.	15	6			6	18	18
	cb	G	E.G.						cb
in drive	4.51	4.51	4.20	3.9			4.4	3.77	
	17 ?	17 ?	14 ?				17 ?	17 ?	
	cb	G	E.G.					cb	
	8.64	9.47	9.16	8.9			9.5	8.76	
	17 ?	17 ?	14 ?				17 ?	17 ?	
	cb.	G	E.G.					cb	
	7.43	8.24	7.98	7.9			8.3	7.59	
	17 ?	17 ?	14 ?				17 ?	17 ?	
	cb	G	E.G.					cb	
	6.27	7.08	6.81	6.6			6.9	7.2	6.44
	17 ?	17 ?	14 ?				7	17 ?	17 ?
	cb.	G	E.G.						cb.

℄

385.16 / 380.77	385.1 / 380.7	385.5 / 381.1	385.2 / 380.8	382.7 / 378.3	385.2 / 380.8	384.6 / 380.2
2.44 / 18 / Cb	2.5 / 15 / Ord.	2.1	2.4 / 10	4.9 / 18	2.4 / 30	3.0 / 60

3+53 (Conc. gutter on left. covered can not get to it)

3+71 = End of curb.

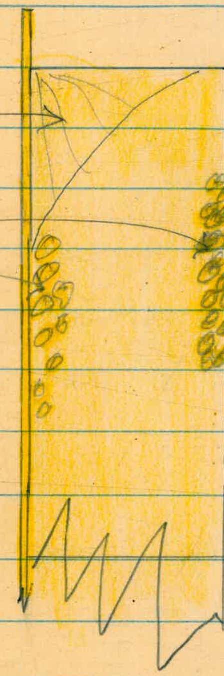
3+67 = End of rough mortar + Conc. gutter.

Rough Conc. slab

This Conc. + gutter should come out.

Not to be considered for grade.

Broken conc. pave. put in gutter + along gutter to control flow of water.



3+49 = Break in gutter grade

T.P. Nail in pole #3650	1.31	387.60	5.22	386.29	BM#1

387.60

3+49 18' Rt / 15' Rt. } = Break in grade of conc. gutter

385.48	384.71	385.01
6.03 / 18 / Cb	6.80 / 18 / G	6.50 / 15 / E.G.

391.51

T.P. 0.76 376.44 11.92 375.68

4+19 Edge canyon 70' Rt.

4+00 41' Rt. = edge canyon

3+95 30' Lt. = line of fence.

3+85 72' Rt. = Rim of canyon

3+75 75' Rt. = Rim of canyon

3+72 17½ Lt. = Δ in picket fence

3+71 - 18' Lt. = End Conc. Ch.

3+70 - 19' Lt. = start picket fence

3+68 -

Slab on left. - Should come out.

3+67 End of Conc. gutter + rough Conc.

2.4 / 50	2.5 / 40	3.9 / 30	19.3 / 29	23.0 / 22	22.2	21.0 / 15	20.2 / 30	18.8 / 45	22.8 / 70
3.0 / 50	3.1 / 30	3.1 / 27	14.1 / 26	18.8 / 15	18.6	19.5 / 30	17.4 / 50	21.9 / 71	
1.0 / 50	1.6 / 30	2.5 / 19	11.3 / 8	16.4	17.0 / 17	18.7 / 30	20.8 / 72		
1.7 / 50	2.0 / 30	2.0 / 25	3.3 / 17	7.5 / 8	7.7	13.5 / 20	18.4 / 30	21.2 / 75	
3.3	2.62 / 18 end ch.								
2.0 / 30	2.57 / 18 ch. + end	4.6 / 14	4.0 / 8	2.9	1.8 / 7	6.8 / 11	13.2 / 30	20.0 / 80	

4.51 / 16 in gutter

383.21

T.B.	3.07	363.72	9.06	360.65
5+76				
5+75				
5+66 ±	10' Lt. = Ctr. 4'x4' pump house			
5+57				
5+53 -	7' Lt. = P. pole + pump house vent pipes			
5+25				
5+00 -	± = soil sample taken			
4+50	T.B. = Top of bank			
4+44	19' Lt. = pole #3676			
T.P.	1.63	369.71	8.36	368.08

376.44

#

						356.6	357.3	355.7	
						13.1 / 30	12.4 / 20	14.0	
359.8	356.6	357.3	355.7	356.3	360.2	354.8			
9.9 / 82	13.1 / 30	12.4 / 20	14.0	13.4 / 18	9.5 / 30	14.9 / 68	33.0 / 72		
Toe of bank							Rim of Canyon		
375.7	361.4	359.7	361.9	361.8	362.1	356.5	355.9	356.7	355.9
+6.0 / 190	8.3 / 71	10.0 / 43	7.8 / 38	7.9 / 30	7.6 / 26	13.2 / 14	13.8	13.5 / 30	14.8 / 76
									Canyon rim
	367.0	360.9	360.4	362.4	362.0				
	2.7 / 80	8.8 / 67	9.3 / 30	7.3 / 23	7.7	8.0 / 9	10.9 / 15	10.8 / 30	12.3 / 72
	Toe of bank								Rim Canyon
	364.5	361.3	361.4	361.8	361.9	363.5	364.3	360.7	360.3
	3.2 / 77	8.4 / 55	8.2 / 30	7.9 / 20	6.8	6.2 / 15	5.4 / 30	9.0 / 43	9.4 / 67
	Toe of bank								Rim of Canyon
378.32	356.32	359.7	359.8	360.6	361.9	362.7	364.1	358.2	358.9
+13.0 / 52	+1.0 / 50	5.6 / 30	5.5 / 10	4.7	3.4 / 25	2.6 / 30	0.6 / 40	6.5 / 57	6.4 / 73
T.B.									Edge Canyon

