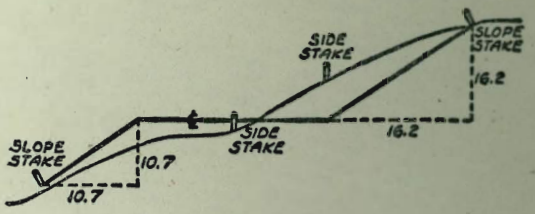
2307

X-SECT.
GRADE ESTABLISHED

TRANSIT BOOK



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	.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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X-Sec Winona Ave - Univ to Ny Polk 1-17

X-Sec 50th St - Univ to Oakcrest 18-25

X-Sec Oakcrest Drive - Winona to Univ 26-

X-Sec Winona, University Ave to Canyon Nly of Polk Ave - Sketch Page 1.

X-Sec 50th St - University to Oakcrest Dr.

X-Sec Oak-crest Drive, Winona Ave to University -

WO # 32129.

9-25-58

C. Allen.

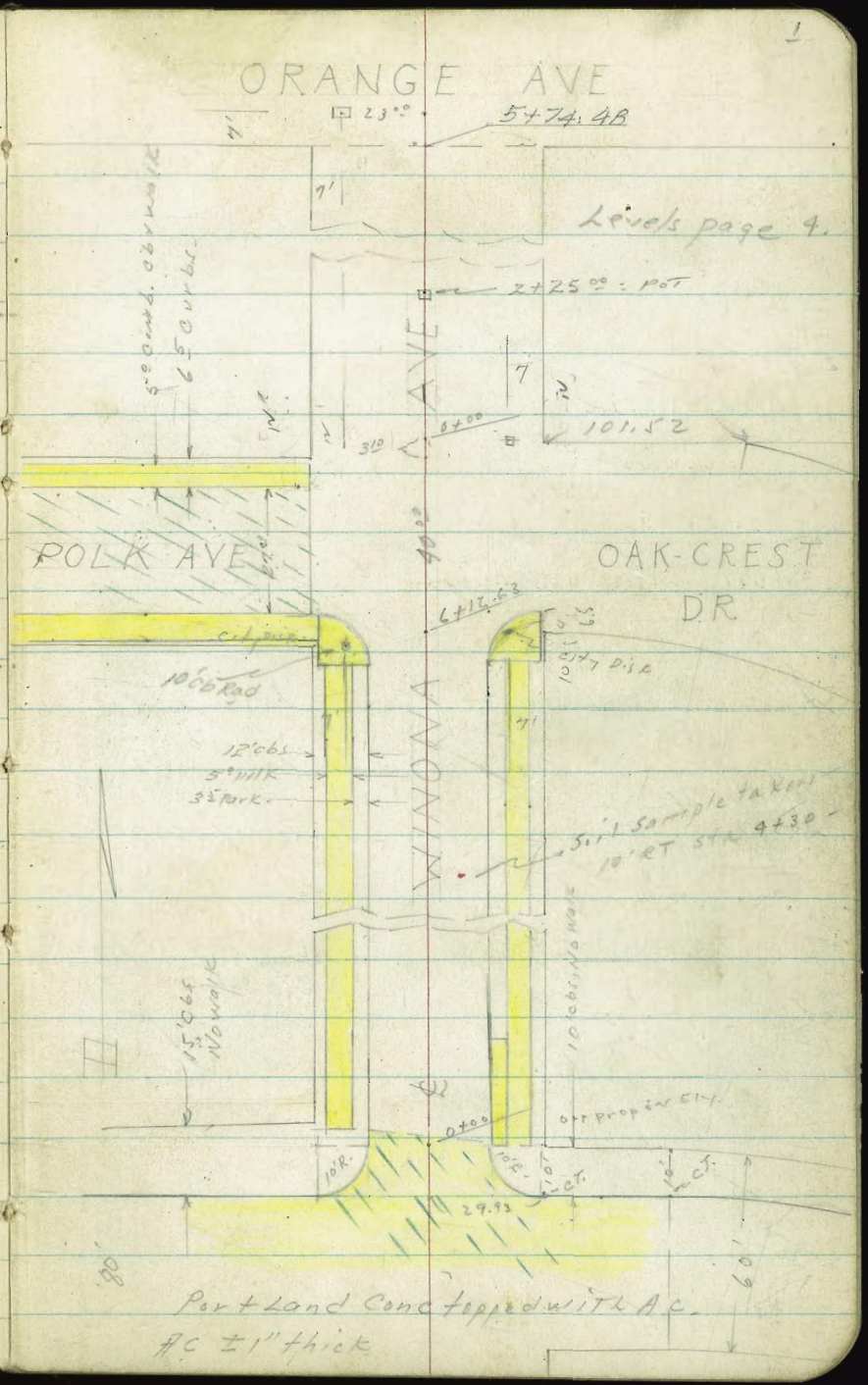
D. Sisson

C. Powell.

Ref - TP sheets 3654, 3664.

G-213

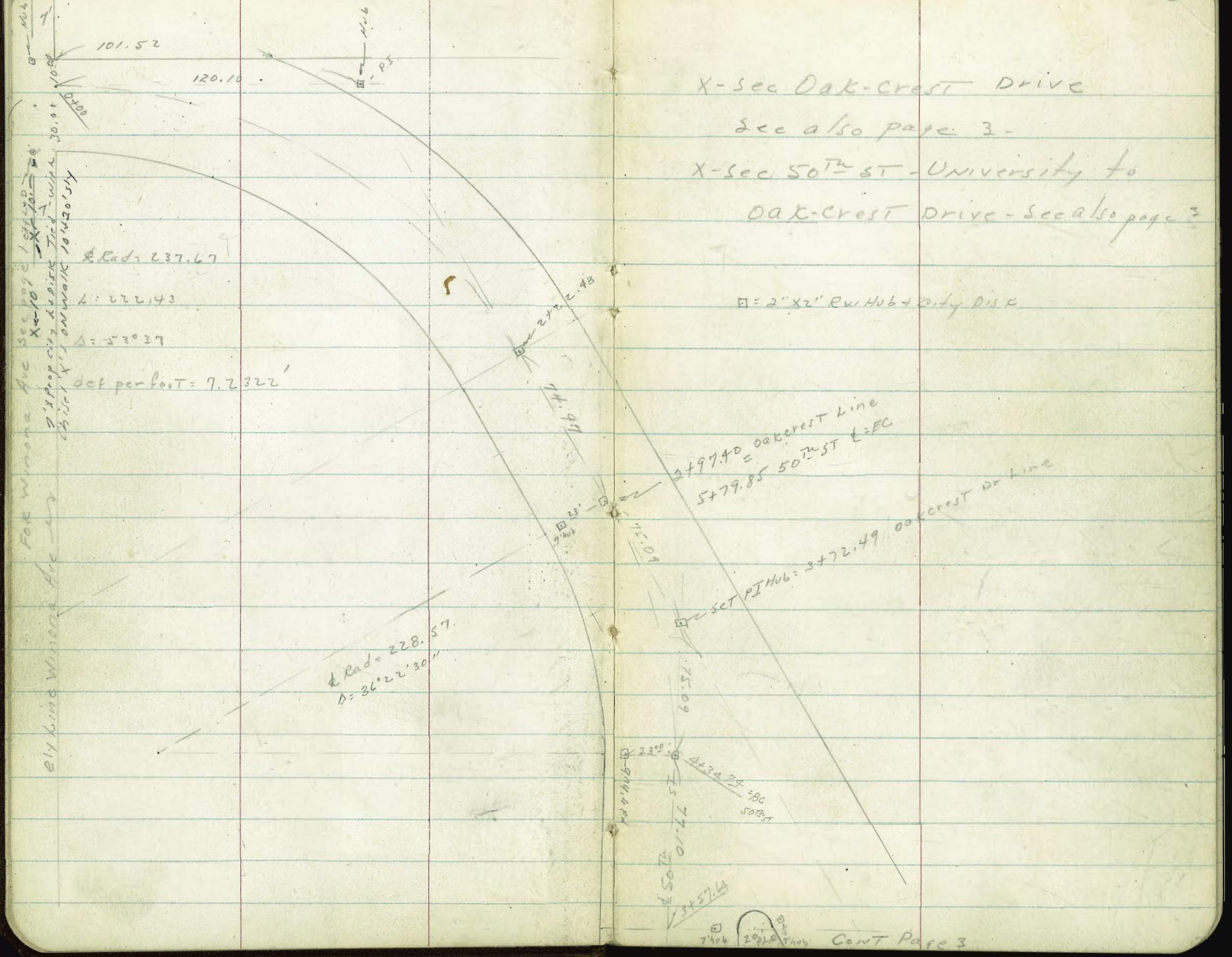
TP Book # 23 r



X-Sec Oak-crest Drive

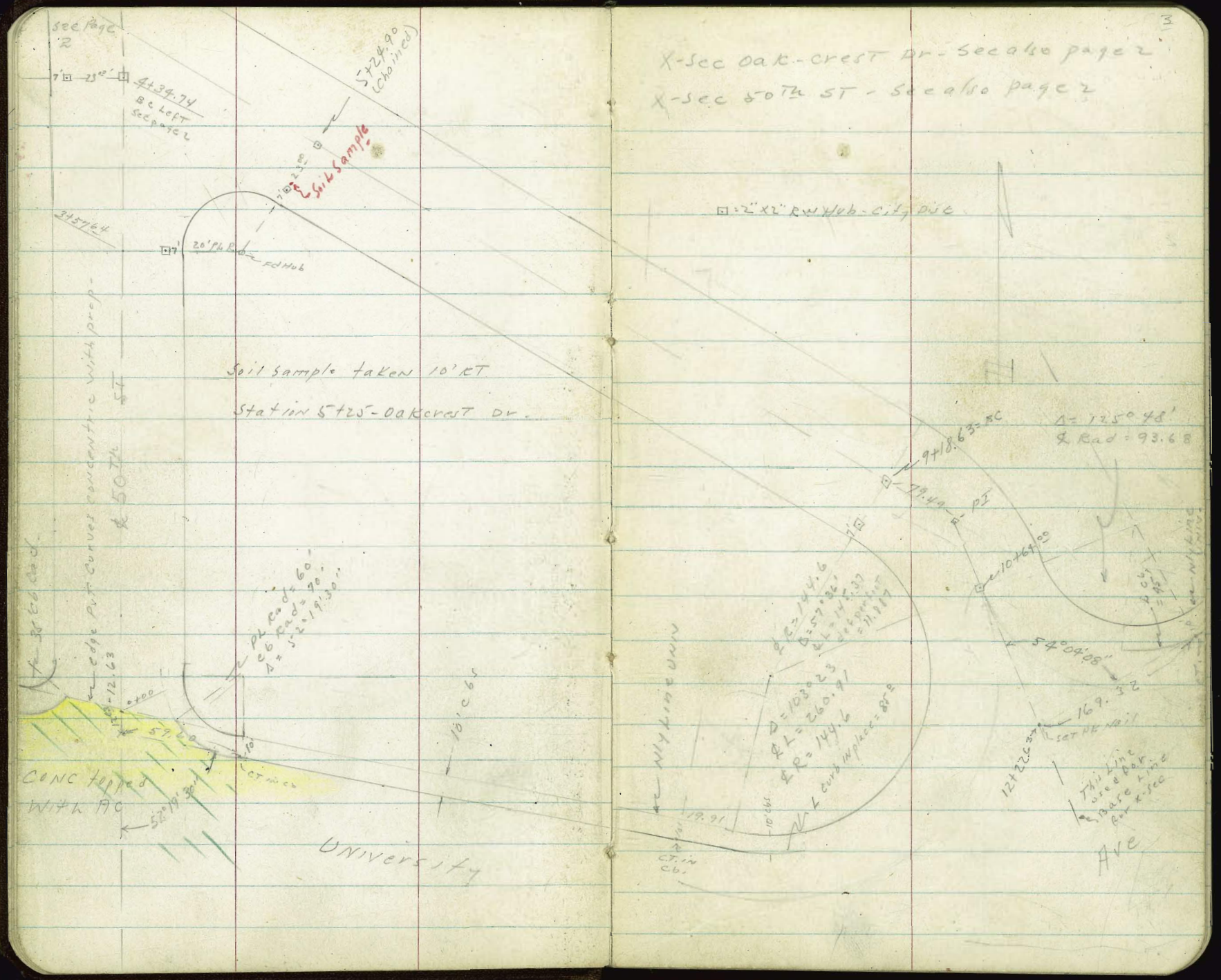
See also page 3 -

X-Sec 50th ST - University to Oak-crest Drive - See also page 3



X-Sec Oak-Crest Dr - See also page 2

X-Sec 50th ST - See also page 2



X-Sec Winona Ave - University Ave to Canyon Nly of Oakcrest Drive (Polk)
See sketch page 1.

LT = Wly | ℄ | Rt = Ely. 4

TP₁	6.88	336.02	7.16	329.14

336.02 ⊼

324.43	323.84
11.87	12.46
100 Cb	100 Gut

0-04.68 = Nly Curb Line University to Wly.

327.13	326.53	328.14	327.51	327.81	328.40	328.88	329.16	329.36	330.07	330.2
9.17	9.77	8.16	8.79	8.49	7.90	7.42	7.14	6.94	6.23	6.1
50 Cb	50 Gut	28 Cb BC	28 Gut BC	18	9		9	19.4 Gut (on ret)	19.4 Cb (on ret)	30

Concrete topped with A.C.

330.70	330.46	
5.60	5.48	in drive nock
53.65 Cb BC Univ	100 Gut (on curve)	100 Cb (on curve)

0-10 = Nly Curb Line University to Ely.

324.05	326.76	327.71	328.06	328.45	328.83	329.12	329.36	329.57	330.11	330.15
12.25	9.54	8.59	8.24	7.85	7.47	7.18	6.94	6.73	6.19	6.15
100	50	28	18	9		9	18	28 Gut BC	28 Cb	53.65 Gut BC Univ.

336.30 ⊼

BM =	6.15	336.30 ⊼	330.15	SWBP 50th + University Ave.

X-Sec Winona Ave

Station / Note	LT = Wly	℄	Rt = Ely
0+31 - 18.0 Rt = end Comm. Drive to filling Sta.			329 22 / 6 30 / 18.0 Lip; 330 37 / 5 63 / 22 Brk; 330 41 / 5 61 / 26.5 Wlk
0+10.32 = Nly Line University to Wly	328 50 / 7 52 / 26.5 Wlk; 328 42 / 7 60 / 17.9 Cb; 327 82 / 8.2 / 17.9 gut; 328 52 / 7 5 / 9	329 1 / 6 9	329 3 / 6 7 / 9; 329 57 / 6 45 / 18.0 Lip Drive; 330 20 / 5 82 / 22 Brk; 330 23 / 5 79 / 26.5 Bk Wk
0+09.5 - 17.9 LT = Nly edge portland Conc & AC	328 37 / 7 65 / 17.9 Cb; 327 79 / 8 23 / 17.9 gut		
0+06 - ℄ intersects Nly edge Conc. & AC paving		329 04 / 6 98 Port. Conc.	
0+05.3 = 18.0 LT EC. NW Return on Winona Ave	328 31 / 7 71 / 18.0 Cb EC; 327 82 / 8 20 / 18.0 gut EC		
0+03 - 18.0 Rt = begin Commercial drive for filling Sta			6 47 / 18.0 Lip; 5 86 / 22.0 Brk Indn
0+02.5 18.0 Rt = N. end Conc And AC. Paving			329 44 / 6 50 / 18.0
0+00 = Nly Line University to Ely.	328 2 / 7 0 / 30; 328 33 / 7 69 / 19.6 Cb; 327 78 / 8 24 / 19.6 gut; 327 80 / 8 22 / 18.0; 328 52 / 7 50 / 9	329 02 / 7 00	329 27 / 6 75 / 9; 329 43 / 6 59 / 18.0 AC gut; 330 07 / 5 97 / 18 Cb BC.; 330 3 / 5 7 / 30

336.02 π

X-Sec Winona Ave

LT = Wly ℄ Rt = Ely

1+52 - for Curb.

- 332.0 / 4.0 / 18.0 gut
- 332.51 / 3.51 / 18.0 cb

1+50

- 332.01 / 4.01 / 18.0 cb
- 331.2 / 4.8 / 18.0 gut.
- 332.0 / 4.0 (℄)
- 331.92 / 4.10 / 18 Lip Drive
- 332.49 / 3.53 / 21.5 Drive
- 332.55 / 3.47 / 26.5 Drive
- 2.94 / 30

1+45 - 18° Rt = ℄ 12' wide Conc Drive

- 331.88 / 4.14 / 18.0 Lip
- 332.41 / 3.61 / 21.5 Brk
- 332.46 / 3.56 / 26.5
- 333.01 / 3.01 / 30

1+00 -

- 331.13 / 4.89 / 26.5 Back Walk
- 331.11 / 4.91 / 17.9 cb
- 330.3 / 5.7 / 17.9 gut
- 330.9 / 5.1 (℄)
- 330.9 / 5.1 / 18.0 gut
- 331.55 / 4.47 / 18.0 cb
- 331.68 / 4.34 / 26.5 Bk Walk.

