

575

1675

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

CITY ENGINEER'S OFFICE

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be 30.6 + (20 - 16) * 2 or 2 ft. added to 30.6 = 32.6. For slopes of 1 on 1 1/2 see inside of back cover.
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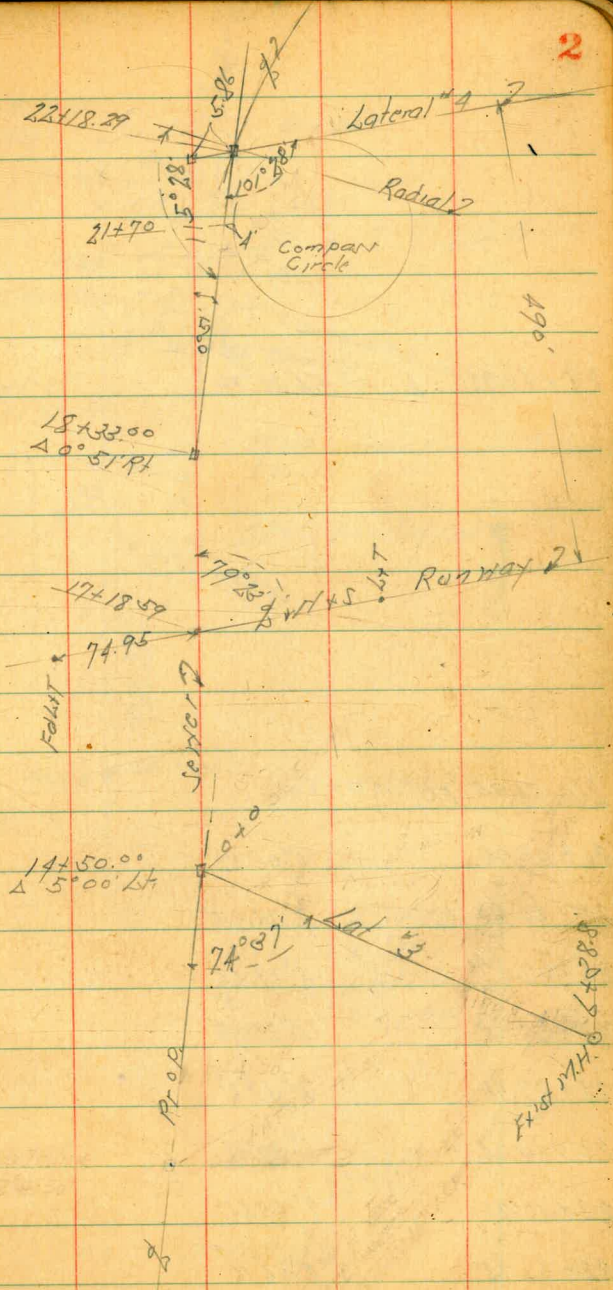
This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

22+18.29 P.O.C. Ahead DK

18+33.0° Δ 0°51' R

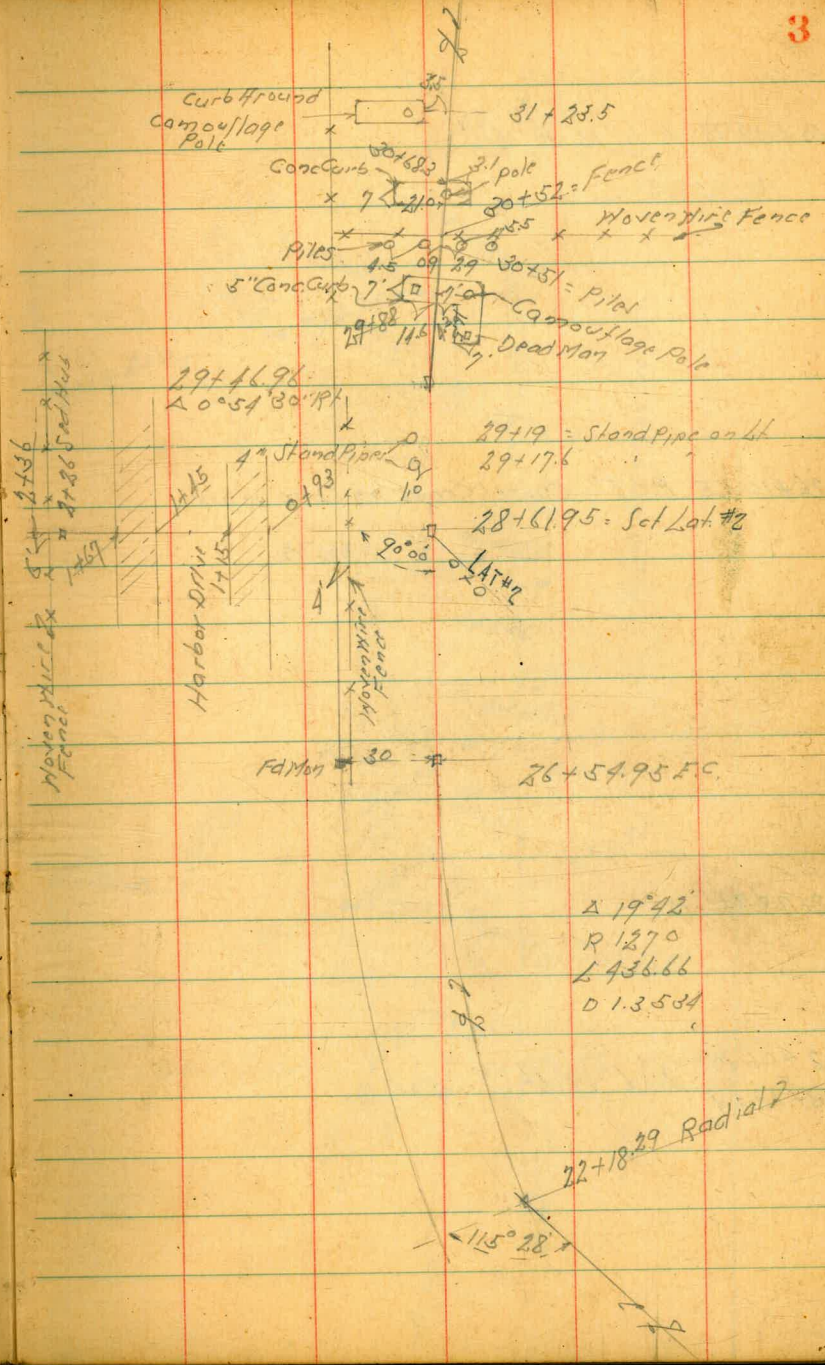
14+50.0° Δ 5°00' L



29+46.96 Δ 0° 54' 30" RT

26+54.95 F.C.

26+05.76	1° 06.52'
25+56.62	2° 13.04'
25+07.47	3° 19.56'
24+58.33	4° 26.08'
24+09.18	5° 32.6'
23+60.04	6° 39.12'
23+10.90	7° 45.64'
22+61.75	8° 52.16'
22+18.29 POC	9° 51'



Curb Ground
Camouflage Pole
31+23.5
Conc Curb 30+58.3
3.1 pole
20+52 = Fence
Woven Wire Fence
Piles
5" Conc Curb 7
1.5 0.9 2.9 30+51 = Pile
Camouflage Pole
Dead Man

29+46.96
 Δ 0° 54' 30" RT
29+19 = Stand Pipe on Lt
29+17.6

28+61.95 = Set Lat #0
90° 00'
LAT #0

Fd Man 30
26+54.95 F.C.

Δ 19° 42'
R 127°
L 436.66
D 1.3534

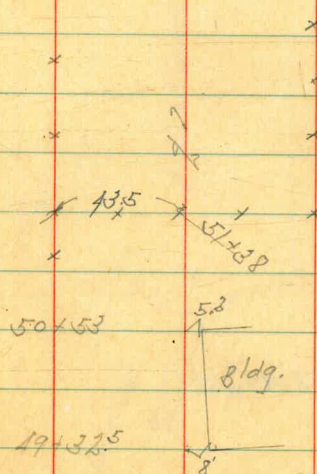
22+18.29 Radial 2

115° 28'

55735⁰⁰ Δ 14° 39' RT.

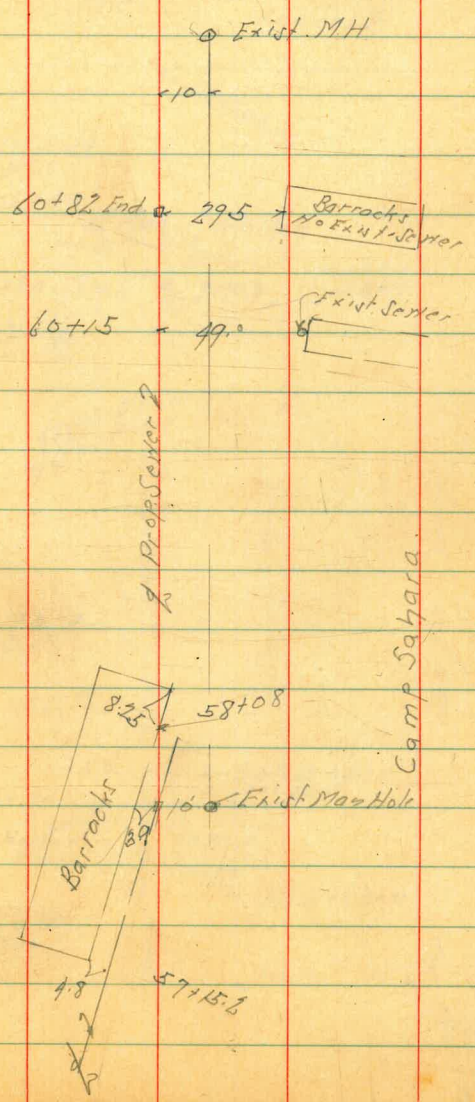
48710.19 Δ 19° 30' RT

Gas Pump
 55750 7-15 5.2
 55735⁰⁰
 Δ 14° 39' RT.
 55720 1087



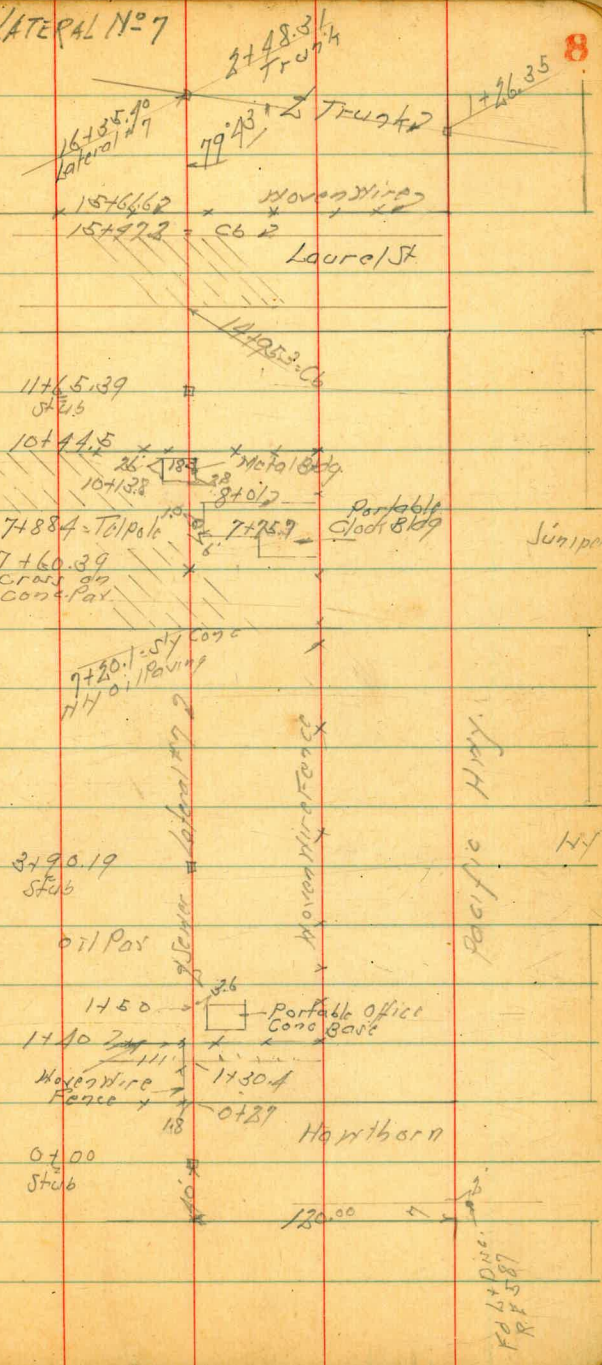
60+82

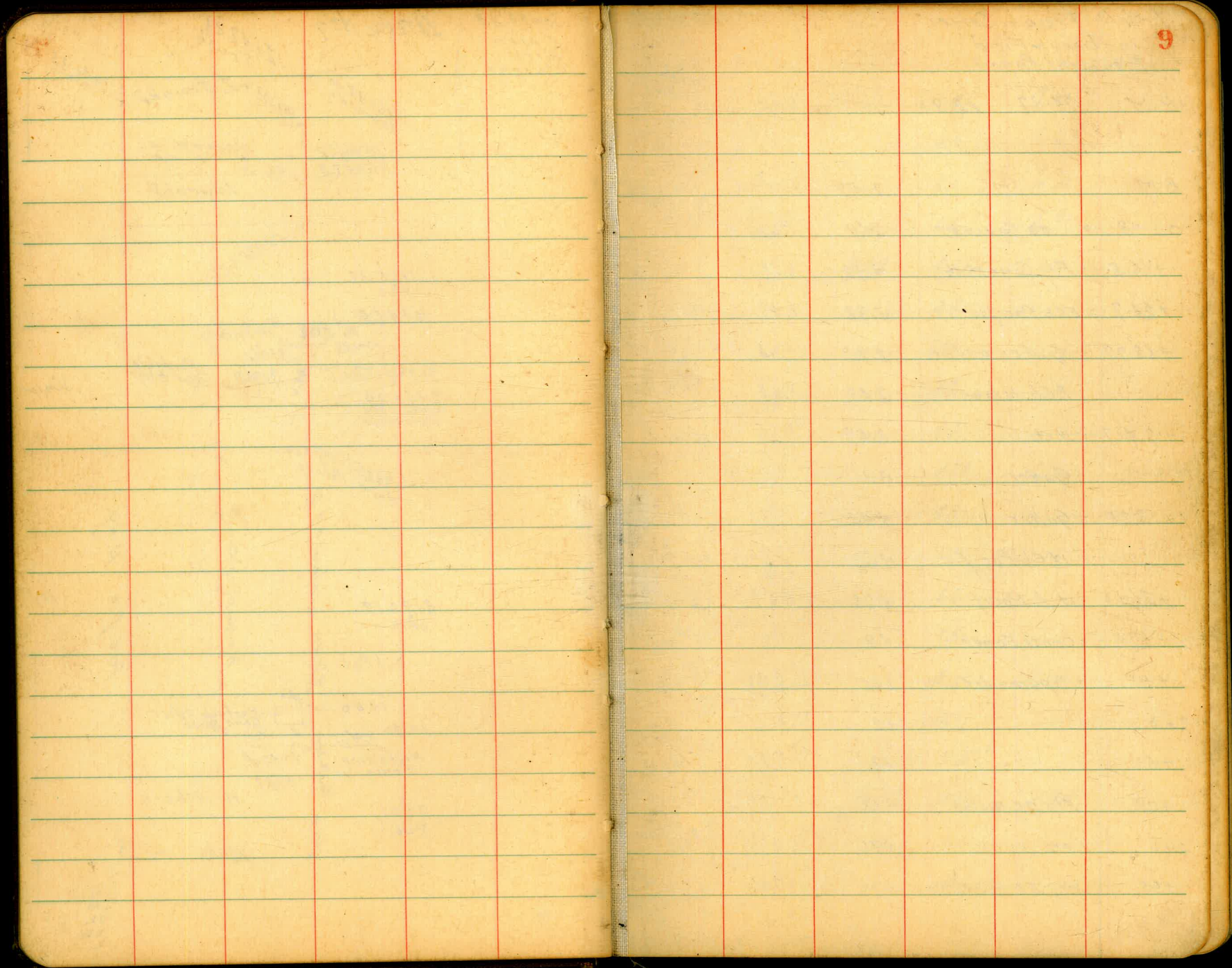
57+95 of Δ $16^{\circ}52'30''$ Lt



Sept 29-44
S10007
Bliss
Asbarne

LATERAL N^o 7





Levels Trout Saver
Lindbergh Field
Elevation Page 1

B.M.	4.37	12.31	7.94	N.W. 8 P Saurcht Pacific 9 20 8 - 4	
B.M.		1.59	10.72	S.E. Top Fire and Saurcht Pacific	
0+08	=	oa Pavimg	2.69	9.62	
+16.5	=	Fly Conc Walk	3.32	8.99	
+24.7	=	ECb Pacific	3.82	8.49	12 Drive
+68.97	=	Gutter on Pav	2.97	9.34	
"	=	ECb Island	2.48	9.83	Top Cb
+74.17	=	W Cb	2.59	9.72	Top Cb
"	=	Gutter	3.11	9.40	
+18.25	=	Gutter	4.43	7.88	
"	=	W Cb Pacific	3.82	8.49	Top Cb
+26.35	=	W-L Pacific	3.78	8.53	oa Walk
+69.5	=	Cross Fence	2.9		
+76	=	Top Granite Curb	3.55	8.76	
2+0			4.2	8.11	
+50			4.8	7.51	
+79	=	Fly HC Pavimg	4.92	7.39	
2+0	=	oa " " "	4.95	7.36	
+05	=	W-L HC Pav + Fly o/L	5.00	7.31	

Sept. 26-44
Sisson
81.44
0.5600 X

10

		12.31		
2+50	Top of Oil Pavimg	5.31	7.00	
4+0	" "	5.7	6.61	
+50	" "	6.0	6.31	
5+0	" "	6.4	5.91	
TP	3.09	9.09	6.31	6.00
+50	T.O.		3.4	
6+0	" "		3.9	
+50	" "		4.2	
7+0	" "		4.7	
+50	A 9' 37' 30" W	4.88	4.21	oa Stub
8+0	T.O.		4.8	
+50	" "		5.0	
9+0	" "		5.1	
+03	Fly HC Pav		5.20	
+20	W-L " " "		5.10	
+50	T.O.		5.1	
10+0	" "		5.2	
TP	4.50	8.43	5.16	3.93
+50	T.O.		4.5	
11+0	" "		4.6	

8.43

11+50	T.O.		47		
12+0	" "		48		
+50	" "		50		
13+0			51		
+50			52		
14+0			52		
+50	= A.5° 00' A		52		
TP	4.74	8.00	5.19	3.26	0.72 Stub 14+50
15+0			41		
+50			50		
16+0			52		
+40	= Fly Oil		48		
+50			46		
+73	= Fly H.C.		4.63		
17+0	Top AC		4.58		
+50	" "		4.65		
BM			5.18	2.85	Lat 71.95 So. 12+18.59 = R.N. S Runway
+73	= Fly H.C.		4.76		
18+0	T.O.		5.01		
+33	= A 0° 51' 9.5"		5.3		

8.00

18+50	T.O.		5.6		
19+0	" "		5.6		
+50	" "		5.9		
20+0	" "		5.9		
TP	4.21	6.45	5.76	2.24	
+50			4.50		
+97	= Fly H.C.		4.41		
21+0			4.37		
+90.5	= Fly H.C.		4.57		
+50	Ground		4.6		
+70	= Fly Compars Circle				
+68	= Top. Elec Cable		6.80		
22+0	Ground		5.7		
BM			2.97	3.48	Top Conc Head 20' St 32+50 345 O.K.
+18.29	= P.O.C.		5.71		0.7 Stub
+60			5.6		
23+0			5.6		
+60			4.9		
24+0			4.4		
+60			4.8		

		6.45			
TP	5.00	9.00	2.45	4.00	
25+0	Approx Ground		7.7		
+50	"		7.4		
26+0	"		7.0		
+54.95	-FC		6.7		
27+0			6.8		
+50			6.6		
28+0			6.7		
+50			6.6		
29+0			6.2		
+46.96	= $\Delta 0^{\circ} 54' 30''$		6.02	2.98	on Stud
+70			5.6		
+75			6.6		
+88	Top 5" Curb		5.64		
30+0			6.3		
+50			5.9		
BM	2.51	7.47	4.04	4.96	Nail Pole 7.12 29+20 1.86 Horiz. 9/26-65
+68.3	Top 5" Curb	Ground	3.93		
"	Ground		4.8		
31+0			4.7		

		7.47				12
31+50					4.8	
32+0					4.8	
+50					4.9	
33+0					5.0	
33+13.04	on Page 4				5.10	
+33.04	= 32+01.40	Abroad				on Stud 2+T 18' 41" 32+13.04 = Conc. N.H.
BM	5.01	7.59	5.09	2.38		
32+50			5.0	2.4		
33+0			5.0	2.4		
+32	- Fly H.C.		4.88	2.51		
+50	- H.C.		4.82	2.57		
+69.3	- Top C&H Walk		4.18	3.21		
175.4	- 1/4" Conc Walk		4.20	3.19		
34+0			3.9	3.5		
+46.1	- Fly Conc. Walk		3.96	3.48		
+55.1	- 1/4" "		3.96	3.43		
TP	4.40	8.33	3.46	3.90		
35+0			4.9	3.4		
+50			5.1	3.2		
36+0			5.0	3.3		
+02.8	- Fly Conc. Walk		4.93	3.40		
+11.8	- 1/4" "		4.93	3.40		