365.32

369.71

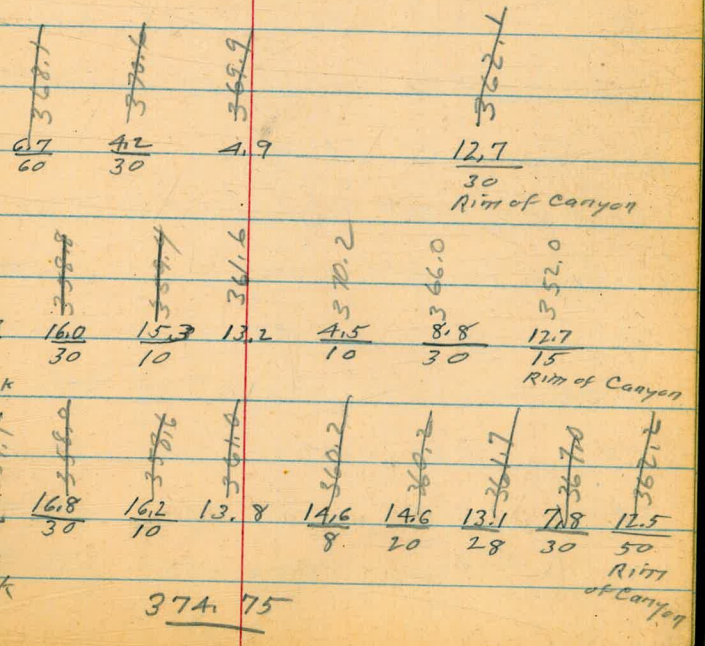
East end. + So. line Copley

Set B.M. 2" Conc. filled pipe			7.03	367.72
T.P.	11.84	374.75	0.81	362.91

	360.0	355.1	358.3	360.6	360.7	360.6	357.7	
6+23	3.7 / 65	6.2 / 30	5.4 / 15	3.1 / 30	3.0 / 15	3.1 / 30	6.0 / 64	
	Toe-bank						Canyon Rim	
	357.7	357.8	350.8	349.0	345.3	340.6	337.5	
6+20	6.0 / 30	5.9 / 14	12.9 / 12	14.7	18.4 / 30	3.1 / 32	6.2 / 64	
							Canyon Rim	
	357.9	357.6	350.2	349.0	345.2	340.7		
6+16	5.8 / 30	6.1 / 16	13.5 / 14	14.7	18.5 / 30	23.0 / 50		
	357.2	356.4	351.2	351.1	351.7	356.5	360.7	360.5	347.1	
6+13	6.5 / 30	7.3 / 17	12.5 / 15	12.6 / 7	6.0 / 5	4.7	3.0 / 5	3.2 / 25	19.6 / 30	
	357.3	357.1	351.7	351.7	358.2	357.2	360.5	360.3	346.2	333.7
6+09	6.4 / 30	6.6 / 24	12.0 / 18	12.0 / 15	5.5 / 11	4.4	3.2 / 5	3.4 / 28	19.5 / 30	30.0 / 75
	357.8	357.3	351.7	351.7	358.2	357.3	360.5	360.3	344.2	
6+08	5.9 / 70	6.4 / 30	6.6 / 24	12.0 / 18	12.0 / 15	5.5 / 11	4.4	3.2 / 5	3.4 / 30	19.5 / 31	

363.72

Orig. B.M. P. 53		1.87	393.82	(393.81)
T.B	9.51	395.69	0.62	386.18
B.M. #1 P. 55			0.49	386.31 (386.29)
T.P.	12.60	386.80	0.55	374.20
6+80				
6+52				
6+418		wly. line lot 163 Normal Hgts. Ely and Copley		



Bench check for Copley St. X-Sec.

3/30/50

				-0.12 392.78	
S.E.B.P. shown as 392.78			4.45	392.66	S.E.B.P. Mansfield + Adams
T.P.	6.25	397.11	3.78	390.86	
T.P.	7.22	394.64	6.77	387.42	
T.P.	4.17	394.19	5.03	390.02	
S.W.B.P.	3.70	395.05	4.10	391.35	S.W.B.P. - E. Mt. View Dr. + Collier to west.
T.P.	6.03	395.45		389.42	
N.E.B.P. (shown as 393.81 on P 53)			6.56	389.42 BM#1	E. Mt. View Dr. + Copley to East.
S.W.B.P.	ss		4.89	391.09	E. Mt. View Drive + Copley - to west
T.P.	4.14	395.98	5.67	391.84	
S.W.B.P.	ss		5.79	391.72	Arthur + 35th (35th and/or Mt. View Drive)
T.P.	4.66	397.51	4.27	392.85	
T.P.	6.14	397.12	6.72	390.98	
3.7	3.72	397.70	—	393.98	S.E.B.P. Sidney Place + Mt. View Drive.