0+69 - 17.9 LT = Break in curb grade on Wly

- 330.56 / 5.46 / 26.5 Back Walk
- 330.49 / 5.53 / 17.9 cb
- 329.4 / 6.6 / 17.9 gut

0+59 - 18° Rt = ℄ 10' wide Conc Drive

- 330.25 / 5.77 / 18.0 Lip
- 330.84 / 5.18 / 21.5 Brk
- 330.84 / 5.18 / 26.5 Brk
- 331.47 / 4.55 / 30

0+50

- 329.9 / 6.12 / 17.9 cb High curb
- 328.92 / 7.1 / 17.9 gut
- 329.62 / 6.4 (℄)
- 330.1 / 5.9 / 18.0 gut
- 330.62 / 5.40 / 18.0 cb

336.02 HI

X-sec Winona Ave.

2+75

2+69.7 Sewer Manhole on ℄

2+57 - 18° Rt = ℄ 10' wide Conc. drive

2+50

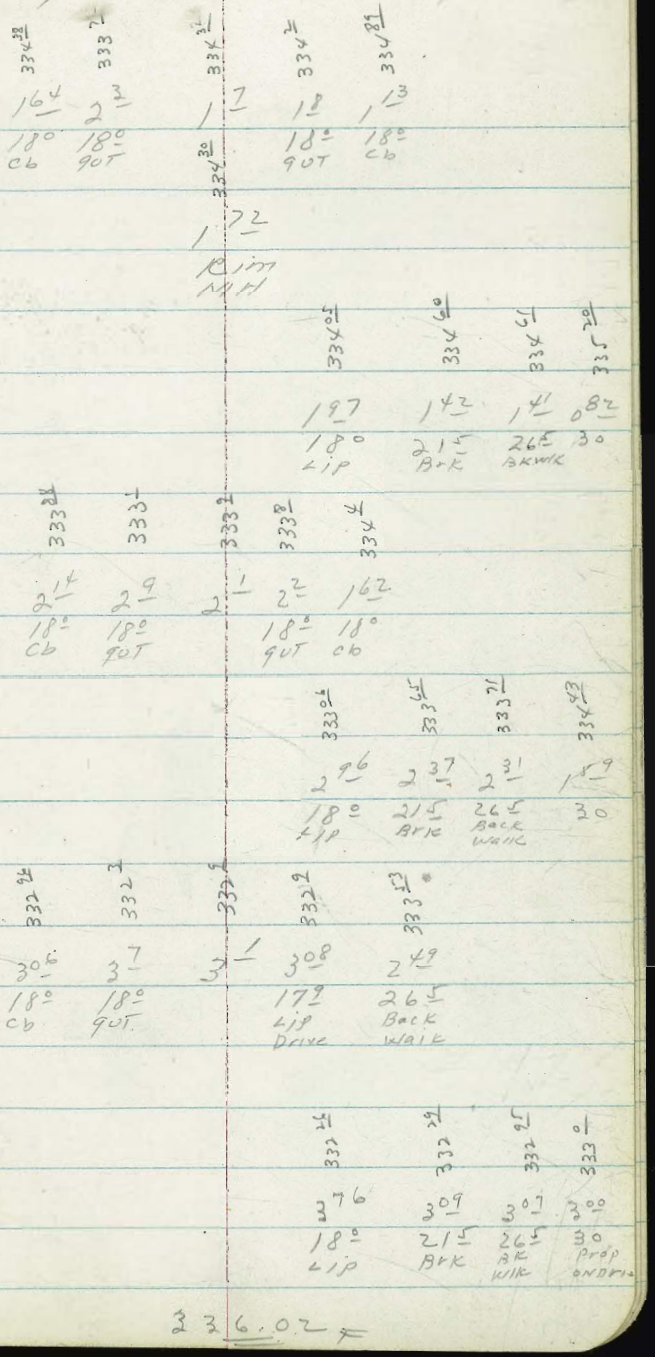
2+10 - 18° Rt = end Conc drive Apt Bldg.

2+00

LOT behind Walk - No garage

1+68 - 18° Rt = begin Drive for Apt - Conc parking

Lt = w/y ℄ Rt = e/y



X-Sec Winona Ave.

LT = Wly ℄ Rt = Ely

3+50

Elev.	336.57	335.7	336.2	336.50	336.70
Rod	9.43	10.3	9.8	9.50	9.00
Dist.	18.0 Cb	18.0 GUT	℄	18.0 GUT	18.0 Cb

3+25

Elev.	335.81	335.0	335.5	335.4	336.20
Rod	10.19	11.0	10.5	10.6	9.80
Dist.	18.0 Cb	18.0 GUT	℄	18.0 GUT	18.0 Cb

3+14 - 18° Rt = ℄ 10' Conc Drive

Elev.	335.36	336.01	336.00
Rod	10.64	9.99	10.00
Dist.	18.0 Lip	21.5	26.5

3+08 - 18° LT = end Conc Drive way

Elev.	335.31	335.30	334.69
Rod	10.69	10.70	11.31
Dist.	26.5	21.5	18.0 Lip

TP2 11.10 346.00 1.12 334.90

346.00 I

3+00

Elev.	335.05	334.50	334.8	335.2	335.45	335.60
Rod	0.95	1.50	1.2	1.1	0.45	0.40
Dist.	26.5 WlK	18.0 Lip	℄	18.0 GUT	18.0 Cb	26.5 WlK

2+91 - 18° LT = begin Conc Drive

Elev.	335.03	334.90	334.89	334.32
Rod	0.99	1.12	1.13	1.70
Dist.	30	26.5	21.5	18.0 Lip

336.02 I

X-Sec Winona Ave

Station	LT = wly			¢	Rt = ely		
4+54 - 18.1 Lt. ¢ 9' Dirt Drive	340^{21} 5.79 26.5	340^{21} 5.79 21.5	339^{59} 6.41 18.1				
4+50		339^{93} 6.07 18.1 Cb	339^{3} 6.7 18.1 Gut	339^{8} 6.2	340^{0} 6.0 17.8 Gut	340^{63} 5.37 17.8 Cb.	
4+44 17.8 Rt ¢ 10' Drive (Dirt)					339^{86} 6.14 17.8	340^{41} 5.59 21.5	340^{38} 5.62 26.5
4+09 18.0 Lt. ¢ 10' Drive (Conc.)	338^{40} 7.60 26.5	338^{41} 7.59 21.5	337^{85} 8.15 18.0 Lip				
4+00	338^{31} 7.69 26.5	338^{2} 7.80 18.0 Cb In Drive Figured	337^{7} 8.3 18.0 Gut Lip	337^{9} 8.1	338^{1} 7.9 18.0 Gut	338^{80} 7.20 18.0 Cb	338^{92} 7.08 26.5
3+75		337^{35} 8.65 18.0 Cb	336^{5} 9.5 18.0 Gut	337^{0} 9.0	337^{2} 8.8 18.0 Gut	337^{89} 8.11 18.0 Cb	
3+53 - 18.0 Rt ¢ 12' Conc Drive					336^{58} 9.42 18.0 Lip	337^{17} 8.83 21.5	337^{17} 8.83 26.5

346.00 x

X-Sec Winona Ave

TP3	7.08	352.80	0.28	345.72
5+60	18.0 Rt. ℄ 12' Conc. Drive			
5+59	18.0 Lt. ℄ 10' Drive			
5+50				
5+08	18.0 Rt. ℄ 11' Conc. Drive			
5+00				
4+57	17.8 ℄ 10' Conc. Drive			

Lt = wly ℄ rt = ely

352.80 ⊼

SW. 7' Winona + Prop. Polk

343.72 2.21 18.0 Lip — 344.48 1.52 21.5 — 344.56 1.44 26.5

343.69 2.31 26.5 — 343.72 2.28 21.5 — 343.14 2.86 18.0 Lip

343.40 2.60 18.0 Cb. in Drive Figured — 342.9 3.1 18.0 Gut — 343.1 2.7 — 343.2 2.6 18.0 Gut — 344.1 1.89 18.0 Cb.

342.06 3.94 18.0 Lip — 342.46 3.34 21.5 — 342.50 3.30 26.5 — 343.38 2.62 30 Drive

341.85 4.15 26.5 Walk — 341.85 4.15 18.0 Cb. — 341.1 4.9 18.0 Gut — 341.1 4.4 — 341.1 4.4 18.0 Gut — 342.37 3.63 18.0 Cb. — 342.47 3.53 26.5 Walk

340.37 5.63 17.8 Lip — 340.85 5.15 21.5 — 340.93 5.07 26.5

346.50 ⊼

X-sec Winona Ave

6+16.03 } 30.0 LT = Elyedge A.C. Pave. Polk St
= Sly Curb Line Polk to Wly.

(Oakcrest Dr.)
6+12.63 Sly Line Polk to East

See also sections Oakcrest Drive - This FB Page 26

6+09.53 Sly Line Polk to West

6+07.6 18.0 Rt. B.C.

6+06 18.0 Lt. B.C.

5+75

LT = wly ℄ Rt = ely

344.15	343.65	341.22	344.65						
8.65	9.15	7.57	8.15						
10.0 Cb	10.6 Gut	5.0 Cb	5.0 Gut						
345.65	345.15	345.65	345.2	345.1	346.2	346.1	346.2	346.39	
7.15	7.65	7.15	7.6	7.3	6.8	6.7	6.8	6.41	
30.0 Cb Elyedge AC Polk St	30.0 Gut	28.0 10.8 Cb	28 Gut	18		18	22.3 Gut	22.3 Cb	
	345.21	345.68	345.3		345.2	345.2	346.32	346.62	347.2
	7.09	7.12	7.5		6.9	6.9	6.48	6.38	5.7
	28	20.5 Cb	20.5 Gut			19.2 Gut	19.2 Cb	28 Blk Walk	30
345.2	345.21	345.60	345.1		345.8	345.2	346.21		
7.1	7.09	7.20	7.7		7.0	7.1	6.59		
30	28.0 Walk	18.5 Cb.	18.5 Gut			18.1 Gut	18.1 Cb.		
						345.6	346.16		
						7.2	6.64		
						18.0 Gut	18.0 Cb.		
		345.50	344.2						
		7.30	7.9						
		18.0 Cb.	18.0 Gut						
		344.42	343.2	344.30		344.40	344.99		
		8.38	9.1	8.5		8.4	7.81		
		18.0 Cb	18.0 Gut			18.0 Gut.	18.0 Cb		

352.80 π

X-sec Winona Ave

LT = Wly | ℄ | Rt = ely | 12

6+49.53 = Nly Line Polk to Wly

345 70	346 30	346 80	346 ℄	347 ℄	347 8	348 00
7 1	6 5	6 0	6 4	5 4	5 0	4 8
50	30	19	18		18	30

344 ??	344 10
0 26	8 70
100 cb	100 gut

No curb Return on N.W. Cor Polk + Winona

6+43.0 = Nly curb Line Polk to Wly

345 ??	345 09	345 92	345 45	346 00	347 ?	347 6	347 8
7 25	7 7	6 88	7 35	6 10	5 16	5 ?	5 10
50 cb	50 gut	30 Top cb	30 gut	18		18	30

6+32.63 = ℄ Polk To Ely (See page 2)

345 63	346 1	346 2	347 1	347 ?
7 37	6 7	6 10	5 7	5 13
30 elyedge AC	18		18	30

30' LT = elyedge AC Pave

6+29.53 = ℄ Polk to Wly

344 10	345 40	346 1	346 2	346 ?	347 3
8 70	7 40	6 7	6 1	5 9	5 15
100 AC	30 ely edge AC	18		18	30

30' LT = elyedge AC pave

6+17.63 = Slycb Line Oakcrest Dr (Polk) to Ely

345 18	345 ?	346 ?	346 ?	346 ?	346 ??	346 3	346 ??
7 62	7 1	6 7	6 7	6 6	6 32	6 5	6 32
30 elyedge AC	18		18	28 gut	28 cb	30 gut	30 cb

BC

Ely end curb

352.80

X-Sec Winona Ave

Station	LT = Wly	℄	Rt = Ely
0+51 - 30.0 Rt = ℄ 1' Conc walk			349.4 / 4.24 / 30.0 Wlk; 349.7 / 4.17 / 40.0 Wlk
0+50	348.2 / 5.4 / 50; 348.6 / 5.0 / 30; 348.7 / 4.9 / 18; 348.2 / 5.4 / 17	348.6 / 5.0	348.4 / 5.2 / 16; 348.8 / 4.8 / 18; 349.1 / 4.5 / 30; 349.3 / 4.3 / 50
0+46 - 32.4 LT = end 4' high Conc Block Wall -	347.6 / 6.0 / 32.4 Footing; 348.4 / 5.2 / 32.4 gr.		
0+41 - 30.0 Rt = ℄ 2' Conc Walk			349.1 / 4.40 / 30.0 Wlk; 349.3 / 4.30 / 40 Wlk
0+16 - 32.4 Lt = begin 4' high Conc block wall	347.6 / 6.0 / 32.4 Foot; 348.2 / 5.4 / 32.4 gr.		
TP4 7.92 353.64 7.08 345.72 (7'd prop Lt Disk Polk & Winona)		353.64 HI	
6+52.63 Back = 0+00 Ahead } = Nly Line Oak Crest (Polk) to Ely.	348.0 / 4.00 / 50; 348.2 / 4.8 / 30; 347.5 / 5.3 / 19; 346.6 / 6.2 / 18	347.5 / 5.3	347.9 / 4.9 / 18; 348.4 / 4.4 / 30

352.80 x

X-Sec Winona

1+09 — 30° LT = end low conc wall (curb)
30° Rt = 11' wide conc drive

1+00

0+97 - 30° Rt = begin 6" Wide conc wall - (curb)
Cyclone fence on top

0+91 - 30° LT = 3' conc walk

0+72 - 30° LT = begin low conc wall (curb)
6" wide

0+66 - 26.3 Rt = 3' conc walk

0+58 - 30° Rt = 8' conc Driveway

LT = Wly

348.2	349.2	349.0
4.9	4.52	4.6
30° Footing	30° Top	30° Gr

349.4	349.1	349.2	348.2
4.5	4.5	4.2	4.7
50	30	20	18

349.4	349.2
4.50	4.52
40 Walk	30 Walk

348.2	349.1	349.0
4.9	4.54	4.6
30° Footing	30° Top Wall	30° Gr

RT = ely

349.45	349.22
4.19	4.10
30° Dr	40° Dr

348.2	348.4	349.1	349.3	349.5
4.9	5.0	4.5	4.3	4.1
	17	19	20	40

349.3	349.7	348.8
4.20	4.17	4.8
30° Gr	30° Top Wall	30° Footing

349.40	349.31
4.24	4.33
26.3	36.3

349.40	349.31
4.24	4.33
30° Dr	40° Dr

353.64

X-Sec Winona Ave

LT = Wly ℄ Rt = ely. 35

Station	Description	LT	℄	Rt
1+66	30° LT = ℄ 10' Conc Drive	349.63 / 4.01 / 40° Dr; 349.37 / 4.27 / 30° Dr		
1+61	30° LT = end Low Conc Wall (curb)	348.2 / 4.2 / 30° Footing; 349.42 / 4.22 / 30° Top; 349.24 / 4.4 / 30° gr		
1+57	30° Rt = ℄ 8' wide Conc Drive (opening in wall for Drive)			348.83 / 4.81 / 30° Dr; 348.78 / 4.86 / 40° Dr
1+50		349.8 / 3.8 / 50; 349.1 / 4.5 / 30; 348.3 / 5.3 / 19	348.3 / 5.3	348.1 / 5.5 / 20; 348.8 / 4.8 / 30; 348.5 / 5.1 / 50
1+49	26° Rt = ℄ 18 sq ft .2 thick Conc Slab			
1+19	30° LT = begin low Conc wall (curb)	348.8 / 4.8 / 30° Footing; 349.55 / 4.09 / 30° Top; 348.9 / 4.7 / 30° gr		
1+14	30° LT = ℄ 10' Conc Drive	349.03 / 4.61 / 40° Dr; 348.92 / 4.72 / 30° Dr		

353.64 ⊼

2+33 - 34° LT = begin 1.5' high Rock wall.

2+30 - 34° LT = ℄ 7' conc drive

2+25 - 15° Rt = Rim Canyon.

Rt to ℄ Winona - poor condition
2+02 - 29.5 LT = end 4' wide rubble conc walk

Wooden Barricade
2+01 - 3° Rt = Wly end 21.5 4"x4" & 1"x6"

2+00 - 55° Rt = Sly rim Canyon.

(Lt)?
1+96 - 30° Rt = end low conc wall (curb)

(Parallel to ℄ Winona) poor condition
1+72 - 28° LT = ℄ begin 4' wide rubble conc walk

LT = Wly ℄ Rt = ely.