		8.33			
36+50			48	3.5	
37+0			48	3.5	
+50			50	3.3	
38+0			50	3.3	
+47.5	Fly Case Bolt		460	3.73	
+56.5	W/4 " "		4.57	3.76	
39+0			47	3.6	
+50			50	3.3	
40+0			50	3.3	
TP	4.74	8.30	477	3.56	
BM			5.09	3.31	Brass Plug in MCB Harbor Dr. 71' at 39+69.55
+39.38	$\Delta 16^{\circ} 13' 30''$ Lt.		5.44	2.86	on Stake
+50			5.3	3.0	
41+0			49.	3.4	
+50			48	3.5	
42+0			48	3.5	
+50			54	2.9	
43+0			54	2.9	
+50			48	3.5	
TP	5.17	8.94	4.53	3.77	

		8.94			
44+0			5.4	3.5	
+50			5.7	3.2	
45+0			5.3	3.6	
+50			5.1	3.8	
46+0			5.1	3.8	
+50			5.5	3.4	
+62	Ground		5.1	3.8	
"	Top Curb		4.8	4.1	
47+0			5.4	3.5	
+50			5.2	3.7	
+54	Edge MC Pav		5.20	3.74	
+88	" " "		5.18	3.76	
48+0			5.2	3.7	
TP	4.94	8.46	5.42	3.52	
+10.19	$\Delta 1^{\circ} 49' 30''$ Rt		4.94	3.52	on Stake
+15.8	Edge MC Pav		4.93	3.53	
+41.8	" " "		5.07	3.39	
BM			3.16	5.30	54 Top of RR. Rail of three Around F Ho Lt of 48+88
49+0			4.3	4.2	
+50			4.1	4.1	

8.46

50+0			4.5	4.0	
+50			4.5	4.0	
51+0			4.5	4.0	
+50			4.6	3.9	
52+0			4.6	3.9	
+50			4.8	3.7	
53+0			4.0	4.5	
+50			3.2	5.3	
TP	4.08	9.99	2.55	5.91	
54+0			4.8	5.2	
+50			5.3	4.7	
55+0			5.5	4.5	
+35°	A 14°39'N		5.45	4.54	075706
+50			5.3	4.7	
56+0			5.0	5.0	
+50			5.3	4.7	
57+0			5.6	4.4	
+50			5.3	4.7	
+95°	A 16°52'30"N		4.64	5.35	075706
BM	3.79	9.48	4.30	5.69	on S4 Rim of peg hole 10/18/50 Harbor Book #121 109066 5.73

9.48

14

58+0			4.6	4.9	
+50			4.0	5.5	
59+0			4.8	4.7	
+50			4.7	4.8	
60+0			5.3	4.2	
+50			5.4	4.1	
+82 - End			5.1	4.4	

Levels Sewer Lateral #2

Sketch Page 3

North Pole
7' Rt. 29+90
Page 1/2

BM	4.50	9.46	4.96
0+0	-28+61.95 Trunk	6.9	2.5
+15		6.7	2.7
+20		5.1	4.4
+30		5.9	4.0
+65		6.8	2.6
+75		7.7	1.7
+93	= 1/4 Conc Pav	6.84	2.62
1+15	= Edge " "	6.56	2.90
+30		7.8	1.6
+45	= Edge Conc Pav	6.60	2.86
+67	" " "	6.84	2.62
+85		7.6	1.8
2+0		7.0	2.4
+36	= End	7.0	2.4

Levels Server Lateral #7

Sketch Page 8

BM	4.05	12.33	8.28	11.88	Hortberry + Pacific #1317-42
0+0	= Hortberry	5.50			on Stub
750		4.8			
1+0		5.0			
+30.1	= Sly Oil Pav	4.73			
+50	T.O.	4.9			
2+0	" "	5.0			
+50	" "	5.0			
3+0	" "	4.7			
750	" "	4.5			
+90.19	" "	4.45			on Stub
4+0	" "	4.5			
+50	" "	4.5			
5+0	" "	4.1			
+50	" "	4.5			
TP	3.42	11.28	4.47	7.86	
6+0	T.O.	3.5			
+50		3.8			
7+0		4.6			
+20.1	= 1/4 Oil Pav + Sly Conc Pav	4.96			

Sept-29-44
Sisson
Bliss
Osborne X

16

11.28

7+50	on Conc Pav	5.16		
+60.39	" " "	5.17		
8+0	" " "	4.91		
+50	" " "	4.65		
9+0	" " "	4.62		
+50	" " "	4.68		
10+0	" " "	4.82		
+44.5	= 1/4 Conc Pav	4.84		
TP	4.11	10.47	4.92	6.36
11+0		4.3		
+17.9	= Sly Top Rail Spur	4.57		
+31.0	= 1/4 " " "	4.49		
+50		4.5		
+65.39		4.45		on Stub
12+0		4.4		
+50		4.7		
12+0		5.0		
+40		5.3		
14+0		4.1		
+50		3.9		

10.47

1495.3 = Sly Cb Top Laurel	3.21	7.21	
" " Gutter	3.80	6.67	
1540	3.81	6.66	
+472 = Gutter	3.80	6.67	
" = H/Cb Top	3.18	7.29	
+61.6 = Misc. Forest + Sly Oil Pav	3.22	7.25	
+63	3.7	6.77	
1640	3.2	7.27	
+3540 = 2+4831 Trunk	2.94	7.53	casted
814	2.55	7.92	H.H. BP Laurel + Pacific 7.94

Levels Server Lateral #5

Sketch Page 1

BM	476	8.97	4.21	07 Stab 7+50 Trunk Page 10
0+0	= 7+50 Trunk			
+50	Top Oil Pav	4.7		
+81.5	= S 1/4 Oil + N 1/4 AC Pav	4.78		
1+0	Top AC	4.80		
+11.7	= S 1/4 AC + N 1/4 Conc Pav	4.93		
+50	Top Conc	5.52		
+7.2	= S 1/4 Conc Pav	5.76		
+73.5	= N + S Wire Fence			
+90		5.8		
2+0		5.3		
+20		5.5		
+27	= N 1/4 AC Pav	6.69		
+43.40	= A 29° 59' 30" Lt	6.50	07 AC	
+83	= S 1/4 AC Pav	6.36		
3+0		6.3		
+50		6.0		
4+0		5.6		
+83.40	= A 89° 56' Lt	5.39	07 Stab	
TP	6.95	10.53	5.39	5.58

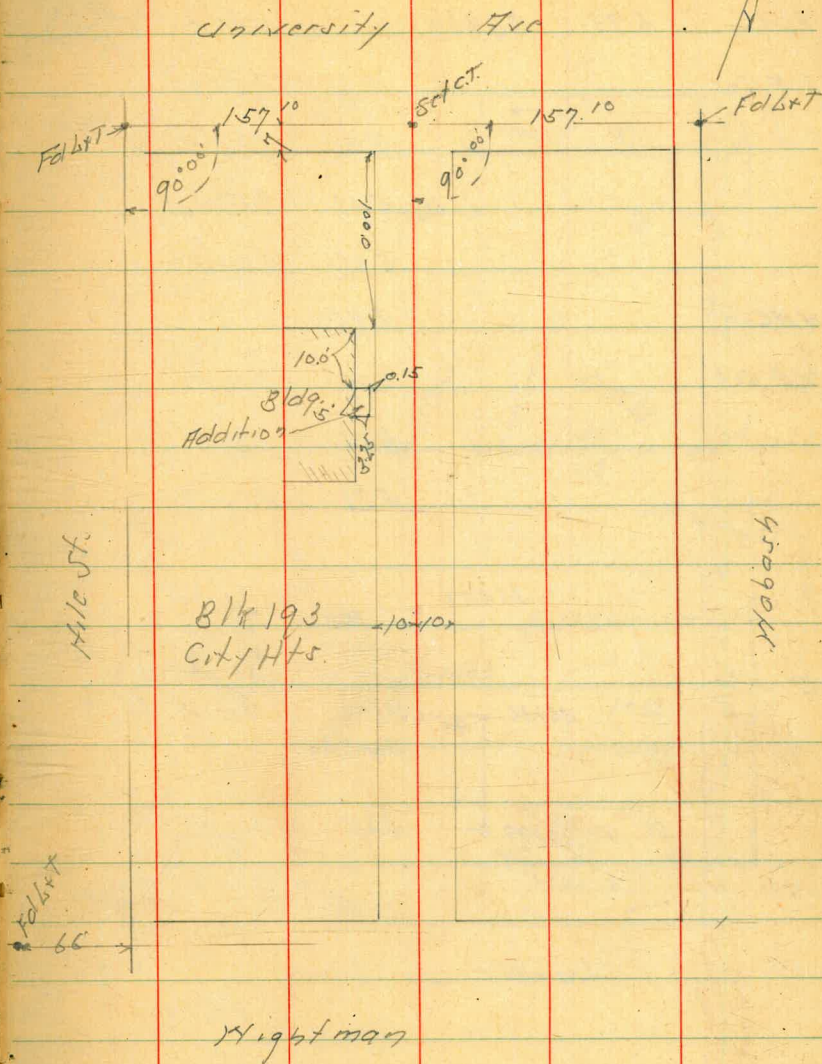
SPPA 78-44
SARON
BANK
0560-00 **18**

		10.53		
+140	= N 1/4 AC Pav	7.27		
+83	= E 1/4 AC "	7.15		
+50		7.0		
+50		6.5		
6+0		6.1		
+50		5.4		
7+0		5.1		
+106.61	= A 90° 05' Lt	5.04	5.49	07 Stab
+10.6	= E 1/4 Wood Wire Fence			
+11.6	= S 1/4 Conc Paving	5.13		
+50	Top Conc Pav	5.53		
8+0	" " "	6.10		
+08	" " "	6.13		
"	12' Rt of Lt	16.14		Flood Line 5' Storm Drain
"	" " "	9.20		Flood Line 6' Drain
TP	4.65	10.83	4.35	6.18
BM	2.59	10.85	2.66	8.19
				Top Fire Hyd NE Westgate 4 Hour cl 8.17 9.20.43

Survey of Building + Addition Lots 5x6
Block 193 City Heights

Jan. 28-75
S. J. Johnson
Bl. J. J.
Osborne

19



Levels Block 8 City Heights Annex #1

0+50

0+48 144 ft of Baseline 2 Power Pole

0+20

0+0 = H-L Ladder

0-14 = 11 Cb-Line Ladder

B.M

4.30

359.70

2.70

355.40

B.M

3.39

358.10

354.71

NW B.P.
Ladder v
Highland

NW B.P.
Highland
144 ft

Lt = W

Baseline
21
RT = E

354.60	354.50	354.60	354.60	354.40	353.60	353.28
5.1	5.2	5.1	5.1	5.3	6.1	6.42
145	125	100	50	25		12=Cb

353.70	354.20	354.20	354.40	353.70	353.45
6.0	5.5	5.5	5.3	6.0	6.25
145	125	100	50		12=Cb

353.43	353.39	353.60	353.90	353.60	353.48	352.90
6.27	6.21	6.1	5.8	6.1	6.22	6.80
145=HH Rel	125=HH Rel	100	50		12=Cb	12=6M

353.23	353.22	353.15	353.37	353.42	353.00
6.47	6.48	6.55	6.33	6.28	6.70
145=Cb	125=Fl Cb Flty	100=Cb	50=Cb	50=Cb	50=90ft

359.70

2190

2196

141' Lt of B = Power Pole

2154

9' Rt of B = Acacia Tree

2150

2111

9' Rt of B = Acacia Tree

210

141' Lt of B = Power Pole

1150

1139

9' Rt of B = Acacia Tree

110

35970

Lt. 21

B

Rt. 22

355.71.0
145355.54.2
125355.04.7
100354.55.2
50352.6

7.1

352.217.49
12.0671355.44.3
145355.44.3
125355.04.7
100354.35.4
50352.9

6.8

352.387.32
12355.54.2
145355.44.3
125355.24.5
100354.65.1
50353.1

6.6

352.647.06
12354.94.8
145355.24.5
125355.24.5
100354.84.9
50353.4

6.3

352.756.95
12354.65.1
145355.04.7
125355.04.7
100354.75.0
50353.4

6.3

353.076.63
12.06

35970

3+46.28 = N.L. of 10638

3+25

359.70

<u>355.4</u>	<u>355.2</u>	<u>354.2</u>	<u>353.7</u>	<u>352.8</u>	<u>351.93</u>
4.3	4.5	5.5 100	6.0 50	6.9	7.77 4.06

<u>355.4</u>	<u>355.1</u>	<u>355.1</u>	<u>354.4</u>	<u>352.9</u>
4.3 12.5	4.6 12.5	4.6 100	5.2 50	6.8

359.70

Levels South Gutter of Main St.
#1 Dancy

B.M. 3.57 28.53 24.96

0+0 = 200 ft of W.L. Dancy

2 5.69 22.84

14' Rt = S 5.02 23.51

14' Lt = N 5.08 23.45

0+50

2 5.52 23.01

14' Rt 4.92 23.61

14' Lt 4.93 23.60

1+0

2 5.31 23.22

14' Rt 4.78 23.75

14' Lt 4.75 23.78

1+50

2 5.13 23.40

14' Rt 4.57 23.86

14' Lt 4.67 23.86

2+0 = W.L. Dancy

2 5.04 23.49

14' Rt 4.48 24.05

14' Lt 4.80 23.73

N.H.B.P.
Main +
Dancy

Feb. 5. 15
S. 1800
81.55
8077

Indexed
C.S.K.

24

Dancy St.

2+0

Commercial Gutter

1+0

0+0

28.53

2+15

2	5.01	23.52
3' Lt	5.10	23.43
7' Lt	5.02	23.51
14' Lt	4.82	23.71
14' Rt	4.55	23.98

2+30

2	5.01	23.52
4' Lt	5.00	23.53
7' Lt	5.01	23.52
14' Lt	4.82	23.71
14' Rt	4.60	23.93

2+50

2	4.99	23.54
7' Lt	4.93	23.60
14' Lt	4.69	23.84
14' Rt	4.53	24.00

2+75

2	4.92	23.61
14' Lt	4.55	23.98
14' Rt	4.37	24.16

28.53

2+10

2	4.82	23.71
14' Lt	4.35	24.18
14' Rt	4.23	24.30

2+50

2	4.58	23.95
14' Lt	4.03	24.50
14' Rt	4.08	24.43

4+10

2	4.42	24.11
14' Lt	3.80	24.73
14' Rt	3.87	24.66

Survey Defence Housing Projects

IN PLOT 1311

E. Side Torrey Pines Rd.

South of MIRAMAN Rd.

Ed. 2" pipes RE. 34
at all corners.

See 1322-60

See 1502-61-71

45.66
1065.72
691.65

1803.03

N 0° 50' 30" E

1312

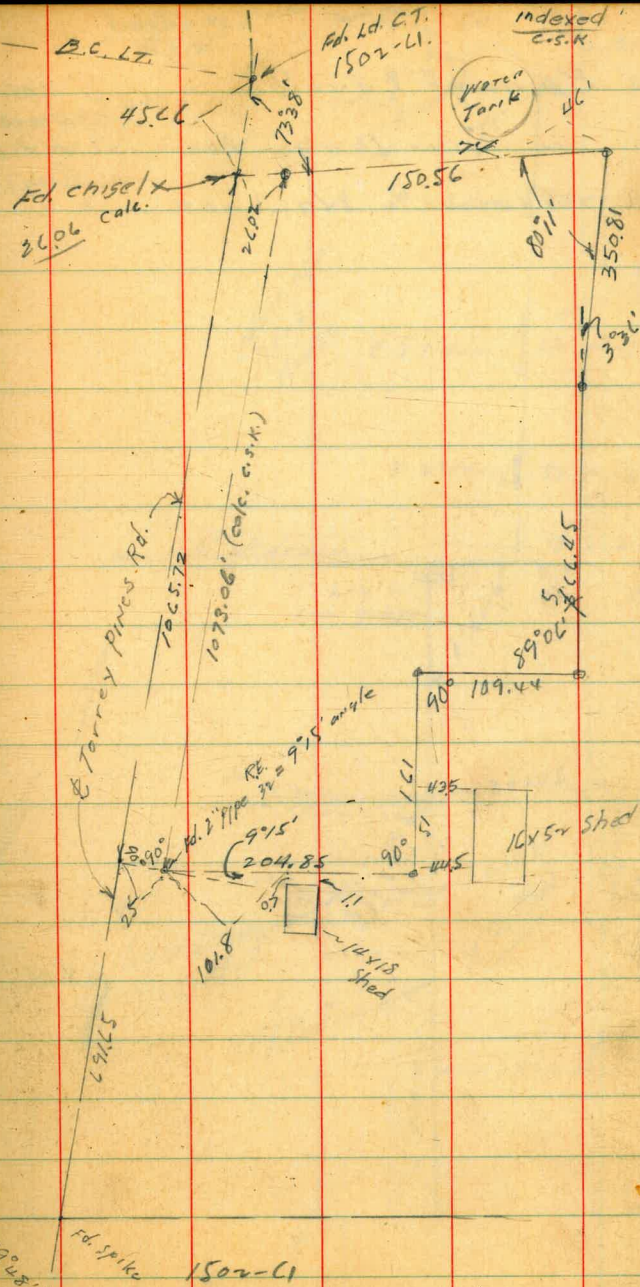
1311

Ed. Gran. Mon.

660.80

1298

1299

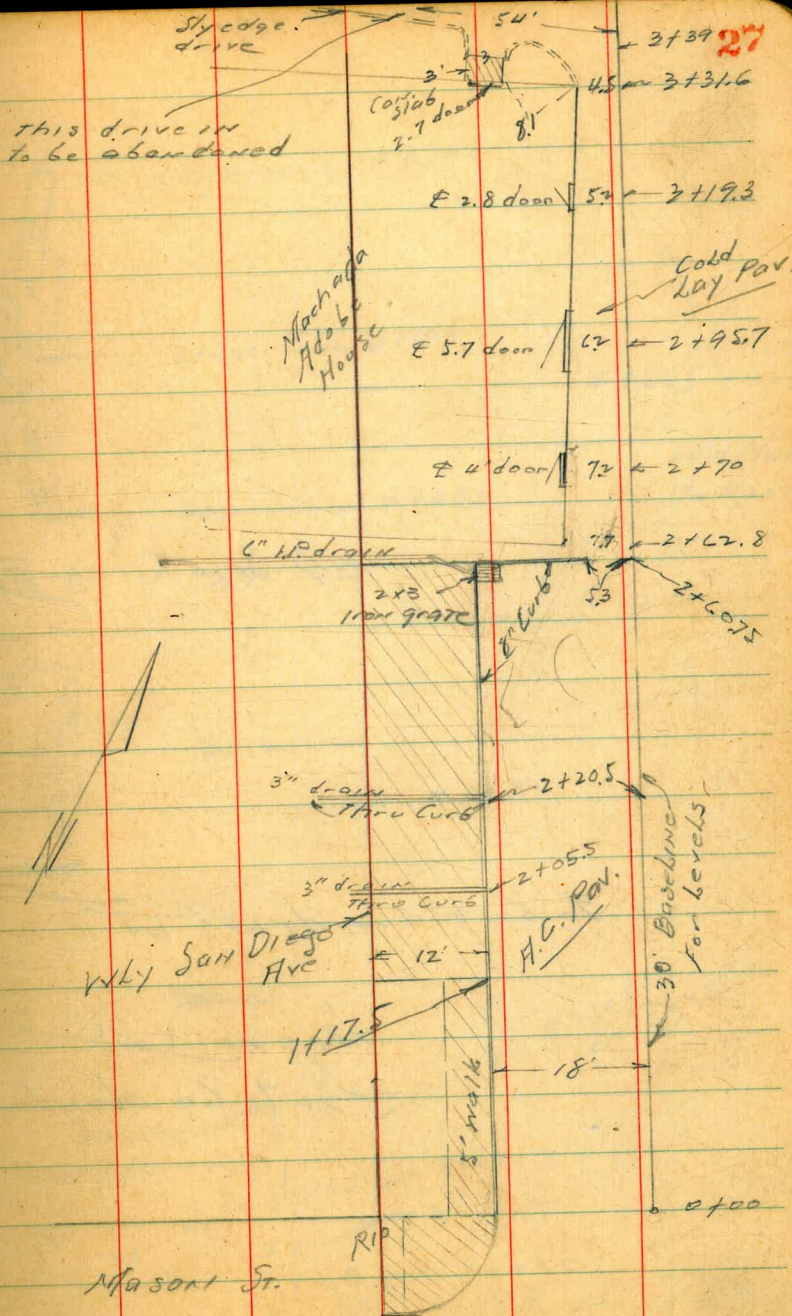


Paving Levels
on San Diego Ave
Mason to Wallace

Indexed
C.S. K.