Garber
Moore
Clark

4/20/50

Grades - Sewer Outfall
College Ave. & Mesita.
(Under College Ave Fill)
See P-2

W.O. 20558

386.34

+60.52

385.63

+37.46

385.15
7.73
2.34
C-5.39

Top Conc. S-Drain
+22.41

384.91
7.97
2.78
C-5.19

1+14.41

384.20
8.68
4.44
C-4.24

+91.35

383.49
9.39
5.34
C-4.05

D.M.H. #1
+68.30

Ref. 8° Rt.
25° Lt.

382.81
10.07
5.76
C-4.31

+45.54

382.12
10.76
5.59
C-5.22

+22.77

381.44
11.44
4.82
C-6.62

Existing M.H.
0+00

Ref. 0-35 on ℄

4.76 392.88
℄

388.12
T.B.M. - East
Rim M.H.
0+00 (Walker)

Ref. 50.00 Tan. produced

M.H. #2
+98.85

Ref. 8.49 Rt. on split
25.00 Rt. " "

+11.10 411.78 400.68
℄ T.B.M.

390.61
21.17
10.23
C-10.94

389.90

+75.79

389.19

+52.74

388.47

+29.68

387.76

2+06.63

387.05

1+83.57

8.38

℄Hob 3.87

		399.23	M.H. #3		407.85
+42.50		12.55	+86.15		11.19
		7.38			2.76
		C- 5.17			8.43 -8.38
		397.79			406.41
4+18.56		13.99	+62.21		12.63
		8.95			5.24
		C- 5.04			7.39
		396.36			404.98
+94.61		15.42	+38.27		14.06
		10.58			7.22
		C- 4.84			6.84
			9.66 419.04	2.40 409.38	
		394.92	⊼		403.54
+70.67		16.86	5+14.32		8.24
		11.54			2.40
		C- 5.32			C- 5.84
		393.48			402.10
+46.73		18.30	+90.38		9.68
		12.88			4.67
		C- 5.42			C- 5.01
		392.05			
3+22.79		19.73			400.67
		13.26	4+66.44		11.11
		C- 6.47			6.67
		Walker			C- 4.44
	11.10 411.78	400.68 T.B.M.			
	⊼	℄Hub 2+98.85			

X-Sec. and sewer profile
Alley. Blk. 2 Stephens Add.

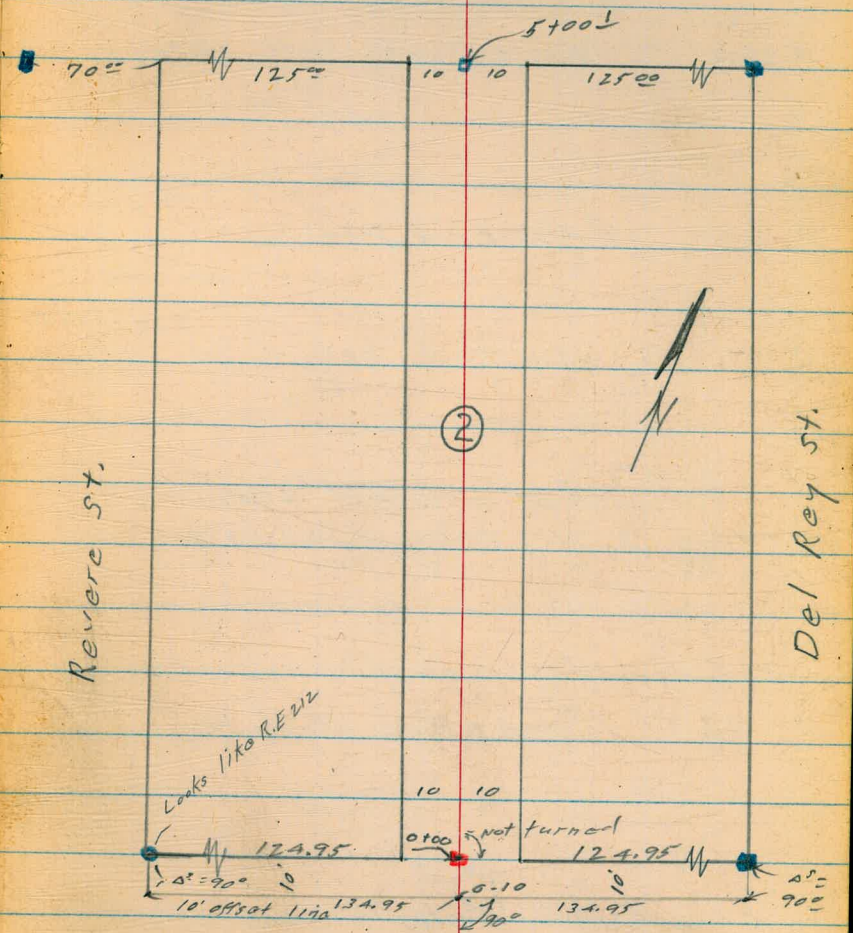
Sommermeyer
Begg
Allen.