LT = Wly				℄				Rt = ely
348.5 / 5.1 / 34.0 Footing	348.6 / 5.0 / 34.0 gr							
349.5 / 4.19 / 44.0	348.91 / 4.69 / 34.0							
349.0 / 4.6 / 50	348.1 / 5.0 / 30	346.1 / 6.9 / 22	346.4 / 7.2 / 5	346.1 / 7.0	346.1 / 7.1 / 15 Rim Canyon	344.0 / 9.6 / 25	344.4 / 9.2 / 30	342.8 / 10.8 / 50
349.1 / 4.5 / 29.5 Wlk								
349.1 / 4.1 / 40	349.1 / 4.5 / 30	349.1 / 4.5 / 27	347.3 / 6.3 / 21	347.1 / 6.5	346.1 / 6.7 / 30	346.3 / 7.4 / 55 Rim Canyon		
					347.0 / 6.6 / 30.0 gr	347.8 / 5.83 / 30.0 Top	346.6 / 7.0 / 30.0 Footing	
345.4 / 4.2 / 28.0 Wlk								

35 3.64

X-Sec Winona Ave <320.15>

TP_8	Starting BM -		9.91	320.18
TP_7	4.89	340.09	11.99	335.20 2"x2" RW hub 23' RT 357.64 Page 3 -
TP_6	1.66	347.19	7.36	345.53 ↗
TP_5	3.77	352.89	4.52	349.12

LT = wly — ℄ — Rt = ely 17

3+50
342.1, 339.0, 337.1, 332.1, 331.2, 331.2, 329.1, 328.1
11^{6}/50, 14^{6}/30, 16^{4}/18, 21^{4}/9, 21^{7} (℄), 22^{4}/20, 24^{3}/30, 25^{5}/50

3+25
346.1, 343.6, 342.4, 334.6, 334.0, 333.0, 330.2
7^{5}/50, 10^{0}/30, 11^{2}/19, 19^{0} (℄), 19^{6}/25, 20^{6}/30, 22^{7}/50

3+00 - 8^{5} LT = Sly Rim Canyon.
346.1, 345.8, 345.1, 345.1, 338.6, 335.1, 336.6, 333.64
7^{5}/50, 7^{8}/30, 8^{4}/27, 8^{5}/10 Rim Canyon, 16^{0} (℄), 16^{8}/25, 17^{0}/30, 20^{0}/50

2+75 - 9^{0} LT = Sly Rim Canyon
348.6, 348.3, 346.2, 346.6, 345.6, 345.2, 345.6, 342.1, 339.6, 335.1, 337.1
5^{0}/50, 5^{3}/37, 6^{7}/35, 7^{0}/30, 8^{0}/24, 7^{7}/15, 8^{0}/9 Rim Canyon, 11^{3} (℄), 14^{0}/10, 14^{4}/30, 16^{3}/50

2+74.35 LT = end 1^{5} high Rockwall.
346.2, 347.0
6^{7}/35^{0} Footing, 6^{6}/35^{0} ground.

2+45 - ℄ Winona intersects Sly Rim Canyon.
348.9, 348.1, 347.8, 346.3, 346.0, 345.8, 341.6, 341.2, 342.3, 341.2
4^{7}/50, 4^{7}/36, 5^{8}/30, 7^{3}/23, 7^{6}/10, 7^{8} Rim Canyon (℄), 12^{0}/12, 12^{4}/26, 11^{3}/30, 12^{4}/50

353.64 ⊼

X-Sec 50th St - University Ave
To Oakcrest Drive
See Sketch pages 2+3-

Shots taken on Portland Conc - Not AC
Section taken along Line prop - Skew -
0+00 = Nly Line University Ave

NE-Return - 70' Rad - Δ = 41°0' - Mid pT = 20.5

NW Return - 35' Rad - Δ = 24° Mp = 12°

0-07 - 24° Rt at 90° (PT ∠) to ℄ 50th = ℄ Fire Hyd.

Skewed
Section taken along Curb Line
Curb Tangent to Ely - Concentric with curve to Wly
0-12.63 = Nly Curb line University

BM. 9.89 340.04 — SWBM 50th + Univ 330.15

Elev	Rod	Description
331.5	8.5	100
330.8	9.2	50
331.02	9.02	54' Cb
330.39	9.65	54' Gut
330.40	9.64	40 Conc
330.31	9.73	20 Conc
330.22	9.82	On Conc
329.99	10.05	14.2 Conc
329.85	10.19	28.5 Gut
330.44	9.60	28.5 Cb — Nly end Ret.
329.79	10.25	Gut Mid pt
330.41	9.63	Cb Mid pt
331.06	8.98	Mid pt Cb
330.38	9.66	Mid pt Gut
331.33	8.71	150 Cb
330.74	9.30	150 Gut
331.11	8.93	100 Cb
330.47	9.57	100 Gut
329.19	10.85	100 Gut
329.82	10.26	100 Cb
327.64	12.40	150 Gut
328.76	11.28	150 Cb
331.04	9.00	83.18 Cb BC Top (PRC's)
330.39	9.65	83.18 Cb BC Gut (PRC's)
330.16	9.88	40
329.95	10.09	On Conc
329.87	10.17	30.0 On AC
329.68	10.36	59.60 Cb + Prop BC
330.33	9.71	59.60 Top Cb

340.04

X-sec 50th ST — LT = W'ly — ℄ — Rt = E'ly

0+64 - 24.3 LT = ℄ 4"x4" Stop sign

0+62.78 - 30' LT = Prop BC - NW COR

0+62 - 24.0 LT = ℄ 10" guy Pole - No #

Station						℄					
0+64 elev	335.4	335.0	333.5	333.5	332.5	333.4	333.1	335.8	338.8	339.0	
rod	4.6	5.0	6.5	6.5	7.5	6.6	6.9	4.2	1.2	1.0	
dist	50	35	30	17	15		14	30	31	50	

0+50 4.8 / 50

Station						℄					
0+50 elev	335.0	333.0	332.2	332.4	331.6	332.5	332.3	333.5	335.2	337.7	338.0
rod	5.0	7.0	7.3	7.4	8.4	7.5	7.2	6.5	4.2	2.3	2.0
dist	42	32	30	23	20		13	16	30	31	50

0+35 - 30.0 Rt = begin Conc Wall - 12" wide

Station			
0+35 elev	335.8	335.2	337.67
rod	4.2	4.3	2.37
dist	30.0 gr	30.0 Footing	30.0 Top Wall

Station						℄					
0+33 - elev	331.4	331.5	330.6	330.8	330.8	331.5	331.2	333.8	335.6	337.6	337.8
rod	8.6	8.5	9.4	9.4	9.2	8.5	0.1	6.2	4.4	2.4	2.2
dist	50	39	35	30	20		19	24	30	37	50

Station				℄		
0+25 elev	330.38	330.44	330.4	331.0	332.31	332.31
rod	9.66	9.60	9.6	9.0	7.7	6.7
dist	50 AC	45 N'ly edge AC	30		30	50

0+06.31 - 30.0 Rt = Prop BC NE COR

0+00 - Section taken at Rt ∠s to ℄ 50th

Station			℄			
0+00 elev	330.42	330.09	330.22	330.24	332.26	333.6
rod	9.62	9.95	9.82	9.8	7.8	6.4
dist	30 A.C.	17 A.C.	ON Conc	17 Dirt	30 Dirt	50 Dirt

340.04 ⊼

X-Sec 50th ST.

1+50			
1+15 - 28^3 Rt = ℄	3' wide Conc Steps		
TP, 7.79	345.52	2.31	337.73
1+00 -			
0+84 - 23^0 LT =	℄ Deadman -		
0+80			
0+78 - 29^5 Rt =	℄ 8' Conc Drive		
0+72 - 30^0 Rt = end Conc Wall -			

LT = Wly ℄ Rt = ely - 20

338.1 338.1 338.1 339.0 338.8 339.2 340.3 341.7 342.8
7.4/50 6.7/30 7.4/15 6.5 6.7/14 5.6/17 5.2/26 3.8/30 2.7/50

338.45 340.83 341.01
7.07/28.3 BOTTOM STEP 4.69/32.8 TOP STEP 4.51/42.8 WLK

345.52 ⊼

336.2 335.8 335.1 335.6 335.8 337.2 340.08 341.2
3.8/50 4.2/30 4.9/16 4.4 4.2/16 2.8/24 +0.4/30 +0.8/50

335.7 335.2 334.6 334.2 333.8 334.4 334.4 335.1 338.2
4.3/50 4.8/32 5.4/30 5.6/18 6.2/16 5.6 5.6/16 4.1/30 on Dr 1.8/50

335.94 336.0 337.06
4.10/29.5 Dr 4.04/30.0 Dr 2.98/40.0 Dr

335.7 338.44 335.6
4.3/30.0 Gr 1.60/30.0 Top 4.4/30.0 Foot

340.04 ⊼

X-Sec 50th

2+32 - 19^{0} Rt = ℄ 8" acacia tree

2+25

2+3[illegible]

2+17 - 16^{0} Rt = ℄ 3' Conc walk

NW cor walk 4043 50th St

TP_2 6.62 350.90 π 1.24 344.28

2+01 - 18^{5} Rt = ℄ 8" Black acacia tree.

2+00 -

1+94 - 23^{8} Rt = ℄ 7' Conc Drive

1+83 - S.M.H. on ℄

27^{5} Rt. walk becomes 3' wide with step

1+73 - 23^{5} RT = ℄ 2' wide Conc walk

Lt = Wly ℄ Rt = Ely

341^{9}	342^{4}	342^{6}	342^{2}	342^{8}	342^{8}	343^{4}	343^{6}	343^{7}
9^{0}	8^{5}	8^{3}	8^{7}	8^{1}	8^{15}	7^{5}	7^{3}	7^{2}
50	30	17	15		14	16	30	50

342^{90}	343^{26}	343^{32}
8^{00}	7^{64}	7^{58}
16^{0} Wlk	26^{0} Wlk	30^{0} Wlk

350.90 π

340^{6}	341^{7}	341^{7}	341^{2}	341^{9}	341^{7}	342^{2}	343^{0}	343^{2}
4^{9}	3^{8}	3^{8}	4^{3}	3^{6}	3^{8}	3^{3}	2^{5}	2^{3}
50	30	17	15		14	16	30	50

342^{76}	342^{93}	343^{07}
2^{76}	2^{59}	2^{45}
23^{8} Dr	30 Dr	40 Dr

341^{09}
4^{43}
Rim

341^{72}	342^{60}	342^{71}
3^{80}	2^{92}	2^{81}
23^{5}	27^{5} step in walk Top Step	37^{5} Walk

345.52 π

X-sec 50 Ft

Station	LT = wly				℄	Rt = ely				
3+00	343^{2} 7^{2} 50	344^{1} 6^{8} 30	344^{1} 6^{7} 16	343^{8} 7^{1} 14	344^{2} 6^{6}	343^{9} 7^{0} 14	344^{1} 6^{2} 17	344^{4} 6^{3} 30	344^{9} 6^{0} 50	
2+84 - 30° LT = end Conc Wall		343^{24} 5^{16} 30^{0} Top	343^{3} 7^{6} 30^{0} Foot	343^{7} 7^{2} 30^{0} gr						
2+75	343^{4} 7^{5} 50	343^{7} 7^{2} 30	343^{8} 7^{1} 16	343^{2} 7^{6} 14	343^{1} 7^{2}	343^{4} 7^{5} 14	343^{2} 7^{0} 16	344^{2} 6^{7} 30	344^{4} 6^{13} 50	
2+62 - 26° Rt - ℄ 3' Conc Walk						344^{25} 6^{65} 26^{0} WLK	344^{33} 6^{57} 30 WLK	344^{46} 6^{44} 36 WLK		
2+57 - 18.7 LT = ℄ 4' Conc Walk	7^{66} 30	7^{64} 28^{7} WLK	7^{62} 18^{7} WLK							
2+50	342^{8} 8^{1} 50.	343^{1} 7^{8} 30	343^{2} 7^{6} 17	342^{8} 8^{1} 15	343^{1} 7^{6}	342^{1} 8^{0} 14	343^{4} 7^{5} 16	344^{1} 6^{8} 30	344^{3} 6^{6} 50	
2+45 - 30° LT = begin Conc Wall	345^{1} 5^{40} 30^{0} Top	342^{8} 8^{1} 30^{0} Foot	343^{1} 7^{8} 30^{0} gr							

350,90 ⊼

X-sec 50th

det 25' = 3°08'
ST = 75.09
℄ L = 145.11
det per foot = 7.52'
℄ Rad = 228.57
Δ = 36°22'30"

Sections taken
Radial to ℄

4+34.74 = BC 50th ST to Rt.

4+00

3+85 - 30± LT = end 3' high Cyclone Fence

3+57.64 - 30.00 Rt = Prop. BC. Ely Line 50th ST
This above dist. is 1.00 off T P sheet -
Fd 7' hub on Left

3+55 - 30± LT = ℄ 2.5' conc walk

3+35 - 30.3 LT = begin 3' high Cyclone Fence -

3+25

3+22 - 20.5 LT = ℄ 10" low pepper tree -

LT = Wly ℄ Rt = ely -

					℄				
346^{5}	346^{2}	346^{3}	346^{0}	346^{4}	346^{2}	346^{2}	347^{0}		
4^{4}	4^{6}	4^{6}	4^{9}	4^{5}	4^{6}	4^{0}	3^{9}		
50	30	16	14		15	17	30		
346^{1}	345^{2}	346^{0}	345^{5}	345^{2}	345^{7}	346^{5}	346^{1}	346^{3}	
4^{0}	5^{0}	4^{9}	5^{3}	5^{0}	5^{2}	4^{7}	4^{8}	4^{6}	
50	30	15	13		15	17	30	50	
345^{1}	345^{2}	345^{3}	345^{0}	345^{2}	345^{0}	345^{9}	345^{1}	345^{8}	
5^{8}	5^{7}	5^{6}	5^{9}	5^{6}	5^{9}	5^{0}	5^{10}	5^{1}	
50	30	14	13		15	18	30	50	
345^{31}	345^{14}								
5^{59}	5^{76}								
40± Wlk	30± Wlk								
344^{0}	344^{4}	344^{6}	344^{3}	344^{8}	344^{2}	345^{5}	345^{0}	345^{4}	
6^{9}	6^{5}	6^{3}	6^{6}	6^{1}	6^{6}	5^{7}	5^{9}	5^{5}	
50	30	15	13		14	17	30	50	

350.90 ⊼

X-sec 50th ST, Univ. to Oakcrest Dr

LT = wly | ℄ | Rt = ely-

5+11 - 23.2 LT = ℄ 2.5 Conc Walk

Elev.	Rod	Dist.
347.99	4.22	38.0 walk at steps
347.81	4.40	30 wlk
347.68	4.53	23.2 wlk

5+00

Elev.	Rod	Dist.
347.2	4.5	40
347.2	4.5	30
347.5	4.2	25
346.1	5.3	14
347.2	5.1	℄
347.1	4.9	15
347.2	5.0	30

8°10.75'

4+92 - 25.5 Lt = angle point in picket fence

4+85 - 21.4 LT = ℄ 9' conc drive

Elev.	Rod	Dist.
347.41	4.80	40 Dr
347.45	4.76	30 Dr
347.28	4.93	21.4 Dr

4+75

Elev.	Rod	Dist.
347.0	5.2	50
346.2	5.3	30
347.1	5.1	19
346.3	5.6	15
346.2	5.3	℄
346.2	5.3	15
347.0	5.2	30

5°02.75'

4+50

Elev.	Rod	Dist.
346.8	5.4	50
346.2	5.5	30
346.5	5.6	18
346.1	6.0	15
346.4	5.7	℄
346.4	5.7	15
347.0	5.2	17
347.0	5.2	20
346.4	5.7	22
346.4	5.7	30

1°54.75'

				PI hub
TP3	5.28	352.21	3.97	346.93

352.21 ⊼

Radial

4+36 - 32.0 LT = 3' high picket fence

Begin

350.90 ⊼

X-Sec 50th Univ. to Oak Crest

			LT = Wly			℄		Rt = Ely
TP4	6.70	TP6 page 17 345.51 (345.53)						
23³ LT = Fence at EC Continues on Wly.								
See also Sections Oakcrest Drive Page 26 et al								
5+79.85 on ℄ 50th ST = EC. also equals 2+97.40 on Oakcrest Dr	18°11.25'		348.2 / 4.0 / 50	348.0 / 4.2 / 30	347.4 / 4.8 / 14	347.5 / 4.7	347.7 / 4.5 / 15	347.7 / 4.5 / 30
5+63 - 22¹ LT = ℄ 9' Conc Drive			348.14 / 4.07 / 40.0 Dr	348.25 / 3.96 / 30.0 Dr	348.24 / 3.97 / 22.1 Dr			
5+51 - 24⁴ LT = begin 4' high cyclone fence								
5+50	14°26.75'		347.8 / 4.4 / 50	347.7 / 4.5 / 30	347.7 / 4.5 / 15 — 347.5 / 4.7 / 14	347.4 / 4.8	347.5 / 4.7 / 15	347.6 / 4.6 / 30
5+47 = 18¹ LT = ℄ 10" power pole # P4068.								
5+28 - 20⁶ LT = end picket fence -								
5+25	11°18.75'		347.8 / 4.4 / 50	347.5 / 4.7 / 30	347.2 / 5.0 / 13	347.4 / 4.8	347.4 / 4.8 / 15	347.3 / 4.9 / 30

352.21 HI

X-Sec Oakcrest Drive - Winona Ave to University See sketch Pages 2 + 3.