C. Maara
Sommer Meyer
H.E.M.
Beggs
3-1-45

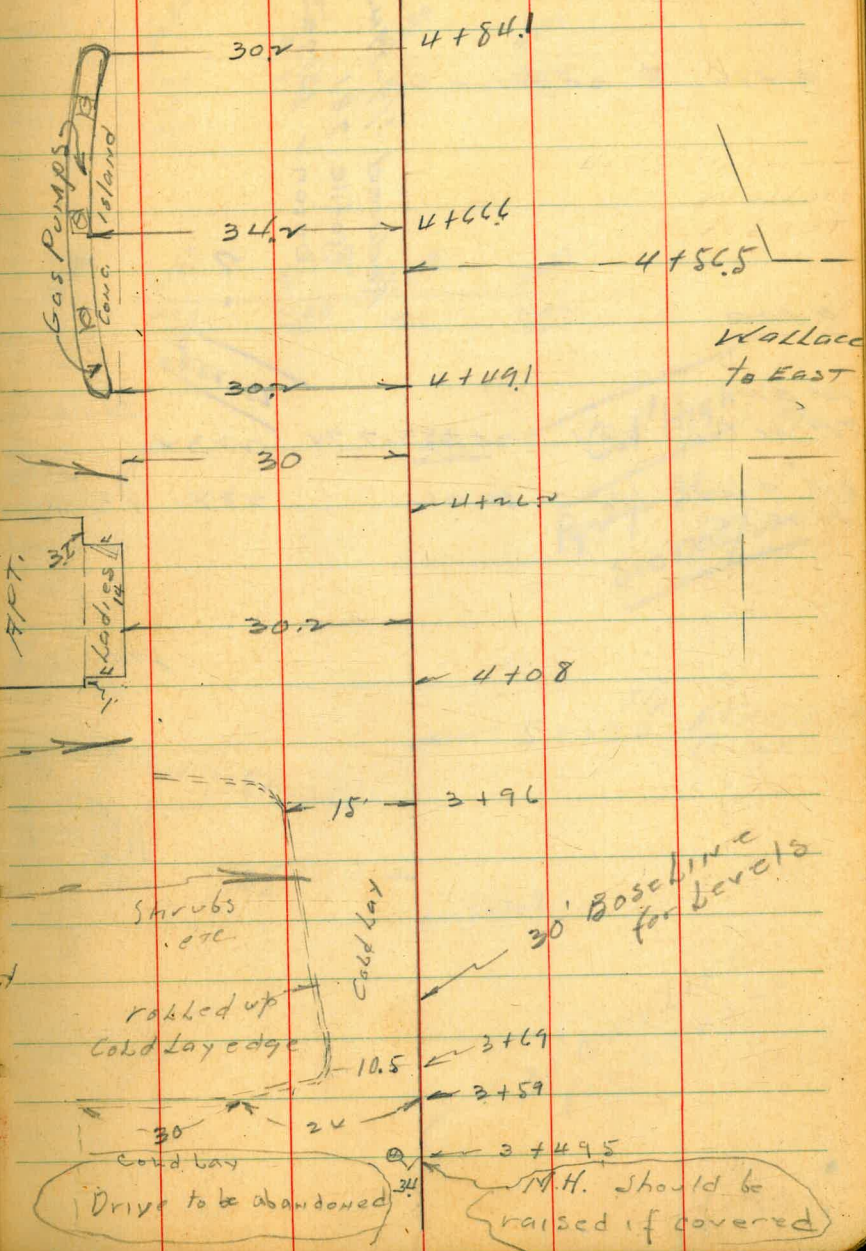
30
30
27
27
27
27



Wly San Diego Ave

to be new drive in

This rolled edge to be abandoned



0 + 16 & 20 drive

Reduced 3/9-1945
Profile 181
onion - large scale

0 + 00

Ad. B.P.

TP W. Con 4.01 26.33 7.74 22.37

BM 7' W. TR. 1.26 30.06 28.80 + Tr. 995

22.225

San Diego

San Diego

Wallace

A.P.T.

AUTO
HOIST
128

5 + 23.6

35

5 + 03.8

sl. Wallace
to WEST

30' Baseline
for Levels

LT.

B6

R7

21.25	21.25	21.57	21.80	21.91
508	508	4.70	453	4.44
drive	18	9		10
	97			

22.32	21.67	21.95	22.17	22.31
4.01	4.66	4.38	4.10	4.02
18	18	9		10
66	97			

26.33

0.1' High ?
Pg-29-36
See 1705/22

LT

BL

R+

2+00

1806	1734	1775	1793	1801
8.27	8.99	8.58	8.40	8.32
18	18	9		10
	97			

1+50

1894	1822	1861	1879	1889
7.39	8.11	7.72	7.50	7.44
18	18	9		10
66	97			

1+23 & 10' drive

1877	1871	1917	1935	1941
7.56	7.62	7.16	6.98	6.92
18	18	9		10
drive	97			

1+00

1980	1919	1955	1977	1975
6.53	7.14	6.78	6.50	6.58
18	18	9		10
66	97			

0+61 & 30 drive

	2012	2035	2051	2061
drive	6.21	5.98	5.82	5.72
	18	9		10
	97			

26.33

26.33

2+62.8

T.P. 4.06 20.72 9.67 16.66

12.98	12.5	17.05	15.06	16.16
13.35	8.78	9.28	11.27	10.17
2.8.5	30	28	18	18
FL outlet 6" drain	sdw	sdw	Bot. Box F.L. 6" pipe	97 +grate

2+40.8

17.72
8.61
30
sdw

2+20.5

3" drain outlet
in gutter
Beg. Job here

18.02	17.84
8.31	8.49
30	23
sdw	sdw

2+12

E 10' drive

18.18	17.99
8.15	8.34
30	23
sdw	sdw

26.33

8.L RT

17.34	16.76	16.65	16.77	16.85
328	3.96	4.07	2.95	3.87
7.7	2.8	5		10
Top Pav. Rollup				

20.72

16.90	17.32	16.79	16.67	16.82	16.87
9.43	9.01	9.54	9.66	9.51	9.46
18	8	8.4	5.3		10
cb	cb	Pav.	Top Pav. d		
angle	TOP		Top cb. end		

17.40	17.23	16.62	16.99	17.24	17.35
8.92	9.10	9.71	9.34	9.09	8.98
23	18	18	9		10
sdw	cb	97			

17.67	17.05	17.00	17.36	17.59	17.63
8.66	9.28	9.33	8.97	8.74	8.70
18	18	18	9		10
cb	F.L.	97			
	3" drain				

17.11	17.11	17.52	17.73	17.80
9.22	9.22	8.81	8.60	8.53
18	18	9		10
drive	97			

26.33

2 + 95.7 E door

2 + 92.3

2 + 73

2 + 70 E door

2 + 67.8

40.77

	Lt	Bk	Rt
	16.52	16.24	16.08
	4.20	4.48	4.64
	6.7	6.7	4.8
	Comp. door sill		4.60
			4.44
			10
		16.85	16.10
		3.87	4.62
		6.5	4.53
		Roll	5.7
	17.14	16.45	16.39
	3.58	4.27	4.33
	7.7	6.4	5.3
	Roll		4.19
			16.53
			16.62
		16.56	16.48
		4.16	4.24
		7.7	5.6
		door sill	4.10
	17.21	16.68	16.52
	3.51	4.04	4.20
	7.3	6.6	5.6
	Top rolled Pav		4.07
			16.65
			16.72
			4.00
			10
			20.72

3+49.5

1376

6.72
30

3+29

I.P.
Ld. C.T.

7.93

20.48

8.17

17.55

W.L. S.D.
Mc Wallace
70 E.

3+31.6

3+19.3

E deer

7+99.6

20.72

L7

B.L.

R

1447

6.01
20

1494

5.52
10

1507

5.41
5

1512

5.22
3.2
M.H.
PINT

1519

5.29

1528

5.20
10

1386

6.02
30

1451

5.97
20

1487

5.21
10

1515

5.33
5

1534

5.12

1549

4.99
10

1486

5.86
10
door
sill

1608

4.64
4.5
Roll
pay

1539

5.23
3.8

20.48

1547

5.25

1565

5.07
10

1620

4.52
5.2
door
sill

1566

5.06
4.4

1556

5.16
4

1566

5.01

1590

4.82
10

1675

3.97
6.1
Roll
in pay.

1592

4.80
5.2

1604

4.68

1621

4.51
10

20.72

4 + 262

$$\begin{array}{r} 1316 \\ \hline 7.32 \\ 30 \end{array}$$

4 + 08

$$\begin{array}{r} 1322 \\ \hline 7.26 \\ 30 \end{array}$$

3 + 96

$$\begin{array}{r} 131 \\ \hline 7.4 \\ 30 \\ \hline \text{dirt} \end{array}$$

3 + 69

$$\begin{array}{r} 133 \\ \hline 7.4 \\ 30 \\ \hline \text{dirt} \end{array}$$

3 + 59

$$\begin{array}{r} 1382 \\ \hline 6.56 \\ 30 \end{array}$$

$$\begin{array}{r} 2048 \\ \hline 2 \end{array}$$

LT L pay Wedge
1339 1351 1336 1355 1387 1406

7.7 6.97 7.12 5.93 6.61 6.42

20 15.5 13.7 10 10 10

1322 1360 1384 1416 1437

7.26 6.88 6.66 6.32 6.11

30 20 10 10 10

1442 1407 1416 1442 1463

6.06 6.41 6.32 6.06 5.85

15 14.5 7 10 10

TopRoll

133 1498 1481 1475 1485 1498

7.4 5.50 5.67 5.73 5.63 5.50

30 11 10.5 5 5 10

dirt TopRoll
pay.

1382 1448 1487 1495 1502 1510

6.56 6.00 5.61 5.53 5.46 5.38

30 20 10 5 5 10

$$\begin{array}{r} 2048 \\ \hline 2 \end{array}$$

5+23.8 Sly Wallace to W

11.56	11.79	11.90
8.92	8.19	8.58
35	30	20

5+03.8

11.60	12.12	12.20
8.88	8.31	8.28
35	30	27

Con.
Habit

4+84.1

12.92	
7.50	
30.2	

Top Island

4+66.6

12.92	12.58
7.50	7.90
34.2	34.2

Top Island

4+49.1

12.95	12.61
7.53	7.87
30.2	30.2

Top Island

20.48

LT

11.77	12.06	12.47	12.57	12.46
8.71	8.42	8.01	7.91	8.02
25	20	10		10

86.

12.01	12.17	12.63	12.89	12.89
8.27	8.31	7.85	7.57	7.59
23.3	20	10		10

12.44

12.36	12.44	12.81	13.06	13.20
8.00	8.12	8.00	7.67	7.22
20.2	22	20	10	10

12.48	12.67	12.97	13.25	13.42
8.00	7.81	7.51	7.23	7.00
23.7	20	10		10

12.66	12.78	13.17	13.28	13.51	13.71
7.82	7.70	7.31	7.20	6.97	6.77
21.3	18	12	7.5		10

MHRAND

20.48

L+

B.L.

R+

check to B.M. BP Taylor S.D. $\frac{1}{2}$ E Ret. on

T.P. 1.70 13.6W 8.50 11.9W

Styl Water will flow W on Wallace
from this point

40.48

11.66

12.08

12.47

12.55

12.46

8.8W8.408.01

7.93

8.02

30

20

10

10

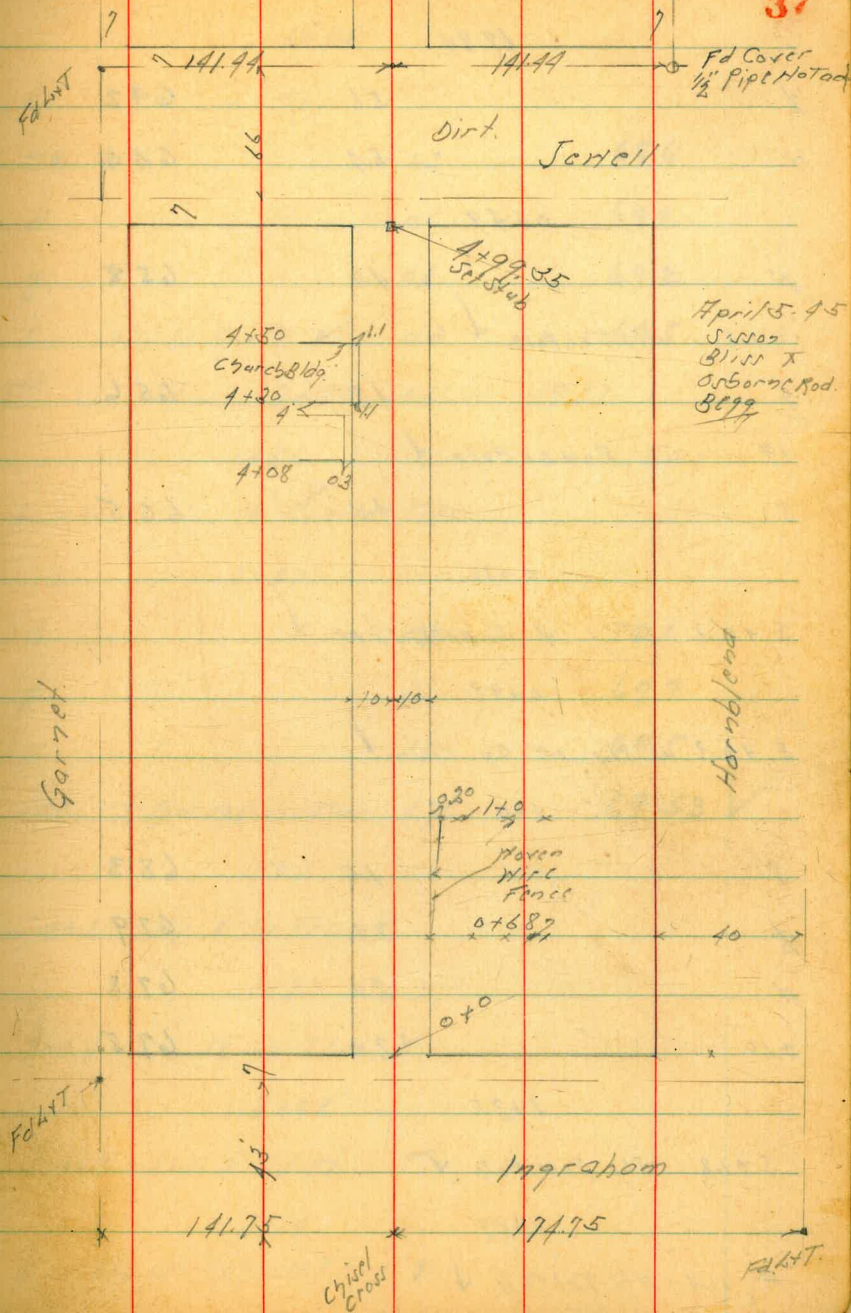
20.48

Cross Section Alley Block 217 Pacific Beach
 From Ingraham to Jewell Between
 Garnet & Hornblend

BM	7.30	69.84	12.54	SE 87° Garnet + Ingraham
		0-40		= Fly Strip Paving
-30		8.30	61.54	
H		8.56	61.28	
Z		8.66	61.18	
S		8.68	61.16	
+30		8.87	60.97	
		0-20		
S		8.8	61.0	
Z		8.6	61.2	
H		8.5	61.3	
		0-2		
H+2				= H4 Tol Pole ✓
		0+0		FL. Ingraham
H		64	63.4	
Z		77	62.1	
S		68	63.0	
		0+25		
-0.3				= 8 1/2" x 12" Cypress Tree ✓
S		48	65.0	

Reduced & Plotted
C.B.H. 5-6-1945

37



69.84		
Z	5.6	642
H	5.4	644
0+49		
H	4.0	658
+1.5 = 1/4 Tel. Pole ✓		
Z	4.2	656
+9' = Sly Post or Pole ✓		
S	3.3	665
0+80		
S + 0.3 = Sly 14" Cypress Tree ✓		
0+98		
S + 0.3 = Sly 15" Cy. Tr. ✓		
1+0		
S	1.5	683
Z	1.9	679
H	2.0	678
+1.0	2.3	675
1+25		
S + 1.8 = Sly Post or Pole ✓		
1+47		
H + 1.4 = 1/4 Tel Pole ✓		

69.84		
1+51		
-1.0		686
H		692
Z		692
S = Sly 24" Cy. Tr. ✓	0.3	695
TP	506 74.29	0.61 69.23
1+56		
S + 0.3 = Sly 18" Cypress Tree		
1+87		
S	4.2	70.1
Z	4.6	697
H	4.8	695
-4.2 = Garage Conc Floor	4.76	69.53 ✓
1+93		
S + 0.5 = Sly 8" Cy Tr. ✓		
1+97		
S = 0.4 = Sly 18" Cy. Tr. ✓		
2+08		
S + 0.7 = Sly 8" Cy Tr. ✓		
2+14		
S = Sly 12" Cypress Tree ✓		

7429			
2+25			
-10	52	69.8	
H	47	69.6	
$\frac{1}{2}$	45	69.8	
S	38	70.5	
2+50			
S = Sly 12" Cyp Tree	✓		
2+54			
S + 0.4 = Sly 20" Cyp Tree	✓		
2+56			
S	41	70.2	
$\frac{1}{2}$	46	69.7	
H	46	69.7	
+13	$\frac{1}{2}$ Garage Dirt Floor	4.9	69.4 ✓
2+59			
S = Sly 14" Cyp Tr.	✓		
2+63			
S = Sly 18" Cyp Tr.	✓		
2+81			
S-0.3 = Sly 20" Cyp Tree	✓		

7429			
2+98			
H + 1.5 = Nly. Tel. Pole	✓		
2+99			
S = Sly. Par. Pole	✓		
3+07			
S-0.5 = Sly 24" Cypress Tree	✓		
3+09			
-6.3 = $\frac{1}{2}$ Garage Dirt Floor	4.9	69.4 ✓	
H	50	69.3	
$\frac{1}{2}$	52	69.1	
S	51	69.2	
3+37			
H-9.6 = $\frac{1}{2}$ Dr. Gar. Conc. Floor	5.10	69.19 ✓	
3+50			
S	6.1	68.2	
$\frac{1}{2}$	6.3	68.0	
H	6.0	68.3	
3+51			
S = Sly 16" Cyp Tree	✓		
3+52			
H-1.0 = Nly Board Fence	✓		

7429

3+55

S - 0.2 = Sly 20" Cyp. Tree ✓

3+59

S + 0.2 = Sly 12" Cyp. Tree ✓

3+67

S - 0.3 = Sly 14" Cyp. Tree ✓

3+70

S - 0.1 = Sly 12" Cyp. Tree ✓

3+71

N - 1.0 = Fly Board Fence ✓

3+82

S = Sly 14" Cyp. Tr ✓

3+85

S = Sly 18" Cyp. Tr ✓

3+89

S - 0.2 = Sly 18" Cyp. Tree ✓

3+92

- 6.3 = Garage Dirt Floor 6.1 682 ✓

N 6.2 68.1

Z 6.4 67.9

S 6.5 67.8

40

7429

3+99

S = Sly 8" Cyp. Tree ✓

4+03

S + 1.2 = Sly Post. Pole ✓

4+12

S = Sly 6" Cypress Tree ✓

4+18

S - 1.2 = Sly 30" Cyp. Tree ✓

4+30

S 7.3 67.0

Z 7.5 66.8

N 7.0 67.3

4+53

N + 1.6 = N 1/4 Tel. Pole ✓

4+60

N 7.7 66.6

Z 7.8 66.5

S 7.9 66.4

4+99.35 = 72. Jernell

S 8.5 65.8

74.29

Z 8.3 66.0

H 8.3 66.0

TP 6.89 72.50 8.68 65.61

5 + 19.35 = 24 Cb Line Jencil

-124.5 = Sky Cb on Garret
10.50 Curb Face 9.00 68.50

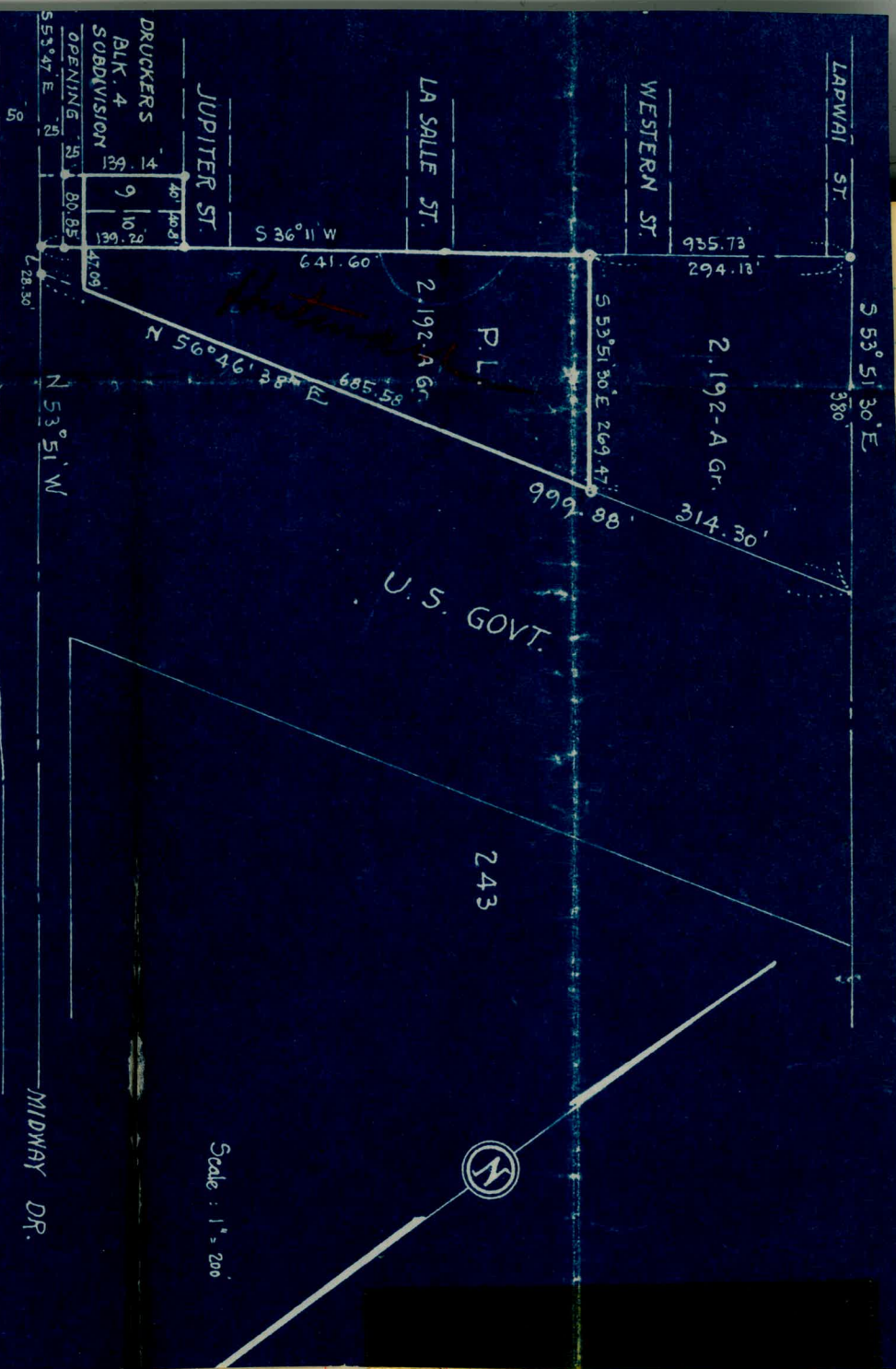
H 7.1 65.4

Z 7.5 65.0

S 7.7 64.8

BM 3.84 68.66
J.M. BP
Sornick
Jencil
68.63

41



U. S. GOVT.

243

Scale : 1" = 200'

Portion of Pueblo Lot 243 and Lots 9 and 10, Blk. 4, Druckers Subdivision.