10-11-50
W.O. 62199

F.B. 1735

■ = Fd. Conc. Mon.
□ = Fd. stub
○ = Fd. 3/4" pipe
▣ = Set 1/2" + disk
× = cross cut in M.H. Rim
• = Nail

out taken to property side of poles



Alley Blk. 2 Stephens Add.

0+24 $12\frac{7}{}$ Lt. = ℄ 3' wide Conc. walk.

0+20 - 13° Lt. = end house

0+11 13° Lt. = start house on Conc. foundation

10° Rt. = Pole # 450609 H

0+00 = N. Wly line Glendora

0-34 = N. Wly. edge M.H. Rim

0-35 = ℄ Existing M. H.

See F.B. 1735 for intersections

1.73 25.67 —— 23.94

19.13 19.71 19.6 19.9 19.5

5.94 / 20 — 5.96 / 127 — 6.1 / 10 — 5.8 — 5.2 / 10

walk

20.4 19.6

5.3 / 13 Floor. Floor. — 6.1 / 13

19.5

6.2 / 13 Conc.

18.0 19.2 19.02 19.6 20.6

7.7 / 60 — 6.5 / 10 — 6.65 Hub — 6.1 / 10 — 5.1 / 50

18.00

7.67

4.46

21.21

I.E.

25.67

Wly Prop. Mon. Del Rey + Glendora 1735 / 35+43

1+50

17.3 19.3 20.7 21.0 21.4

9.4/110 7.4/50 6.0/10 5.7 5.3/10

1+13 16' Lt. = ℄ Sing. Gar. dirt floor

20.0 20.6

6.7/16 6.1/10

1+03 - 7℄ = small pepper tree

1+00

17.1 19.2 20.3 20.6 20.6 22.1

9.6/110 7.5/50 6.4/10 6.1 5.9/10 4.6/50

26.70

T.P. 6.11 26.70 5.08 20.59

0+97 12' Lt. = end conc. slab

20.39 20.2

5.28/12 conc. 5.5/12 end

for garage + work shop.

0+73 - 12℄ Lt. = start Conc. slab floor

20.36 19.6

5.31/12 conc. 5.9/12 end

0+50

17.2 16.8 19.7 19.9 20.5 21.6

8.5/110 6.9/50 6.0/10 5.8 5.2/10 4.1/50

25.67

Alley Blk. 2

2+50 Cont.

17.5 19.8
9.2/110 6.9/50

2+50 - 11.7 Lt. = end conc. foundation

20.8 21.55 21.59 21.3 21.4 21.80 22.00
5.9/24 Grd 5.15/23.5 T.F 5.11/11.7 T.F 5.4/11.6 5.3/10 4.9 4.7/10

(T.F. = Top of foundation)

Bldg. under construction

2+27 - 12' Lt. = start conc. foundation for

21.47 21.10
5.23/12 Top. F 5.6/12 Grd

2+25

17.4 19.5 21.1 21.5 21.9
9.3/110 7.2/50 5.6/10 5.2 4.8/10

2+16

17.1 18.4 20.6 21.3 21.6
9.6/110 8.3/50 6.1/10 5.4 4.9/10

2+00 9.7 Lt. = Pole # A 4345

17.6 19.6 21.2 21.3 21.6 23.2
9.1/110 7.1/50 5.5/10 5.4 4.9/10 3.5/50

26.70

Alley Blk 2.

T.R. 5.57 30.80 3.52 25.23

3+50

3+49.5 - 16.3 Lt. = end Gar. + work shop.

3+45 = 16.2 Lt. = ℄ 9' door into garage.

Conc. foundation.
work shop. Conc. floor. +
3+30 - 16.3 Lt. = start Comb. Garage +

3+00

T.R. 7.10 28.75 5.05 21.65

2+80 90' Lt. = ℄ - 24.5' wide frame house

℄

20.3	21.1	22.8	23.2	23.3	23.1	24.6
8.5 / 110	7.1 / 50	6.0 / 16	5.6 / 10	5.5	5.1 / 10	4.2 / 50

19.7	21.7	22.0	23.3	23.1	24.6
9.1 / 110	7.1 / 16.3 Grd	6.8 / 10	5.5	5.1 / 10	4.2 / 50

21.84	21.1
6.91 / 16.3 Floor	7.1 / 16 Grd.

21.1	21.1	22.7	22.6
7.1 / 16 Grd.	7.1 / 10	6.1	6.2 / 10

17.9	30.00	21.6	21.7	22.0	23.4
10.9 / 110	8.8 / 50	7.2 / 10	7.1	6.8 / 10	5.4 / 50

28.75

20.6	18.7
6.1 / 90 Floor level	8.0 / 90 Grd

26.70

Alley Blk 2
Stephens Add.

