1869

DENVER

ENGINEERS'

LEVEL BOOK

No. 410F

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

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 1½ see inside of back cover.

W.O. 21328

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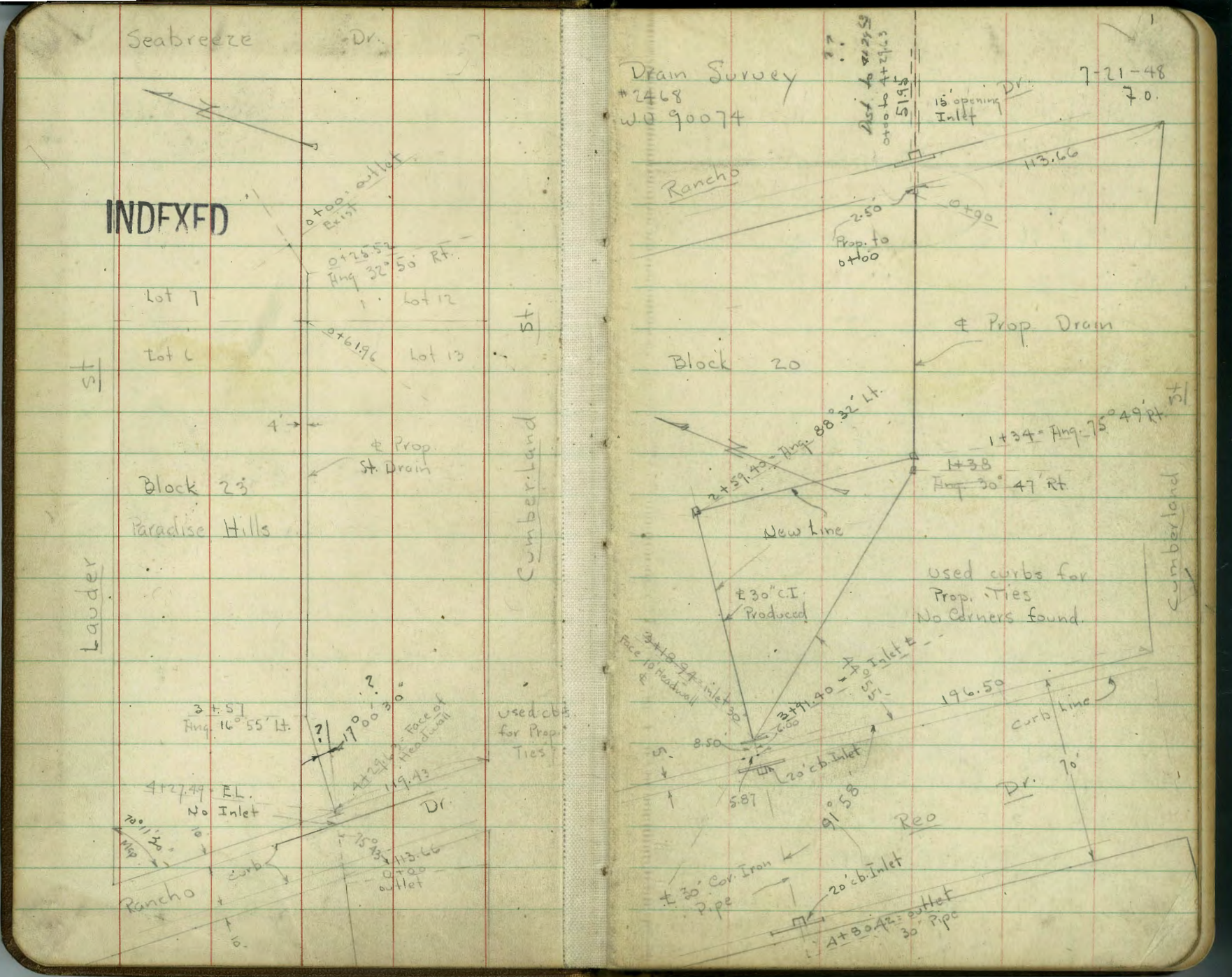
except page #31

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.


Seabreeze Dr.
0+00 outlet
Exist
0+25.53
Ang 32° 50' Rt.
Lot 1
Lot 12
Lot 6
0+61.96
Lot 13
St.
4'
℄ Prop.
St. Drain
Block 23
Paradise Hills
Lauder
Cumberland
3+57
Ang 16° 55' Lt.
17.00
30"
Face of Headwall
4+27.49 = EL.
No Inlet
4+29.43
119.43
Dr
Used cbs for Prop. Ties
70.11
Mag
curb
Rancho
1+50.43
113.66
0+00
outlet
Drain Survey
#2468
W.O 90074
7-21-48
7.0.
15' opening
Inlet
Dr.
51.98
113.66
Rancho
2.50
Prop. to
0+00
0+90
℄ Prop. Drain
Block 20
1+34 = Ang. 75° 49' Rt.
1+38
Ang. 30° 47' Rt
Ang. 88° 32' Lt.
2+59.49
New line
Used curbs for
Prop. Ties
No Corners found.
Cumberland
℄ 30" C.I.
Produced
3+19.94 = Inlet
Face to Headwall
℄
3+91.40 = ℄ Inlet
30"
St.
196.50
curb line
8.50
20' c.b. Inlet
5.87
91° 58'
Dr.
70'
Reo
℄ 30" Cor. Iron Pipe
20' c.b. Inlet
4+30.42 = outlet
30" Pipe

Levels along ℄ of Prop. Culvert in Block 23 - Paradise Hills

1+24 - 34' Rt. = ℄ P. pole # 88474

1+10

0+75

0+62 - 13' Rt. = Beg wire fence

0+35 = ℄ Wash

0+25.52 - Ang 32° 50' Rt. - Sect. on Split

0+00 = outlet of Exist. 24" R.C. Pipe

779	224.85 ✓	3.84	217.06	S.W. Cor Rancho ℄ Cumberland 1692 - P.26
10.49	220.90		210.41	

4 - ℄ Rt. 2

6.1 (218.8)	10.1 (214.8)	7.2 (217.6)	5.8 (219.0)
25	13 ℄ wash		20
4.9 (220.0)	8.6 (216.4)	5.8 (219.0)	4.4 (220.4)
25	8 ℄ wash		20
3.0 (221.8)	4.5 (220.4)	7.1 (217.8)	6.1 (218.8)	3.3 (221.6)
20	7		4	20
1.4 (223.4)	3.3 (224.6)	4.97 (219.88)	6.9 (218.0)	3.6 (221.4 ✓)
20	2	on Stub	4 ℄ wash	20
2.8 (222.0)	6.04 (218.81)	1.7 (223.x)		
10		10		

224.85 ✓

3+57: Flng. 16° 55' Lt. - Sect. on Split

3+30

3+03 - 9.6' Lt. = Beg wire fence

3+00

2+50

T.P. 0.20 213.18 11.87 212.98

2+44 - 4' Rt = ± P. pole ± 884'S

2+00

1+81.5 - 13.1 Rt = end fence

1+75

1+50

Lt.	±	Rt.
3.5 209.7 / 20	4.6 208.6 / 3	3.80 209.38 on Stub.
		2.9 210.3 / 20
2.8 210.4 / 20	3.9 209.3	2.8 210.4 / 20
3.2 210.0 / 20	3.6 209.6	2.4 210.8 / 20
2.5 210.7 / 20	2.2 211.0	1.4 211.8 / 20
	213.18	
9.2 215.6 / 20	10.9 214.0	10.8 214.0 / 9 ± wash; 11.8 213.0 / 14; 11.4 213.4 / 25
7.5 217.4 / 20	7.0 217.8	7.0 217.8 / 6; 10.9 214.0 / 10; 10.6 214.4 / 20
5.3 219.6 / 25	9.4 215.4 / 8	9.9 215.0 ± Wash; 8.9 216.0 / 20

0+44 + 7.4 Rt. = Beg. Wire. fence

0+37 - 34.2 Rt. = ℄ House

0+30

Headwall

0+00 = outlet of 24" Cor. Iron pipe - no

Block 20 - Paradise Hills

Beg. Levels along ℄ of Prop Culvert in 1+38 - St-6

T.P.	3.75	205.03	11.90	201.28
Top Conc Headwall			1.08	206.10

4+29.63 = ℄ inlet of 24" Cor. Iron pipe - in ℄ of 8' Conc. Headwall

3+90

3+77 - 10' Rt + ℄ Dead man

3+64 - 5.8' Lt. = end fence

3+61 - 4.6 Rt = ℄ P. pole # 88476

Lt		Rt
		206.03
		+1.20
		34.2
		floor
202.7		
2.3		
20		
202.4		
2.6		
6		
201.1		
3.9		
1		
198.6		
6.4		
℄ Ditch		
200.8		
4.2		
4		
204.1		
0.9		
20		
204.1		
0.9		
10		
204.3		
0.7		
5		
199.79		
5.24		
F.L. Pipe		
204.7		
0.3		
6		
204.1		
0.9		
10		
	205.03 ✓	
206.6		
6.6		
20		
206.1		
7.1		
7		
202.57		
10.66		
F.L. 24" pipe		
205.6		
7.6		
4		
205.6		
7.6		
20		
207.0		
6.2		
20		
207.5		
5.7		
207.8		
5.4		
20		
	213.18 ✓	

Lt. ℄ Rt.