February 1946

SURVEY OF

KARL F. JAGGER, Registered Civil Engineer



Karl F. Jagger

Location of EXISTING
Traffic Lanes
Midway + Frontier
Moore
Sampson Meyer
W. FM 1
4+12-45.

see 1636-4

1636-4

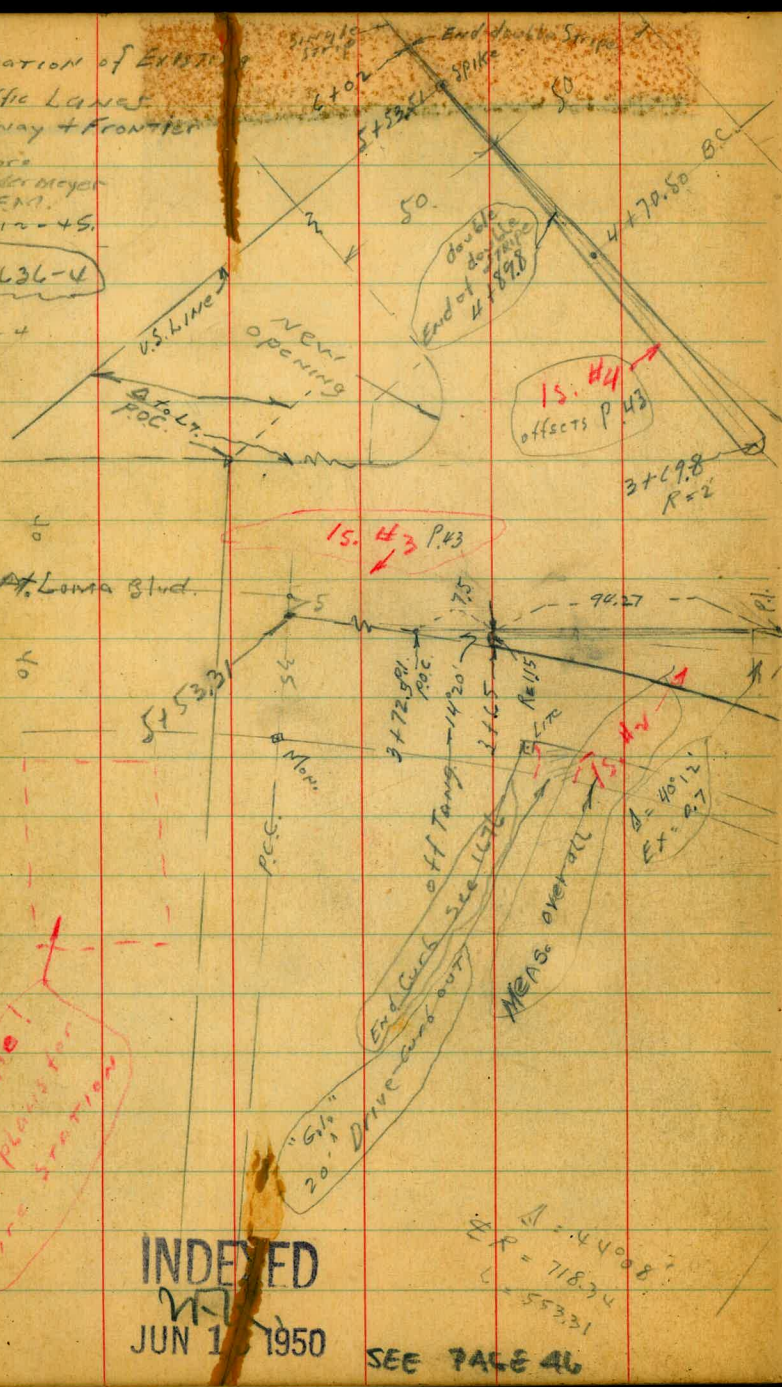
W. At. Loma Blvd.

of

Jimmie!
See Plans for
Fire Station

INDEXED
JUN 1 1950

SEE PAGE 46



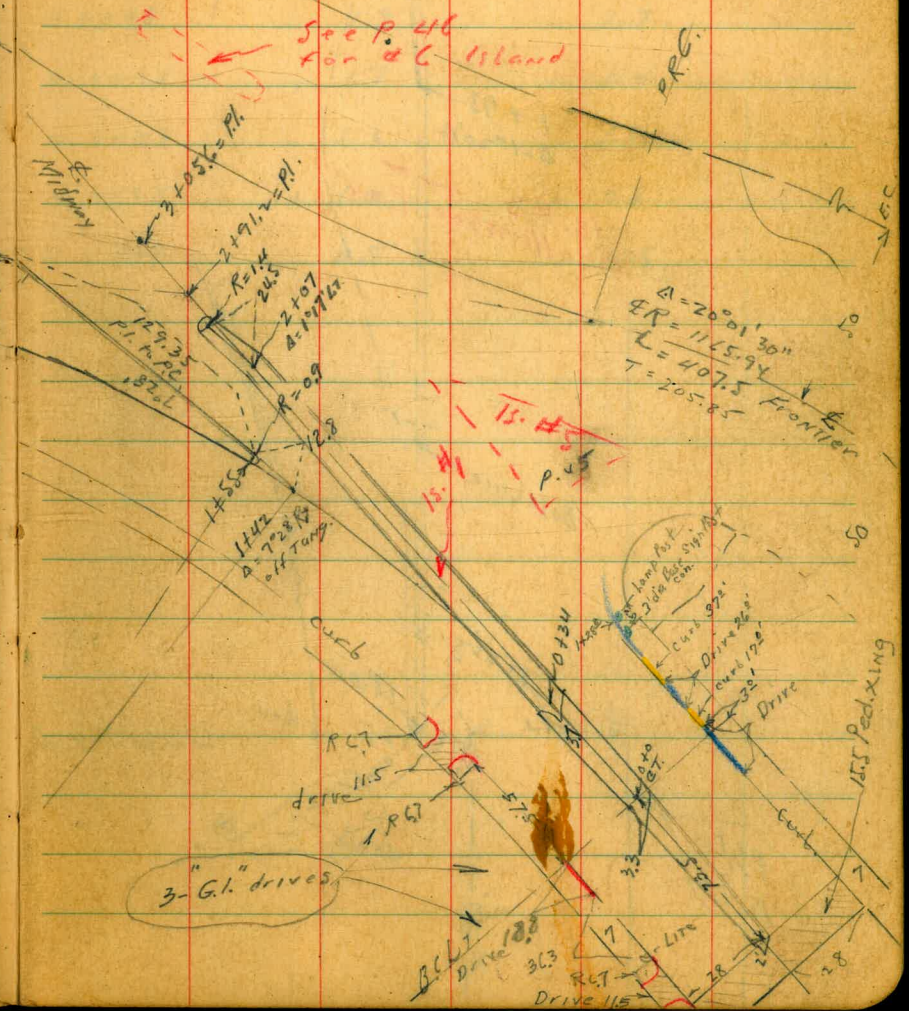
See Ties - Page 41
original

$\Delta = 39^{\circ}02'30''$
 $ER = 465.12$
 $L = 311.93$
 $T = 164.9$

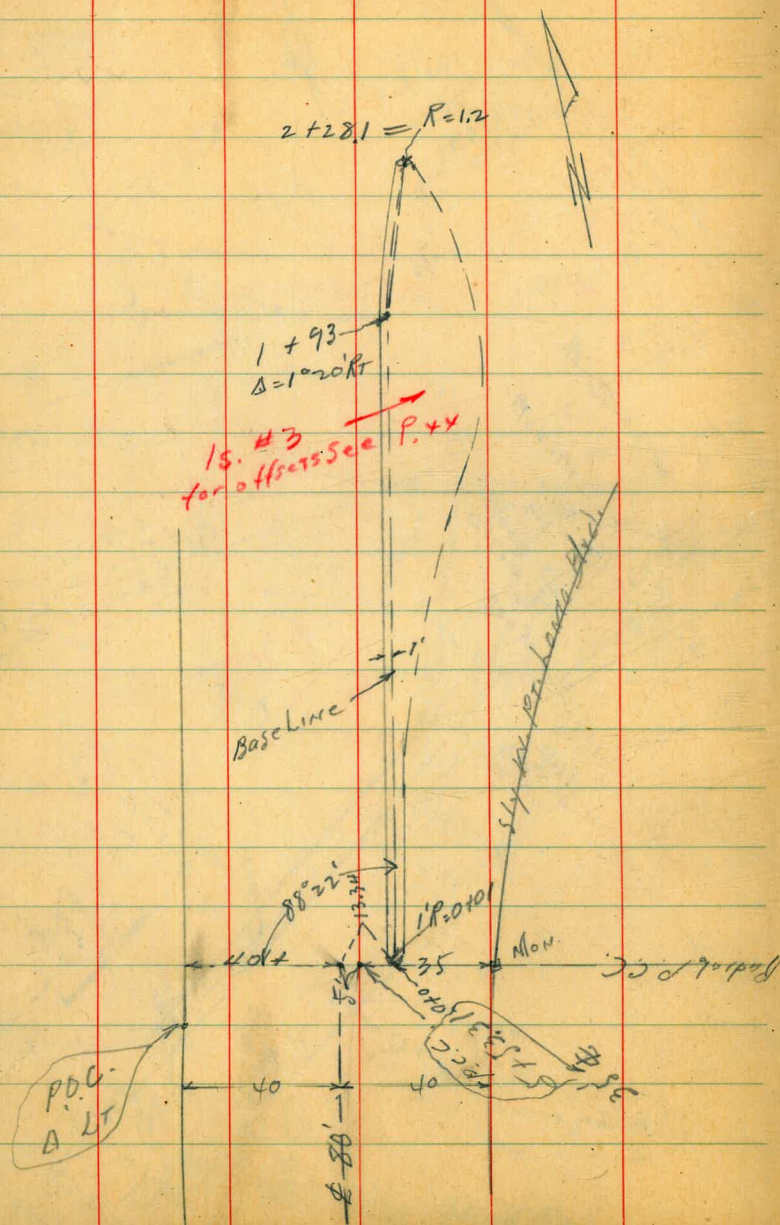
See P. 46
for Island

$\Delta = 20^{\circ}01'30''$
 $ER = 1165.94$
 $L = 407.5$
 $T = 205.85$

3-G.I. drives



Island #3 is Too far South Ely.



Island #4 Sketch P. 42

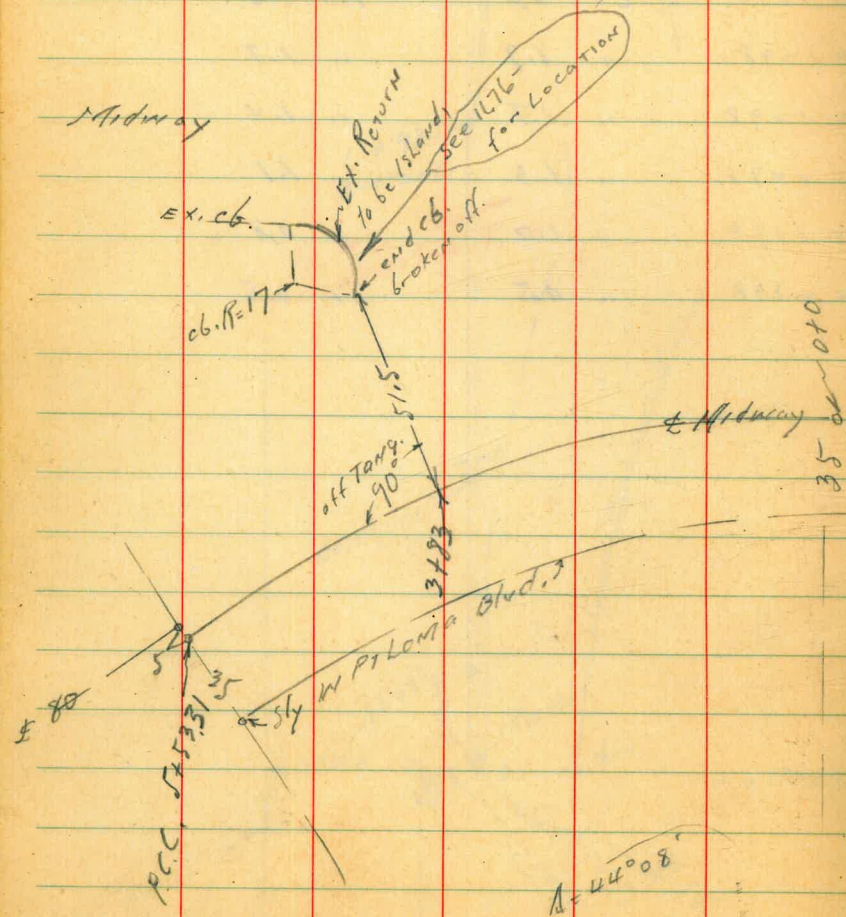
Meas. over all

offset from Midway

3+69.8	R.V		
3+89.8	LT	2.0	RT 1.8
4+09.8	"	1.9	" 1.7
4+29.8	"	1.7	" 1.4
4+49.8	"	1.3	" 1.1
4+69.8	"	1.0	" 0.8
4+89.8	"	0.5	" 0.5

Note!

ART - this tie at your request.

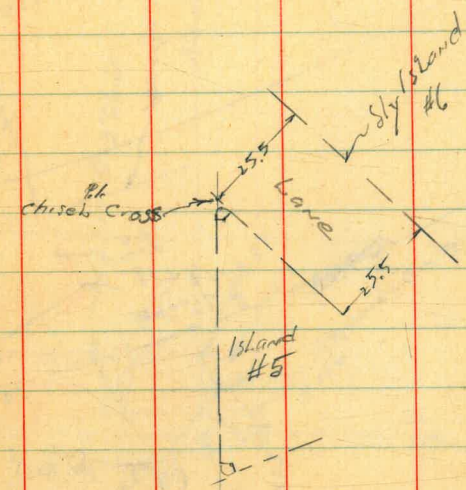
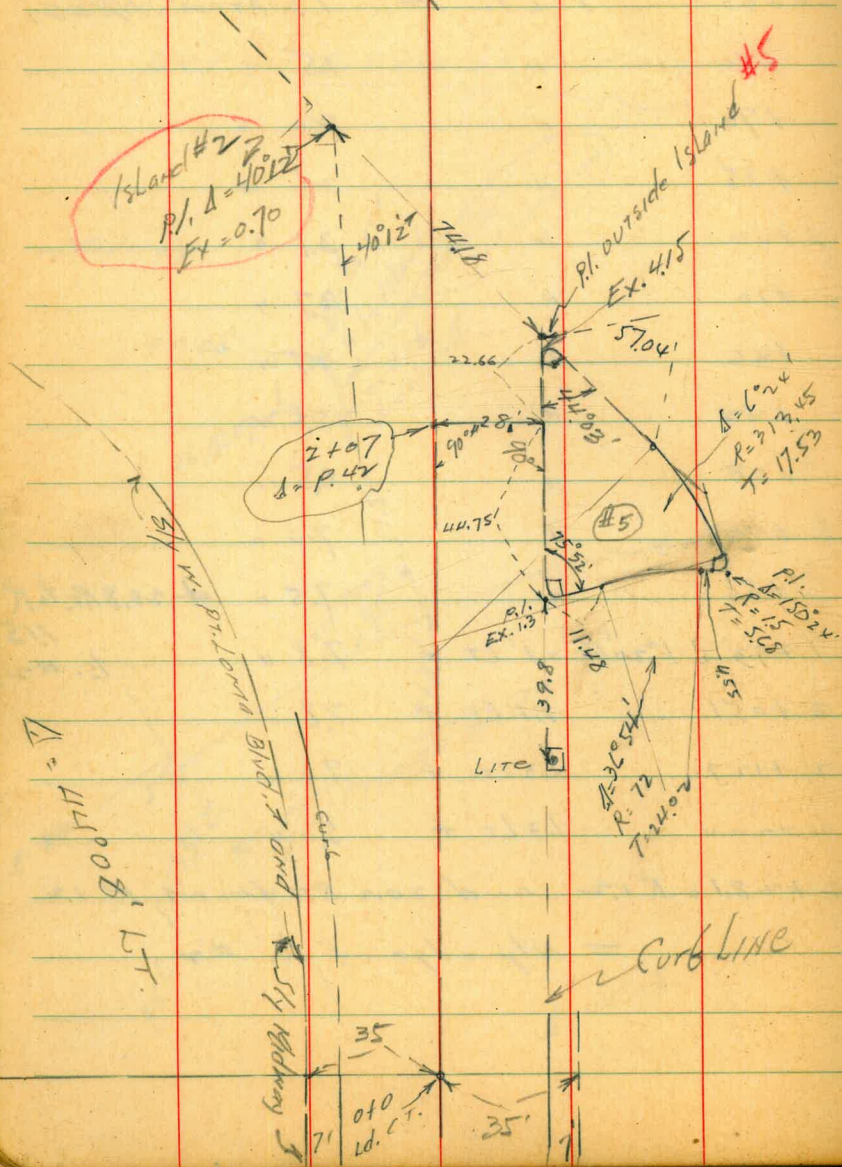


offsets, Is. #3 (from p. 43)

0401	= 1' R	
0435	1' LT.	4 1.3 Rt = overriable Meas.
+50	"	1.5 "
+70	"	2.0 "
+85	"	2.6 "
+100	"	3.1 "
+10	"	3.7 "
+26	"	4.7 "
+42	"	5.6 "
+58	"	6.5 "
+75	"	7.4 "
+86	"	7.5 " + 20.8 Rt. to R 115 Is. #2
1+93	Δ 1°20' Rt = 1' LT +	7.8 "
2+05.1	1.1 LT +	7.8 "
2+12.7	1.3 LT +	7.0 "
2+20.4	1.3 LT +	5.0 "
2+28.1	= R 12 and 20.12 Rt. from R 12	
	= Nly edge of Is. #2	

Layout for Island #5

Meas. on outside



Outside Meas.

offsets from Baseline

	Island #6	Ties P. & C.
	LT	RT
0-15.3 to R.I.V	-	-
0+0 = A 24' LT	1.5	1.5
+20	0.7	4.0
+40	0.8	5.7
+60	1.4	6.9
+80	2.1	7.4
+100	2.9	7.8
+108	2.9	7.4
+116.2 = R 23	2.3	4.0

Baseline cont. to Pl.

P.O.C.
to Frontier

Jimmie; 13 Frontier St. private or

Public Road?

Frontier paved full 100' width
but joins only 40' Rdway, on Midway,
leaving 20' width of 30'.

Outside Meas.

Offsets from 12.47

47

	LT	RT
0+00	0.4	0.4
+08.87 = Radiata	0.4	0.4
+37.10 A 3' offset	0.5	0.5
+50	0.4	1.3
+70	0.7	2.7
+95	1.7	4.6
+115	3.0	6.3
+130	3.9	7.7
+145	4.9	9.1
+155	5.5 to angle	10.4
+156.38 A 28' 5" RT	4.0	-
+184.18 A 76' 20" RT	1.0 of back Tan.	- wly of 1.4 painted line
+202.8 = edge Pav		1.4 Blvd. Stop

Bus stops could be changed and
Ped. Crossings established.