0+26 - 11.2 LT = ℄ 3' Conc Walk

0+25   3°00'48"

0+12 - 26.7 Rt = ℄ Deadman

0-02 - 25.0 Rt = BC cb. Ret. ely edge Conc

def per foot = 7.2322'
Δ = 53°37
L = 222.43
℄ Rad = 237.67

Sections taken Radial to ℄ Oakcrest
30 RT = Sly Prop.
10' LT = Prop   Also BC to RT
0+00 = Ely Line Winona Ave - See page 2
See Sections Winona Ave Page 11 et al -

BM   8.08   353.80   345.72

LT: Nly   ℄   Rt = Sly.

Elev.	349.1	348.87
Rod	4.69	4.93
Dist.	21.2 Wlk	11.2 Wlk

Elev.	349.1	349.1	348.8	348.6	348.2	347.8	347.2	348.2	348.2	348.3
Rod	4.7	4.7	5.0	5.2	5.6	6.0	6.6	5.6	5.6	5.5
Dist.	30	22	12	11	℄	12	23	25	30	40

Elev.	346.3	346.5	346.33
Rod	7.5	7.30	7.47
Dist.	25.0 gut	25.0 cb BC	35.0 SE cor Conc

Elev.	347.1	346.8
Rod	6.7	7.0
Dist.	30	50

Elev.	349.1	348.6	348.1	347.8	347.3	346.3	346.58	347.1
Rod	4.7	5.2	5.7	6.0	6.5	7.5	7.22	6.7
Dist.	35	10	9	℄	12	25 gut	25 cb ely end Return	26

353.80 HI

TP3 - Page 10 -

X-Sec Oakcrest Dr

1+12 - 19.6 Rt = ℄ 8' Conc Drive

1+06 - 37.7 Lt Radially = SE Cor. slab

1+00 — 12°03'12"

0+96 - 24' Rt = 3" acacia tree

0+75 — 9°02'24"

(Parallels Polk St. Line)
0+72 - 21.3 Lt = begin Conc slab.

0+55 - 16.4 Lt = ℄ 3' Conc walk

0+50 — 6°01'36"

Lt = N'ly ℄ Rt = S'ly

348 1 | 348 82 | 345 20
5 10 / 19.6 Dr | 4 91 / 30 Dr | 4 80 / 40 Dr

4 95 / 38.2 NE Cor | 4 95 / 37.2 SE Cor
5 3 / 32 | 5 3 / 30 | 5 3 / 18 | 5 6 | 5 7 / 9 | 5 4 / 10 | 5 0 / 30 | 4 8 / 40

4 89 / 32 ON CINC | 5 10 / 22.2 S'ly edge conc. slab | 5 4 | 6 1 / 13 | 5 2 / 15 | 5 0 / 30 | 5 10 / 40

4 70 / 39.3 Slab NW Cor | 5 09 / 21.3 Slab SW Cor

4 84 / 26.4 Wlk | 4 99 / 16.4 Wlk

4 9 / 25 | 5 1 / 15 | 5 4 / 14 | 5 5 | 5 08 / 12 | 6 2 / 19 | 5 2 / 21 | 5 2 / 30 | 5 2 / 40

353.80

X-Sec Oakcrest Dr

1+85 - 23.8 LT = ℄ dead man

1+77 - 52.0 LT = ℄ Single garage Wood floor — Dirt Drive

1+75 - 22.5 Rt = fence

21°05'36"

1+56 - 19.6 Rt = ℄ in 3' high hog wire fence

1+53 - 41.0 LT = ℄ Frame house — Entrance

1+51 - 23.3 Rt = begin 3' high Hog wire fence

1+50 - 25.8 Rt = NElyCor Redwood Fence — Conc Slab behind fence

18°04'48"

1+46 - 28.0 Rt = ℄ 4' Conc Entrance walk

1+45 - 17.2 Rt = ℄ 12" power pole P4090

1+25

15°04'00"

LT = N14 — ℄ — Rt = S4

348.0 / 5.8 / 50

348.4 / 5.4 / 30

348.2 / 5.6

348.8 / 6.0 / 14

348.5 / 5.13 / 30

348.5 / 5 / 40

349.3 / 4.9 / 41.0 Floor House

348.4 / 5.0 / 30

348.2 / 5.2 / 15

348.2 / 5.6

348.4 / 5.8 / 11

348.9 / 5.3 / 30

348.5 / 5 / 50

348.6 / 5.1.9 / 28.10 INIK

348.1 / 5.1.4 / 38 INK

348.5 / 5.13 / 40

348.2 / 5.1 / 30

348.5 / 5.13 / 15

348.2 / 5.6

348.9 / 5.8 / 7

348.5 / 5.3 / 9

348.7 / 5.1 / 30

348.2 / 4.9 / 40

3 ℄ 3.80 ℄

X-Sec Oak Crest Dr-

2+50 - 23.5 Rt = fence

2+46 - 21.0 LT = ℄ 12" Pepper tree

2+34 - 25.0 Rt = 2.5' Conc Walk

2+22.43 = E.C. 24.5 Rt = fence

26°48'30"

2+17 - 31.5 = ℄ 8.5' Conc Drive

2+01 - 24.8 Rt = ℄ 2.5 Conc Walk

29.4 Rt = Nly Cor Frame House

25.0 Rt = Fence

2+00 - 31.0 LT = ℄ 2.5' Conc Walk

24°06'24"

1+95 - 22.5 LT = ℄ 10" pole # 556990 H

LT = Nly ℄ Rt = Sly

347.1	347.2	347.1	347.2	347.1	348.1	348.1	348.2	348.2
6.1	5.9	5.9	5.9	6.1	5.7	5.4	5.6	5.6
50	30	15		15	16	23	30	50

348.30	348.28
5.50	5.52
25.0 Wlk	35.0 Wlk

347.8	348.1	348.1	348.1	347.2	348.2	348.3	348.5
6.0	5.7	5.7	5.7	5.9	5.6	5.3	5.3
50	30	15		16	18	30	50

347.23	348.02
5.87	5.71
41.5 Dr.	31.5 Dr.

348.36	348.36
5.44	5.44
24.8 Wlk	34.8

348.18	348.18	348.2	348.2	348.0	348.1	348.1
5.62	5.62	5.6	5.6	5.8	5.7	5.7
41.0 Wlk	31.0 Wlk	30		15	25	29.4 Fr Cor House

353.80

X-Sec Oakcrest Dr

3+07 - 20^7 LT = ℄ 12" pepper tree.

2+97^40 { 28^5 LT = ℄ 3' Conc walk
23^3 = Cyclone fence
See page 25 for sections
Oakcrest Dr Line = 5+79.85 (BC) 50th St }

2+83 - 29^5 LT = begin 3' high Picket fence

6' Wide Conc Base
2+78 - 23^8 RT = begin 4' high Cyclone fence

2+78 - 29^0 LT = ℄ 8' Conc drive

2+72 - 16^6 Rt = ℄ 8' Conc Drive
2+61 - 26^4 Rt = end Hogwire fence
2+54 - 21^0 LT = ℄ 12" Pepper Tree.
2+51 - 30^2 LT = ℄ 3' Conc walk

3x7^62 3x7^75 3x7^75 3x7^7 | 3x7^6 3x7^5 3x7^8 3x7^8 3x8^0 3x8^0

6^17 / 40^0 Wlk; 6^05 / 30^0 Wlk; 6^05 / 28^5 Wlk; 6^1 / 15 | 6^2; 6^3 / 15; 6^0 / 16; 6^0 / 23; 5^80 / 30; 5^00 / 40

3x8^0 3x7^9 3x8^25

5^00 / 23^8 gr; 5^9 / 23^8 Foot; 5^55 / 23^8 Top

6^58 / 40 Dr; 6^15 / 30^0 Dr; 6^10 / 29^0 Dr

3x8^18 3x8^22 3x8^24

5^62 / 16^6 Dr; 5^50 / 30^0 Dr; 5^56 / 40^0 Dr

3x8^0 3x8^00

5^79 / 40^2 Wlk; 5^80 / 30^2 Wlk

353.80 x

X-Sec Oakcrest Drive

LT = N 1/4 | ℄ | Rt = S 1/4

TP,	4.00	350.98	6.82	346.98

3+75 — 346.1, 347.0, 347.2, 347.3, 347.1, 346.9 — 7.1/40, 6.8/30, 6.6/15, 6.5 (℄), 6.7/15, 6.9/30

3+74 29.5 Lt. End 3' Picket fence

3+50 — 347.1, 347.3, 347.4, 347.4, 347.2, 347.5, 347.6, 347.6 — 6.7/40, 6.5/30, 6.4/16, 6.4 (℄), 6.6/18, 6.3/26, 6.2/30, 6.2/40

3+45 = 26.4 Rt. N.E. Cor. 3' Picket fence

3+40 22.5 Lt. ℄ 8" Pepper Tree

3+37 29.5 Lt. ℄ 3' Conc Walk — 347.45, 347.60, 347.60 — 6.35/40 Walk, 6.20/30 Walk, 6.20/29.5 Walk

3+27 - 20± Rt = ℄ 10" power pole # P4068

3+25 — 347.1, 347.6, 347.6, 347.6, 347.6, 347.8, 347.8, 347.8 — 6.7/40, 6.2/30, 6.2/15, 6.4 (℄), 6.2/15, 6.0/17, 6.0/30, 6.0/50

3+24 - 26± Rt = end cyclone fence; 20.0 LT = ℄ 10" power pole # P4069 — 348.29, 348.29, 347.26 — 5.5/22.8 Dr., 5.5/30 D, 5.5/40 Dr

Shown also on sections of 50th ST

3+15 - 22.0 Rt = ℄ 9' conc drive

353.80 x

Oakcrest Dr.

4473 } 30.0 Lt. Beg. 3.5 Picket fence
4473 } 30.5 Lt. ℄ Fire Hdy.

4458 31' Lt. ℄ 2' Hedge 3' High

4450

4439 29.8' Lt. ℄ 2' Conc. Walk

4425 31' Lt ℄ 2' Hedge 3' High

4423 21' Lt. ℄ 12" Power Pole # P4055

4411 21' Lt ℄ 2' Palm

4404 29.5 Lt. ℄ 4' Conc. Walk

4400

3491 21' Lt ℄ 3' Palm

346-1 4.9 / 40
346-2 4.6 / 30
346-3 4.7 / 16
346-4 4.3
346-5 9.6 / 15
347-1 3.9 / 17
347-2 3.9 / 30
346-8 4.2 / 34

346-23 4.25 / 40
346-24 4.37 / 29.8

346-9 4.9 / 50
346-6 4.4 / 30
346-8 4.2 / 16
346-25 9.5 / 15
346-9 4.1
346-11 4.3 / 15
346-12 4.3 / 30

346-55 4.43 / 40
346-57 4.11 / 30
346-87 4.11 / 29.5 Walk

346-0 5.0 / 50
346-7 4.3 / 30
346-7 4.0 / 15
346-1 3.9
346-9 4.1 / 15
346-8 4.1 / 30

350.98

Oak Crest Dr.

5+73 29.5 Lt. Beg. 2.5 Picket Fence

5760

5+59 18.4' Lt & 3' Conc. Walk (29.0 Lt. Ends Walk

5+30 30.0' Lt. & 11' Conc. Drive

5+24.90 = B.C. on West

5+23 30' Lt. End 3.5 Picket Fence

5+00

4+91 32.0' Lt. & 6' Conc. Walk

4+75

346-5 5.2 40

346-4 5.9 30

346-3 5.5 18

346-2 5.7 17

346-1 5.3

346-15 5.87 29.0

346-16 5.97 18.4 Walk

346-17 5.53 40

346-18 5.35 30.0 Dr.

346-14 5.6 40

346-13 5.5 30

346-12 5.4 17

346-11 4.9

346-10 5.0 40

346-9 5.2 30

346-8 5.2 18

346-7 5.9 16

346-6 4.7

346-17 4.61 40

346-16 4.82 32 Walk

346-5 4.5

346-4 4.7 30

346-3 4.7 18

346-2 4.9 17

346-1 4.5

346-8 5.0 16

346-7 4.7 17

346-6 4.7 30

346-5 4.7 50

345-8 5.0 16

345-7 4.2 20

345-6 4.5 30

345-5 5.1 50

345-4 5.7 15

345-3 5.3 17

345-2 5.1 30

345-1 5.3 50

350.98

X-See Oakcrest Drive
Winona to ...

TP_2	2.98	349.00 ⊼	4.96	346.02	

349.00 ⊼

Station	Description	Readings
6+61	Power Pole 20.3 Rt. #P4030	345.19 / 5.79 / 30 Dr.; 345.21 / 5.77 / 40
6+40	30' Rt ¢ 8' Conc. Drive	
6+35	29.8' Lt. ¢ Ribbon Drive 6.5 with (2) 1.5' strips	344.76 / 6.22 / 40; 344.88 / 6.10 / 29.8 Dr.
6+23	29.2' Lt Beg. 4' Lath fence	
6+10	29.6' Lt End 2.5' Picket fence	
6+05	19.8' Lt. ¢ 10" Power Pole #JP4047	
6+00		344.8 / 6.2 / 50; 345.4 / 5.6 / 30; 345.5 / 5.5 / 18; 345.1 / 5.9 / 17; 345.5 / 5.5; 345.2 / 5.8 / 15; 345.5 / 5.5 / 16; 345.5 / 5.5 / 30; 345.3 / 5.7 / 50
5+96	26.7 Lt ¢ Deadman	
5+89	18.3 Lt ¢ 2' Conc. Walk	344.19 / 6.79 / 40; 345.04 / 5.94 / 30; 345.44 / 5.54 / 18.3
5+81	¢ M.H.	345.57 / 5.41 / ¢

350.98 ⊼

X-Sec Oakcrest Dr -
Winona Ave to Univ

7+50

7+45 - 29^{6} LT = ℄ 3' apron on 1^{5}' walk

7+27 - 20^{4} LT = ℄ 10" tel pole J.P. 4039 -

7+23 - 29^{1} LT = begin 3' high picket fence

7+12 - 30^{0} RT = end 5' high picket fence
7+12 - 29^{2} LT = end lath fence

7+00

6+93 - 30^{0} Rt = begin 5' high picket fence

6+90 - 29^{3} LT = ℄ 3' conc walk

6+65 - 20^{6} LT = ℄ 4" acacia tree -

6+60 - 30^{0} Rt = ℄ 12" power pole # P4030 -

6+50

6+45 - 21^{0} LT = ℄ 6" acacia tree

LT = N'ly | ℄ | Rt = S'ly.

7+50:

343^{8}	344^{2}	343^{2}	343^{2}	344^{0}	343^{6}	344^{0}	344^{1}	344^{1}
5^{2}	4^{8}	5^{1}	5^{3}	5^{00}	5^{4}	5^{0}	4^{9}	4^{9}
50	30	18	17		16	17	30	40

7+45:

343^{72}	344^{11}	344^{28}
5^{21}	4^{89}	4^{72}
45^{6} Wlk	35^{6} Begin 15 walk	29^{6} Walk apron -

7+00:

344^{5}	344^{6}	344^{2}	344^{6}	344^{0}	344^{6}	344^{9}	344^{7}
4^{5}	4^{4}	4^{8}	4^{4}	5^{0}	4^{4}	4^{1}	4^{3}
50	30	17		16	17	30	50

6+90:

344^{90}	344^{81}
4^{10}	4^{19}
39^{3} Wlk	29^{3} Wlk

6+50:

344^{4}	344^{8}	345^{0}	344^{7}	345^{1}	344^{7}	345^{0}	345^{2}	344^{9}
4^{6}	4^{2}	4^{0}	4^{3}	3^{9}	4^{3}	4^{0}	3^{8}	4^{1}
50	30	18	17		15	16	30	50

349^{00}

X-Sec Oakcrest Dr | LT = N14 | ℄ | Rt = S14 | 36

Station / Notes									
8+42⁷ - 30⁰ LT = begin conc curb wall 6" wide	342⁵ / 6⁰⁰ / 30⁰ Foot	342⁶⁹ / 6³¹ / 30⁰ Top	342² / 6² / 30⁰ gr						
8+41 - 30⁴ LT = ℄ 3⁵' conc walk	343³² / 5⁶¹ / 40⁴ Wlk	342⁹⁵ / 6⁰⁵ / 30⁴ Wlk							
8+30 - 21⁵ LT = ℄ 6" pepper tree.									
NOT 90° to ℄ Drive parallels Lot Lines which are									
8+25 - 30² Rt = ℄ 8⁰' wide conc drive	343² / 5⁷ / 50	343⁴ / 5⁶ / 30	343⁴ / 5⁶ / 21	342³ / 6⁷ / 17	342⁸ / 6²	342³ / 6⁷ / 16	342⁹ / 6¹ / 18	343²¹ / 5⁶⁹ / 30² Dr	343⁴¹ / 5⁵⁹ / 40² Dr along Drive
8+23 } 30⁰ LT = end picket fence.									
29⁰ LT = ℄ Deadman									
21⁶ LT = ℄ 12" power pole # 4031									
8+15 - 22⁰ LT = ℄ 4" pepper tree.	343² / 5⁰⁰ / 50	343⁶ / 5⁴ / 30	343⁴ / 5⁶ / 18	342⁹ / 6² / 17	343² / 5⁰⁰	342⁶ / 6⁴ / 16	343² / 5⁸ / 18	343⁶ / 5⁴ / 30	343³ / 5⁷ / 50
8+00 -									
7+93 - 21⁰ LT = ℄ 6" pepper tree									
7+74 - 20⁶ LT = ℄ 3" floral tree									

349.00 π

X-Sec Oakcrest Dr

Sections taken Radial to ℄ Oakcrest

℄ ST: 79.49
def per foot = 11.887'
Δ = 5° 7' 36"
℄ Rad = 144.6

9+18.63 = BC to Rt.