2+00

6.3 198.7 — 6.4 198.6 — 6.7 198.3 — ? ? ?
30 — 50 — Channel

See Pg. 4

1+60

4.9 200.1 — 5.0 200.0 — 5.0 200.0 — 9.2 198.8 — 7.4 197.6 — 2.0 198.0
30 — 26 — 29 — 3 — 40
℄ Ditch

1+38 = Ang 30° 47' Rt. - Sect. on split

3.7 201.3 — 3.7 201.28 — 3.9 201.1 — 8.7 196.3 — 6.9 198.1 — 7.2 197.8
30 — on Stub. — 5 — 8 — 11
℄ Ditch

1+34 - 5.6 Lt. = ℄ P. pole # JP 88 5 89

1+32 - 5.6' Rt. = end fence = Cor. ℄ Top of Bank

4.2 200.8

1+29 ~~℄~~ Ditch

7.8 197.2

1+27

3.1 201.9 — 5.8 199.2 — 7.9 197.1 — 6.1 198.9 — 7.2 197.8
30 — 4 — 2 — 30
℄ Ditch

1+00

200.5 — 200.2 — 197.6 — 198.6 — 198.8 — 198.6 — 200.1
4.5 — 4.8 — 7.4 — 6.4 — 6.2 — 6.4 — 4.9
30 — 12 — 7 — 5 — 16 — 30
℄ Ditch

0+70

201.4 — 201.2 — 199.9 — 198.1 — 199.9 — 197.8 — 200.0 — 202.0
3.6 — 3.8 — 5.1 — 6.9 — 5.1 — 5.2 — 5.0 — 3.0
25 — 11 — 6 — 5 — 3 — 10 — 20
℄ Ditch

205.03

		Lt	℄	Rt.
℄ Cumberland.				
Check B.M. S.W. B.P. - Reo	4.58	194.86 ✓		194.88
				1692-P.27
10' Headwall - outs Normal to Reo				
3+18.94 = ℄ inlet of 30" Cor. Iron Pipe in ℄ of				
		195.3	194.65	197.48
		4.1	7.79	11.96
		20	5	F.L. Pipe
		along Reo	Top-end Headwall	
T.P.	4.12	199.44	9.71	195.32
				199.44 ✓
2+90				
		196.4	195.2	190.4 ✓
		8.8	9.4	14.8
		30		25
				℄ Ditch
2+50				
		197.0	197.3	195.6
		8.0	7.7	8.2
		30		30
				205.03

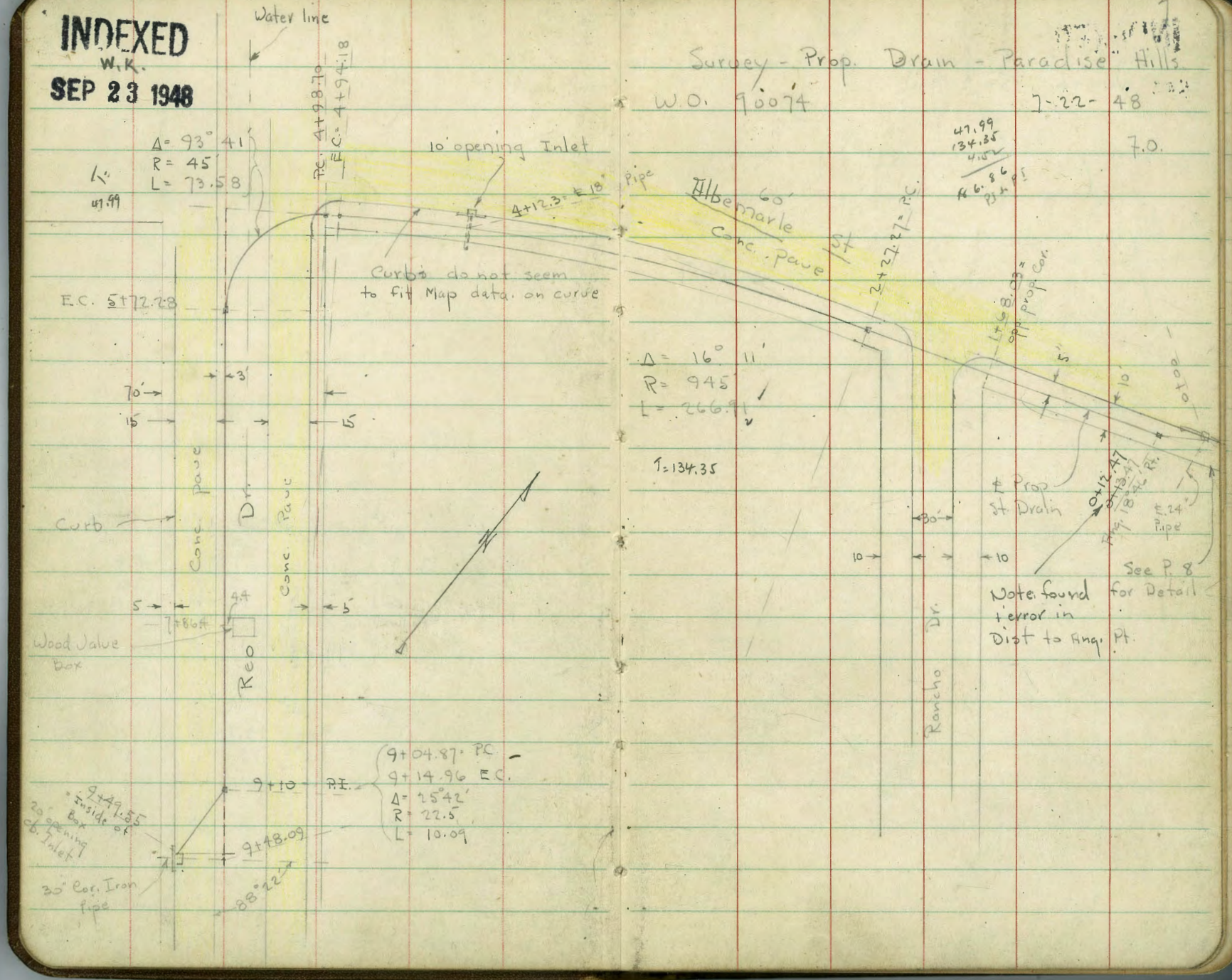
				194.4 ✓	195.0
				10.8	45
					℄ Ditch
				11.8	193.4 ✓
				61	

Survey - Prop. Drain - Paradise Hills

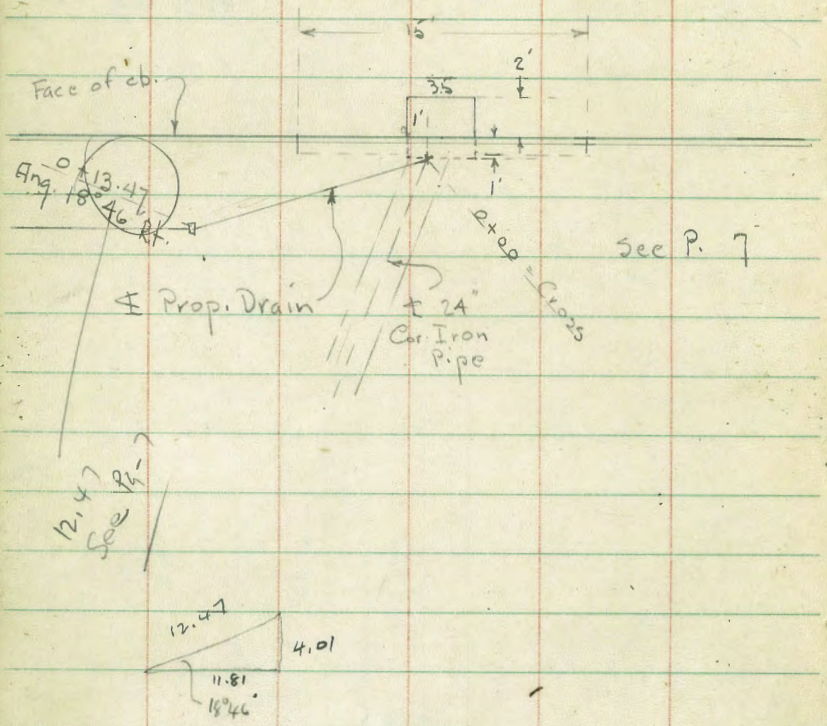
W.O. 70074

7-22-48

7.0.

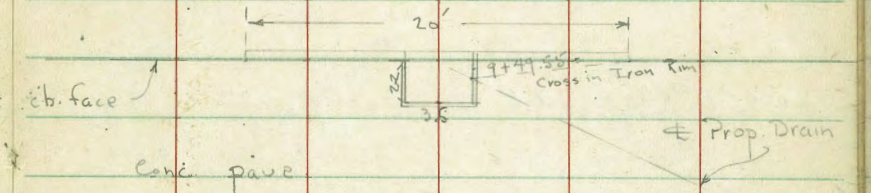


Detail of 15' opening Inlet on Albermarle E. of Rancho



Detail of 20' cb. Inlet on Reo Dr.

= end of Prop. Drain - P. 7



Levels along ℄ Prop. St. Drain along S. side of Albemarle - from W. of Rancho Dr. to Reo and S. along Reo.

Beg Lawn

0+92.6 = Wly. Conc. Dr.