Levels on Existing Sewer ManHoles
Alley Between 4th & Highland North & South
of Polk Ave

BM	2.78	361.88	359.10	H.W.B.P. Polk & Fairmount
TP	2.28	358.50	5.66	356.22 N.E. Top Fire Hyd. Polk & 4th

Sewer ManHole North of Polk

on Rim		4.01	359.99	
" Flow Line		10.09	348.91	(Compute 348.99 on 0.3%)

Existing Water Main

on Paring		5.28	353.22	
" Top Pipe			50.2	

Sewer ManHole South of Polk

on Rim		5.20	353.30	
" Flow Line		10.22	348.28	(Plan Record 348.26)

5.08	59.57		54.99	M.H.
------	-------	--	-------	------

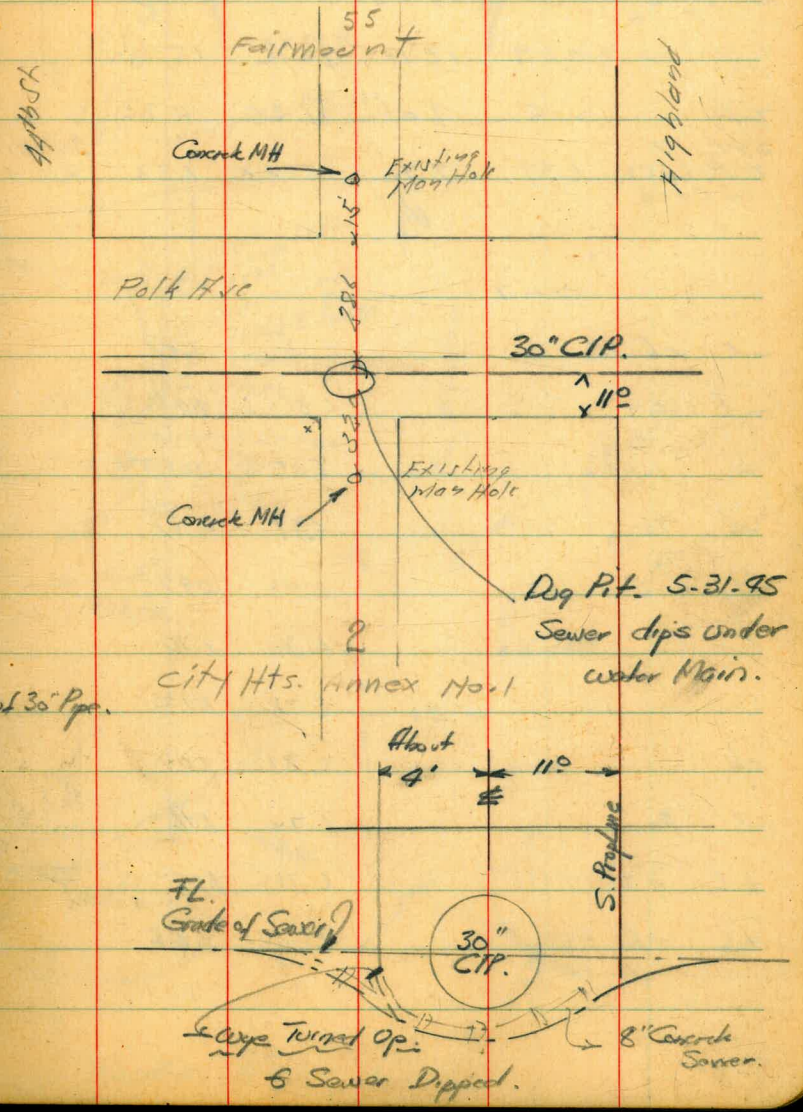
Hand Level Notes

11.75		47.82	Top of 8" Sewer, 2' N of 30" Pipe.
9.15		50.92	Top 30" CIP.
6.05		58.52	Corb. Sw Alley.

TP	2.06	358.28	356.22	N.E. Top Fire Hyd. Polk & 4th
Top of Curb S. of Polk & Alley		4.76	353.52	
M.H. in Alley North of Polk		3.79	354.49	

index of
c.s.k

May 28-45
5.0002
81.00
8099



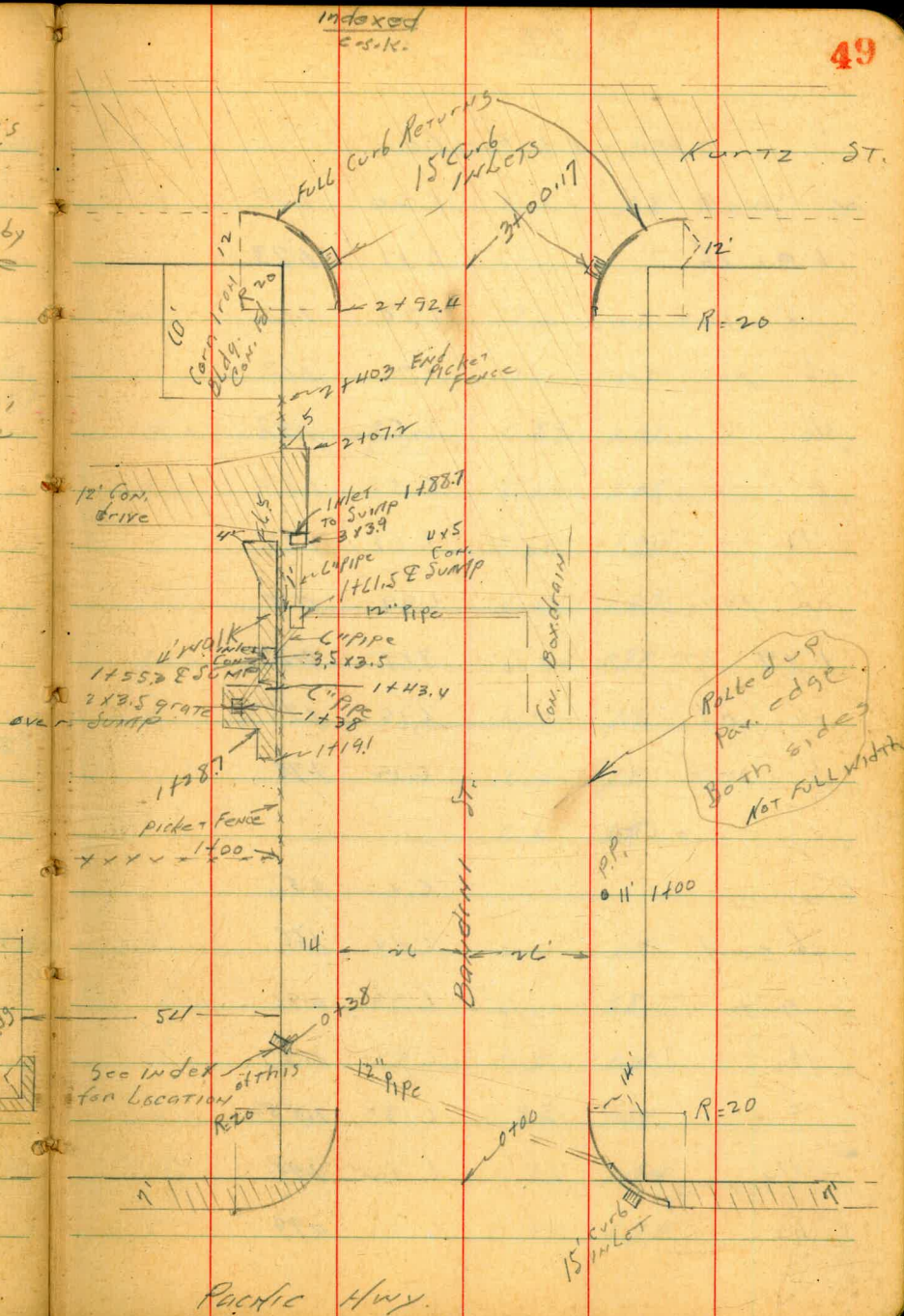
C.S.M. Levels on Black Pav. on
C.S.

W.F.M. Bandini ST = 80' wide 14' cbs 13' 1/4"
6-8-45.

B.M. SW B.P. Curb	235	28.08	27.73	Wetherby Moore
T.P.	0.19	16.11	12.10	15.94
T.P.	2.15	7.01	11.25	4.80
SW 1/4 T.P. Loc. in curb	6.37	7.90	5.48	1.53
				Bandini Kurtz

0-7

- C cb PC		6.13	1.77
- C 9T		6.80	1.06
S pav		7.05	0.85
cb		6.99	0.91
1/4		6.93	0.97
c		6.80	1.10
1/4		6.78	1.12
cb		6.81	1.09
N Pav		6.74	1.16
7C 9T		6.71	1.19
7C cb PC		6.24	1.66



0400 = E.L. Pacific		
N walk	6.20	1.70
+ 9.2 cb	6.17	1.73
n gut	6.78	1.12
cb pav	6.77	1.13
1/4 "	6.53	1.37
c "	6.58	1.32
1/4 "	6.68	1.22
cb pav	6.99	0.91
+ 4.9 QT	7.17	0.73
" cb	6.15	1.75
S walk	6.12	1.78
0413		
S	6.4	1.5
cb end	6.24	1.66
gut	6.99	0.91
1/4	6.53	1.37
c	6.35	1.55
1/4	6.42	1.48
QT	6.91	0.99

N cb end	6.0	1.30
N	6.6	1.3
0425		
N	7.0	0.9
cb diet	7.1	0.8
+ 0.7 = E.P. = edge pav,	6.89	1.01
1/4	6.44	1.46
c	6.26	1.64
1/4	6.43	1.47
+ 12 E.P.	6.94	0.98
cb diet	6.7	1.2
+ 6	6.4	1.5
S	6.4	1.5
0432		
S	6.4	1.5
+ 10	6.1	1.8
cb	6.5	1.4
+ 1 E.P.	6.86	1.04
1/4	6.36	1.54
c	6.19	1.71

7.90

1/4		6.40	1.50	
+12.2	E.P.	6.95	0.95	
cb	dirt	7.1	0.8	
N		7.0	0.9	
	o + 38			
N	Top grate	7.32	0.68	
	FL 12" pipe	9.32	0.68	
48'	N of N.L. Top walk	5.50	2.40	at Bldg
	o + 50			
N		6.9	1.0	
cb	dirt	7.1	0.8	
+08	E.P.	6.83	1.07	
1/4		6.25	1.64	
c		6.10	1.80	
1/4		6.27	1.63	
+14	E.P.	6.70	1.20	
cb	dirt	6.8	1.5	
+4		6.1	1.8	
S		6.5	1.4	

7.90

51

				o + 60
S		6.4	1.5	
+11		6.22	1.7	
cb	dirt	6.5	1.4	
+1	E.P.	6.65	1.25	
1/4		6.24	1.66	
c		6.08	1.82	
1/4		6.24	1.68	
+12.4	E.P.	6.87	1.03	
cb	dirt	7.0	0.9	
N		6.7	1.6	
	o + 80			
N		6.5	1.4	
cb	dirt	7.1	0.8	
+04	E.P.	7.00	0.90	
1/4		6.16	1.74	
c		6.04	1.86	
1/4		6.22	1.68	
+12	E.P.	6.68	1.22	
cb	dirt	6.3	1.6	

7.90

cb +4 5.8 2.1

S 6.1 1.8

1+00

S 5.8 2.1

+10 5.5 2.4

cb dirt 6.2 1.7

+1 E.P. 6.66 1.24

1/4 6.26 1.64

c 6.06 1.84

1/4 6.22 1.68

+12 E.P. 6.88 1.02

cb dirt 6.7 1.2

+3 6.4 1.5

N 6.5 1.4

1+28.7

N-11.1 v.L. Cond drive
Thru Gate 7.51 0.29

N-8 " " " 7.65 0.25

N-4.8 " " " 7.11 0.79

N-0.5 " " " 6.96 0.94

N 7.0 0.9

7.90

52

N +4 6.4 1.5

+11 6.3 1.6

cb dirt 6.6 1.3

+1 E.P. 6.90 1.00

1/4 6.36 1.54

c 6.15 1.75

1/4 6.33 1.57

+12 E.P. 6.80 1.10

cb 6.4 1.5

+2 5.8 2.1

S 5.7 2.2

1+38

N-9 CTR Top grate 7.82 1.06

1+43.4

N-11.1 EL Cond drive 7.64 1.26

N-8 7.64 1.26

N-5.8 7.19 1.71

N-0.5 6.89 1.01

1+50

S 4.9 3.0

7.90

S + 10	5.0	2.9
cb	6.6	1.3
+1 E.P.	7.01	0.89
1/4	6.24	1.46
C	6.22	1.68
1/4	6.37	1.53
+12	7.00	0.90
cb dirt	6.8	1.1
+3	6.0	1.9
N	6.3	1.6
1+115		
Top Con. Sump	6.12	1.78
FL 12" pipe	9.21	-1.49
1+75		
N	6.3	1.6
+11	6.4	1.5
cb	6.8	1.1
+1 E.P.	7.02	0.88
1/4	6.51	1.39
C	6.31	1.58

7.90

53

1/4	6.55	1.35
+12 E.P.	7.01	0.89
cb dirt	6.7	1.2
+2	5.6	2.3
S	5.3	2.6
1+88.7		
N + 5 Top SE Con Sump	6.7	1.2 = 9'21 of cb
N + 5 Con. =	7.41	0.49
N + 2 Con. Fb. drive	7.84	0.16 Inlet to Sump 2.9 wide opening
N Con drive	7.70	0.20
1+98		
S	5.4	2.5
+12	5.3	2.6
cb	6.8	1.1
+1 E.P.	7.14	0.76
1/4	6.69	1.21
C	6.47	1.43
1/4	6.63	1.27
cb oil Pav.	7.00	0.90
+9 Sledge Con drive	7.16	0.74

7.90

N on Cond drive 7.5v 0.38

+10 " " " 7.4v 0.48

2+077 EL Cond drive

N+5 on drive 6.9v 0.98 = 9' of cb

N " " 7.10 0.80

N-5 " " 7.18 0.72 = 5' of cb

2+25

N 6.6 1.3

+1v 6.4 1.5

cb 6.9 1.0

+1 E.P. 7.16 0.94

1/4 6.83 1.17

c 6.65 1.25

11x 6.8x 1.06

+1v 7.41 0.49

cb 7.2 0.7

+v 5.3 2.6

S 5.2 2.7

2+50

S 5.4 2.7

7.90

54

S+11 5.5 2.4

cb 7.0 0.9

+1 E.P. 7.2x 0.46

1/4 6.9v 0.98

c 6.80 1.10

1/4 6.9v 0.92

+1v E.P. 7.3x 0.56

cb 6.9 1.0

+v 6.1 1.8

N 6.2 1.7

2+75

N 5.8 2.1

+13 6.3 1.6

cb 6.7 1.2

+1 E.Pay 7.56 0.34

1/4 6.96 0.94

c 6.86 1.04

11x 6.93 0.97

+1v E.Pay 7.38 0.52

cb 6.9 1.0

7.90

cb + 2	5.4	2.5
S	5.3	2.6
2 + 9 + 4		"
S	5.5	2.4
+ 9	5.6	2.3
Top cb end	6.42	1.48
gut	7.41	0.49
1/4	6.88	1.02
c	6.84	1.08
1/4	7.02	0.88
gut	7.55	0.35
Top cb end	6.60	1.30
+ 3	6.0	1.9
N	5.6	2.3
3 + 0.17 = WL Kurtr		
N	5.6	2.3
+ 7	5.8	2.1
+ 12 Top cb	6.59	1.31
+ 12 gut grate	7.60	0.30
cb on grate	7.38	0.52

7.90

Barber

55

1/4	6.96	0.94
c	6.79	1.11
1/4	6.84	1.06
cb on grate	7.10	0.80
+ 2 " "	7.39	0.51
+ 2 Top cb	6.44	1.46
+ 7	5.7	2.2
S	5.5	2.4
3 + 12.17 = WL of Kurtr		
S - C Top cb end	6.10	1.8
" " gut	6.96	0.94
S - par. in gut	7.05	0.75
cb par.	6.85	1.05
1/4	6.66	1.24
c	6.68	1.22
1/4	6.81	1.09
cb par.	7.16	0.74
N par gut	7.17	0.73
+ 6 gut	7.14	0.76
+ 6 Top cb end	6.43	1.47

7.90

T.P.	12.39	19.57	0.72	7.18
------	-------	-------	------	------

T.P.	12.60	30.11 ^{off}	2.06	17.51
------	-------	----------------------	------	-------

check to Starting B.M.	2.36	27.75	27.73	0.02
------------------------	------	-------	-------	------

Walker Hazard
Hornby
7-13-45

Curb levels - on Existing curb

Akron & Trumbull sts
B.M. SE 87
Trumbull
& Akron

Note by A.E.B. low
This BM is a 18
by for many Notes
on plan.

NE Return Akron & Trumbull

#5 = E.C. on C. 4.33 153.16 ✓

#4 34' 4.24 153.25 ✓

10' Cb.R. BC 20' Cb.R. 315' Length Cb
EC 3 2 1

EC 15' @ Rate 2.5' 109' Cb Line Produced

10' Cb.R. 34' 28.5' Akron 218.74' Cb Line

NW Cont. from 35' Cb.R. 55' Length
#3 4.36 152.93 ✓

#2 5.41 152.08 ✓

#1 EC 6.65 150.84 ✓

SE Ret. Trumbull & Akron

#1 6.79 150.75 ✓

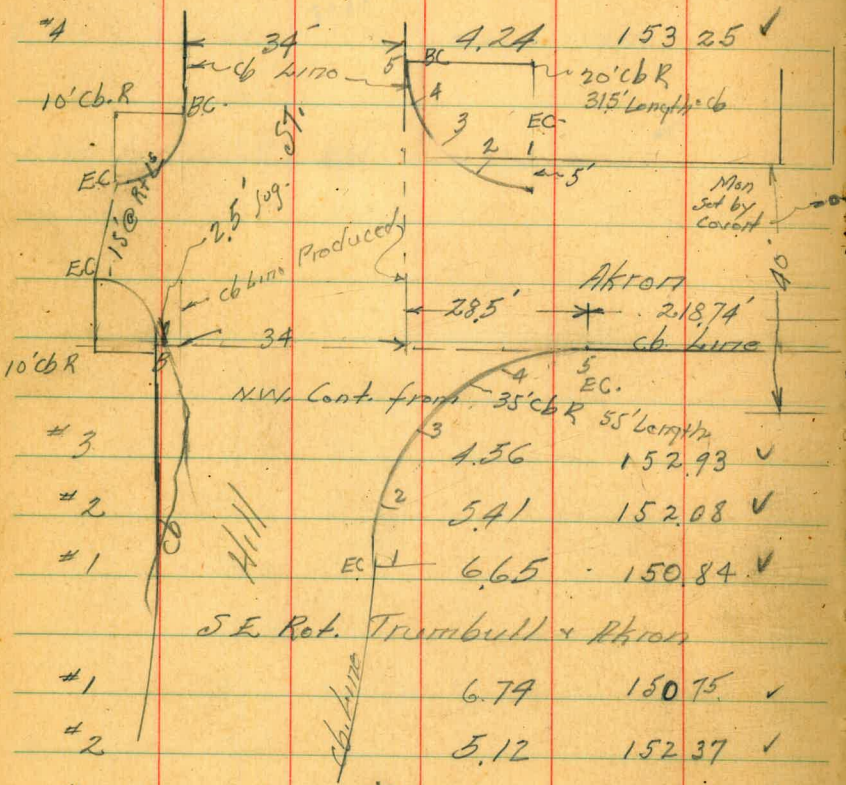
#2 5.12 152.37 ✓

#3 3.61 153.88 ✓

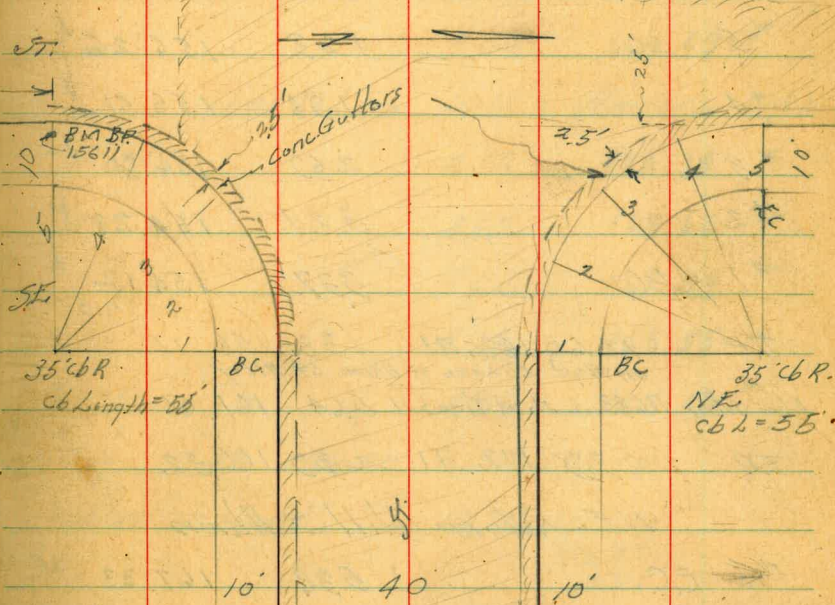
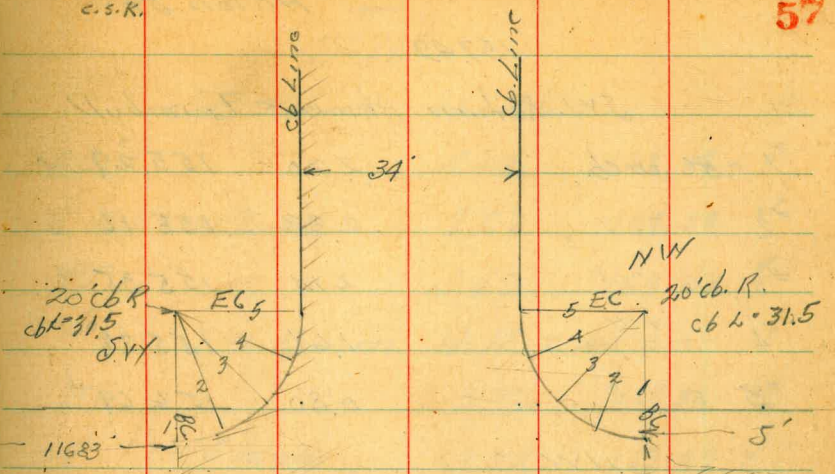
#4 2.35 155.14 ✓

#5 = E.C. 1.42 156.07 ✓

Reduced & put on profile
2438



Indexed
C.S.R.



TRUMBULL

Akron st.

157.49

SW. Return Akron - Trumbull

#1 - BC on cb	2.20	155.29	✓
#2 " "	2.33	155.16	✓
#3 " "	2.14	155.35	✓
#4 " "	1.61	155.88	✓
#5 - E " "	0.80	156.69	✓

NW

#5 - EC	1.23	156.26	✓
#4	1.28	155.51	✓
#3	2.69	154.80	✓
#2	3.21	154.28	✓
#1 = BC	3.37	154.12	✓ on B.M.