0.03
1.47 33.47 (33.44)

T.P. 10.12 34.94 5.98 24.82

See FB 1735 for Bunker Hill St.

5+00 = Ely line Bunker Hill St.

4+85

4+50

4+00

EL. 33.44
F.B. 1735
50

Sly. Prop. Mon. Del Rey & Bunker Hill.

18.6 20.6 23.9 24.82 25.8 29.4
12.2/110 10.0/50 6.9/10 5.98 Stub 5.0/10 1.4/50

24.7 25.4 26.3
6.1/10 5.4 4.5/10

17.9 21.3 24.8 25.6 26.4
12.9/110 9.5/50 6.0/10 5.2 4.4/10

20.6 23.1 25.0 25.2 25.5 26.6
10.2/110 7.7/50 5.8/10 5.6 5.3/10 4.2/50

30.80

Cross Section - Rose St.

Walker
Pope
Clark
Huffman
3-15-51

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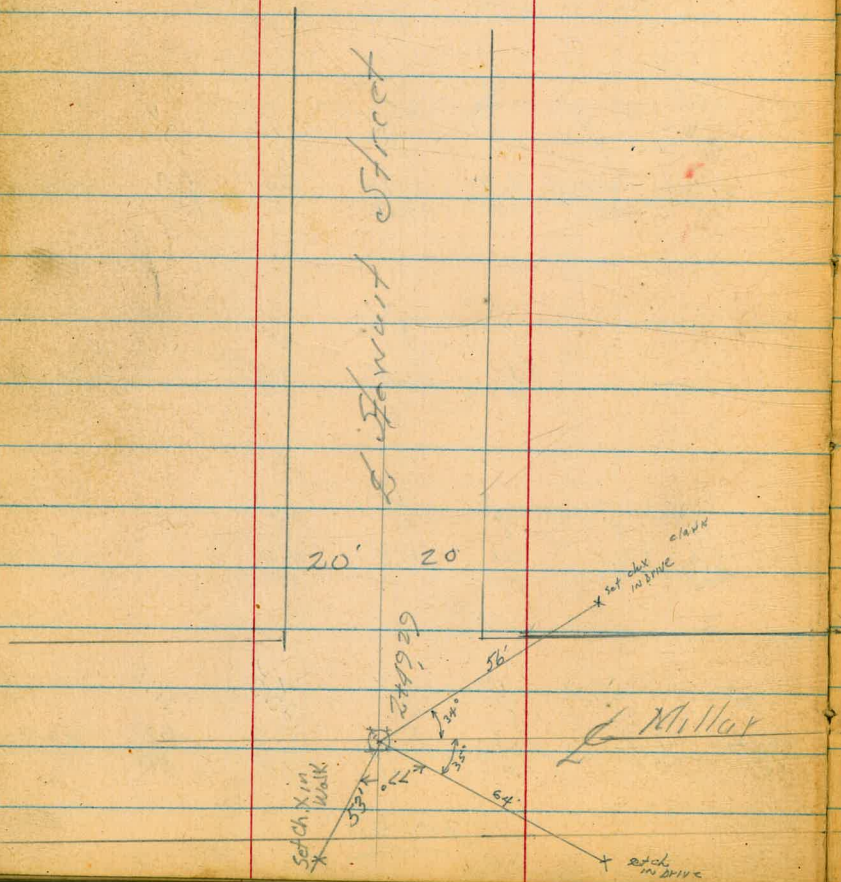
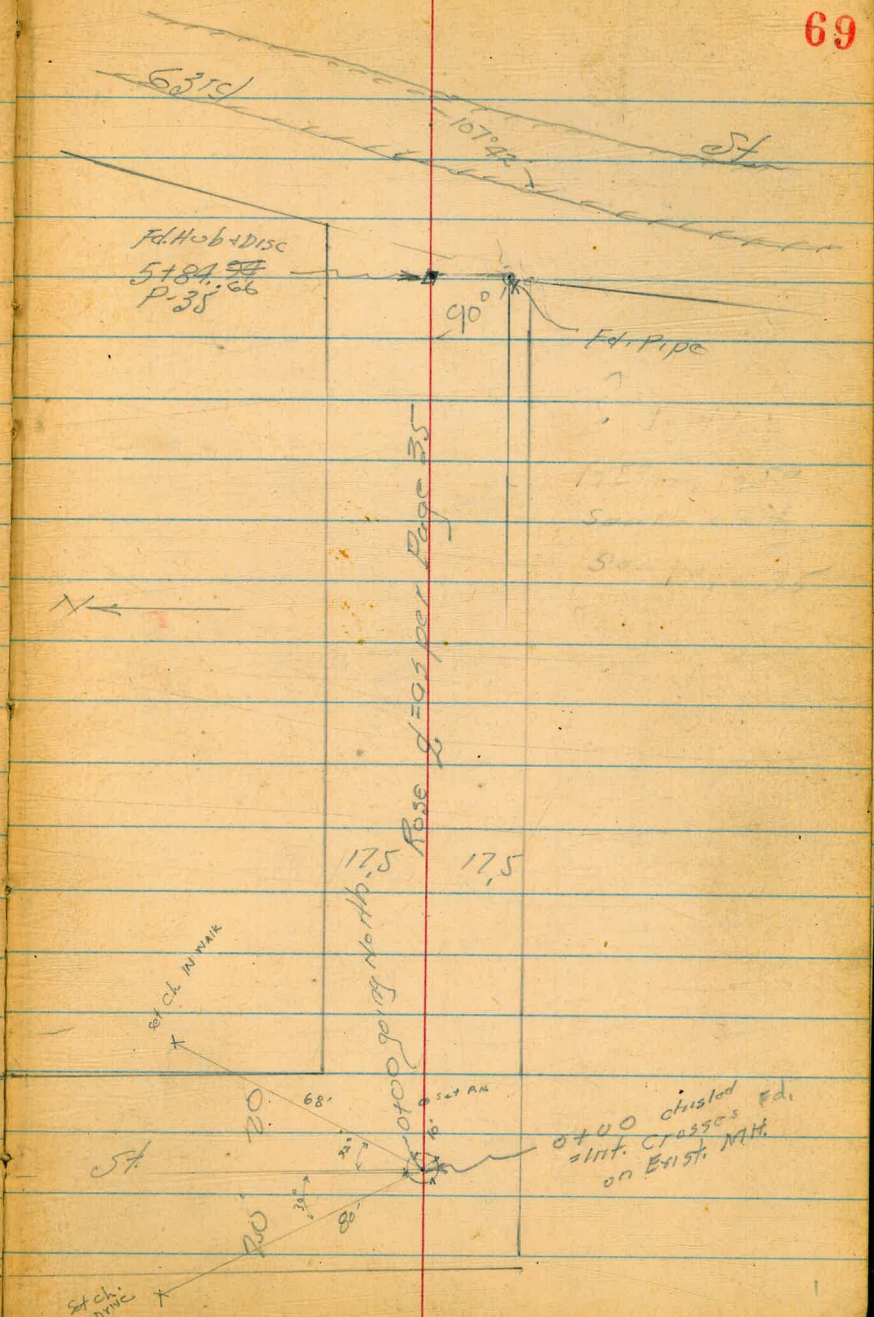
MAR 19 1951