0+85.8 = Ely. of Conc Dr. to House

0+40

foward Tang. = Albemarle

0+13.47 = Ang. 18° 46' Rt. - Sect 90° to

+ ℄ 24" pipe at inside of Box

0+00 = Cross on top Inlet 1' Back of Cb.

B.M. 5.15 220.61 215.46 SW. Rancho + Albemarle B1692-P.26

Lt.	℄	Rt
	3.97 216.64 ℄	
5.57 215.07 2.5 at Gar.	5.65 214.56 18 Brk.	3.98 216.63 2.5 Brk.
4.03 216.58	4.11 216.50 2.5 Brk.	4.57 216.04 5 Dr. in gut
9.0 211.6 20 end of low ground	6.1 214.5 6	5.7 214.9 5.44 215.17 5 = Top cb.
13.3 207.31 20 in Ditch	6.2 214.4 3	6.14 214.47 on Stub.
6.08 214.53 5 = Top cb.	7.02 213.59 5 g.t.	
13.24 207.37 = flow line of Box	7.11 213.50 Top grate ℄ at cb. Line	6.20 214.41 0+00 = Cross
6.10 214.51 Top cb. opp 0+00		

220.61 ✓

2+35.5 - 1.9 Rt = ± 3" Palm

2+33.5 - 5.5' Lt. = Cor 6" Conc wall

2+27.27 = P.C. Curve along cb.

2+12.5' = face cb on Ret

2+00

1+77 = face of cb on Ret. = end Lawn

1+68.03 = P.C. to Rad + Prop. Cor - (S.E.)

1+30

Lt.	℄	Rt	
215.38 5.23 5.5 Topwall	215.1 5.5 ground		
214.6 6.0 20	214.26 5.35 on Stub	214.48 5.13 5 Top	214.88 5.73 5 gut
	215.87 4.74 Top	215.23 5.38 gut	215.53 5.08 5 on Conc
215.43 5.18 6 Brk	215.72 4.89 on Conc Pave	216.12 4.49 10	
215.28 5.33 10 gut	215.82 4.79 10 Top cb	216.61 4.00 Top	215.94 4.67 gut
			216.12 4.79 5 = on Conc Pave
214.9 5.7 20	216.7 3.9	216.81 3.80 5 Top	216.17 4.44 5 gut
215.1 5.5 19.8 along House	216.9 3.7	216.86 3.75 5 = Top ch.	
	220.61		

4+12 3 = ℄ + ℄ 18" Cor Iron pipe from
10' opening cb Inlet on Rt - 3.5 x 3' Box
T.P. 5.13 214.59 11.15 209.46

4+00
3+87 - 1.3' Rt. = ℄ 3" Palm
3+62 - 2.6 Rt. = ℄ P. pole - # 87554

Block wall
3+50 - 5.6 Lt. = Nly 8" Conc. footing for prop
3+46 - 2.4 Rt. = ℄ Dead man
3+40 - 1.2' Rt. = ℄ 3" Palm
3+05 - 1.5 Rt. = ℄ 3" Palm + end of Lawn
3+00

2+92 - 20.8 Lt. = Cor. House (see Gar. below)
2+70 - 1.8' Rt. = ℄ 3" Palm
2+47 - = Nly Conc. Dr. = Beg. Lawn

Ely.
2+39 = edge Conc. Dr. + 5.8 Lt. = end wall

Lt. ℄ Rt
9.78 204.81 6.2 208.4 9.68 204.91 6.24 208.35 7.28 207.31
7.1 3 4 4
= F.L. outlet F.L. 18 pipe Top Top
18" pipe at Box cb Grate = Gut.
214.59 ✓

12.1 208.5 12.25 205.36 13.09 207.87
4.1 4.1
Top gut

209.6 209.80 210.1 210.08 209.45
11.0 10.81 10.5 10.53 11.16
15 5.6 4.3 4.3
edge Conc. Top cb gut

212.1 212.4 212.26 211.66
8.5 8.2 8.35 8.95
20 4.6 4.6
Top cb gut

213.36 212.5
7.25 8.1
20.8 20.8
floor ground

214.70
5.91

212.83 215.34 214.58 215.08 215.04 214.99 214.42
7.78 5.27 6.03 5.53 5.57 5.62 6.19
23.8 5.8 5.8 2.3 2.4 5
Gar. Top Dr Brk. Brk. Dr. in gut.
end wall

Dr. at
220.61 ✓

Lt.	℄	Rt.
5+47.76		
5+23.23 = on H.C. pave		
Sects. on Radial Line		
Curve in 3 parts		
5+20.5 = end Conc. Pave		
5+02.5 = face cb. on Ret. = end Lawn		
4+98.70 = P.C. 45° Rad. Curve		
4+94.18 = E.C. = opp. P.C. 10' Rad. Ret.		
4+68 = 17.5' Lt = Near Cor. Real Estate office (Beg. Lawn)		
4+50		
4+22 = 0.9 Rt. ℄ 3" Palm		

Lt.	℄	Rt.
208.5 6.1 10	208.6 6.0	6.08 208.51 10.8 edge Conc. pave
208.97 5.62 10 on Conc.	209.54 5.07	210.01 4.58 10 = on A.C.
208.89 5.70 10 along edge	209.50 5.09	4.72 209.87 10 along edge
209.09 5.50 10 gut	209.59 5.00 10 Top along cb	210.0 4.60 Top 5.08 209.51 gut 209.76 4.83 10 = conc.
	4.55 210.04 on St.b.	
4.8 209.8 15	4.55 210.04 on Stub.	4.66 209.93 3.7 Top cb P.C. 5.30 209.29 3.7 gut. 209.57 5.02 10 on Pave
210.51 4.08 17.5 floor	5.3 209.3 17.5 ground. 6.3 208.3 15	6.0 208.6 5.90 208.49 3.8 Top cb 6.50 3.8 gut 208.09

214.59 ✓

T.P.	4.62	199.60	12.89	194.98
8+00				

7+86.4 - 4.4 Lt. = ℄ + Wly. of 10.3' x 10' wood Valve chamber for pipe line. Lid is Locked - cant get Bottom

7+50				
7+00				
6+50				
6+00				
T.P.	1.02	207.87	7.74	206.85

E.C. Stub.

5+72.24 = E.C.

Lt.	℄	Rt.
195.9	195.7	195.40
12.0	12.5	12.47
10		3 edge
193.x	196.16	145.38
14.7 = approx. Bottom	= 11.71 = Top of	12.49
	44 Box	10
196.9	196.7	196.57
11.0	11.2	11.35
10		3 edge
		196.43
		11.44
		10
198.9	198.8	198.78
9.0	9.1	9.09
10		3 edge
		198.61
		9.26
		10
201.77	201.57	201.81
6.1	6.3	6.06
10		3 edge
		201.67
		6.20
		10
205.4	205.0	205.00
2.5	2.9	2.87
10		3 edge
		204.76
		3.11
		10

207.87 ✓

207.3	206.85	206.77	206.65
7.3	7.74	7.85	7.94
10	on Stub.	3 edge Conc. Pave	10 Conc.

214.59

Rec + Comberland
check BM · SW. 4.70 194.90 194.88

9+49.55 = ℄ of N. side of 3.5' x 2.2' Box (inside) + inside
of 20' opening Inlet

9+30

9+17 = edge Conc. pave on ℄

9+14.96 = E.C.

9+04.87 = P.C. of 22½ Rad. Curve

8+50

Notes Reduced 11-8-89

	Lt	℄	Rt	14
	185.72	193.60		
	13.88	6.00		
	F.L. of Box	Top of grate		
	5.10 194.50	5.33 194.27	5.26 193.84	5.00 194.60
	6.5	on Con	10.3	10.3
	edge Conc.		gutter	Top cb.
		5.01 194.59		
		5.1 194.5	4.98 194.52	
			edge	
	194.8	194.6	194.68	194.40
	4.8	5.0	4.92	5.20
	10		3	10
			edge	
	194.9	194.9	195.07	194.89
	4.7	4.7	4.83	4.71
	10	199.60	3	10
			edge	

Profile of ℄ 24" C.I. Pipe across Rancho Dr. - Sketch - P. 1 - & Notes - P. 4

0+51.95 = out let of 24" C.I. Pipe = 0+00 - P. 4

0+48

0+39.2 = W. cb. = ℄ of 15' opening - See Detail above

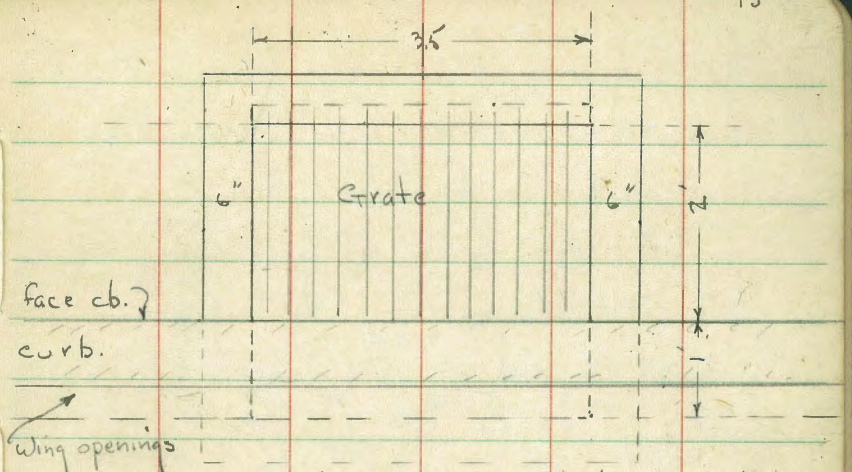
0+24 = ℄ St

Rancho Dr.