T.P. 10.60 166.71 1.38 156.11
on West 66 line of Akron at Hill of
Elev. Mass 116.83 South of Trumbull 5.64 161.07

T.P. 6.39 172.71 0.39 166.32

N.E. Return Hill & Akron

#5 EC	5.38	167.33	✓
#4	5.05	167.66	✓
#3	5.10	167.61	✓
#2	5.63	167.06	✓
#1	6.60	166.11	✓

172.71

SE Return 10' 66"

BC	4.24	168.47	✓
# Ret. } 155' Length	3.62	169.09	✓
EC	3.49	169.22	✓

SW Return Hill & Akron

EC	3.39	169.32	✓
# } 155' Length	3.22	169.49	✓
BC	3.02	169.69	✓

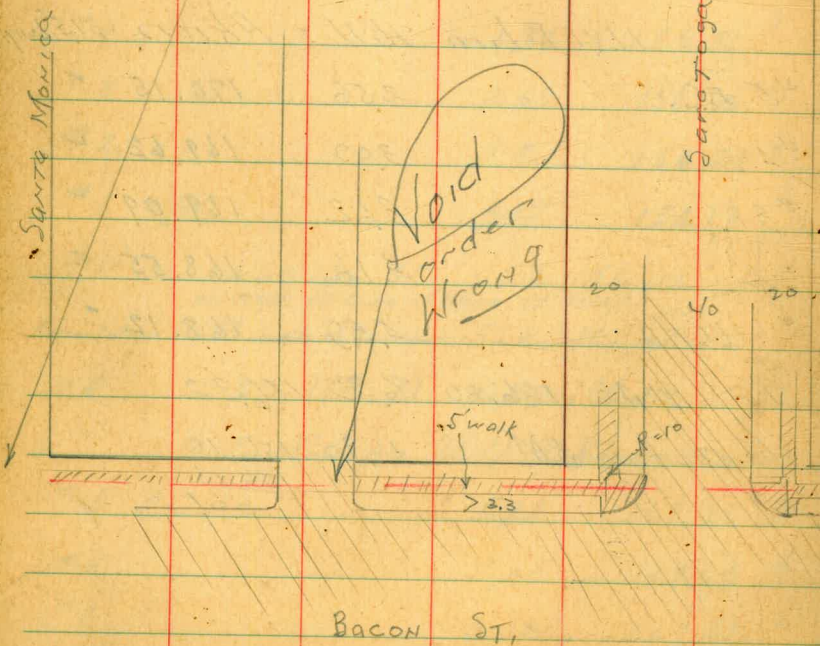
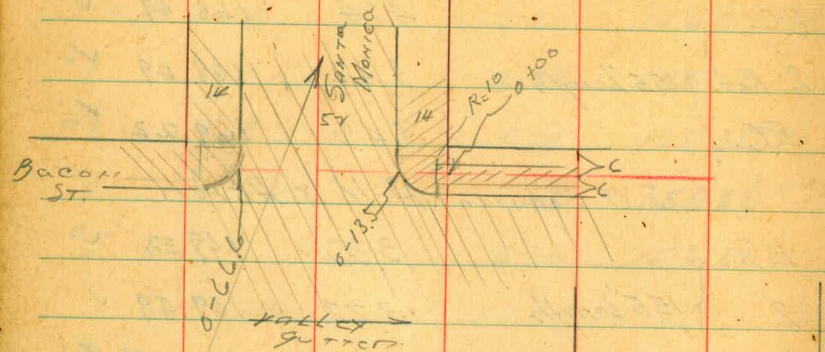
NW Return Hill & Akron 215' Length

#5 EC	2.56	170.15	✓
#4	3.09	169.62	✓
#3	3.62	169.09	✓
#2	4.16	168.55	✓
#1 = BC	4.59	168.12	✓

T.P. 0.48 166.80 6.39 166.32

chk. starting B.M.
10.70 156.10
156.11
0.01

Proposed drain on Bacon St.
 Santa Monica to Cape May



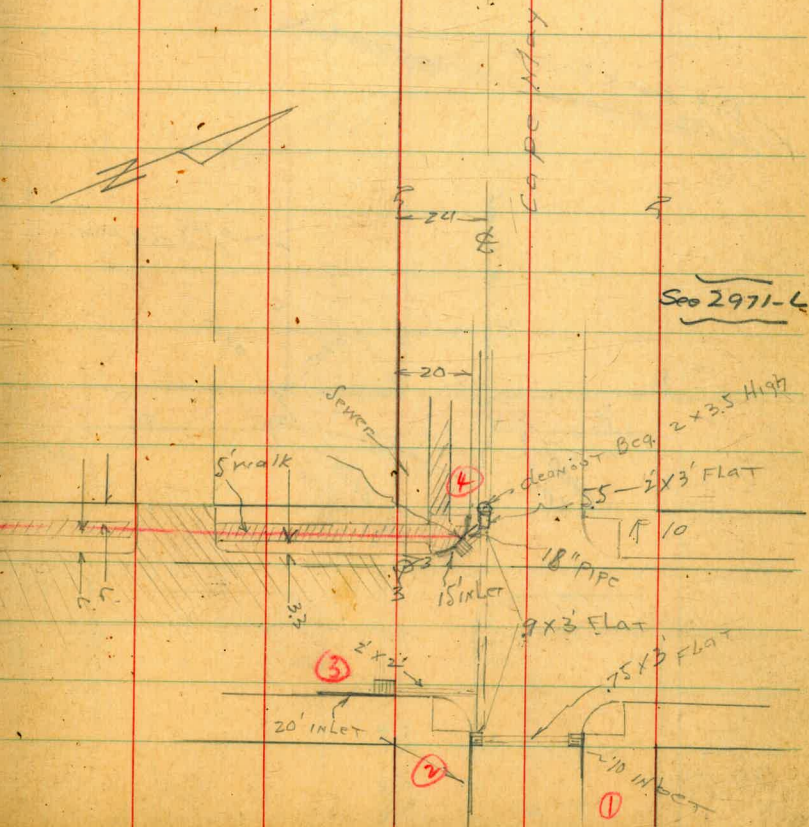
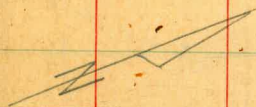
B.M.
 NESE Newport
 to Bacon
 11.5'

indexed
 Crisk

circled
 8-2-45

Abbott
 St

⊙ Cleanout

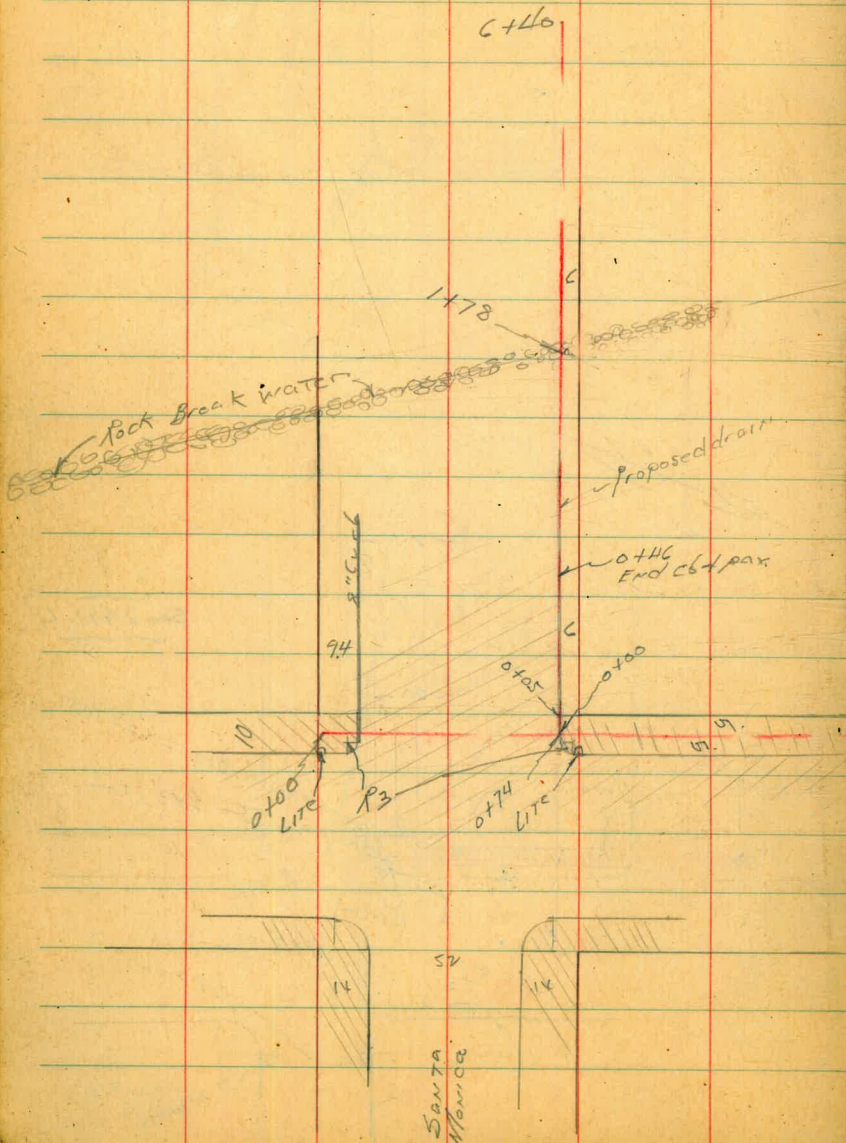


See 2971-6

20' INLET
 15' INLET
 20' INLET
 18" P/C
 9' x 3' FLAT
 7.5' x 3' FLAT
 2' x 2'
 2' x 3.5' HIGH
 5.5' - 2' x 3' FLAT
 10'

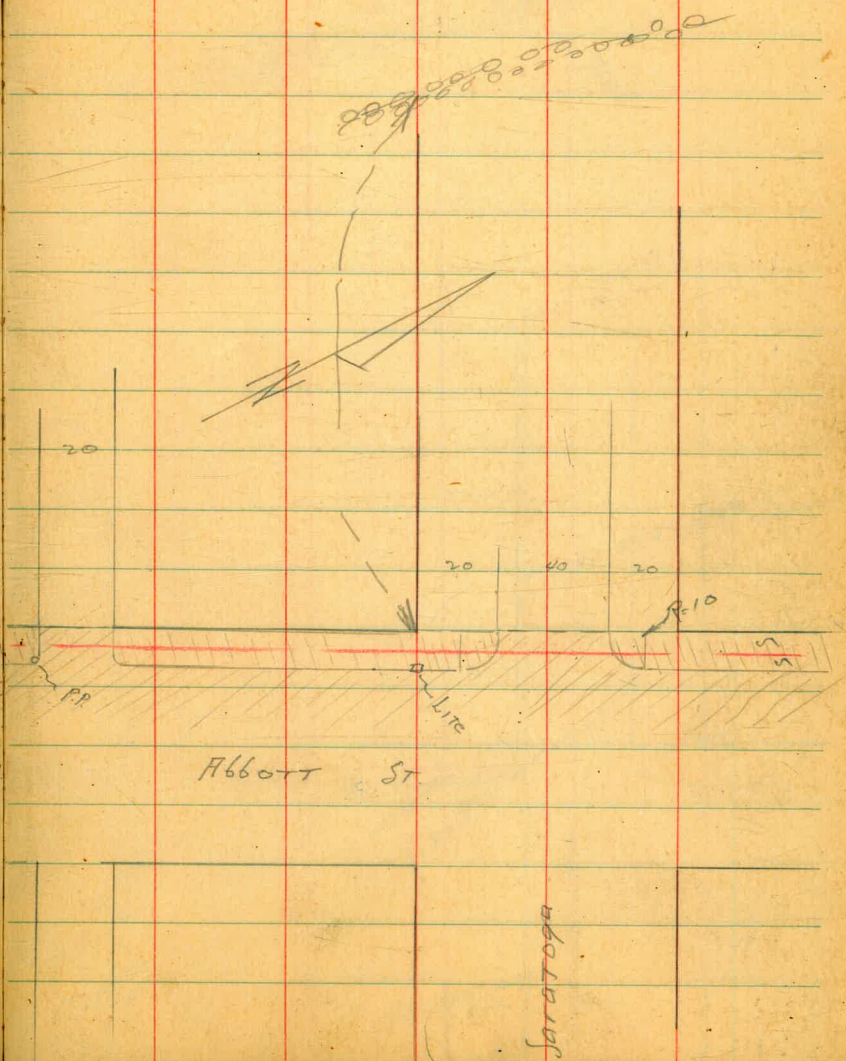
Proposed drain on Abbott St.
Santa Monica to Cape May

C+46



Santa Monica

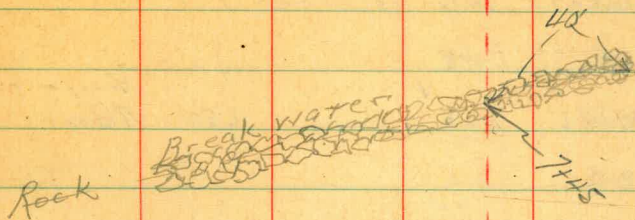
S. Maurice
S. M. Maurice
W. Maurice
8-12-45



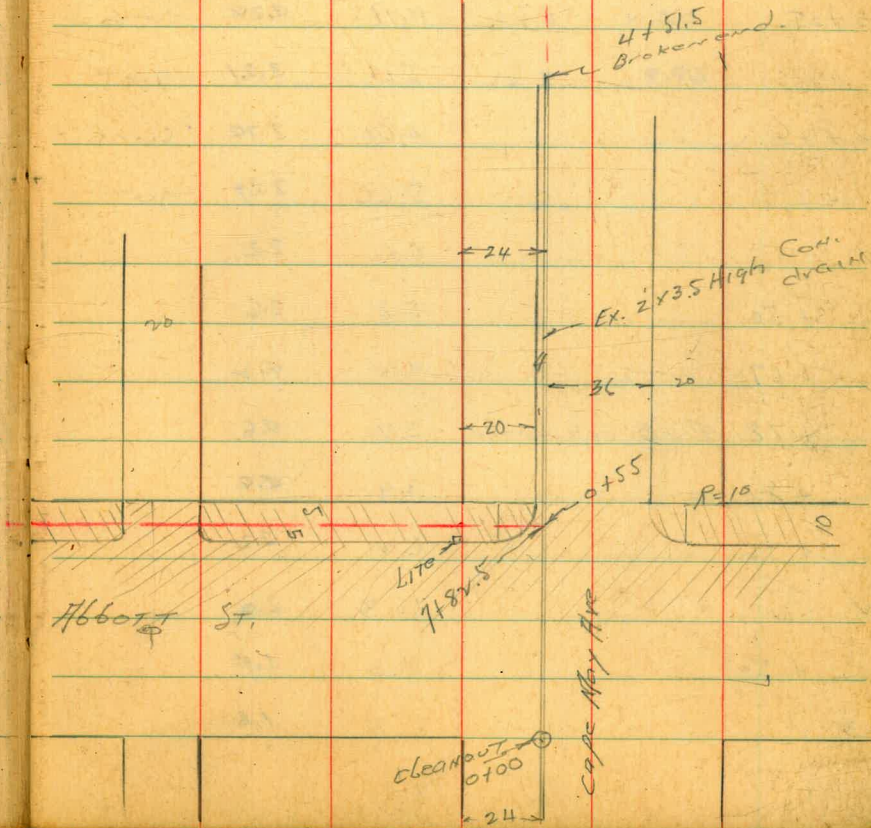
Abbott St

Saratoga

10+00



4+51.5
Broken end.



Levels for proposed drain
on N side Santa Monica

Abbott Wly to Ocean

Sketch P. 60

City datum
Newport
Abbott

NEBP 1.85 8.35 ✓ 6.50

0+00 E W 10' walk Abbott 4.08 4.27 curb

" " 4.74 3.91 gut

0+05 " 4.11 4.29 curb

" " 5.14 3.21 gut

0+46 " 4.61 3.79 curb

" " 5.66 2.69 gut

" " 6.1 2.2

+50 " 5.8 2.6

+67 " 4.2 4.2

+78 E Breakwater 3.7 4.6

+81 " 3.9 4.4

+95 " 6.2 2.2

✓ " 6.3 2.0

+50 " 7.0 1.4

3 " 6.8 1.6

8.35

3 +50 7.4 1.0

4 8.2 0.2

+50 8.0 0.4

5 7.6 0.8

+40 6.9 1.4

+60 8.8 -0.4

6 10.3 -2.0

+40 Foreshore 12.8 -4.95

E Levels Proposed drain
 on E of W 10' walk on Abbott.
 Santa Monica to Cape May

		8.35		
T.P.	5.49	9.76	4.08	4.27
0+00	S.L. Santa Monica		4.84	4.90
0+19.4	curb		5.10	4.66
"	gutter		5.97	3.79
+25			5.51	4.25
+35			5.20	4.86
+40			5.31	4.95
+50			5.56	4.20
+60			6.08	3.68
+74	gutter		6.36	3.20
"	curb		5.49	4.27
+80	N.L. Santa Monica		5.37	4.39
1			5.24	4.57
+50			5.17	4.59
2			5.06	4.70
+20	curb		5.05	4.71

63

		9.76		
2+20	gutter		5.30	4.46
+30			5.60	4.16
+40	gutter		5.33	4.83
"	curb		4.85	4.91
+50			4.93	4.83
3			4.85	4.91
+50			4.77	4.99
+80	S.L. Saratoga		4.70	5.06
+98	curb		4.83	4.93
"	gutter		5.19	4.57
4+20			4.76	5.00
+40	gutter		5.40	4.36
"	curb		4.86	4.90
+60			4.58	5.19
5			4.12	5.69
T.P.	7.95	13.59	4.12	5.14
5+50			7.35	6.24
+98.8	curb		6.84	6.25

		<u>13.59</u>		
5+98.8	gut		7.17	6.87
6+09			7.31	6.28
+18.6	gut		6.98	6.61
"	comb		6.59	7.00
+50			6.70	7.39
7			5.55	8.02
+50			5.08	8.51
+65.5			4.95	8.62
+76.3	cut		5.07	8.57
"	gut:		5.43	8.16
7+82.5	par. ^{over} Existing drain on Cape May		5.25	8.32
T.P.	4.82	<u>12.22</u>	6.19	7.40 ✓

Levels on Extension of
 4x3.5 Existing drain on
 Cape May, Abbott Wh.
 to Ocean Sketch p. 11

	12.22	Fwd.		
0+00	R.M. Cleanout	3.95	8.27	FL. Abbott
"	FL. 2x3.5 drain	11.93	0.29	
0+55 = 7+82.5	Pay. over drain	3.88	8.39	
4+51.5	Broken end drain	14.21	-1.99	FL.
T.P.	2.95	<u>5.01</u>	10.16	2.06 ✓
4+52	Now on Sand	8.2	-3.2	
+65		10.2	-5.1	
+80		7.7	-2.7	
+90		7.4	-2.9	
5		10.2	-5.2	
+35		12.6	-7.6	
+70		11.7	-6.7	
+80		8.0	-3.0	

5.01

6		7.4	-2.9	
+50		6.1	-1.1	
7		5.8	-0.8	
+34		-5.2	-0.1	
+39		+0.5	+5.5	
+45	Breakwater	+1.4	+6.9	
+48		+0.5	+5.5	
+54		-3.7	+1.3	
8		5.4	-0.9	
+50		5.4	-0.9	
9		4.2	+0.8	
+30		3.4	+1.6	
+50		5.4	-0.9	
10	Fore Stone	9.1	-9.1	
	Check Levels on drain		8-9-45	
NW con			Cape May	
BMBP	3.15	12.04	8.89	Abbott
T.P. old	0.63	2.73	9.94	EL 2.06
4+51.5	FL. drain	4.48	-1.95	
Note! 2 cracks in drain approx 8' and 30' back from end drain. 0.15 opened on top inside				

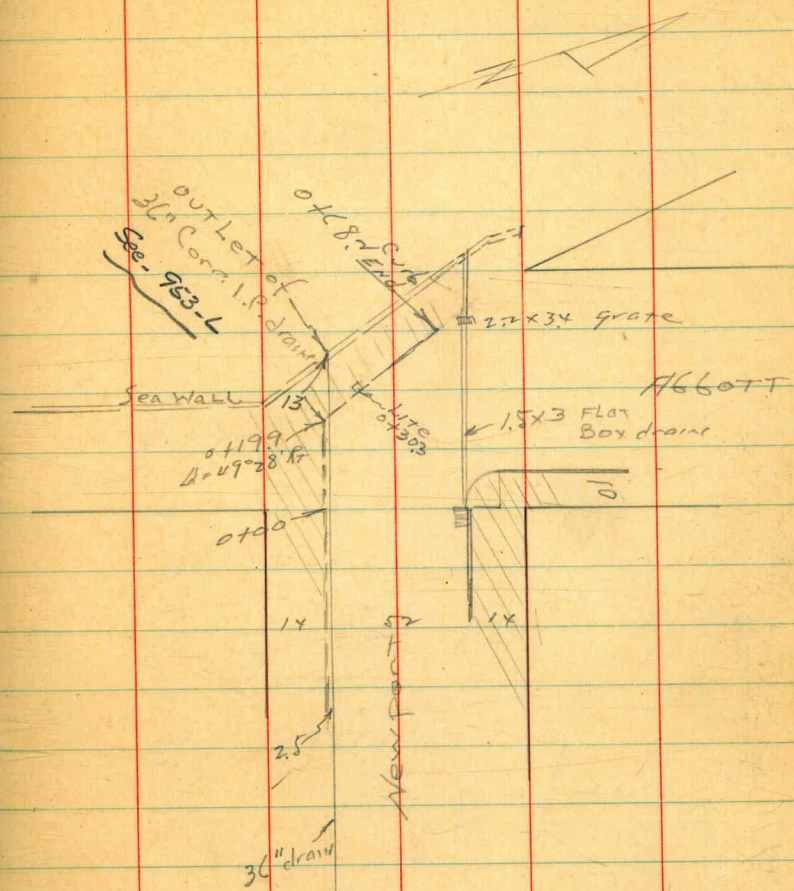
Levels for curb inlet

Foot of Newport:

				Newport	Abbott
NEBP	2.94	<u>10.14</u>	6.50		
0+00	Curb	4.25	6.19		
"	gut	4.76	5.68		
0+19.9	Δ ^{49°28' RT} Top curb	4.33	6.11		
"	gut	5.13	5.31		
0+18.2	end curb	4.72	5.72		
"	gut	5.28	5.16		
Flg. outlet of 30" corr. from		8.39	2.05		

Indexed
crsk

66



LOCATION approx. $\frac{1}{2}$ Rock Breakwater
on Ocean Front

Station Newport to Cape May Ave.
S. J. Moxley
W. Moore
8-9-45

Nly End \circ 13+40
Breakwater

12+08.8
 Δ 21 $^{\circ}$ 42' Rt.