WO 25020

FB 222C
33

Reduced
3-20-51
Ryan





Rose St. Cross Sections

1+00

0+62 = Beg Wire Fence 13.1' Rt

0+50

0+32.5 ℄ Gate Valve 2' Rt

0+31 = ℄ Fire Hyd. 14.3' Lt.

0+25 = Proposed East Line

0+00 = ℄ Millar

0-25 = proposed w/l Millar

0-40

9.31 470.02 460.21

Lt.	℄	Rt
465.6 4.4 35	465.0 5.0 22.5	464.9 5.1 14
464.2 5.8 35	464.0 6.0 22.5	464.5 5.5
463.7 6.3 35	463.7 6.3 22.5	463.9 6.1
463.2 6.8 35	463.4 6.6 22.5	463.35 6.67 Rim MH.
462.1 7.9 35	462.1 7.9 22.5 proposed opening line	462.6 7.4
461.5 8.5 32	461.8 8.2 22.5	462.4 7.6

2 Nails Pole
B.M. on T.P. #19 - P

470.02

Lt.	℄	Rt
465.8 4.7	465.7 4.3 12	465.7 4.3 27.5	465.7 4.3 40
464.5 5.5	464.1 5.9 27.5	464.2 5.8 40
463.9 6.1	463.4 6.6 27.5	463.6 6.4 40
463.35 6.67 Rim MH.	463.1 6.9 27.5	462.7 7.3 40
462.6 7.4	462.3 7.7 27.5 proposed opening line	462.5 7.5 40
462.4 7.6	461.8 8.2 27.5 Proposed opening line	462.1 7.9 40

Pole
S Side Hobart
Produced
Approx. 50' W of Millar.

Rose St - Cross Section

3+49 = Beg. Frame House on Rt 26.5' Rt.

3+40 = ℄ Garage on Rt.
= ℄ Guy Pole 11' Rt

3+34 = End Wire Fence 11.5' Rt.

T.P. 4.33 469.81 454 465.48

3+00 = W. edge Single Garage on Lt. 465.59 / 4.43 / 35 / Proposed Conc. Floor under Const.