0+08.2 = E. cb. - No Inlet

0+00 = inlet of 24" C.I. Pipe = 4+29.43 - P. 4

8.87 210.15 201.28 ✓ = P. 4 St. b 1+38



Detail of Box - 15' Opening Inlet

204.8
5.4

203.91
6.24
Top grate

204.90
5.25

200.32
9.83
F.L. Box

204.75
5.40

204.47
4.68
Top cb

204.86
5.29
Out

210.15 ✓

Relocation of Prop. Drain Thru Block 20 - Sketch - P. 1 - Levels from outlet on Rancho to 1+34 = P. 4

2+35 - Pitch tapers off to Ang. pt.

2+01 - 3.8 Rt = end of wire fence & Beg Picket

2+00

1+70

1+42

1+38.8 - 3.6 Rt = Cor. of wire fence

1+38 = Top of Vert Bank to Drain ditch

Begin at 1+34 = Ang. 75° 49' Rt.

2.68 203.96 201.28

197.9	197.3	196.7	196.7	196.7	196.9	197.5
6.1	5.7	8.3	8.3	8.3	7.1	6.5
20	3	0.5	Bottom	0.8	3	20

198.7	199.1	196.3	196.3	196.3	197.4	197.5
5.3	4.9	7.7	7.7	7.7	6.6	6.5
20	1 Top	1.6	Bottom	1.5	2 Top	20

199.4	200.0	196.5	196.5	197.6		197.6
4.6	4.0	7.5	7.5	6.4		6.4
20	1 Top	0.9	Bottom	1.2 Top		1.5

200.3	201.1	196.6	196.6	196.6	198.3	198.6
3.7	2.9	7.4	7.4	7.4	5.7	5.4
20	1 Top	0.9	Bottom of Ditch	0.9	1 Top	20

199.9	196.5
4.1	7.5
Top	Bottom

200.71
3.25
on Stub.

203.96

	Lt.	℄	Rt.
3+91.40 = ℄ Inlet of 30" C.I. Pipe – See P. 1+6		187.48 16.48 = F.L. Inlet 30" Pipe	
3+85	195.8 8.2 20	192.7 11.3 8 189.0 15.3 1 ℄ Drain	15.0 193.9 10.1 10 195.7 8.3 20
3+60	196.1 7.9 25	190.2 13.8 5 190.0 14.0 3 ℄ Drain	190.1 13.9 194.1 13.9 3 194.9 9.1 15 195.7 8.3 30
3+30	196.7 7.3 25	192.8 11.2 9 191.1 12.3 4 ℄ Drain	192.4 11.6 196.8 8.2 20 196.2 7.8 30
3+00	197.8 6.2 30	196.9 7.1 20 193.4 10.6 4 ℄ Drain	193.9 10.1 195.5 7.5 20 196.9 7.1 30
2+75	198.3 5.7 30	197.2 6.8 15 195.9 8.1 6 194.1 9.9 5	193.8 10.2 194.0 10.0 6 195.4 8.6 7 196.6 7.4 20
2+61 – 1.5' Rt. = ℄ Pipole # 477670-H 3.2 Rt. = fence 2.6' S. of end. 2+59.40 = Hng. 88° 32' Lt. – Sect. on split	197.5 6.5 20	194.7 7.3 13 194.0 10.0 10 ℄ Ditch 203.96	195.98 7.98 on Stub. 194.4 6.6 20