9+17 - 29.0 Rt = ℄ 2' conc walk

9+14 - 30.0 LT = begin conc block wall -

9+00 -

8+87 - 29.3 LT = ℄ 2' conc walk

8+75 -

8+63 - 30.0 LT = end conc curb wall - 6" wide

8+50

LT = N'ly | ℄ | Rt = S'ly 37

340.2 / 8.8 / 30 · 340.4 / 8.6 / 20 · 339.9 / 9.1 / 18 · ℄ 340.3 / 8.7 · 340.0 / 9.0 / 17 · 340.8 / 8.2 / 30 · 340.6 / 8.4 / 50

339.8 / 9.2 / 30.0 Foot · 340.94 / 8.06 / 30.0 Top · 340.2 / 8.8 / 30.0 gr · 341.24 / 7.76 / 29.2 Wlk · 341.24 / 7.76 / 30.1 Wlk · 341.17 / 7.83 / 40.0 Wlk

340.7 / 8.3 / 50 · 340.8 / 8.2 / 30 · 340.6 / 8.4 / 18 · ℄ 341.1 / 7.9 · 340.6 / 8.4 / 17 · 340.8 / 8.2 / 18 · 341.4 / 7.6 / 30 · 341.1 / 7.9 / 50

340.99 / 8.01 / 39.3 Wlk · 341.03 / 7.97 / 29.3 Wlk

341.2 / 7.8 / 40 · 341.2 / 7.8 / 30 · 341.4 / 7.6 / 17 · ℄ 341.9 / 7.1 · 341.2 / 7.8 / 17 · 342.3 / 6.7 / 22 · 342.4 / 6.6 / 30 · 341.8 / 7.2 / 50

7.2 / 30.0 Foot · 6.70 / 30.0 Top · 7.1 / 30.0 gr

342.9 / 6.1 / 40 · 342.5 / 6.5 / 30 · 342.3 / 6.7 / 19 · 341.9 / 7.1 / 17 · ℄ 342.4 / 6.6 · 341.9 / 7.1 / 16 · 342.2 / 6.8 / 18 · 342.6 / 6.4 / 30 · 342.5 / 6.5 / 50

349.00 π

X-Sec Oakcrest D-

House is far below graded ST.

9+69- 70⁰ LT = ℄ Small frame House

31⁵ LT } = ℄ Deadman
9+63- 23⁵ LT = } ℄ 10" power pole # P 4023-

9+59⁵ = 5⁸ LT = ℄ SMH-

9+50

6° 12.89' (From BC

9+47- 38⁷ LT = end Conc Drive 2 car gar

9+22- 40² on Radial = begin Conc Drive 2 car gar

Wall is streight not concentric with curve
9+22- 30⁵ LT = end Conc Block Wall-

LT = N'ly = E'ly | ℄ | RT = S'ly = W'ly | 38

329 1
19 13
70 0
Floor

338 5
10 85
5 8
Rim

337 9 | 337 9 | 338 1 | 338 1 | 338 1 | 338 5 | 339 1 | 339 5
11 1 | 11 1 | 10 7 | 10 3 | 10 7 | 10 5 | 9 9 | 9 5
40 | 30 | 18 | | 16 | 18 | 30 | 50

338 20 | 337 77
10 80 | 11 03
44 3 Floor Conc | 38 2 Apron

338 13 | 338 04
10 87 | 10 96
45 1 Conc Floor Gar- | 40 2 Dr-

338 7 | 340 70 | 335 04
10 3 | 8 10 | 9 6
30 5 Foot | 30 5 Top | 30 5 gr

349 00 ⊼

X-Sec Oakcrest Dr.

LT = ely   ℄   Rt = wly

Station	Notes		Right-hand page readings, left to right (elevation / rod reading / distance)
10+25	21°04.19'		322.9 / 16.9 / 50; 330.5 / 9.3 / 30; 333.9 / 5.9 / 17 Rim; 331.9 / 7.9 / 14; ℄ 332.7 / 7.1; 331.9 / 7.9 / 17; 333.3 / 6.5 / 30; 334.3 / 5.5 / 50
10+18			330.2 / 9.6 / 30; 333.7 / 6.1 / 15 Rim Canyon; 332.8 / 7.0 / 14; ℄ 333.4 / 6.4; 332.8 / 7.0 / 25; 336.4 / 3.4 / 30; 336.6 / 3.2 / 50
10+13 - 49.5 Rt - begin cyclone fence			
10+01 - 21.2 LT = ℄ Fire Hyd.			
10+00 {26 LT = Rim Canyon}	16°07.09'	326.5 / 13.3 / 50; 330.0 / 9.8 / 40	333.5 / 6.3 / 30; 334.8 / 5.0 / 26 Rim Canyon; 334.9 / 4.9 / 14; 334.4 / 5.4 / 12; ℄ 335.0 / 4.8; 334.3 / 5.5 / 19; 335.9 / 3.9 / 23; 336.8 / 3.0 / 29; 337.6 / 2.2 / 30; 337.9 / 1.9 / 40
9+84. 24.0 LT = ℄ Deadman			
9+75 {30 LT = Rim Canyon}	11°09.99'		333.8 / 6.0 / 50; 336.0 / 3.8 / 30 Rim; 336.3 / 3.5 / 16; ℄ 337.0 / 2.8; 336.6 / 3.2 / 16; 337.2 / 2.6 / 17; 337.8 / 2.0 / 27; 338.9 / 0.9 / 30; 339.1 / 0.7 / 50
TP3 2.59	339.77 11.82	Top FH opposite 10+01 LT. 337.18	339.77 π

349.00 π

X-Sec Oak Crest Dr

11+25			
11+00-			11.9 / 80
10+78-37.6 rt = angle point in cycline fence			
10+75- ℄ = tangent extended			
TP4	0.48	328.39	11.86	327.91 (on ℄ Hub 10+64 (EC))
10+64.00 = EC			
	28°48'		
10+50-	26°01.29'		

LT = ely ℄ rt = wly.

Station	Left					℄	Right				
(top)		314.0: 14.4 / 100	317.1: 11.3 / 75				334.2: +6.2 / 80				
11+25	321.5: 6.9 / 50	323.5: 4.9 / 36 Top Rim Canyon	318.7: 9.7 / 30 Toe	319.6: 8.8 / 15	319.0: 9.4 / 12	319.2: 8 10.5	321.0: 7.4 / 15	321.6: 6.8 / 38	321.1: 7.3 / 48 Toe Bank	332.5: +4.1 / 63 Top Bank	332.7: +4.3 / 68
11+00	320.8: 7.6 / 60	322.8: 5.6 / 50	326.0: 2.4 / 30 Rim	321.5: 6.9 / 22 Toe Bank		323.5: 4.9	323.4: 5.0 / 24	322.5: 5.9 / 34 Toe Bank	332.7: +4.3 / 47 Top Bank	332.9: +4.5 / 50	
10+75	324.9: 3.5 / 50	327.7: 0.7 / 30	329.2: +0.8 / 22 Rim Canyon	325.0: 3.4 / 18		326.8: 1.6	326.8: 1.6 / 15	325.8: 2.6 / 26	333.69: +5.3 / 37	334.4: +5 10.0 / 50	
						328.39 HI					
10+64	322.1: 17.7 / 50	328.2: 11.6 / 30	330.1: 9.7 / 20 Rim	326.7: 13.0 / 16		328.0: 11.8	327.4: 12.3 / 20	331.8: 8.0 / 30	334.2: 5.6 / 43	334.5: 5.3 / 50	
10+50	319.37: 20.4 / 50	327.7: 12.6 / 30	331.8: 8.0 / 18 Rim	329.0: 10.8 / 14		329.9: 9.9	329.7: 10.1 / 17	332.0: 7.8 / 30	334.4: 5.4 / 46		
						339.77 HI					

X-sec Oakcrest Drive
Winona Ave to University Ave

LT = Ely ℄ Rt = Wly 4!

Elev.	331^{98}	332^{15}	333^{2}
Rod	$+8^{3}$	$+8^{5}$	$+9^{6}$
Dist.	90 Top Bank	93	100

311^{1}
12^{57}
58 edge Ac

11+58 LT = Nly edge Ac

Elev.	310^{8}	313^{7}	313^{9}	313^{5}	315^{5}	317^{6}	319^{8}	320^{6}	320^{4}
Rod	12^{9}	10^{0}	9^{8}	10^{2}	8^{2}	6^{1}	3^{9}	3^{1}	3^{3}
Dist.	50	43	23	21		25	50	65	72 Toe

TP5 8.56 323.68 13.27 315.12

323.68 ⊼

Elev.	308^{39}	316^{4}	332^{3}	332^{5}	334^{4}
Rod	20^{0}	12^{0}	$+3^{9}$	$+4^{1}$	$+6^{0}$
Dist.	70	60	83 Top Bank	88 Fence	100

11+50

Elev.	317^{7}	319^{5}	316^{0}	314^{6}	316^{4}	318^{1}	320^{3}	320^{7}	320^{4}
Rod	10^{7}	8^{9}	12^{4}	13^{8}	12^{0}	10^{3}	8^{1}	7^{7}	8^{0}
Dist.	50	43 Top-Rim	40 Toe	18		25	50	59	67 Toe Bank

11+41.5 = 94.0 LT = Wly end Nly (University) Curb Ret

Elev.	307^{52}	306^{66}
Rod	20.87	21.73
Dist.	94.0 Cb	94.0 Gut

328.39 ⊼

X-Sec Oakcrest Dr

LT = ely ℄ Rt = wly

Reduced 10/22/53 [illegible]

309.51	309.03	322.51	323.42				
14.17	14.65	1.1	0.26				
82° Cb	82° GUT	110 GUT	110 Cb Top				

Intersection
University should be X-sec through this.

11+95 - } 82° LT = Sly Curb Line UNIV. / 110° Rt = Ely end Nly Curb UNIV.

305.47	311.75	313.43	315.62	316.81	318.11	320.45	321.91
14.21	11.93	10.25	8.62	6.86	5.57	3.43	1.77
75	50	25 ℄ UNIV		25	50	75	100

331.4	331.6
+ 7.7	+ 7.9
115 Top	130

11+75 - ℄ intersects Nly edge A.C. Pave.

308.43	311.85	314.44	316.6	318.5	321.5	321.8
15.25	11.83	9.24	7.1	5.2	2.2	1.9
91 Approx ℄ UNIV	34 AC	AC	25	50	93	100 Toe

323.68

CROSS SECTIONS OF WINONA AVE FROM 225' NLY OF POLK AVE TO ORANGE AVE

W.O. 32129

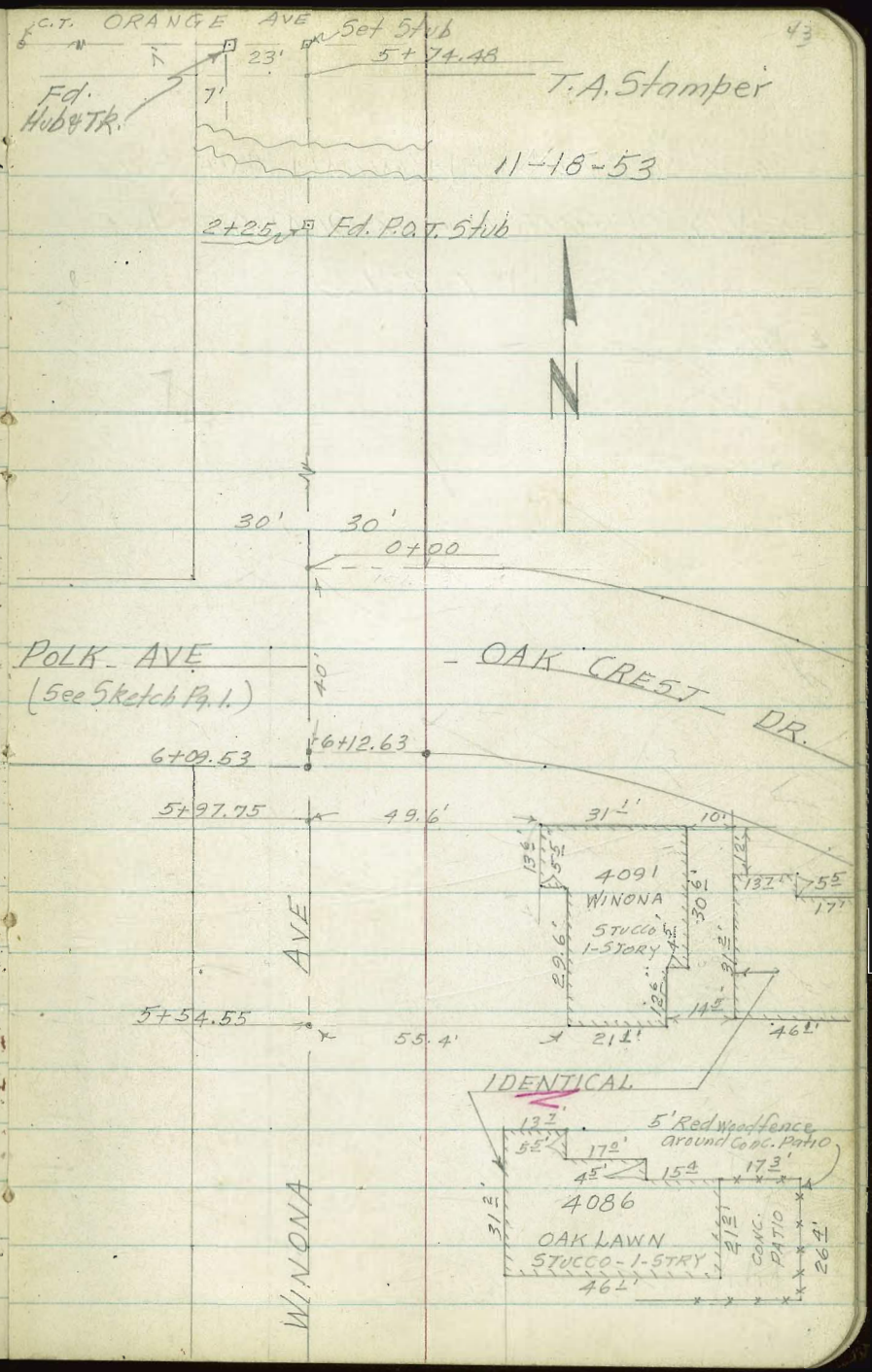
Tie Sheet 3664

See Sketch Pg. 2, T. Pt. Book No. 23

Additional Topographic Features S.E. Cor. Oak-Crest & Winona For Proposed Widening

NOTE: It seems as though Patio Attached To House No. 4086 Possibly Encroaches on 5' ly. Prop. Line of Oaklawn; I do Not have Curve data to check

T.A.S.



Ref T.Pt. #23
Tie Sheet No 3664

11-18-53

Stamper
Huffman
Nordahl
Sherry

(44)

CROSS SECTIONS WINONA AVE FROM 225' N'LY. OF POLK AVE TO ORANGE AVE

W.O. 32129

Lt. ℄ Rt.

NOTE: Rods Shown Thus (-0.0) are Plus & are to be added to H.I.

(See Sketch Pg. 1)

Sta.		Wly Lt.	℄	Rt. Ely
				337.4 / 2.7 / .50
2+75				334± / 6.0 / 75
				329.5 / 10.6 / 100
	+0.41	340.11	℄ 340.11	
TP.		-12.69	339.70	
				341.0 / 1.4 / 50
2+45				337.2 / 15.2 / 75
				333.9 / 18.5 / 100
NOTE: See Pg. 17 For Sections Previously Taken			℄ 352.39	
B.M.	+6.67	352.39	345.72	S.W. Disk Prop Polk & Winona

11-18-53

X-SEC'S WINONA ST CONTD.

	Lt Wly.	℄	Rt. Ely.
	+6.51 335.00		
T.P.	-11.62 328.49		
		327.1	322.9 318.4
3+50		13.0	17.2 21.7
		0 50	75 100
		330.2	327.4 323.6
3+25		9.2	12.8 16.5
		0 50	75 100
		334.1	330.5 326.4
3+00		6.0	9.6 13.7
		0 50	75 100
	340.11	℄ 340.11	

X-SEC'S WINONA ST. CONT'D.