11+00
 Δ 23 $^{\circ}$ 34' Lt.

4+05 Δ 9 $^{\circ}$ 27'

Beq. Breakwater 2+00

66.47

112 $^{\circ}$ 03'

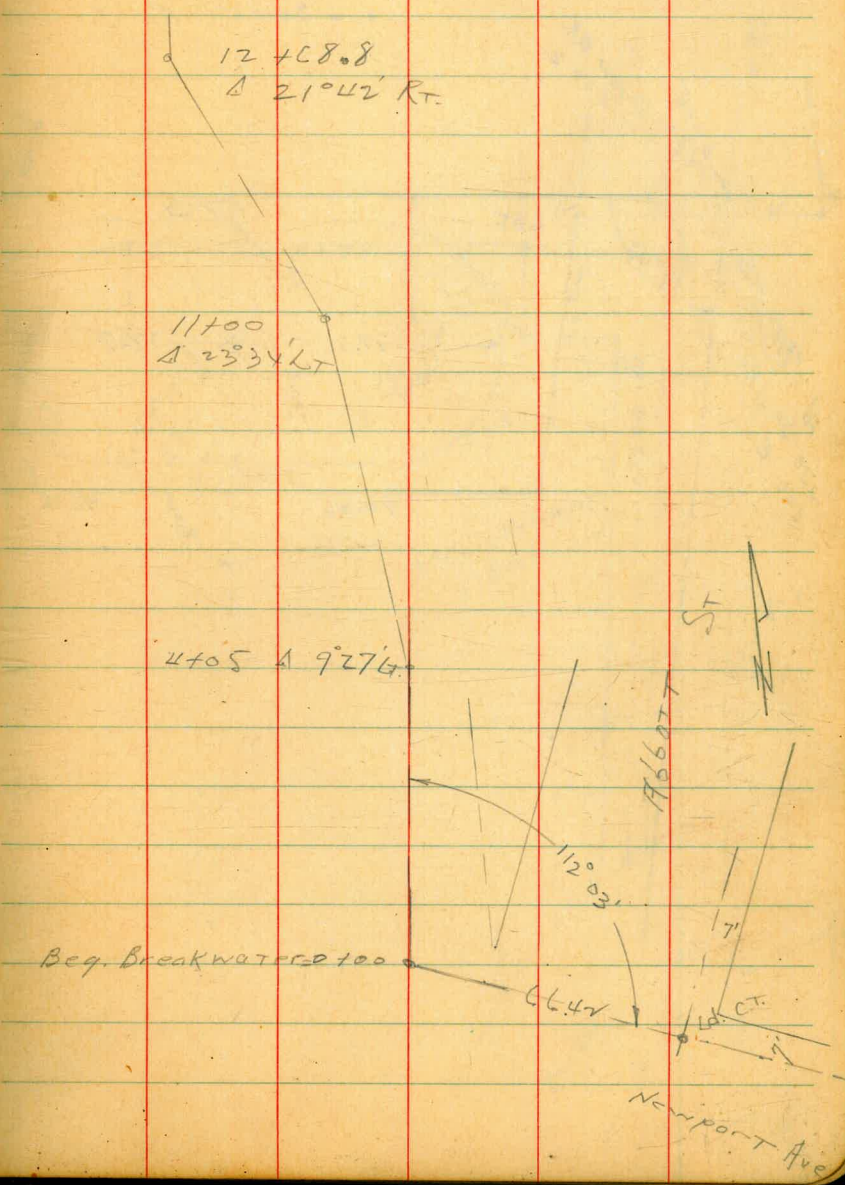
766.077

ST

17'

14' Ct.

Newport Ave



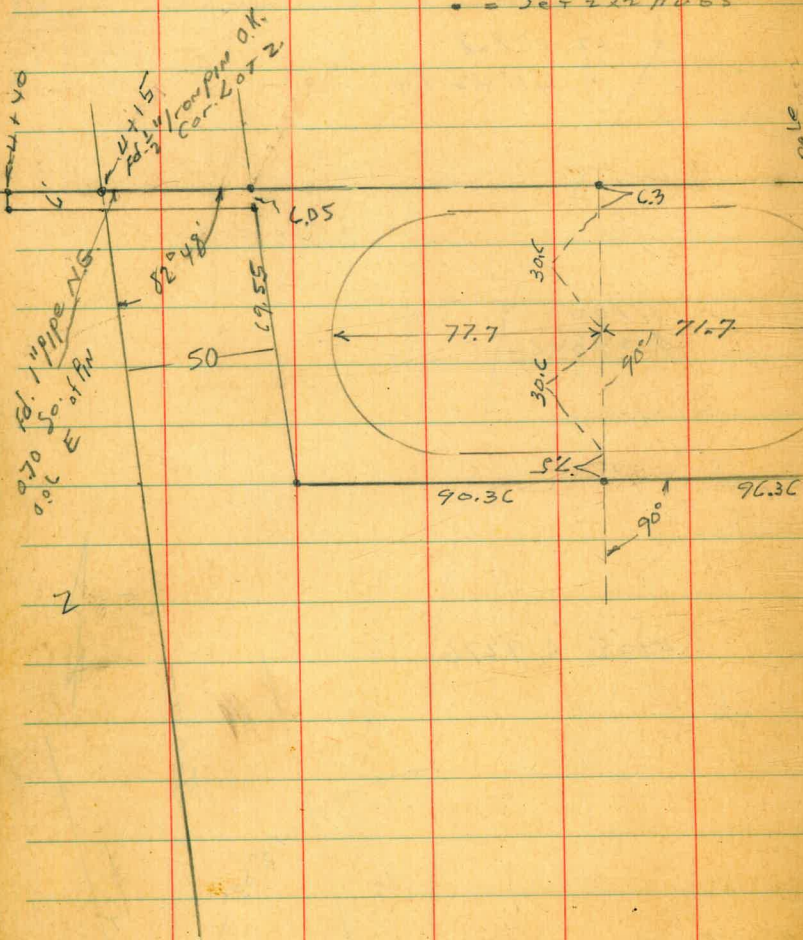
SOLEDAD RESERVOIR

CITY RES. SITE

2-3-4
F

La Jolla Country Club HTS.

• = Setzer Hubs



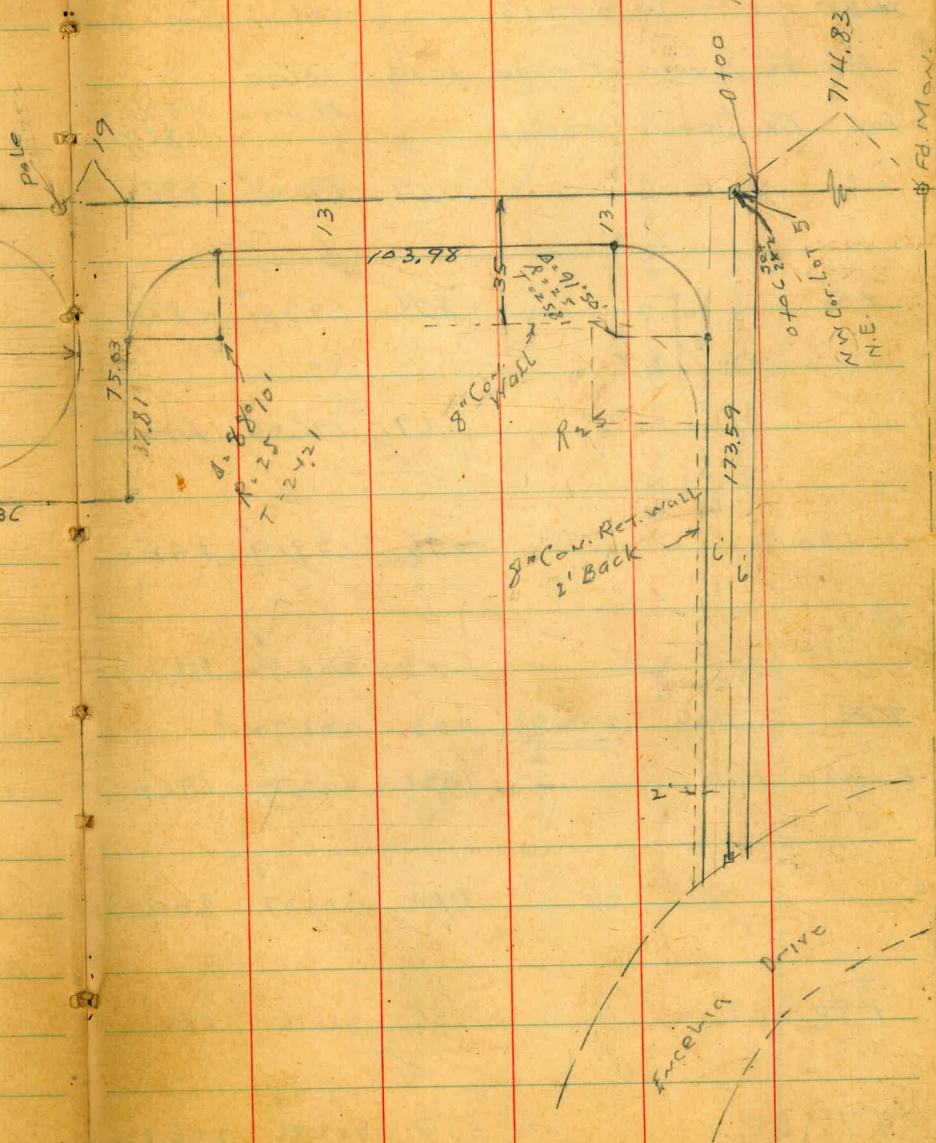
Plotted on 2977-B

C.S.K. 10-8-45

Indexed
C.S.K.

68

C. Moore
SANDWICH CO.
W. MO. C.
OCT. 3, 45.



C.S.M.
S.M.R. Myr.
ST. WEM.
10: 9-45

SEWER CONST. ON VENICE ST. WEM.
AT SANTA MONICA AVE.

SWAP	0.70	202.15	201.45	VENICE & SANTA MONICA
FL. EX. SEWER AT 0+00	16.15	186.00	EI. STUBS	FL. 186.0
0+00 EX. SEWER WALLEY				186.0
"	"	"	11.67	190.48 186.0
+50	Offset Stakes 5' W. on RT. ± EI. SAME AS OFFSETS	8.74	193.41	188.0
1		5.69	196.46	190.0
+50		2.96	199.19	192.0
2		1.23	200.92	194.0
T.P.	11.06	212.98	0.23	201.92
2 +50 M.H.		10.26	202.72	196.00
3		6.61	206.37	200.25
+50		2.36	210.62	204.50
+75 D.E.		0.12	212.86	206.62

CUTS

4.48

5.41

6.46

7.19

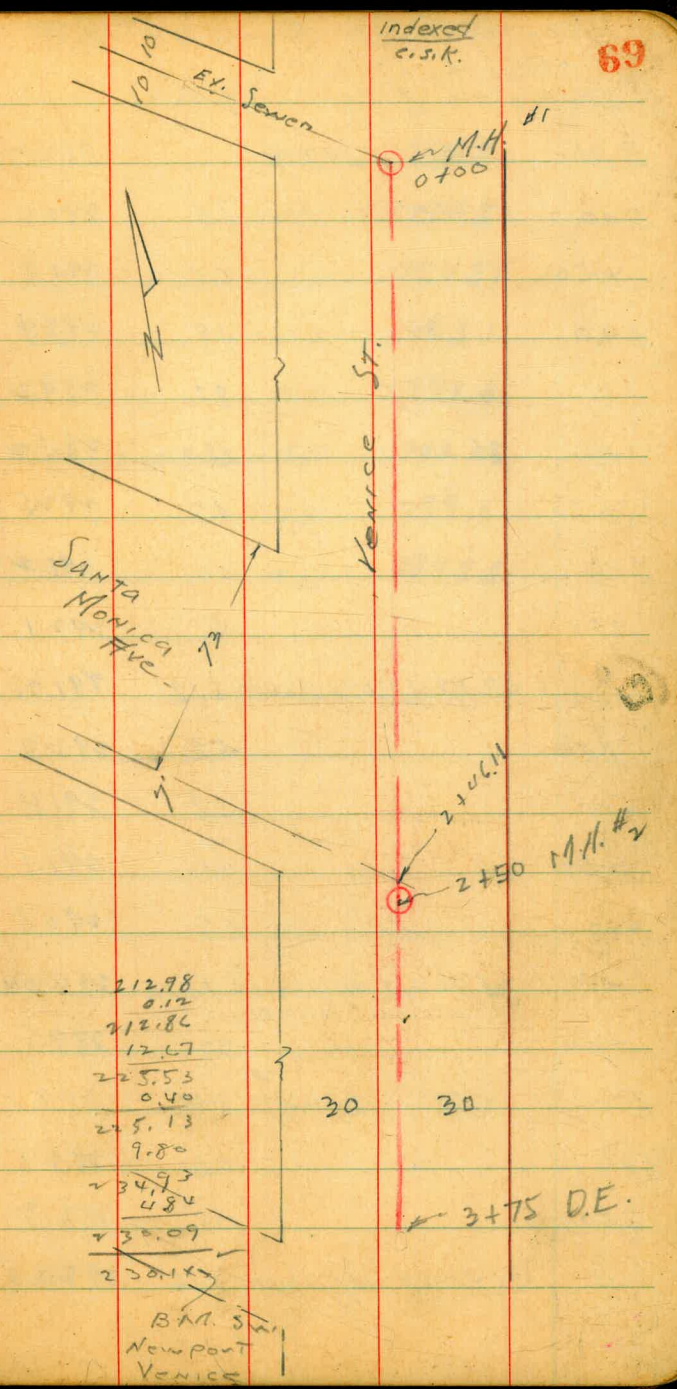
6.92

6.72

6.12

6.12

6.24



INDEXED
C.S.M.

M.H. #1
0+00

Venice St.

SANTA MONICA AVE.

M.H. #2
2+50

30

3+75 D.E.

B.M. SW
NEWPORT
VENICE

Proposed Sewer Brooklyn H.C.
67th St. to 68th St.
Levels on 2 Brooklyn

BM	722	297.19	289.97	2 Moos Brooklyn + 67th St
0+0	FL 67th St	6.6	290.6	
+50		5.4	291.8	
+10		4.8	292.4	
"	50 R/O 1/2	8.0	289.2	
"	80 " " "	12.0	285.2	
+50		4.7	292.5	
+10		5.0	292.2	
+25		5.1	292.1	
"	52 R/O 1/2 N.Y. House	6.12	291.07	07 Floor
+50		5.2	292.0	
+10		5.8	291.4	
+50		6.1	291.1	
+10		6.7	290.5	
+90	74 R/O 1/2 - N.Y. House Sewer Conc. 2' below Floor	13.15	284.04	07 Floor
+50		7.7	289.5	
IP	0.62	289.47	8.34	288.85 ✓
+10		0.2	289.3	
+50		0.8	288.7	
"	126 R/O 1/2 - N.Y. House	6.85	282.62	07 Floor

Indexed
C.S.K.

Oct 20-45
Survey
81.57
Osborn

70

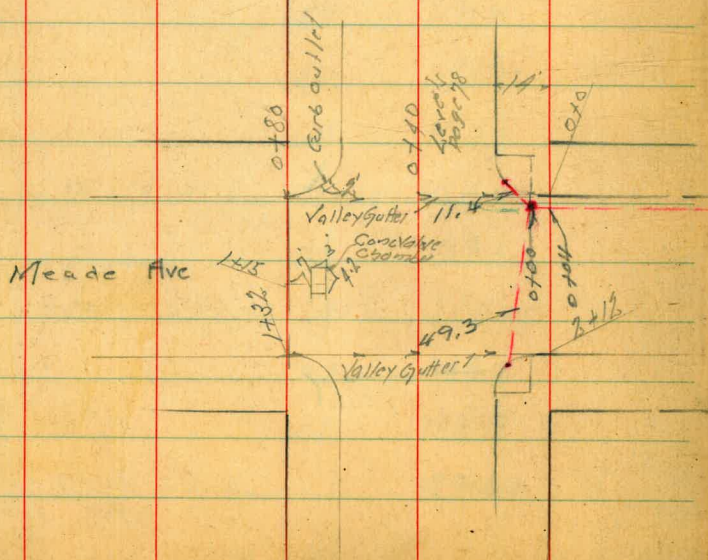
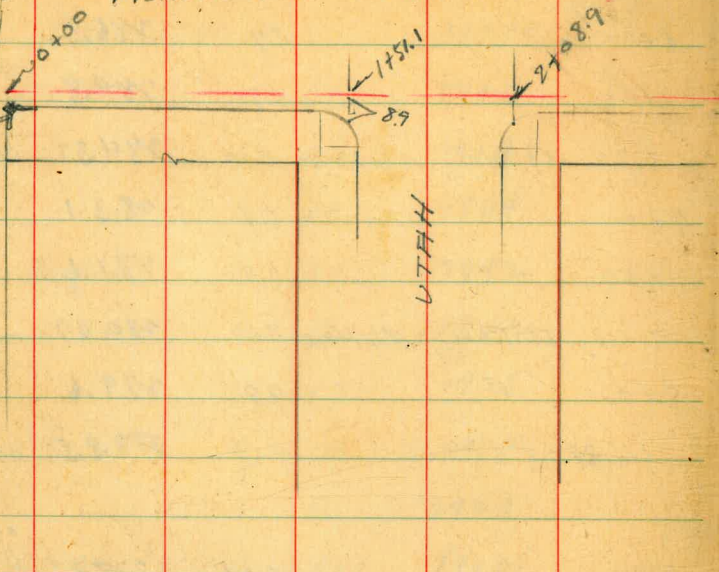
289.47

6+0		2.7	286.8	
+50		4.7	284.8	
+70	54 R/O 1/2 - N.Y. House	5.10	284.37	07 Floor
+10		6.4	283.1	
+50		7.7	281.6	
+52	55 R/O 1/2 - N.Y. House	9.40	280.07	07 Floor
+10		9.9	279.6	
+16.84	- 2 68th St	9.62	279.85	07 Paving
BM		16.05	279.42	07 2 Moos Brooklyn 68th St 279.42

Levels on Proposed drain
Beg. at alley west of
Monroe and UTAH

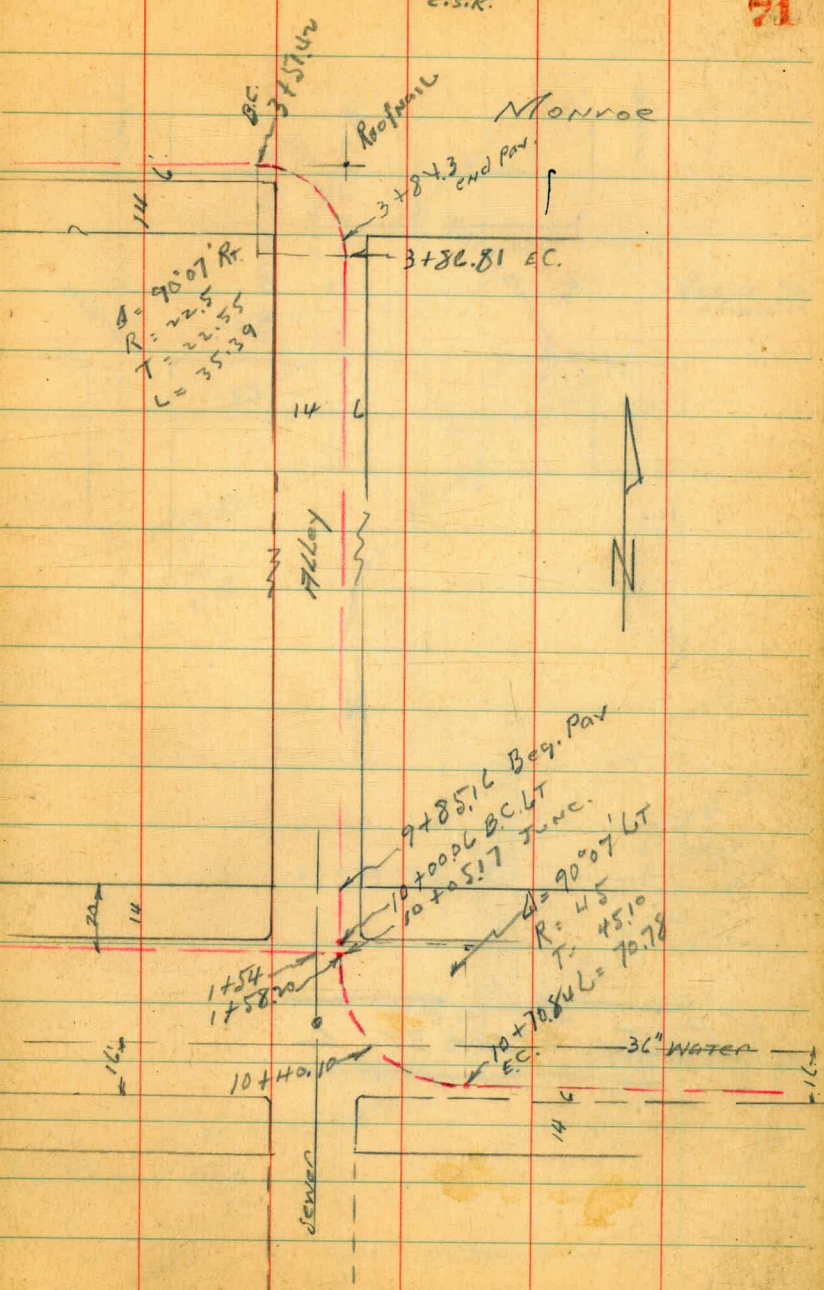
C.S.M.
C.S.
N.Y.
1126-45

Alley
crossing drain



Indexed
C.S.K.