4+80.42 = outlet of 30" Pipe

4+70

Curb Inlet - Box - Same

4+62.4 = W. cb. of Rea Dr. = ℄ of 20' opening

4+47.1 = edge Conc. pave

4+32

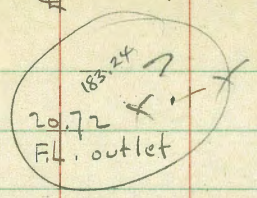
4+16.8 = edge Conc. pave

Box - Same as Detail - P. 15

4+02.2 = E. cb. at ℄ of 20' opening Inlet

3+97

Lt ℄ Rt 18



194.10
10.0

194.48 193.51 187.61
9.48 Top cb. 10.45 Top grate 19.35 F.L. of Box

194.32
9.64

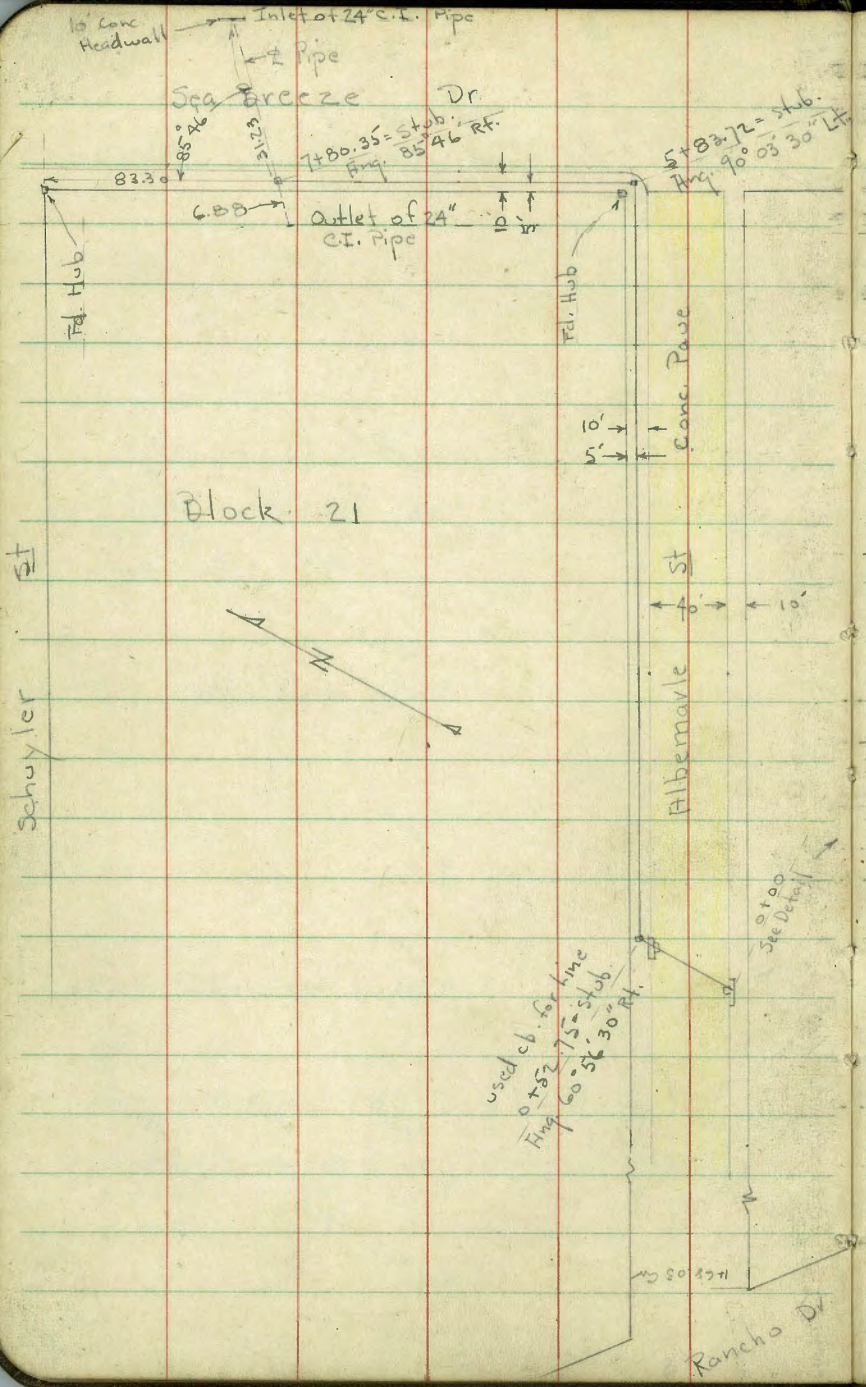
194.96
9.0

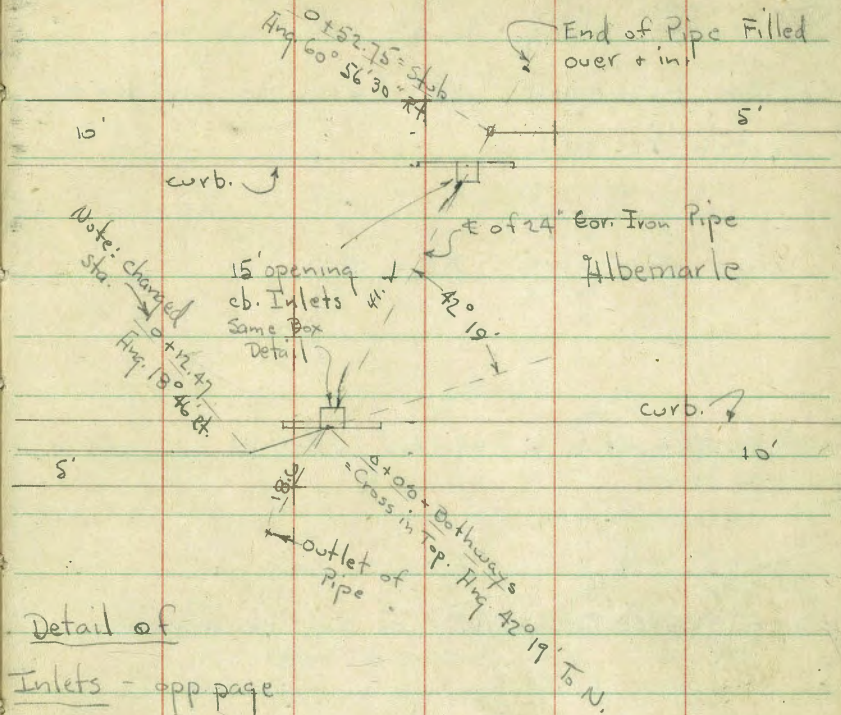
194.51
9.45

193.50 194.50 187.14
8.46 Top cb. 9.46 Top grate 16.82 F.L. Box

8.71 185.1

203.96





Detail of Inlets - opp page

Levels along ℄ of Prop. Drain from Albemarle to Inlet on Sea Breeze
Sketch P. 19

1+00

0+52.75 - Stub. Ang. 60°56'30" Rt.

0+47 = N. cb. Albemarle - on Box to 15" opening Curb Inlet

0+24 = ℄ St.

0+01.2 = cb. face - for elev. of Box See P. 9

See P. 8 + 9

0+00 = Cross on Top of Cover - also 0+00 to W.

0-18.6 = outlet of 24" C.I. Pipe

11.17 226.63 21546 S.W. P.P. Ranch ℄ Albemarle

20

Lt. ℄ Rt.

9.5 (217.1) 9.9 (216.7) 10.46 (216.17) ℄ = Top cb.

11.80 (214.83) on Stub. 17.16 = F.L. of Pipe (209.47) (headed over in Pipe)

12.20 (214.43) Top cb. 13.22 (215.41) Top. grate 17.48 (209.15) F.L. Box

12.30 (214.33)

12.22 (214.41) on Cross

19.82 - F.L. outlet. (206.81)

226.63

2+18.3 = wly of 6" Conc wall

2+00

1+72.8 = Ely. Dr.

1+60.8 = wly. of Conc. Dr.

1+57.8 = wly. of 3' Conc. flower box

1+50

1+11.4 = Ely. Dr.

1+03 = wly of Conc. Dr.

Lt.	℄	Rt.
	221.7 4.9 = ground	222.58 4.05 Top wall
221.3 5.3 5'	221.1 5.5	220.9 5.74 5'
219.91 6.72 5' Conc.	219.48 7.15 Conc.	218.86 7.77 5' = gut
	219.12 7.51 Conc.	
	219.0 7.6 = ground	220.94 5.69 Top Conc.
	218.8 7.8	
217.37 9.26 5' Conc.	217.12 9.51 Conc.	216.12 10.51 5' = gut
	216.76 9.87 = Conc	
	226.63 ✓	

3+68.5 - Wly. 3' Conc. walk

T.P.	10.93	250.28	0.04	239.35

3+50

3+00

2+83

2+78

T.P.	13.20	239.39	0.44	226.19

2+50

2+31.7 = Ely. Dr.

2+24.7 = Wly. of Conc. Dr

Lt.	℄	Rt
	240.09	
	10.19	
	250.28 ✓	
	2.1 237.3	
8.7 230.7 5	8.8 230.6	8.9 230.47 5 = Top ds
	10.4 229.0	
	12.4 227.0	
	239.39 ✓	
	225.4 ✓ 1.4	
	223.11 3.52 Conc.	
223.7 ✓ 3.41 5 Conc.	222.87 4.06	221.88 4.75 5 = g.t.
	226.63	

	Lt.	℄	Rt
5+40		247.3 3.0	
5+00	246.3 4.0 5	246.7 3.6	246.77 3.51 5 = Top
4+60		246.2 4.1	
4+30	244.9 5.4 5	245.2 5.1	245.31 4.97 5 = Top cb.
4+00	242.9 7.4 5	243.0 7.3	243.00 7.28 5 = Top cb.
3+97.5 = Ely. of Dr.	242.58 7.70 5 = Conc.	242.83 7.45 Conc.	242.17 8.11 5 = gut.
3+86.7 = wly. of Conc. Dr.		241.9 8.38 Conc.	
3+71.5 = Ely. of walk		240.19 10.10 = Conc.	
		250.28 ✓	

= end.

31.23' Rt. along ℄ of pipe = inlet of 24" pipe in ℄ of 10' Conc. Headwall

6.88' Lt. = outlet of 24" C.I. Pipe

7+80.35 =

7+50

7+00

6+50

6+00

Check B.M. = S.W. B.P. Tilbemarle + Sea Breeze 2.69 247.59 ✓ See B. 1092

5+83.72 = Hng. 90° 03' 30" Lt.

Notes Reduced 2-21-89

℄

247.72 2.56 31.23 Top Conc. Headwall

247.18 6.10 31.23 = F.L. inlet

241.70 8.58 F.L. outlet

247.58 3.60 on Stub.

248.20 2.08 5 = Top cb. + 9.4

248.6 1.7 15

247.3 5.0 10

247.9 2.4

247.94 2.34 5 = Top cb.

248.0 1.3 5

247.8 2.5

247.42 2.36 5 = Top cb.

247.8 2.5

248.0 2.3 5'

247.4 2.9

247.51 2.69 5 = Top cb.

247.59 2.79 on Stub. 250.28 ✓

Walker
Johnson
Pope
Crawford
7-26-49

Location - Proposed Elec. Duct Sewer
To Serve Proposed Pump Plant
Near Jenner And Coast Blvd.

1+86.59 Δ Lt. 22°26' on line

Note: * Indicates W.O. 20199
Sta & Location of Duct
as Constructed.

1+50 1.5' Lt.
93.17

* 1+00 3' Lt.

0+92.82 = Δ Pt. 51°59' Set 1"x1" Redwood & Disk

* 0+91 Pull Box 2.4 Lt.

* 0+85 5.1 Lt.

* 0+61 5' Lt.

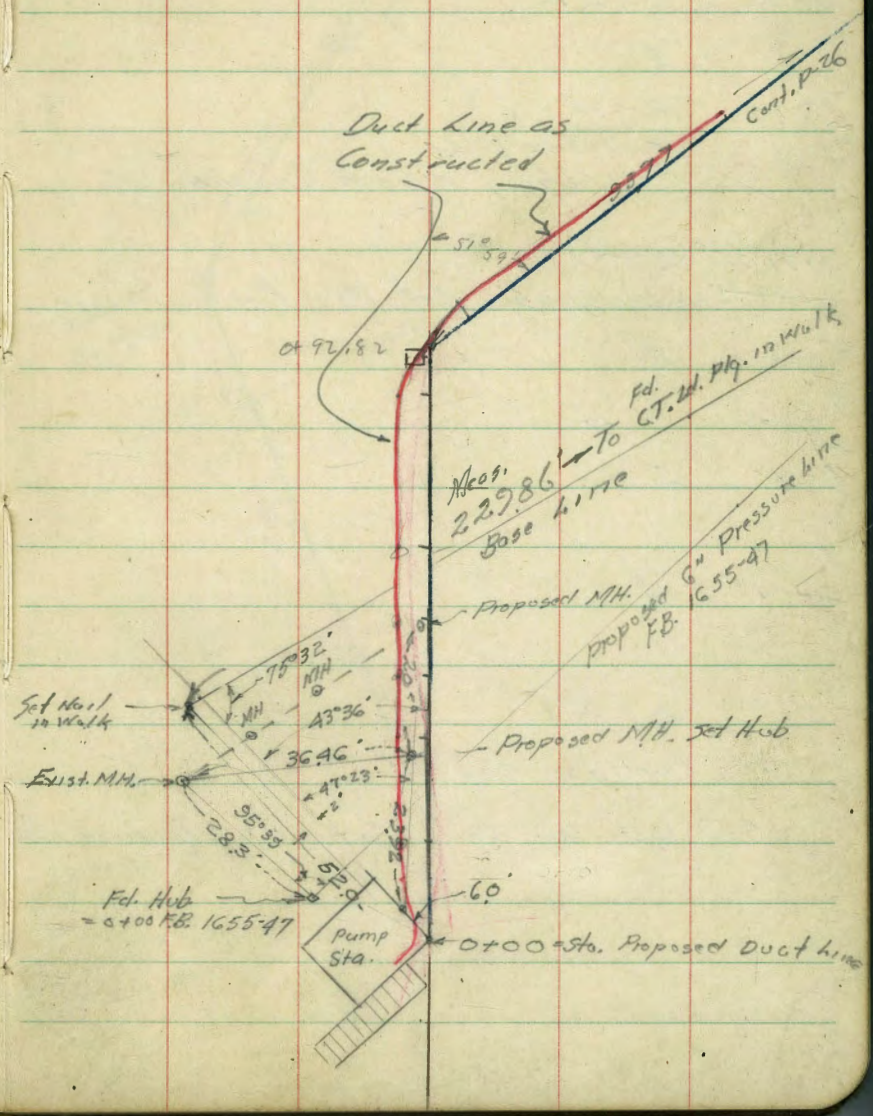
* 0+50 5.5 Lt.