11-18-53

	Lt. Wly				℄							Rt. Ely.
	338.1	333.9	322.6	323.8	323.4	319.5	312.1	311.4	309.9	308.5	308.9	
4+25	(-7.6)	(-3.4)	7.9	6.7	7.1	11.0	18.4	19.1	20.6	22.0	21.6	
	90	65	30	21	10	0	25	30	56	75	100	

△ 330.54

	+6.23	330.54	
T.B.M.		-10.69	324.31

15'± Wly Sta 4+25 Top Stab

	339.2	335.8	334.4	327.1	326.4	317.9	313.0	307.7	307.0
4+00	(-4.2)	(-0.8)	0.6	7.9	8.6	17.1	22.0	27.3	28.0
	75	50	30	24	0	30	50	80	125

	342.0	338.0	335.6	335.2	331.2	329.8	329.5	329.3	326.2	324.5	319.5	316.2	311.0	308.3
3+75	-7.0	(-3.0)	(-0.6)	(-0.2)	3.8	5.2	5.5	5.7	8.8	10.5	15.5	18.8	24.0	26.7
	75	50	30	27	19	13	0	8	20	30	60	75	105	130

335.00

△ 335.00

11-19-53

X-SEC'S WINONA ST. CONT'D.

Wly. Lt. — ℄ — Rt. Ely

5+00

330.1 326.5 311.2 310.7 314.7 | 312.0 310.1 310.7 311.9 322.4

(-5.1) (-1.3) 13.3 14.5 10.5 | 13.2 15.1 14.5 13.3 2.8

110 93 50 30 18 | 6 0 25 30 60

Toe Toe | Toe Top Canyon

4+75

331.7 323.9 312.9 312.9 313.2 318.1 | 317.2 313.3 310.5 310.4 304.8 319.0 319.8

(-6.5) 1.3 12.3 12.3 12.0 7.1 | 7.5 11.9 14.7 14.8 20.4 6.2 5.4

100 75 42 35 30 19 | 10 0 10 30 51 78 100

+6.49 325.69 | ⊼ 325.69

TP -11.84 318.60 (7 written above the 8)

4+50

325.2 325.5 318.4 320.4 | 320.1 313.2 310.3 305.5 309.2 309.1 313.0

0.6 5.0 12.1 10.1 | 10.4 16.8 20.2 21.1 20.8 21.9 17.5

75 60 30 25 | 12 0 6 30 50 80 100

Toe

330.54 | ⊼ 330.59

11-19-53

X-SEC'S WINONA ST. CONT'D.

	Wly Lt					℄			Rt. Ely
	327.2	327.5	327.5	327.3	327.1	327.2	327.2	327.4	
5+74.48 Sly Line Orange Ave	3.5	3.7	4.3	4.9	5.4	5.3	5.4	6.1	
	135	100	66	30	24	0	30	70	
	325.6	325.3	322.0	324.6	326.0	325.2	326.2	325.1	325.5	325.0	
5+52 Top Nly Canyon Rim	2.6	6.9	10.2	17.6	16.2	6.5	5.4	5.9	7.0	6.7	7.2
	140	121	104	70	56	30	26 Top	0	30	45	71 @ Bldg.
						∧ 332.23					
T.P. +7.30	332.23 - 0.26	324.93									
	324.7	321.0	321.2	320.4	320.2	323.5	320.5	321.6	322.5	323.7
5+20 Toe Sec. Canyon Floor	(-2.9)	4.2	13.0	14.8	14.9	11.7	14.8	14.7	3.6	1.6	1.5
	115	85	57 Toe	30	20	9	0	11 Toe	30	40 Top	70 @ Bldg
						332.7	330.1				
						(-6.9)	(-4.9)				
						140	135				
5+20 4+ Rt. ℄ Outlet. 48" R.C.P. Storm Drain									309.7		
									16.12		
									4+		
									F.L. 48" R.C.P.		
	325.19					∧ 325.19					

11-19-53

X-SEC'S WINONA ST. CONTD.

	W'ly Lt.	&	Rt. E'ly
5+87 ℄ 24" R.C.P. & Grate Inlet Cover 21 5 Lt.	323 Rt. 8.92 21 5 Inlet Elev 24" R.C.P.		
5+88 ℄ F. Hydrant. 34 2' Rt.			
5+87 33 5' Lt. ℄ P.P. No 4949			
5+85 N'ly Edge Sidewalk 38' Rt.			327 32 4.91 38 Lt Top S.W. / 327 44 5.12 48 Lt S.W.
5+80 S'ly Edge Sidewalk 38' Rt.			327 38 4.89 38 Lt Top S.W. / 327 44 5.07 48 Lt S.W.
5+79 48 S'ly End E.C. Curb Inlet 18° Lt.	327 43 4.80 18° Top Cb. / 327 31 5.02 18° Gut.		
	332.23		332.23

11-19-53

X-SEC'S WINONA ST. CONT'D.

			Wly. Lt.	℄	Rt. Elv.
B.M.	-3.51	328.72 ±	328.75 Spike S.W.P.P. Orange & Winona		
6+14.48 ℄ Orange Ave			328.4 / 3.8 / 100	328.4 / 4.0 / 75	328.2 / 4.3 / 50
			327.7 / 4.3 / 25	327.7 / 4.3 / 0 Edge Oil	327.7 / 4.5 / 25
			327.4 / 4.8 / 50	327.0 / 5.2 / 75	326.5 / 5.7 / 100
5+89.48 B.C. Curb Inlet		28.1' Lt.	326.2 / 5.3 / 50 Gut	326.2 / 5.5 / 30	325.52 / 4.67 / 28.1 Top Cb.
℄ S			326.0 / 5.83 / 28 Gut.	327.0 / 5.2 / 0	
			326.2 / 3.9 / 75 Top	326.2 / 5.0 / 75 Gut.	327.1 / 4.5 / 50 Top
5+89.48 S/y Curb Face Orange Ave.		37.6' Rt.	327.0 / 5.2 / 0	326.8 / 5.4 / 30	326.28 / 5.45 / 37.6 Gut.
			327.27 / 4.96 / 37.6 Cb	326.5 / 5.63 / 47.6 Gut	
	332.23		332.23	327.0 / 5.13 / 47.6 Cb	326.02 / 6.20 / 75 Gut.
				326.54 / 5.69 / 75 Cb.	

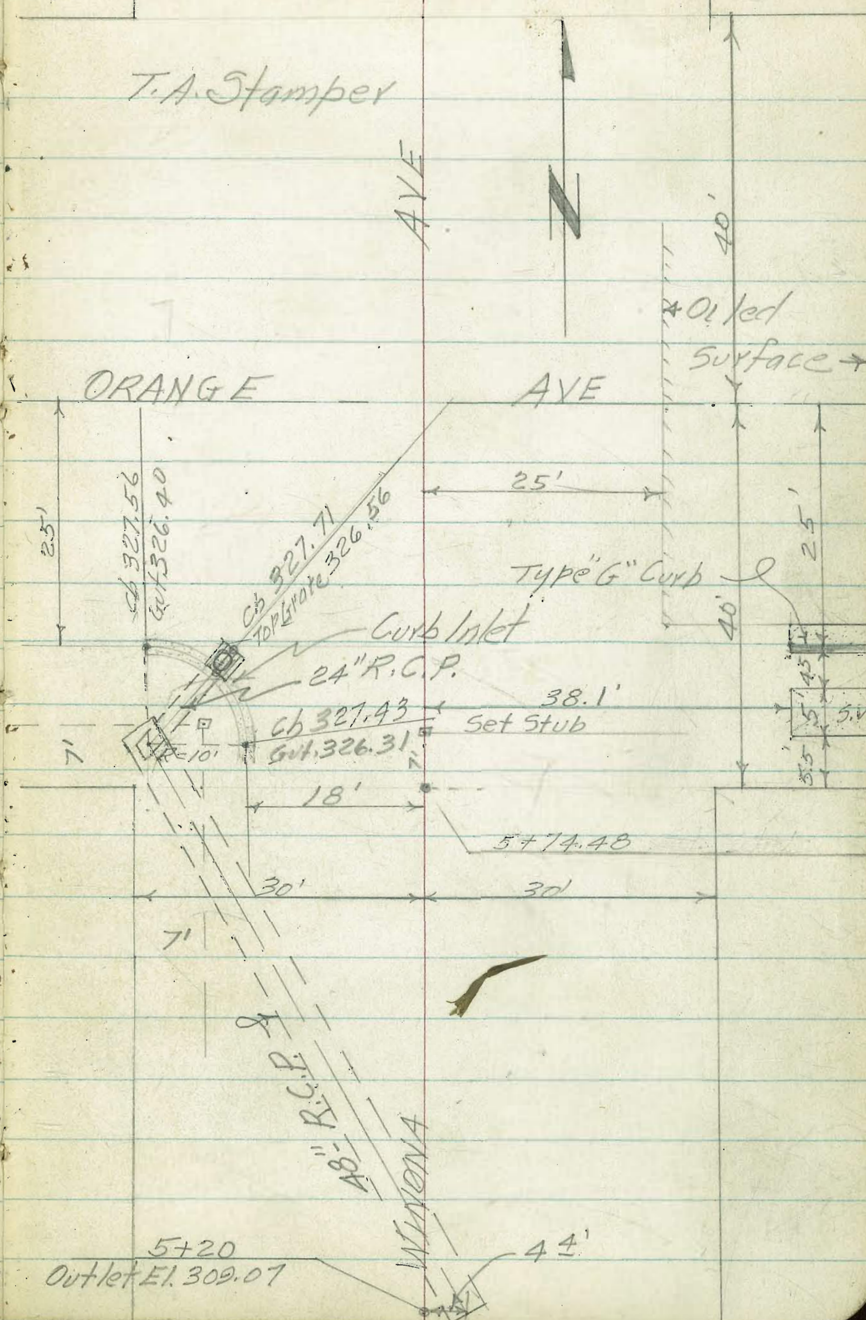
INTERSECTION DETAILS ORANGE & WINONA AVES. W.O. 32129

NOTE: 24" R.C.P. Extends down on Approx. 45° Angle from ℄ of Grate for 12.5'± to Junction With 48" R.C.P.; Thence SELY. To Outlet @ Sta. 5+20 - Rt. 4.4'

additional notes reduced Nov. 20, 1953
L. Birdsell

11-19-53

T.A. Stamper



8+40.6 = 27.76 Lt. - 1¼" Pipe RE. 41.19

of Olive Tree - end of Row of Trees.

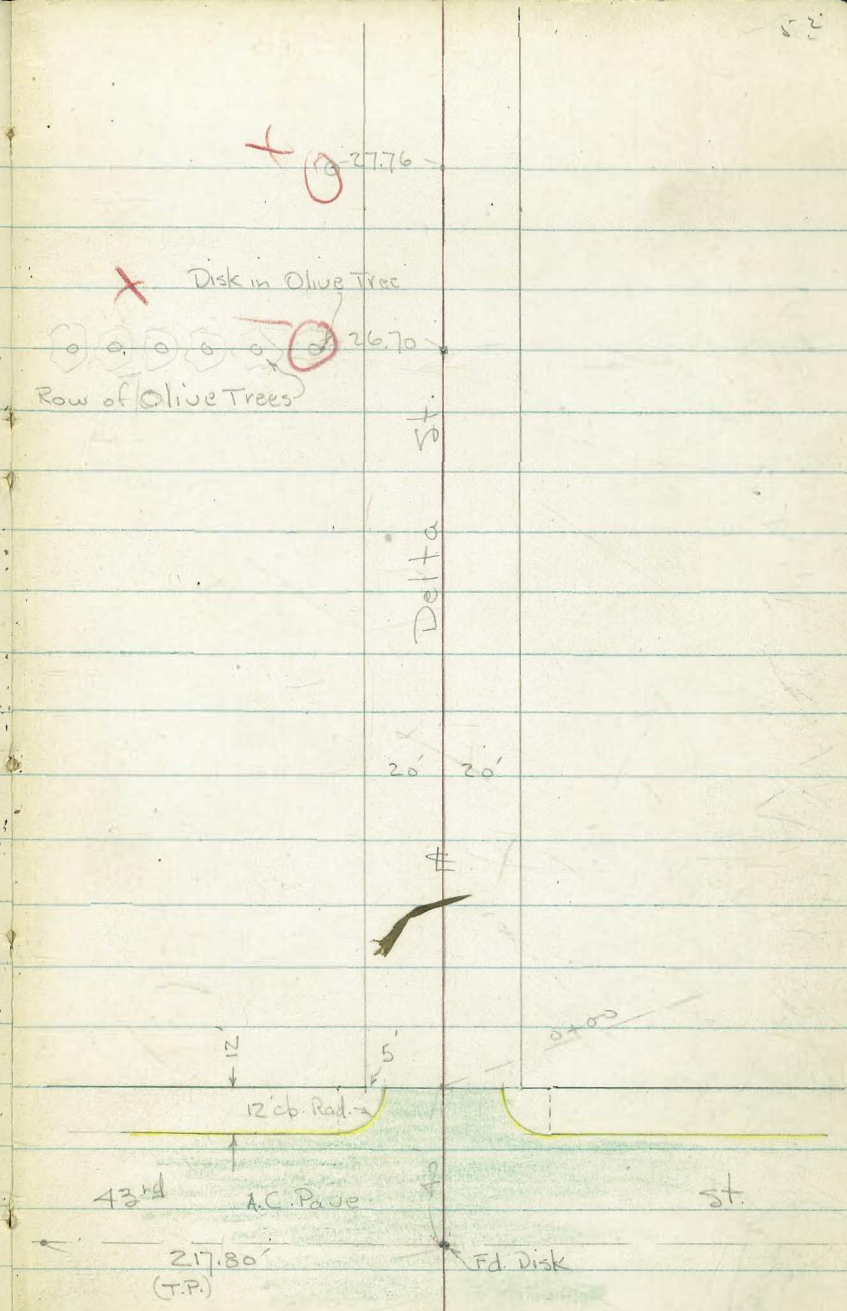
4+48.51 = P.O.T. Hub. - 26.70 Lt. = Disk in Sly. Trunk

See T.P. Sheet 416 - 4923-B + 3159-B

T.P. Book 24 - Pages - 22-23 + 24

0+00 = E.L. of 43rd

Fd. City Disk in Conc. - Replacing ct. Shown in T.P. 24 - P. 23



16+11.49
-12 95 92
3 15.57

17+33.80 - 29.98 Lt. - 3/4" pipe - R.E. 6170

16+11.49 = P.O.T. Hub

15+61.3 - 16.07 Lt. - 1/2" Iron pin

15+59.5 - 29.96 Lt. - 3/4" pipe - R.E. 6170

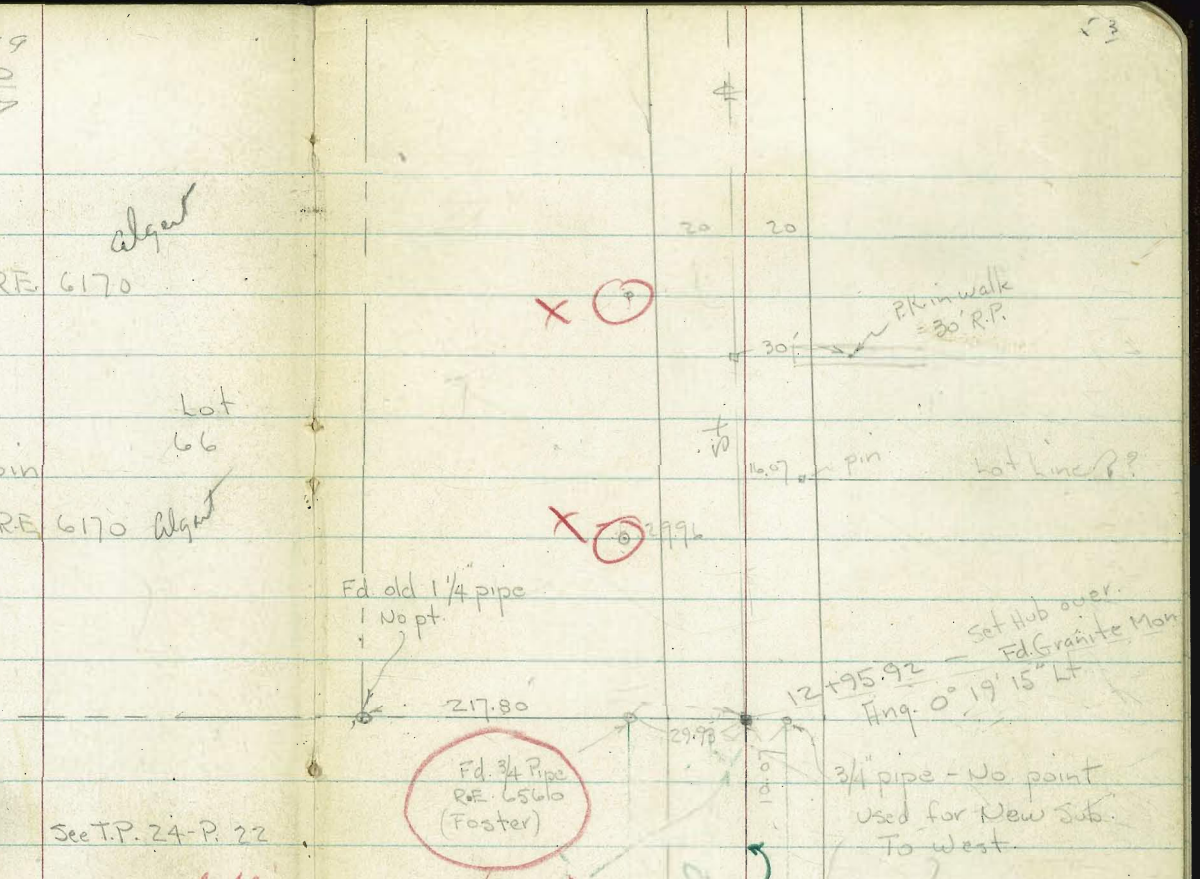
Note: ℄ of County Road Survey was established by deed as 13.2 rods = 217.80' from North line of Lots 69 & 70 Map 283
width of road = 40'