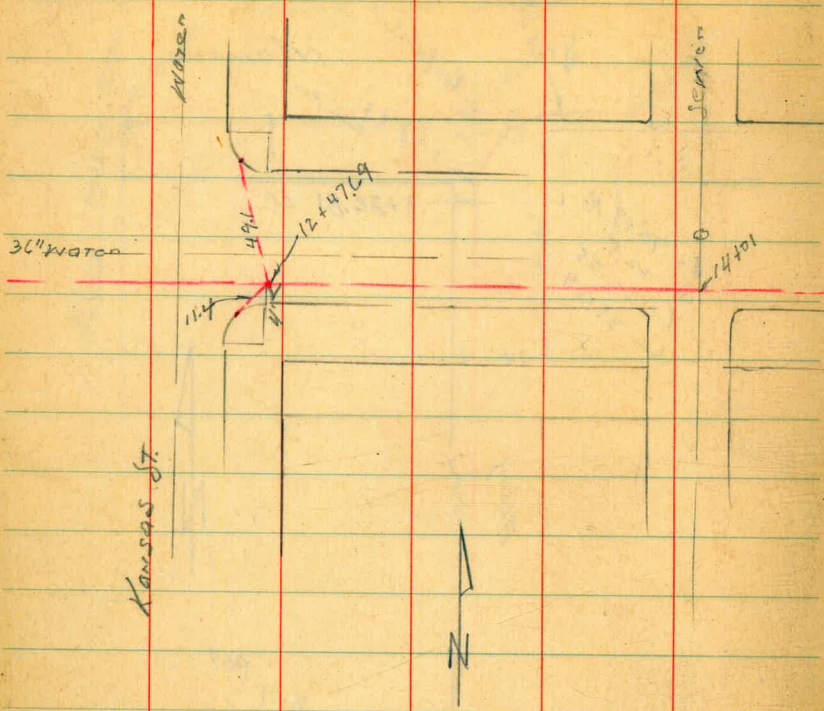
71



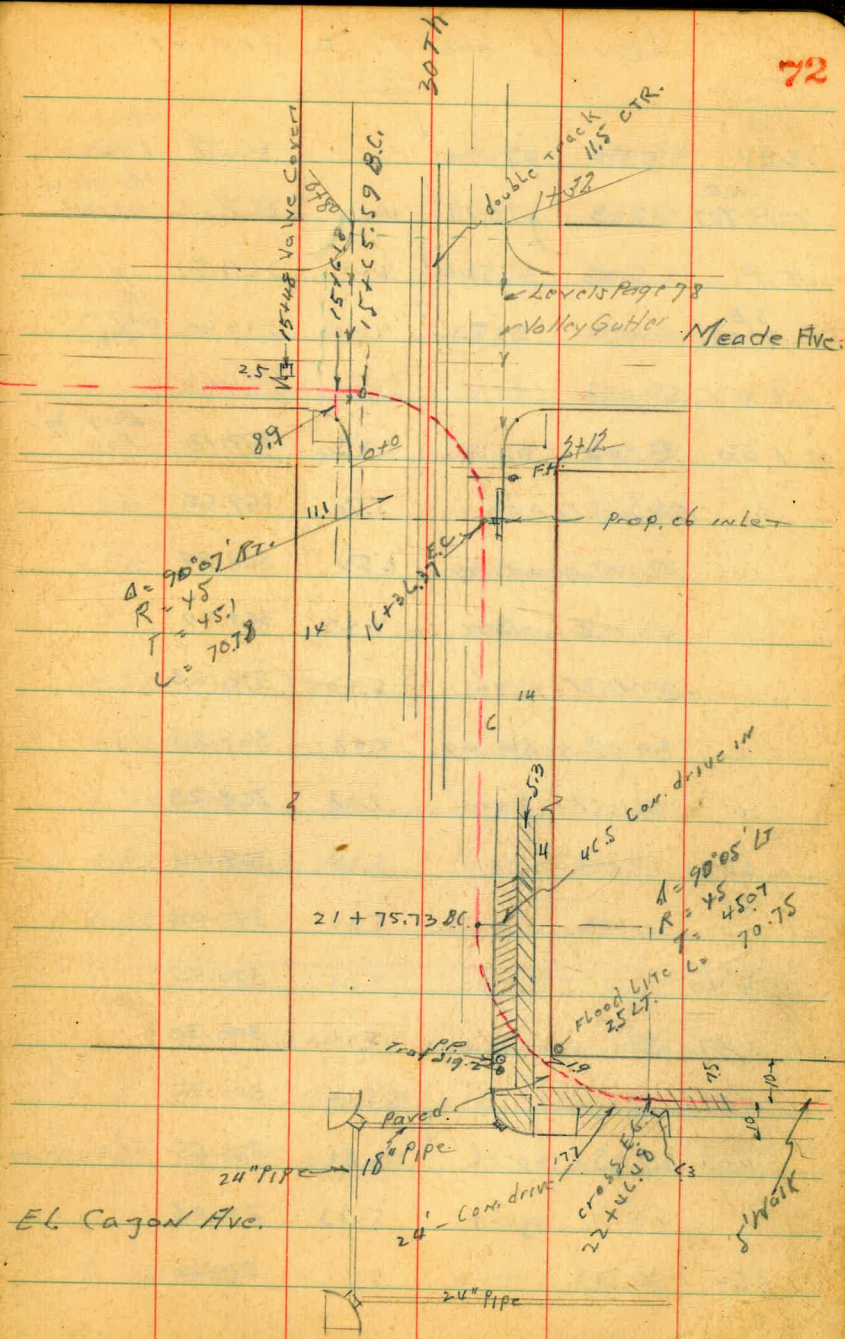
$\Delta = 90^\circ 07' R$
 $R = 22.5$
 $T = 22.55$
 $L = 35.39$

7+85.16 Beg. Pav
10+00.06 B.C. LT
10+05.17 Junc.
 $\Delta = 90^\circ 07' LT$
 $R = 45$
 $T = 45.10$
 $L = 70.78$

10+40.10
10+70.86 EC.
36" WATER



Sec. 6536 & 37 - L



El. Cagon Ave.

Levels on Prop. drain

SEBP	5.52	372.30	✓	366.78	Meade & Kansas
N.E. T.P. 707	5.63	373.79	✓	368.16	Meade & UTAH
T.P.	5.43	375.00	✓	369.57	
S.E. T.P. 71CT	4.76	375.36	✓	370.60	Monroe UTAH 37061
0+00	£ = E.L. Allen	6.23		369.13	Boq. ^{LV} PAV.
"	6' S Top cb	5.70		369.66	
"	" grating	6.52		368.84	
"	" F.L. Box	7.42		367.94	
"	40' N Top cb	5.13		370.23	
"	" grating	6.08		369.28	
"	" F.L. Box	7.08		368.28	
0+50		5.74		369.62	
1		5.34		370.02	
+40		4.91		370.45	
1+47		5.06		370.30	
1+51.1		5.14		370.22	
"	8.9 S Top cb	4.81		370.55	Ctr. Ret.
"	" " gut	5.33		370.03	
1+54		5.16		370.20	

375.36 ✓

73

1+80		4.54		370.82	
+90	Cross Water	4.69		370.67	
2+06		5.17		370.19	
2+08.9		5.16		370.20	
"	8.9 S Top cb	4.93		370.92	CTR. Ret.
"	" " gut	5.37		369.99	
2+20		4.91		370.45	
+50		4.80		370.56	
3		4.60		370.76	
1+51.42	BL AT	4.58		370.78	
+69.12		4.93		370.93	
+74.5	over sewer	4.79		370.57	
+84.3	end Pav.	4.39		370.97	St. Monroe
3+86.81	EC	4.4		371.0	

158.2 of drain on Meade
 UTAH Ely to Main line
 N.E. 71CT 3.71 371.87 ✓ 368.16 UTAH & Meade
 0+00
 £ on Pav. 4.21 367.66

371.87

0 + 00			
11.4 N CTR. Ret.	Top curb	3.80	368.01
" " " "	gut	4.38	367.99
49.3 S of 020		3.75	368.12 curb
" " " "	CTR. Ret.	4.25	367.62 gut
0 + 50		4.44	367.93
1		4.61	367.26
+ 54	over Sewer	4.80	367.07
1 + 58.7	JUNE 10 to 5.17	4.80	367.07
CONT. MAIN LINE			
9 + 85.16	N.C. Moode	4.69	367.18 B=9. Pav
10 + 00.6	B.C.	4.89	366.98
10 + 05.17	JUNE	4.80	367.07
+ 25		4.44	367.93
+ 40	over 36" Water	4.65	367.22
10 + 70.84	E.C.	4.92	366.95
11		5.10	366.77
+ 50		5.33	366.59
12		5.39	366.98
+ 47.69	JUNE	5.53	366.34

371.87 ✓

11.4 S of June	CTR. Ret.	5.10	366.77 curb	74
" " " "	" " "	5.79	366.08 gut	
49.1 N. " "	" " "	5.14	366.73 curb	
" " " "	" " "	5.81	366.06 gut	
check to SEBP	Moode & Kansas	5.09	366.78 ✓	
13 + 00		5.76	366.11	
+ 50		5.93	365.99	
T.P.	3.99	370.73 ✓	5.13	366.74
14 + 01		5.04	365.69	
+ 50		5.14	365.59	
15		5.24	365.99	
+ 48		5.38	365.35	
+ 61.8	JUNE	5.58	365.15	
" 8.9	S CTR. Ret.	5.12	365.61 curb	
" " " "	" " "	5.68	365.05 gut	
15 + 65.59	B.C. RT	5.64	365.09	
+ 80		4.90	365.83	
+ 83.1	W rail W To	4.94	365.79	
+ 88.3	E " " "	4.95	365.78	

370.73 ✓

15 + 96.5	W. side E.T.C.	5.02	365.71	
16 + 031	E " " "	5.05	365.68	
+11	Cross 4" W. to F.A.	5.41	365.32	
+15	" 16" W. to C.	5.41	365.32	
+32	" W. Sec.	5.59	365.19	
16 + 36.37	= E.C.	5.59	365.19	
"	6' Left g.U.T.	5.81	369.92	
"	" " curb	5.14	365.57	
SL Meade on E	Curb	5.05	365.68	curb
"	LINE	5.08	365.05	g.U.T.
"	30 TH			
E S F Ret.		5.15	365.58	curb
"		5.61	365.12	g.U.T.
T.P. S.E.B.P.				
30 TH d				
Meade	4.77	370.49 ✓	5.01	365.71 ^{JK} (365.80)
16 + 50		5.39	365.10	
17		5.50	369.99	
+30	W.S.			
+50		5.62	367.85	
18		5.67	369.82	
+30	W.S.			

370.49 ✓

75

+50		5.60 ✓	369.89	
+81	W.S.			
19		5.83	369.66	
+31	W.S.			
+50		5.78	369.71	
T.P.	4.82	369.82 ✓	5.49	365.00
+80	W.S.			
20		5.26	369.56	
+50		5.37	369.95	
+63	gas line			
21		5.46	369.36	
+50		5.66	369.16	
21 + 75.73	80 LT.	5.82	369.00	
T.P. B.P.	5.33	369.50 ✓	5.55	364.27
22 + 00	g.U.T. in drive	5.77	368.73	
+08	W. edge walk	5.03	369.97	
+15	E " "	4.95	369.55	
+18.6	opp. Prop. Cor.	4.89	369.61	1.9 LT to prop. Cor.
+31.7	N. edge walk	4.95	369.55	
22 + 46.48	E.C.	5.05	369.95	
23		5.25	369.25	

CONT. P. 77

38 1/2' E/C on = 36' Rise to Top 16" Water Main.
 20' C.S. = 31" to Top 16" Water Main -
 (Soundings by Another Dept.)

N.E. Cor
 30 TH and
 E/C on 70'



369.50 ✓

23+48	C' Rt to E	12" dc Eucaly. Tree		
+50		5.24	369.26	
+99	6.3 Rt to E	14" Eucal Tree		
24		5.42	369.08	
+50		5.53	363.97	
"	C.D Rt to E	12" Eucal		
25		5.62	363.88	
+32.5	A 5° 20' Rt	5.60	363.90	
+42.5	curb	5.86	363.69	
"	gwt	6.76	362.79	
+50		6.09	363.91	
+63		5.81	363.69	
+76		5.95	363.55	
25 + 82	20° 20' Rt	6.31	363.19	
25 + 84.5	Top grate	6.46	363.09	
"	F.L. Box	12.41	357.09	✓
"	Top Curb	5.49	369.01	
	NW Cor 9bia + EL Canyon Inlet			
	Top Curb	5.87	363.63	
"	grate	6.74	362.76	
	F.L. Box	11.49	358.01	

369.50 ✓

	NE Cor. 30th + EL Canyon Inlet			
	Top Curb	5.19	369.31	
	" grate	6.16	363.39	
	F.L. Box	11.68	357.82	
	NW Cor 30th + EL Canyon Inlet			
	curb	4.82	369.68	
	grate	5.85	363.65	
	F.L. inlet to Box	11.35	358.15	
	" outlet " "	11.38	358.12	Bubbler
	SW Cor 30th + EL Canyon Inlet			
	curb	4.78	369.72	
	grate	5.87	363.63	
	F.L. inlet to Box	12.07	357.93	
	" outlet " "	12.07	"	
	check to SEBP ^{also and} EL Canyon	6.35	363.15	363.10 005

See Book 519-51
Also

Proposed Storm Drain
 Meade Ave & 4th St
 Sketch Page 71

BM	640	373.18	366.78	S.F. 8P Meade & Kaweah
0+0	= E.L. 4th St N.C.B. of Meade	5.75	367.93	Gutter
"		5.22	367.96	Top Cb
+14	= E.C.B. of 4th St	5.68	367.50	opp Pav
+40	= 1/2 4th St	5.45	367.73	
+66	= W.C.B. Line "	5.27	367.81	
+80	= W.L. 4th St	5.28	367.90	Gutter
"		4.77	368.91	Top Cb
1+06	= 1/2 Meade	4.68	368.50	
1+22	= W.L. 4th St S.C.B. of Meade	5.14	368.09	Gutter
"		4.65	368.53	Top Cb
+46		5.21	367.97	
+72	= 1/2 4th St	5.35	367.83	
+98		5.56	367.62	
2+12	= E.L. 4th St	5.54	367.69	Gutter
"		4.92	368.26	Top Cb

Proposed Storm Drain
 Meade Ave & 3rd St.
 Sketch Page 72

BM	521	377.07	365.80	0.93 72 S.F. 8P Meade Ave & 3rd St
0+0	= S.L. Meade N.C.B. of 3rd St	5.97	369.99	Gutter
"		5.25	365.68	Top Cb
+14		5.93	365.00	
+40		5.71	365.22	
+66		5.52	365.91	
+80	= W.L. Meade	5.47	365.96	Gutter
"		4.82	366.11	Top Cb
+98	= W. Rail S.D.E. of C.R.R.	4.72	366.21	Top Rail
1+06		4.65	366.28	
1+14	= E. Rail S.D.E. of C.R.R.	4.72	366.21	Top Rail
1+22	= E.C.B. of 3rd St	5.43	365.50	Gutter
"		4.72	366.21	Top Cb
1+46		5.55	365.38	
+72	= 1/2 Meade	5.61	365.32	
+98		5.85	365.08	
2+12	= S.L. Meade	5.85	365.08	Gutter
"		5.24	365.69	Top Cb

SWR Const. curb + WALL
 BM 13P South side San Diego Ave
 S. Diego 0.94 2316 2222
 Mason

N of Mason

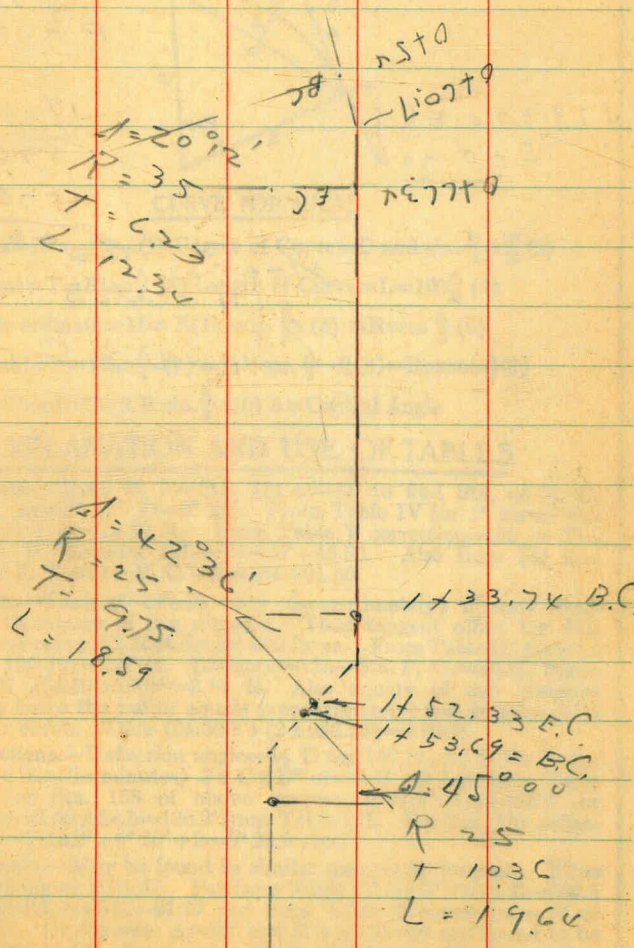
Moore
 Be 99
 Sheridan
 Sisson
 Reg. Co. 0040

79

0100 Beg. ck E. of Wallace	14.50 8.66 9.30 F 0.64
0127	15.40 7.70 8.50 F 0.74
015x B.C.	15.85 7.31 8.06 F 0.75
016017 Gr	15.98 7.18 7.90 F 0.72
01663x EC	16.10 7.06 7.79 F 0.73
1700	16.70 6.46 7.31 F 0.85
17337x B.C.	17.20 5.96 6.64 F 0.68
174304 E	17.25 5.91 6.52 F 0.61
175233 EC	17.29 5.87 6.43 F 0.56

INDEXED
 Law
 OCT 11 1951

W.G. 21001
 4-15-49



1753.69 B.C.

17.30
5.86
C.43
F 0.57

1463.51 C+R

17.35
5.81
5.99
F 0.18

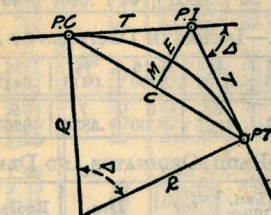
1773.33 = E.C.
End job

17.40
5.76
5.76
6.90

Meet
old curve
line + grade

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

Copyright, 1914, by Eugene Dietzgen Co., New York City



CURVE FORMULAS

Radius= $R = \frac{50}{\sin \frac{D}{2}}$ (1) Degree of Curve= D and $\sin \frac{D}{2} = \frac{50}{R}$ (2)

Tangent= $T = R \tan \frac{\Delta}{2}$ (3) Length of Curve= $L = 100 \frac{\Delta}{D}$ (4)

Middle ordinate= $M = R(1 - \cos \frac{\Delta}{2})$ (5) $= R \text{vers} \frac{\Delta}{2}$ (6)

External= $E = T \tan \frac{\Delta}{4}$ (7) $= R \div \cos \frac{\Delta}{2} - R$ (8) $= R \text{exsec} \frac{\Delta}{2}$ (9)

Long Chord= $C = 2 R \sin \frac{\Delta}{2}$ (10) $\Delta =$ Central Angle

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.=Sta. 161+60.35 to find Sta. of P. C. and P. T. $\Delta=62^\circ 10'$ $D=8^\circ 20'$. From Table IV for 1° curve $T=3454.1$ and $\div 8\frac{1}{2}=414.49$ ft. From Table V correction=.36 or $T=414.85$ ft. P. C.=Sta. P.I.— $T=157+45.50$. Also from (4) $L=746.00$ and P. T.=Sta. P. C. + $L=164+91.50$.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft.=7.27 ft. Distance=158—Sta. P. C.=54.50, hence offset= $7.27 (54.50 \div 100)^2=2.16$ ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2 \div (2 \times 688.26)=2.16$ ft.

Deflections.—Deflection angle= $\frac{1}{2} D$ for 100 ft., $\frac{1}{4} D$ for 50 ft., etc. For c ft.=(in minutes) $.3 \times C \times D$ or =defl. for 1 ft. from Table III $\times C$. For Sta. 158 of above curve=.3 $\times 54.5 \times 8\frac{1}{2}=136.2'$ or $2^\circ 16.2'$, or =2.50 $\times 54.5=136.2'$ from Table III. For Sta. 159 deflection angle= $2^\circ 16.2' + 8^\circ 20' \div 2=6^\circ 26.2'$, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 91.37. For from Table IV for 1° curve $E=960.6$ for $8^\circ 20'=960.6 \div 8\frac{1}{2}=91.27$ and from Table V correction=.10 or $E=91.37$ ft. Or suppose $\Delta=32^\circ$ and E is measured and found to be 42 ft. What is D ? From Table IV $E=230.9$ and $\div 42=5.5$ or $D=5^\circ 30'$.

8 off on 4' in way

35' S of P.L.

25 R

348.73
88

28.293
141.46

DISTANCES FROM CENTER OF ROADWAY FOR
CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be $41.9 + (20 - 16) \div 2$ or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.

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