* 0+41 5.1 Lt.

* 0+31 4.6' Lt.

* 0+15 4.2' Lt.

* 0+00 Duct 2' Lt
Δ 0+00 Set Hub 2"x2"x10"



~~4+58.15~~
4+48.15

*3+65 Pull Box 1 Rt.

*3+51 7.5 Rt.

*3+40 6.5 Rt.

*3+21 ℄

*3+14 2.5 Lt.

*3+05 Pull Box 3' Lt.
Everything Ahead 10' too Long

2+78.35 (w&t.)

~~2+88.35~~ = A Rt. 51°45' Set 1"x1" Redwood + Disk

* 2+76 ℄

* 2+60 3' Lt.

* 2+41 5' Lt.

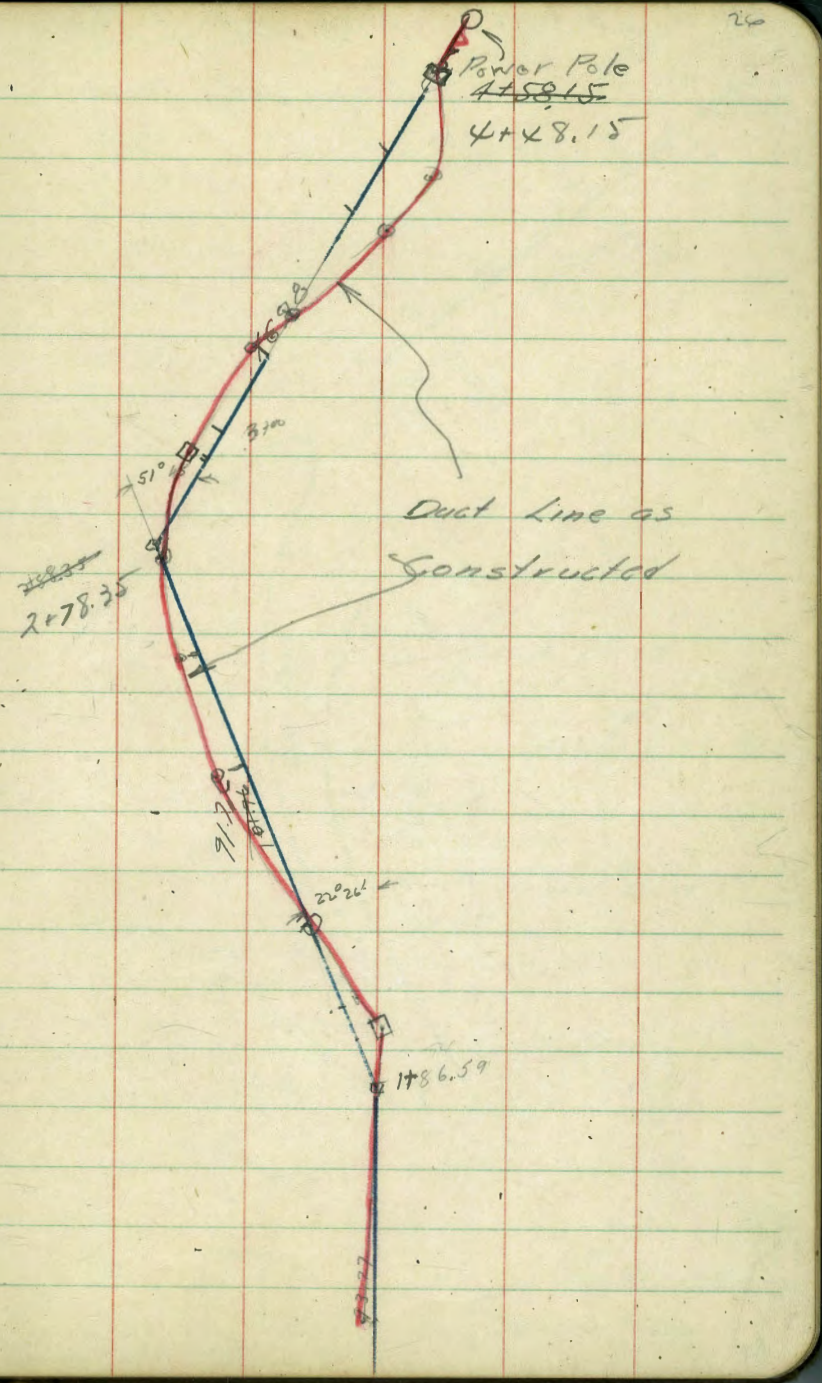
* 2+14 ℄

* 2+00 2.3' Rt.

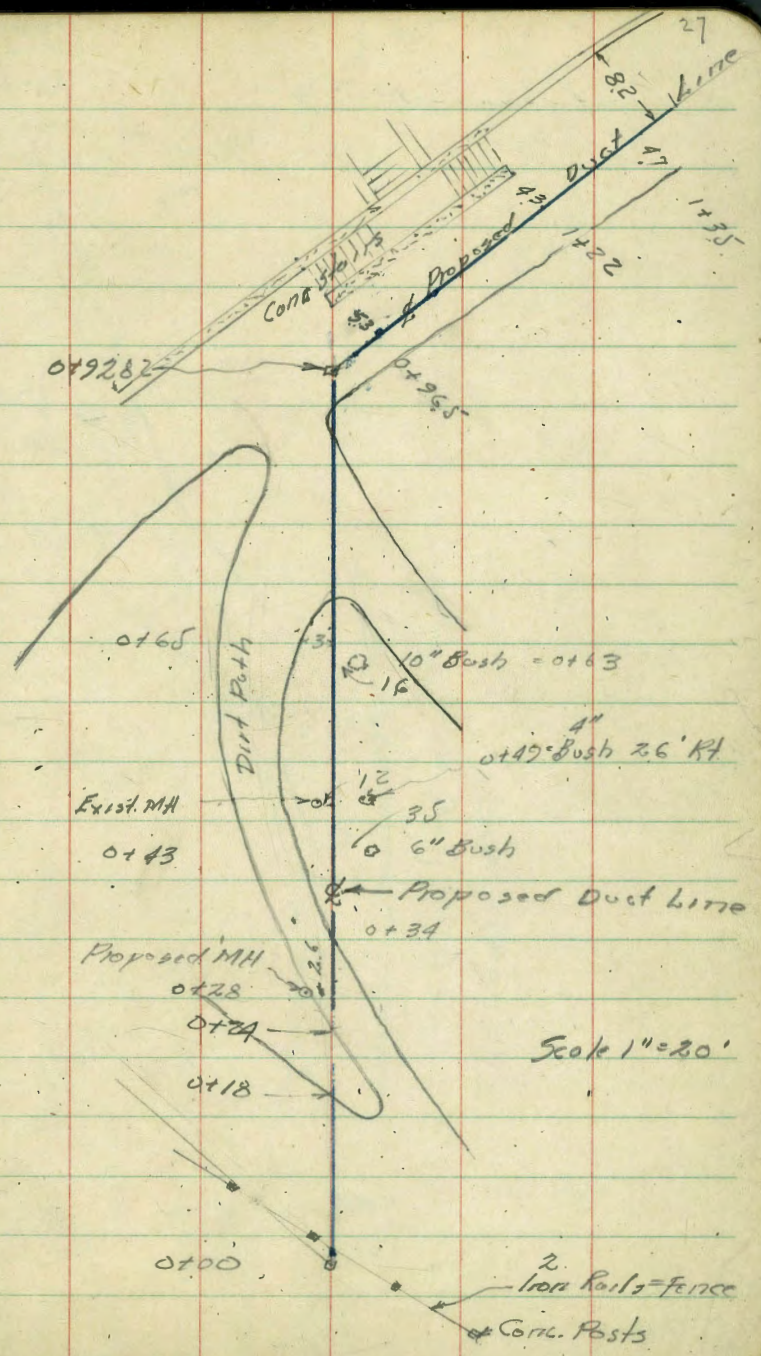
* 1+94 Pull Box 4.3' Rt.