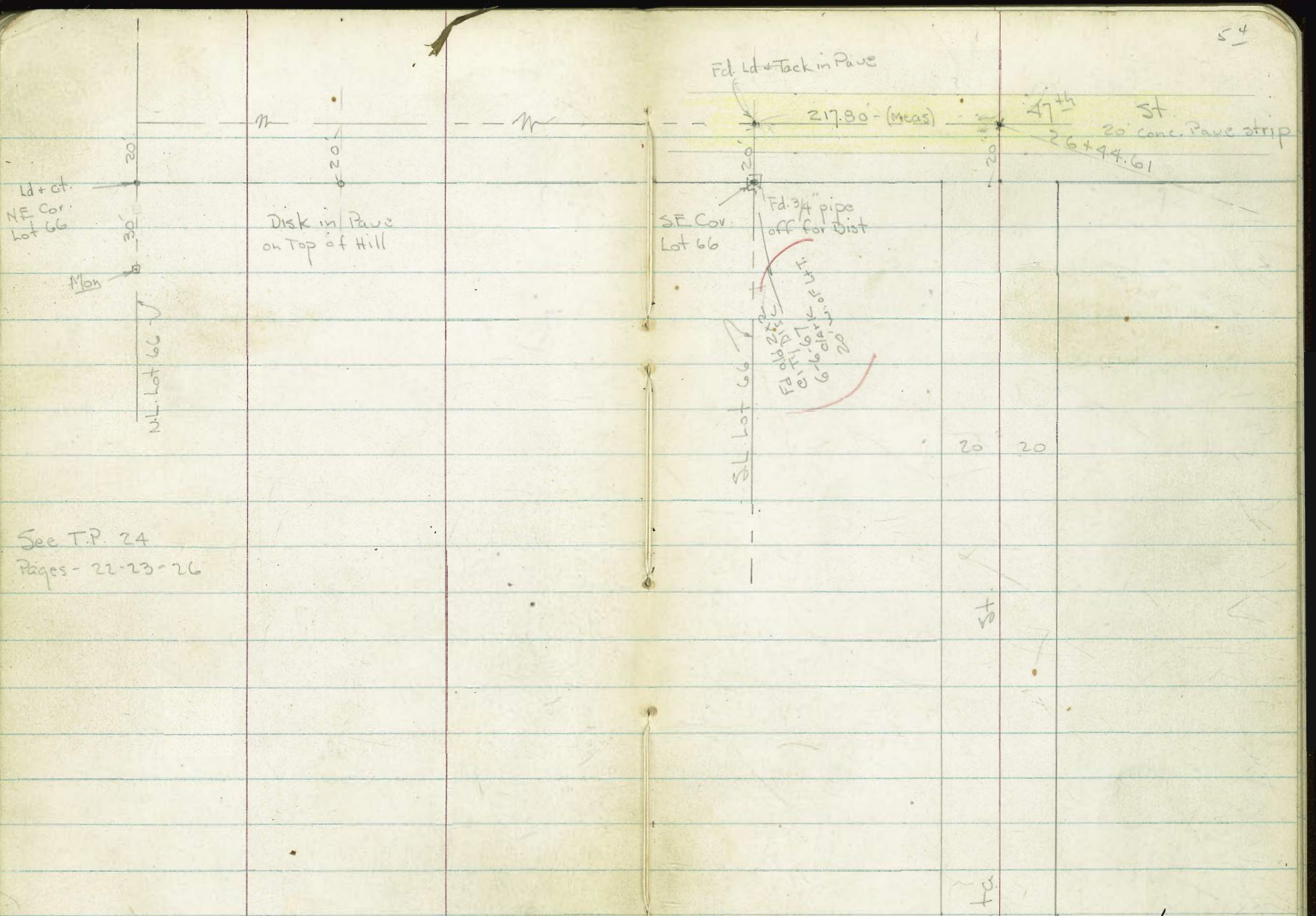
See Record of Survey No. 1046
1370

Deed holds over incorrect position of private surveyors monument

See T.P. 24-P. 22

Note. Deeds held use 217.80' as per original deeds.
See D.B. 310
pages 419-423





See T.P. 24
Pages - 22-23-26

Del Id.

Set Tie Points & X-Section - Delta St.
43rd to 47th - See Sketch - P. 52-54
W.O. 25020 - 5-20-54 - 7.0.

3+00

2+91 - 13.2' Lt. = ℄ P. pole # P-75851

2+50

2+00

1+50

1+00

0+90 - 19' Lt. - Beg ℄ Row of Palm Trees.

0+55

0+39.5 - 9.6' Lt. = ℄ P. Pole # T.P. 171429

0+30 - 9.3' Lt. = ℄ inlet 18" Cor. iron pipe ℄ - outlet 5.5' Conc. Head wall 12" wide Not found

0+00 = E.L. of 43rd = edge of A.C. pave ℄ cbs.

0-12 - E. cb. Line

BM. = NE. B.P. - Delta & 43rd 58.00

5.1

Lt.		℄		Rt.	
68.8	67.6	63.9	63.8	62.7	63.4
30	15	7		20	30
63.8	63.5	62.0	62.1	61.1	61.7
30	15	9		20	30
63.0	61.9	59.8	60.2	59.0	59.9
30	15	9		20	30
62.8	61.4	58.3	58.7	57.5	57.7
30	20	9		20	30
62.1	60.6	56.9	57.3	56.2	56.2
30	20	9		20	30
56.0	55.9	56.3	56.2	55.3	55.5
30	20	10		20	30
55.1	54.6	56.09	53.63	55.8	55.2	55.3
30	15	Top wall	93 = I.E. of inlet.		15	30
57.3	56.60	56.05	55.51	55.14	55.81	54.7
30	Top	15.1 gut		15.1 gut.	Top = end cb.	30
59.42	58.78	57.99	57.39	57.00	55.70	54.67	54.31	54.90	53.14	53.76
Top	50 gut.	Top = P.C.	27 gut.	20		20	27 gut.	Top = P.C.	50 gut.	Top

Actual Elev. shown.

Delta

	Lt.			℄		Rt.	
7+55	59.0	58.3	54.6	52.6	53.2	53.2	53.0
	35.8 = By Conc. Block wall	25	12	8		20	30
7+11 - 20.1 Rt. = end walk form							54.71 = Top of form 20.1
7+00 = BM. = 60.24.	66.1	64.5	58.5	55.1	55.0	54.8	55.33	55.2
	35	25	15	8		18	20.1 form	30
6+59 - 14' Lt. = ± P. pole # P. 472459								
6+50	65.3	64.5	60.0	56.9	56.8	56.7	57.88	56.8
	35	25	15	8		18	20.1 form	30
6+00	65.2	64.0	62.0	59.6	59.1	58.9	59.82	58.8
	30	20	12	8		18	20.1 form	30
5+50 - New Houses + Gar. are Lower than walk grade as staked.	68.2	67.8	61.5		61.3	60.9	61.86	61.2
	30	20	8			18	20.2 form	30
5+30 - 15' Lt. = ± P. pole # P-75852 N. for New Houses								
5+29 - 20.2' Rt. = Beg. edge of Walk + cb. forms							62.75 = Top of 20.2 walk form.	
5+00	71.6	70.8	63.2		63.3	63.4	63.6	
	30	20	8			20	30	
4+50	73.0	72.2	70.0	65.3	65.2	64.6	65.0	
	30	20	12	6		20	30	
4+16 - 19' Lt. = end ± of Row of Palms								
4+00	73.7	72.9	70.7	65.8	65.7	65.5	65.5	
	30	20	12	6		20	30	
3+50	72.8	71.7	70.4	65.0	65.3	64.7	64.9	
	30	20	12	6		20	30	

Delta

10+85 = 32.3' Rt. = ℄ 8' Conc. Dr.

10+50

10+35 = 33.5' Rt. = ℄ 8' Conc. Dr.

10+00

Set. BM = U in N.E. end of Head wall 43.01

9+78.5 = end Headwalls

Note: 6"x6" Guard rails along inside of Both walls

9+68 = ℄ Ely. Culvert.

9+57 = ℄wly. Culvert

□ = Sect. of Culverts.

9+46.5 = Beg. 8' Conc Headwalls to Double - 4' High

9+00 = 52.2' Rt. = floor of New Gar. - lowest of New Houses.

8+50

8+40 = 35.8' Lt. = end wall

8+41 = 22' Rt. = ℄ Guy Pole

8+40.5 = 14' Lt. = ℄ P. pole # 75853

8+00

57

Lt.	℄	Rt.
		50.50 50.96 32.3 47.5 Dr. floor gar.
39.2 45.5 45.9 46.1 47.4 40 15 20 30 ℄ Stream		
		45.42 46.00 33.5 48.4 Dr. floor gar.
38.5 42.4 44.0 44.3 44.3 44.4 35 20 15 20 30 ℄ Stream		
39.0 39.5 43.01 43.8 44.0 43.5 42.68 39.7 38.5 40 21 20 15 15 20.2 21 30 ℄ Stream N. face S. face		
38.15 I.E. of inlet		37.64 I.E. of Inlet.
38.20 I.E. of Inlet		37.63 I.E. of outlet
40.7 40.7 43.16 43.9 44.0 42.80 40.3 38.9 40 21 20.1 15 20= 21 30 N. face of wall S. face of wall		
42.3 43.2 44.9 44.9 44.0 43.6 44.15 35 18 12 20 30 52.2 floor		
48.6 47.1 46.6 46.8 45.7 45.5 35 20 8 20 30		
50.2 35.8 By wall		
51.9 51.2 50.0 50.0 49.6 49.0 30 20 8 20 30		

Delta

13+37 - 23.1' Rt. = ± 8' Conc. Dr.

13+25 - Thru 14' Conc. Dr. on Lt.

12+95.92 = Ang. Pt. = Wly. of Conc. Water M.H.

12+83 - 23.9 Rt. = ± 11' Conc. Dr.

B.M. - 61.01

12+95.5 - 21.5' Lt. = ± P. pole # P 473296

12+50

12+07 - 28.5' Rt. = ± 8' Conc. Dr.

12+00

11+86 - 29.9' Rt. = ± 8' Conc. Dr.

11+50

11+34 - 31' Rt. = ± 8' Conc. Dr.

11+31 - 18.5' Lt. = ± P. pole # P 75854

11+00

58

Lt.	℄	Rt.
		63.23 23.1 Dr. — 63.31 43.1 floor
62.31 50 Dr. — 62.01 30.2 Dr. — 61.7 20	62.2	61.9 8 — 62.9 12 — 63.2 30
60.0 40 — 60.6 20 — 60.90 5.1 Conc. M.H. — 60.97 1.1	60.9	61.0 12 — 62.0 15 — 62.8 30
		62.09 23.9 Dr. — 62.62 43.9 - floor gar.
56.2 40 — 57.4 20	58.1	58.1 10 — 61.1 25 — 61.4 30
		60.43 28.5 Dr. — 61.00 40
53.2 40 — 54.1 20	55.0	55.2 10 — 57.6 20 — 59.9 30
		58.77 29.9 Dr — 60.19 45 floor
49.0 40 — 50.8 20	51.5	51.7 10 — 53.9 20 — 55.0 30
		56.50 31 Dr — 58.30 46 = floor gar.
39.1 45 ± Stream — 48.0 18	48.2	48.4 15 — 51.0 20 — 52.5 30

16+25 - 24.9 Lt. = Beg. Conc. cb.

16+11.5 - 15' Rt. = ℄ 3' Conc. walk - 70.22 = P.K.

16+00 - 33.3' Lt. = Cyclone Fence

15+59 - 21.5' Lt. = ℄ P. pole # P 472523

15+50

15+00

14+50

14+30 - 21' Lt. = ℄ P. pole # P 75855

14+04 - 5' Rt. = ℄ Sewer M.H. 65.09 = Sly Rim

14+00

13+87 - 24.3' Rt. = ℄ 8' Conc. Dr.

13+65 = Wly. of 8' Conc. Dr. on Lt.

13+49 - 15' Rt. = ℄ Tel. pole # 605317-H

59

Lt.	℄	Rt.
71.08 Top	70.5 24.9 Gut	
		70.55 15 walk
		70.22 30 = on P.K. R.P.
72.9 40	71.5 30	69.7 20
		69.8 10
		70.4 20
		69.4 30
68.7 40	68.8 30	68.4 20
		68.8 10
		68.5 20
		68.2 30
67.7 40	67.7 30	67.0 20
		67.6 15
		67.7 30
66.9 40	66.9 30	65.7 20
		66.3 15
		65.9 30
65.2 40	65.2 30	64.4 15
		64.9 10
		64.6 20
		64.5 30
		64.31 24.3 Dr
		64.34 43 - floor gar
64.30 50	63.97 31.7 Dr.	63.2 15
		63.8 10
		63.4 20
		63.8 30
		63.7

Station	Lt.	℄	Rt.
20+29 - 24' Lt. = ℄ P. pole # P 75857			
20+00 - 11.3' Rt. = Conc. Block wall - under Const. across Lot. to S. on Rt. 2'x1.5' Conc. Box & grate - 2 - 8" V.C. Pipes wandering	68.7 / 40, 67.1 / 25, 67.7 / 20	67.7	66.7 / 10, 66.1 / 20, 65.9 / 30
19+63.5 - cross 18' Cor. Iron Culvert	65.40 I.E. of Inlet, 68.36 22.8 Top ℄ of 6' Conc. Headwall		Top Box 67.48 10.5 = ℄ 2'x1.5' Box, 64.84 I.E. of Pipe
19+50	69.0 / 40, 67.9 / 20	67.8	66.9 / 10, 64.6 / 30
19+10 - 24.4 Lt. = ℄ P. pole # P 77763			
19+00	71.1 / 40, 68.0 / 28, 67.9 / 20	67.8	67.5 / 5, 64.9 / 15, 63.3 / 30
18+50	71.9 / 40, 71.0 / 30, 68.2 / 20	68.2	68.0 / 5, 63.5 / 18, 63.5 / 30
18+00	69.9 / 40, 69.4 / 30, 68.3 / 20	68.5	68.3 / 7, 65.8 / 20, 62.8 / 30
17+50	70.2 / 40, 69.5 / 30, 68.9 / 20	69.0	68.5 / 10, 65.5 / 20, 64.0 / 30
17+29 - 22.4 Lt. = ℄ P. pole # P. 75856			
17+00	71.4 / 40, 70.7 / 30, 69.4 / 20	69.8	69.4 / 10, 67.7 / 20, 67.0 / 30
16+82 - 25.8' Lt. = end cb.	71.10 Top, 70.6 25.8 gut		
16+50	71.9 / 40, 71.37 Top cb, 70.8 / 25.2, 70.1 / 15	70.3	70.1 / 10, 70.8 / 20, 70.1 / 30

24+50

24+42 - 8.5' Rt. = ℄ Headwall outlet - 24" pipe & 10' Rock
8' Conc. Head wall - 10' wide

24+42 - 30.5' Lt. = ℄ inlet of 24" Cor Iron pipe &

24+17 - 9.5' Lt. = ℄ Sewer M.H. 66.10 N. Rim

24+00

23+50

23+30 - 25' Lt. = ℄ P.pole # P-75858

23+00

22+50

22+30 - 24.5' Lt. = ℄ P.pole # P 177664

22+00

21+50

21+00

20+50 - 11.4' Rt. = wall

Lt.		℄		Rt.		
63.0	63.2	66.4	66.5	66.4	62.8	62.2
40	30	20		5	10	30
				64.85		60.17
				8.5		I.E. of
				Top wall		outlet.
	61.30	64.15				
	I.E. of	30.5 = Top				
	Inlet	wall				
63.6	63.6	65.5	65.4	65.3	60.6	59.1
40	30	20		3	15	30
67.8	67.2	66.0	65.9	65.7	59.2	58.2
40	30	20		5	25	30
72.3	71.4	67.9	67.8	67.8	64.3	62.2
40	30	20		5	15	30
72.1	71.0	69.5	69.0	68.6	65.6	63.1
40	30	20		5	20	30
71.3	70.5	69.1	69.4	68.8	68.6	
40	30	20		15	30	
70.0	69.2	68.5	68.8	69.0	69.2	
40	30	20		15	30	
68.5	68.0	68.0	68.3	67.9	67.7	
40	30	20		15	30	
68.2	67.2	67.6	67.9	67.2	67.0	
40	15	20		10	30	

Lt. ℄ Rt.