2+50

2+25

2+00

1+70

1+50

470.02

Lt.	℄	Rt.
	464.9 / 4.9 / 469.81	465.2 / 4.6 / 27.5 / Dirt Drive	465.46 / 4.35 / 69 / Conc. Floor Garage
464.2 / 6.0 / 35 / Ground at Garage	464.1 / 5.1 / 22.5	465.6 / 4.4 / 13	465.6 / 4.4	465.3 / 4.7 / 12	465.2 / 4.8 / 27.5	465.2 / 4.8 / 40
465.2 / 4.8 / 35	465.4 / 4.6 / 22.5	466.0 / 4.0		465.7 / 4.3 / 27.5	465.8 / 4.2 / 40
466.6 / 3.4 / 35	466.5 / 3.5 / 22.5	465.9 / 4.1 / 14	465.8 / 4.2	465.7 / 4.3 / 27.5	465.9 / 4.1 / 40
465.1 / 4.9 / 35	465.3 / 4.7 / 22.5	465.8 / 4.2		466.0 / 4.0 / 27.5	466.1 / 3.9 / 40
467.4 / 2.6 / 35	466.4 / 3.6 / 22.5	465.7 / 4.3		465.7 / 4.3 / 27.5	465.9 / 4.1 / 40
465.3 / 4.7 / 35	465.0 / 5.0 / 22.5	465.0 / 5.0 / 17	465.6 / 4.4	465.9 / 4.1 / 27.5	465.9 / 4.1 / 40

470.02

Rose St - Cross Sections

4+41 = End Conc. Drive on Lt.

4+34 = Beg. Conc. Drive

4+34 = End 8" Conc Tile Wall 17' Rt

4+31 = Beg. Conc. Drive
4.8 High

4+24 = Beg. 8" Conc. Tile Wall 17' Rt.

4+00

3+89 = ℄ Garage under Const.

3+85 11' Rt = ℄ Pole 175859

3+78 = ℄ 2.5' Conc. Walk on Rt

3+73 = East edge House 26.5 Rt

3+59.5 = ℄ MH

3+50

465.14	464.1	464.3	464.8	464.8	464.9
462	5.7	5.5	5.0	5.0	4.9
36.5	35	22.5	12		26.5 —
Conc. Porch					at House
					on Ground

464.19	464.32
5.62	5.49
43.5	17.7
Floor	on Drive
Garage	

464.81	464.77	464.99
5.00	5.04	4.82
17	22.7	26.5
Drive	Bik.	Floor Garage
	in Drive	

464.19	464.41
5.62	5.4
43.2	17.5
Conc. Floor	on Drive

464.0	463.2	464.0	464.7	464.6	464.6
5.8	5.9	5.8	5.1	5.2	5.2
37.3	22.5	16		27.5	40
Ground of S.W. Cor House					

464.99
4.82

464.31
5.50
4.82
Proposed Conc. Floor

464.68	464.79
5.13	5.02
12	26
on Walk	on Walk

464.58
5.23
Rim
MH

469.81

Rose St.

5+67 14.5' Rt 4" Orange

5+65 16.8' Rt = Pole Anchor

5+56 14.7' Rt 4" Orange Tree

T.P. 4.96 469.05 5.66 464.15

5+50

5+35 = End Frame House on Rt 32.4' Rt

5+23 32' Lt = Beg Frame House

Lt. 8.5' Conc. Porch on Rt.

5+11 = Lt 4' Conc. Walk on Rt

4+95 = Lt 4" Peach 15' Rt

5+00 = Lt 20' Garage on Lt.

4+80 = Beg. Frame House 28' Rt.

12.3' Rt.

4+84 = Beg. Loose Rock Rot Wall Approx 1' High

4+81 12.6' Rt. = 4" Peach Tree

17.1' Rt.

4+85 = End Conc. Tile Wall & Brick Patio.

4+52 = Beg Brick Patio 17.2' Rt.

Beg 5' Conc. Tile Wall 17.2' Rt.

4+52 = East edge Driveon Rt

4+50

469.81

Lt. Lt. Rt.

469.05

464.21	464.21	464.21	464.6	464.5	464.7
5.6	5.6	5.6	5.2	5.3	5.1
27.6	22.5	15		27.5	40
Of House					

464.61	464.62	466.79
5.20	5.19	3.02
12.1	22.2	25.9
on walk	on Walk	on Conc. Porch

464.27	464.1	464.7	464.3	464.7	464.8
5.54	5.7	5.14	5.5	5.1	5.0
24.8	27.5		12.6	13.6	30'
Floor Level Across					Of House

464.91

490

17.1

Brick Patio

463.8	463.8	464.7	464.70	464.85	464.87
6.0	6.0	5.1	5.11	4.96	4.94
35	27.5	469.81	16.6 Conc. Drive	23 Drive	27.5 Floor.

Rose St. | Lt. | ℄ | Rt.

Catoctin or 63rd

			0.03			
			465.66 P10			
Chk N.W. B.P. El Cajon		4.50	465.69			
T.P. 5.59	470.19	4.45	464.60			

Diag Sec 107°42' Rt

6+09 on Pav

Lt.	℄	Rt.
463.77	464.08	464.11
5.28	4.97	4.94
50	Pav.	50
Pav.		Pav.

Diag. Section 107°42' Rt Page 35

6+02.4 = W edge cold Lay Pav

463.71	464.13	464.16
5.34	4.92	4.89
50	Pav.	50
Pav.		Pav.

5+84.66 Rt ⊥ to SW Cor Rose & 63rd.

463.85	463.95	464.15	464.3	464.3
5.2	5.1	4.90	4.8	4.8
35	22.5	on	27.5	40
Lawn	Lawn	Hub.		