1+86.59 = Bk. 22°26' Set 1"x1" Redwood + Disk

Cont. from P. 25



Details Walks etc for
— Location Proposed Duct
Line P-25-26



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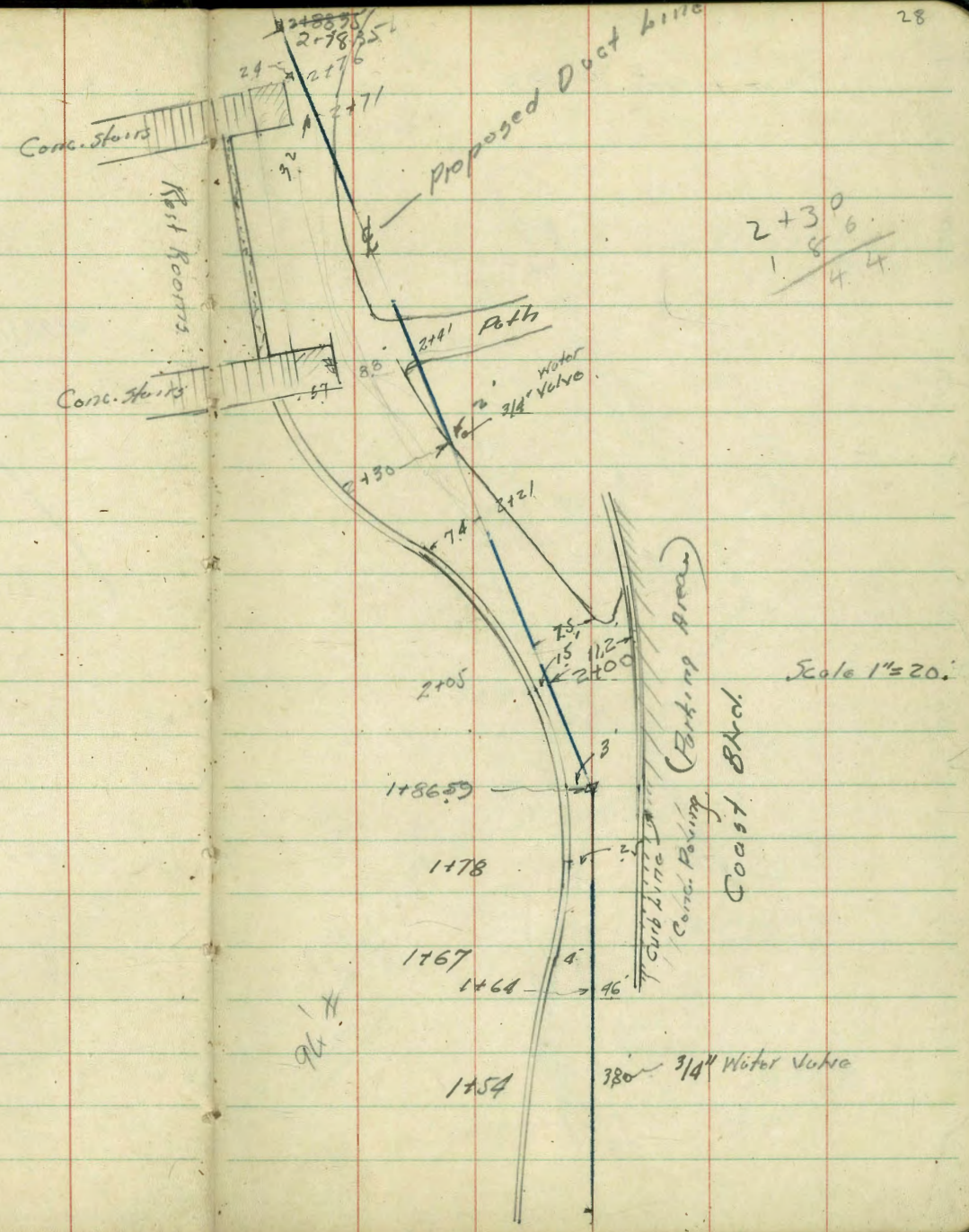
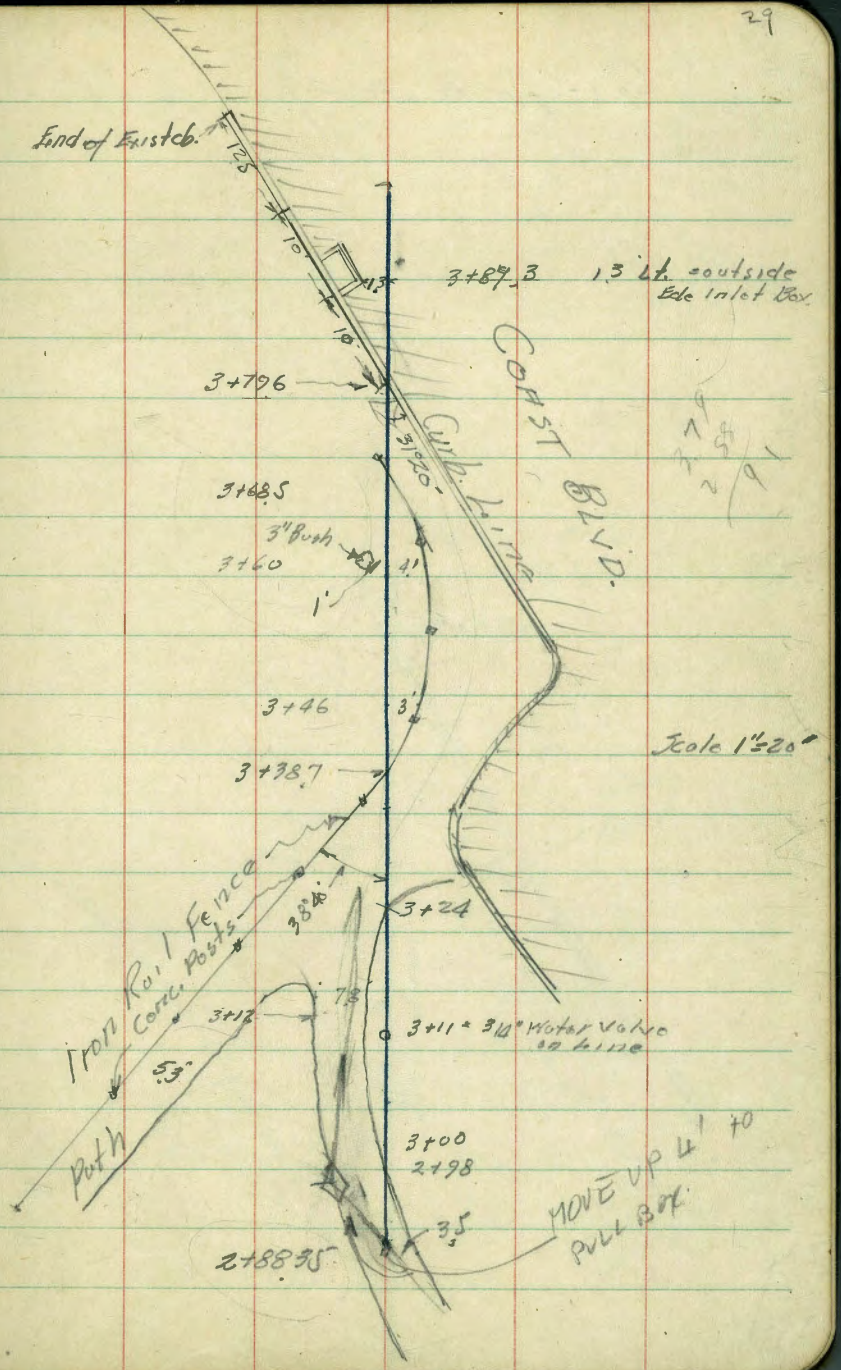