Set B.M. in S.W. Pole - 47th & Delta 82.35

26+34.4 = W. edge of Conc. Strip Pave - 20'

80.50 81.68 82.00 82.28 82.74 83.70 85.11
50 30 15 15 30 50

26+24.6

81.6 82.2 81.0 81.7 81.8 82.0 83.7
40 35 30 12 15 30

26+00

25+53 - 26.2' Lt. = ℄ P. pole # J.P. 272385 = B.M. = 75.60

80.5 80.7 78.7 79.9 79.4 79.1 80.1 83.8
40 30 25 12 5 10 30

25+50

75.1 74.8 74.1 74.8 74.4 76.6 81.9
40 30 25 12 10 30

25+00

65.9 68.5 69.5 69.5 69.9 70.4
40 30 20 15 30

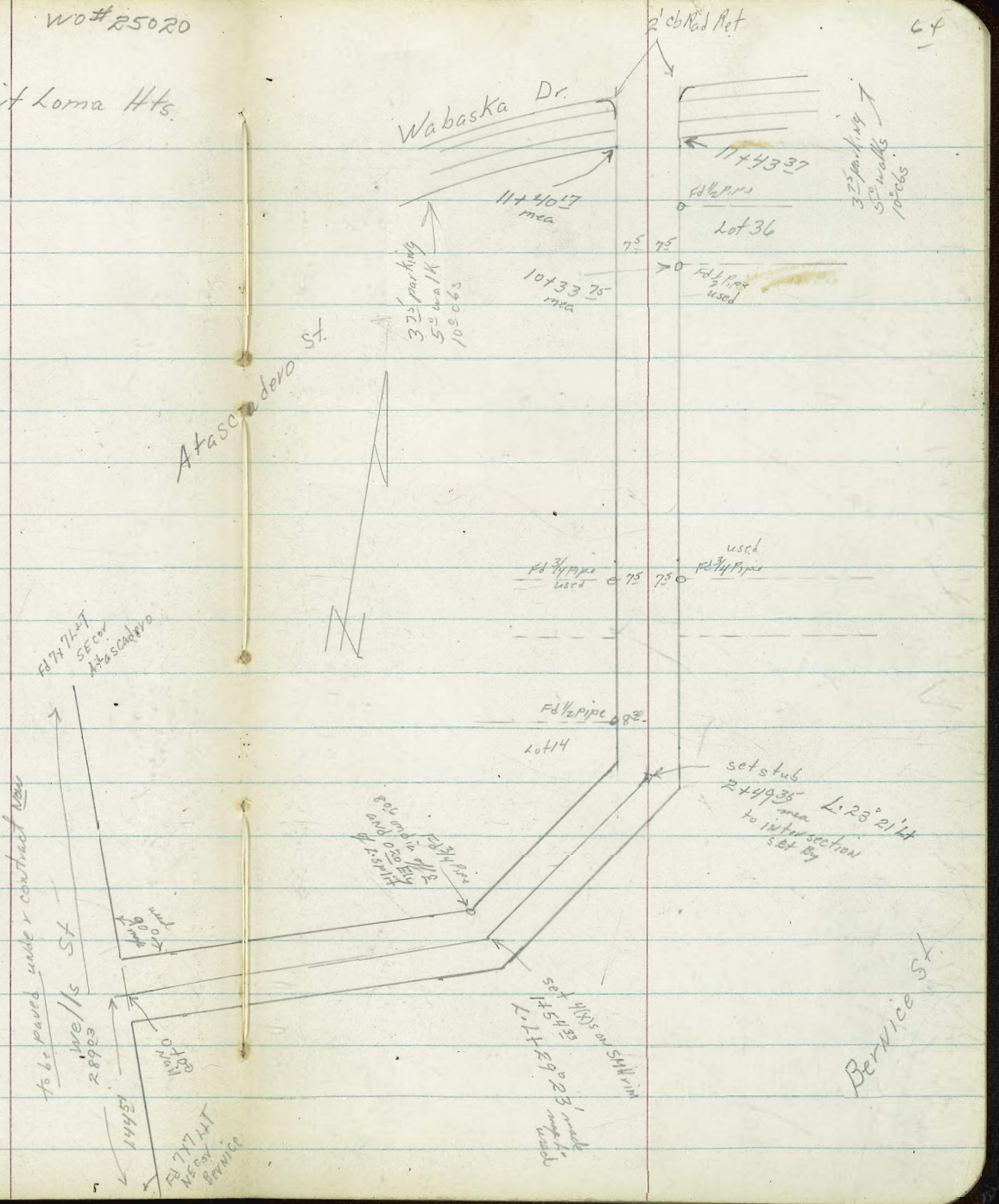
D. Smith
J. Rorer
R. Hamilton

INDEXED
NOV 2

WO# 25020

"X" Sec Alley Block C Point Loma Hts.

Ref: File Map # 1523



TP.	0.36	161.58	11.01	161.22 Nail in P Pole 1+00 7' Lt #A3985

1+00 7' Lt ℄ 10" P Pole # A3985

0+86 7' Lt ℄ double garage con. floor & apron (flat)

0+75

0+50

0+22 7' Lt ℄ deadman

0+20

0+02 6.4 Lt ℄ 10" tel Pole # 4935 10 H

0+00 Ely Wells St

For Wells St see paving plans under const

BM #4 FB2189-20	4.04	172.23		168.19 NE 7' Lt Berniece & Wells

Lt = Wly & Nly ℄ Rt = Ely & Sly

Sta.								
1+00	14.5 / 15 — 167.7	12.5 / 7.5 — 159.7	12.3 — 160.0	11.9 / 6 — 160.3	11.1 / 7.5 — 161.1	7.5 / 17 — 164.7		
0+86	11.5 / 20 — 160.7	11.3 / 7.5 — 160.9	10.5 / 3 — 161.7	10.2 — 162.0	9.8 / 6 — 162.4	9.2 / 7.5 — 163.0 apron	6.5 / 16 — 165.7	11.80 / 7 — 160.43; 12.03 / 12.2 floor
0+50	9.4 / 20 — 162.8	8.9 / 10 — 163.4	7.5 / 7.5 — 165.7	7.2 — 165.0	6.9 / 6 — 165.3	6.0 / 7.5 — 166.2	3.8 / 12 — 168.4	3.5 / 20 — 167.7
0+20	5.4 / 15 — 166.8	5.1 / 7.5 — 167.1	5.2 — 167.0	5.0 / 6 — 167.2	4.2 / 7.5 — 168.0	3.3 / 12 — 168.9	2.9 / 20 — 169.3	
0+00	4.92 / 7.5 CB — 167.31	5.5 / 7.5 gut dirt — 166.7	5.2 — 167.0	4.7 / 7.5 gut dirt — 167.5	3.82 / 7.5 CB Broken to be replaced — 168.41			

∇ 172.23

2+75'

2+49 ^{35} ∠ Lt 23° 21' on split

2+42 4.2 Rt ℄ SMH

Tr₂	0 ^{47}	148 ^{78}	13 ^{27}	148 ^{31}	on S.M.H. rim

2+25'

2+00

1+95' 4.5 Lt ℄ 12" pole # PA 3975

1+90 6.5 Lt ℄ 6" Tree

1+75'

1+72 4.2 Lt ℄ deadman

1+54 ^{33} ∠ Lt 29° 23' taken on split

1+25'

Lt = N'ly + W'ly ℄ Rt = E'ly + S'ly

141.5	141.3	140.5	140.6	140.9	141.4
7.3 / 7.5	7.5 / 5	8.3 / 3	8.2	7.2 / 7.5	7.4 / 13
146.6	146.2	145.6	146.0	145.8	145.6
2.3 / 10	2.6 / 7.5	3.2	2.8 / 5	3.0 / 7.5	3.2 / 10

⊼ 148 ^{78}

13 ^{27}
4.9 rim

150.0	150.4	150.1	150.4	150.3
11.6 / 15	11.2 / 7.5	11.5	11.2 / 7.5	11.3 / 15

153.6	153.8	153.6	152.9	153.4	154.0
8.3 / 15	7.8 / 7.5	8.0 / 3	8.7	8.3 / 7.5	7.6 / 10

156.0	156.4	156.4	155.8	155.8	156.3	156.6
5.6 / 15	5.3 / 7.5	5.2 / 5	5.8 / 2	5.8	5.3 / 7.5	5.0 / 9

157.6	158.1	158.27	158.4	158.9
4.0 / 7.5	3.5 / 2	3.31 rim SMH	3.2 / 5	2.7 / 7.5

158.6	158.9	159.2	159.4	159.8	159.9
3.3 / 15	2.7 / 7.5	2.4	2.2 / 6	1.8 / 7.5	1.8 / 8

⊼ 161 ^{58}

5+00				
4+50				
4+33 5^{8} Lt ℄ 12" P.Pole #PA3935				
4+27 3^{5} Lt ℄ 10' rough con drive only				
4+00				
TP_4	0^{54}	123^{74}	13^{08}	123^{20}
3+50				
3+25				
3+14 5^{3} Lt ℄ 10" P.Pole #PA3955				
TP_3	0^{47}	136^{28}	12^{97}	135^{81} — Nail in P.Pole #PA3955 3+14 5^{3} Lt
3+00				
2+96 4^{8} Lt ℄ deadman				

Lt = Wly ℄ Rt = Ely

115.4 115.8 115.8 115.4 115.3 115.0 115.4 115.4 115.6
8^{3}/15 7^{9}/7.5 7^{9}/5 8^{3}/4 8^{4} 8^{2}/5 8^{3}/6 8^{3}/7.5 8^{1}/15

118.1 118.2 118.6 118.1 118.3 118.6 118.8
5^{6}/15 5^{5}/7.5 5^{1}/5 5^{6}/3 5^{4} 5^{1}/7.5 4^{9}/15

121.54 121.42 120.65
2^{20}/8.0 2^{32}/7.5 3^{09}/3.5

123.7 123.4 123.4 122.4 122.3 122.4 123.0 123.2
0^{0}/15 0^{3}/7.5 0^{3}/5 1^{3}/2 1^{4} 1^{3}/7.5 0^{7}/10 0^{5}/15

HI 123^{74}

130.6 128.0 127.4 127.4 127.6
5^{7}/9 8^{3}/7.5 8^{9} 8^{2}/7.5 8^{7}/15

131.3 131.1 130.8 130.8 131.6
5^{0}/15 5^{3}/7.5 5^{4} 5^{4}/7.5 4^{7}/7.5

HI 136^{28}

137.3 135.4 135.7 135.6 136.4 136.7
11^{5}/7.5 13^{3}/3 13^{1} 13^{2}/7.5 12^{3}/10 12^{1}/15

HI 148^{78}

TP_6	0^{41}	99^{46}	12^{87}	99^{05}	Nail in Pole
7+94	6^2 Lt ℄ 10" P Pole # PA 3875				
7+50					
7+07	℄ SMH				
7+00					
6+72	6^4 Lt ℄ 12" P Pole # JPA 3895				
6+50					
6+00					
TP_5	0^{28}	111^{92}	12^{10}	111^{64}	
5+75					
5+53	6^4 Lt ℄ 12" P Pole # PA 3915				
5+50					

Lt = Wly ℄ Rt = Ely

99.8 99.6 99.5 99.6 99.7
$\frac{12^1}{15}$ $\frac{12^3}{7^5}$ 12^4 $\frac{12^3}{7^5}$ $\frac{12^3}{15}$

100.72
11^{20} SMH

101.9 102.3 102.3 101.3 101.3 (SMH rim) 101.7 101.4
$\frac{10^0}{15}$ $\frac{9^6}{12}$ $\frac{9^6}{7^5}$ $\frac{10^6}{4}$ 10^6 $\frac{10^2}{7^5}$ $\frac{10^5}{15}$

105.2 104.9 103.9 104.0 104.2 103.9
$\frac{6^7}{15}$ $\frac{7^0}{7^5}$ $\frac{8^0}{5}$ 7^9 $\frac{7^7}{7^5}$ $\frac{8^0}{15}$

109.1 109.1 107.9 107.7 107.5 107.8 107.8 108.8
$\frac{2^8}{10}$ $\frac{2^8}{7^5}$ $\frac{4^0}{4}$ 4^3 $\frac{4^4}{4}$ $\frac{4^1}{5}$ $\frac{4^1}{7^5}$ $\frac{3^1}{15}$

HI 111^{92}

111.3 111.2 110.6 110.5
$\frac{12^4}{15}$ $\frac{12^5}{7^5}$ $\frac{12^9}{4}$ 13^1 $\frac{13^4}{5}$ $\frac{13^2}{7^5}$ $\frac{13^3}{15}$

113.5 113.7 112.9 112.7 112.4 113.1
$\frac{10^2}{15}$ $\frac{10^0}{7^5}$ $\frac{10^8}{4}$ 11^0 $\frac{11^3}{5}$ $\frac{10^6}{7^5}$

HI 123^{74}

10+75'

10+50

10+43 6^{6} Lt ℄ 12" Pole # PA 3825

10+00

9+94 13^{0} Lt ℄ double garage dirt floor

9+50

9+13 6^{5} Lt ℄ 12" Pole # JPA 3855

9+00

8+50

8+00

Lt = Wly ℄ Rt = Ely

Sta.	Readings (distance, rod, elev.)
10+75	15 10^{3} 89.2 · 75 10^{1} 89.4 · ℄ 10^{2} 89.3 · 5 10^{0} 89.5 · 75 9^{7} 89.8 · 15 9^{6} 89.9
10+50	15 9^{6} 89.9 · 75 9^{5} 90.0 · ℄ 9^{8} 89.7 · 5 9^{6} 89.9 · 75 9^{3} 90.3 · 15 9^{1} 90.4
10+00	13 9^{0} 90.5 · 75 9^{0} 90.5 · ℄ 9^{0} 90.5 · 75 8^{8} 90.7 · 15 8^{8} 90.7
9+94	13^{0} floor 9^{0} 90.5
9+50	15 7^{0} 92.5 · 75 6^{7} 92.8 · ℄ 6^{6} 92.9 · 75 6^{3} 93.2 · 15 6^{5} 93.0
9+00	15 4^{3} 95.3 · 75 4^{6} 94.9 · ℄ 4^{6} 94.9 · 75 4^{3} 95.3 · 10 4^{7} 94.8
8+50	15 3^{5} 96.0 · 75 3^{5} 96.0 · 5 3^{6} 95.9 · ℄ 3^{4} 96.1 · 5 3^{3} 96.2 · 75 3^{0} 96.5 · 10 3^{5} 96.0
8+00	15 1^{6} 97.9 · 75 1^{4} 98.1 · 5 1^{9} 98.6 · ℄ 1^{8} 98.7 · 75 1^{8} 98.7 · 15 2^{3} 97.2

$\top$ 99^{46}

				95.75
BM			0.42	95.65 NWBP (SW) Alicia + Tennyson
TP8	8.74	96.07	3.16	87.33
11+52.5 Sly cb Tennyson				
11+43.37 end cb Rt begin AC pav.				
11+40.17 end cb Lt begin AC pav.				
11+25				
TP7	1.64	90.49	10.61	88.85
11+22 6"LIS 12" P Pole #JPA 3815				
11+00				

86.88 85.32 85.77 85.20 85.77 85.20 85.16 85.10 85.10 85.17 85.02 85.66
4.61 5.17 4.72 5.29 4.72 5.25 5.33 5.39 5.39 5.32 5.47 4.83
25 cb, 25 gut, 9.5 cb, 9.5 gut, 7.5 cb, 7.5 gut, 7.5 gut, 9.5 gut, 9.5 Lip, 25 gut, 25 cb

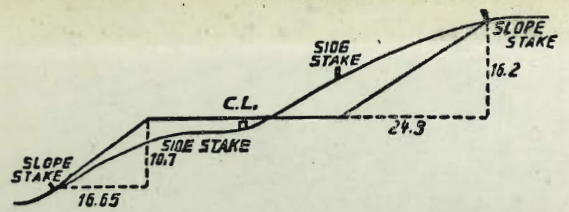
85.17 85.57 85.75
5.32 4.28 4.72
AC pav., 7.5 gut (drive), 7.5 cb end

85.72 85.38 85.7 86.1
4.77 5.11 4.8 4.4
7.5 cb end, 7.5 gut, 7.5

87.6 87.4 86.7 87.0 87.5
2.9 3.1 3.8 3.5 3.0
15, 7.5, 5, 7.5

90.49
88.7 89.4 89.3 88.8 89.1
10.8 10.9 11.2 10.7 10.4
15, 7.5, 7.5, 15

99.46



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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