4+84 = Beg. wall

5+83 = End 1' High Loose Rock Wall

5+77 14' Rt = 4" orange Tree

24.8 Lt = End Porch.

5+70 ~~19.6 Lt.~~ = End Frame House

465.65	464.24
340	481
24.8	19.6
on Porch	on walk

5+64 20.5' Lt. Beg. Conc. Walk

469.05

469.06

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Cross Section - Millar St.

Sketch P-69

29+29 = Proposed St. Stewart St

	Lt		℄		Rt.	
2+00	461.1 6.4	461.0 6.5 25	462.4 5.1	463.0 4.5 25	462.- 4.4 35	75
	464.1 6.4 35	461.5 6.0 25	462.9 4.6	463.3 4.2 25	463.2 4.3 35	
1+50	461.1 6.4 35	461.3 6.2 25	462.9 4.6	463.0 4.5 25	462.7 4.8 35	
1+00	461.3 6.2 35	461.4 6.1 25	462.6 4.9	463.0 4.5 10	464.3 3.2 3.1 25	464.0 3.5 35
0+50	461.7 5.8 35	461.7 5.8 25	463.0 4.5		464.4 3.1 25	464.9 2.6 35
0+22.5	462.0 5.5 35	462.2 5.3 25	463.4 4.1	463.9 3.6 25	463.9 3.6 35	
0+00	462.7 4.8 35	462.6 4.9 25	463.36 4.13	463.9 3.6 25	464.- 3.5 35	

7.28 467.49 460.21

B.M. Nails in Pole R-76

467.49

7

Miller St.

	Lt	℄	Rt
2+00	458.6 8.9 35	459.0 8.5 25	459.5 8.0 459.7 7.8 15 461.0 6.5 25 460.6 6.9 35
1+50	459.3 8.2	460.1 7.4 25	460.7 6.8 460.6 6.9 25 460.8 6.7 35
1+97. 14.7' Lt. Pole Hole (under const.)			
1+30 = Pole Anchor 14.8' Lt. (under const)			
1+22 = ℄ Conc. Drive			462.0 5.49 20.3 Drive 462.09 5.40 30 Drive
1+00	460.6 6.9 35	460.8 6.7 25	461.5 6.0 461.7 5.8 25 462.1 5.4 35
0+60	461.4 6.1 35	461.4 6.1 25	461.9 5.6 462.5 5.0 25 462.8 4.7 34 at House
0+25	461.2 6.3 35	461.7 5.8 25	462.3 5.2 462.9 4.6 25 463.1 4.4 35
= 0+00 Ahead			
2+49.29 = ℄ Station	461.1 6.4 35	461.6 5.9 25	462.5 5.0 462.6 4.9 25 462.6 4.9 35
467.49 →		467.49	

Millar St.

2+92.49 = Lt. Hobart

2+82

15' Lt.
2+74 = Pole. Hole under Const.

2+72.49 = ℄ Hobart

2+57.49 = ℄ MH

2+52.49 = Lt. Hobart St.

2+42 17' Rt = ℄ Fire Hyd.
on Rock

T.P. 5.34 461.02 11.81 455.68

2+20 = N edge Drive on Lt.

2+13 ℄ 8' Drive on Rt.

2+09 = Beg. Conc. Drive on Lt.

467.49

Lt.	℄	Rt.
444.2	446.3	450.0	454.1
16.8	14.7	11.0	6.9
50	25		25
446.5	449.2	454.4	455.3	456.1
14.5	11.8	6.6	5.7	4.9
50	25	6		25
450.2	452.7	455.4	456.0	457.2
10.8	8.3	5.6	5.0	4.0
50	25	17		25
		457.33		
		3.69		
456.4	456.7	457.8	458.1	458.6
4.6	4.3	3.2	2.2	2.4
35	25	461.02	25	35
458.9	458.79			
8.60	8.70			
47.1	19.9			
Floor	Drive			
			460.05	460.39
			7.44	7.10
			21.7 on Drive	45.6 Drive at Garage
458.93	458.87			
8.56	8.62			
47.2	20			
Floor Garage	Drive	467.49		

Millar St.

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			0.01
2 Nails in Pole			460.21
Chk BM P-75		5.66	460.20
TP 4.94	465.86	0.10	460.92
3+26			
	461.02		

435.4	436.6	439.1	443.4	445.4
2.56	2.44	21.9	17.6	15.6
50	32		25	50
		461.02		

91°42'30
10°22'45
102°05'15

67

63.

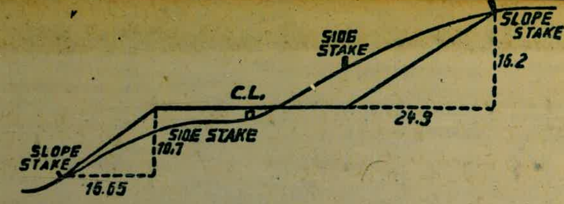
67.88
64.50 end.
3.38

2509

.0175
75
875
1225
.13125

1288
668
1956

2618°
175



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ TO 1. ROADWAY OF ANY WIDTH.

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

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