18

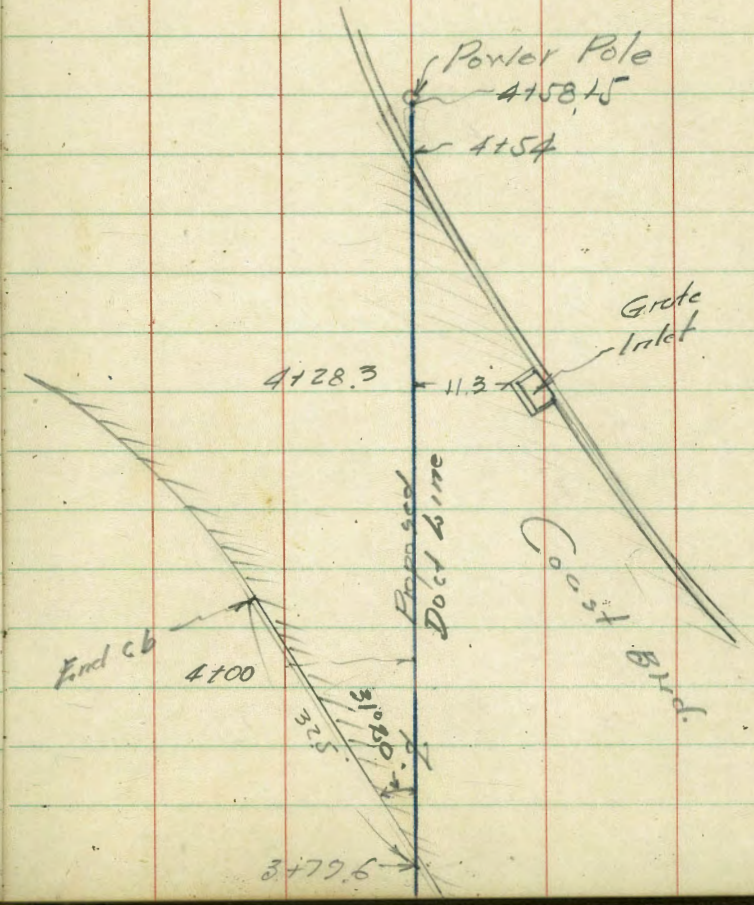
Cont. from P-28



Cont. from p. 29

#2 SS 2 1/10

#3 SS 3 9/9 1

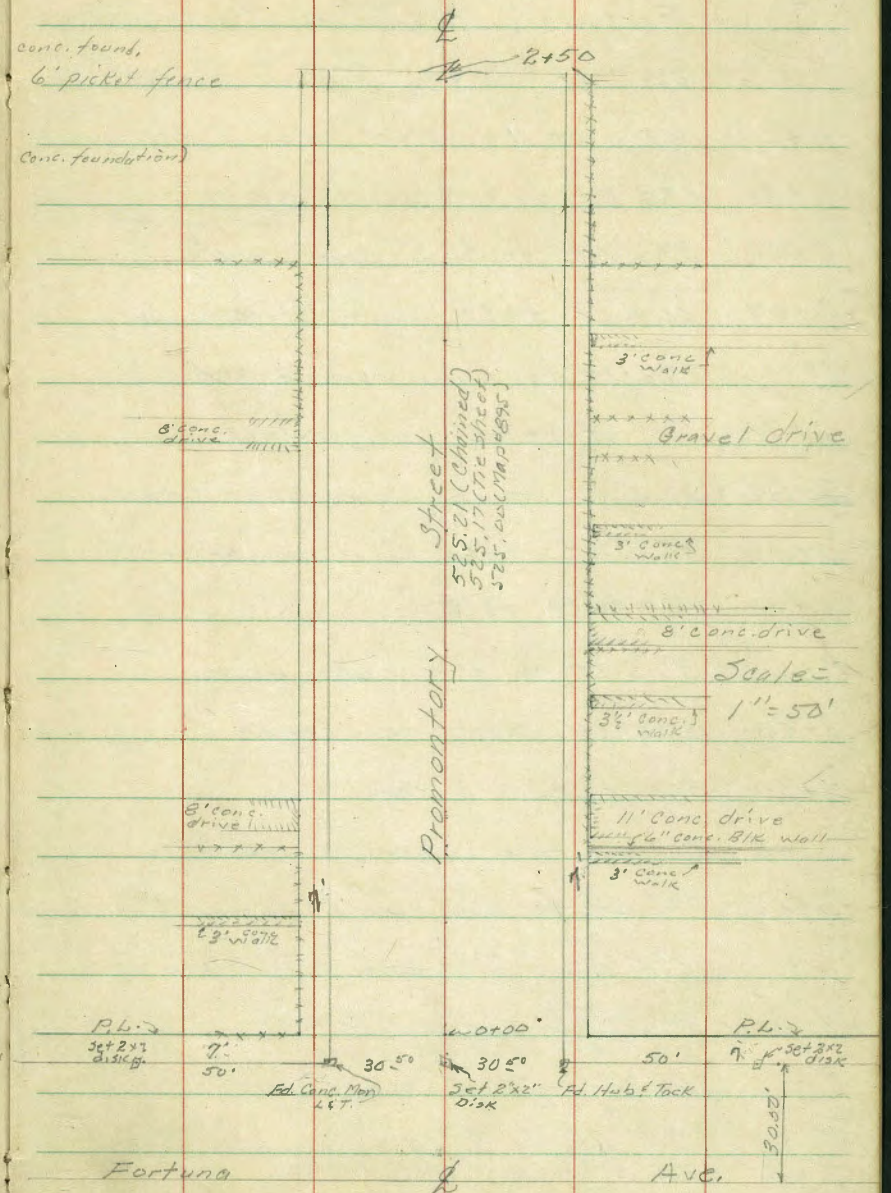


X-Section Promontory Street

Johnson
Pope
Crawford
9-22-49
W.O. 31396

Fortuna to Pacific Beach Drive.

37.7' Lt to end of rail fence with 6"
2+00 - 37.6' Rt. to end of picket fence - Start
1+80 - 37.7' Rt to ℄ 3' Conc. Walk
- 37.6 Lt to start Rail fence (with 6"
1+59 - 37.5' Rt to start picket fence
1+55 - 37.6' Lt. to ℄ 8' conc drive
1+50 - 37.6' Rt. to end of picket fence
1+31 - 38.5' Rt. to ℄ 3' conc. walk
1+10 - 37.3' Rt to start picket fence
1+05 - 37.5' Rt to ℄ 8' Conc. Drive
1+00 - 37.5' Rt to end picket fence
0+87.5 - 38.5' Rt. to ℄ 3.5' conc. walk
0+57 - 38' Rt to ℄ 11' Conc. drive
0+56 - 37.7' Lt to ℄ 8' conc. Driveway
37.5' Rt to Picket fence
0+50 - 37.5' Rt to 6" conc Blk. Fence
0+49 - 37.5' Lt to end of Wooden Fence
0+47 - 37.5' Rt. to ℄ 3' Conc. walk
0+30 - 37.4' Lt to ℄ 3' conc walk
0+00 - Wooden Fence - 37.7' Lt ℄



X-Section - Promontory Street

Fortuna to Pacific Beach Drive

4+66 = 37.5' Lt to ℄ 10' conc drive

4+50 - 37.6' Lt to start 6" conc. BIK wall

4+34 = 37.3' Rt to ℄ 8 conc. drive

4+08 - 37.2' Rt to ℄ 5' conc. walk

4+07 36.8' Lt to ℄ 8' conc. drive

4+00 - 37.5' Lt to end wire fence

3+98 = 37.1' Lt to ℄ 2' conc walk

3+84 - 37.5' Rt to 6" Conc. Block Wall

3+80 - 36.3' Rt to ℄ 8' conc. drive

3+71 - 37.3' Lt to ℄ 3.5' conc. walk

3+54 - 37.5' Lt to ℄ 8' conc. drive

3+50 - 37.8' Lt start wire fence

3+30 - 37.3' Lt. to ℄ 3' conc. Walk

3+05 - 37.5' Lt. to ℄ 8' conc. drive

3+00 - 37.5' Lt to end picket fence & 6" conc. found.

2+91 - 37.5' Rt to 2' Ribbon Conc. drive

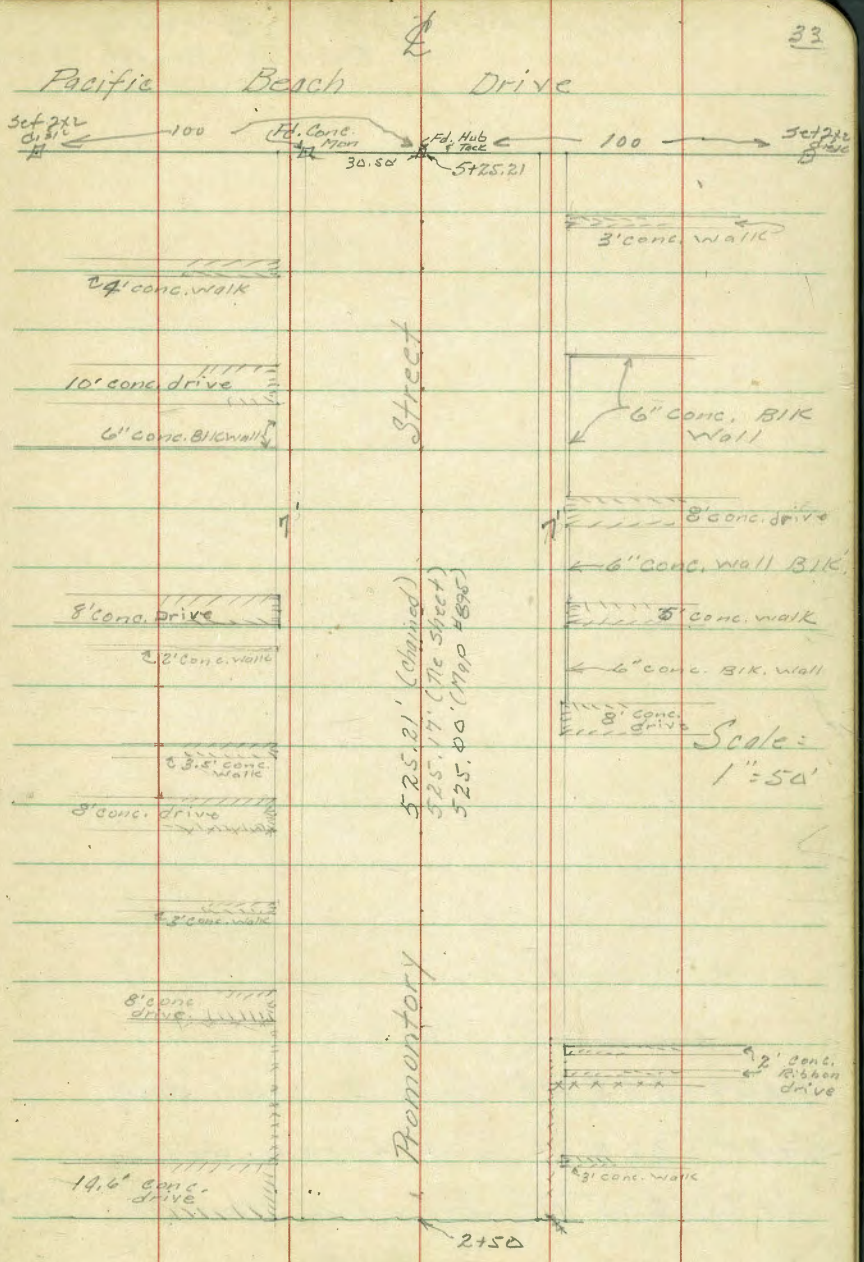
2+85 - 34' Rt. to 4' picket fence
37.5' Lt to start picket fence (6" conc. found.)

2+65 - 36.5' Rt to ℄ 3' conc. walk.

2+57 - 37.5' Lt to ℄ 14.6' conc. drive

2+51 - 33.5' Rt to 4' picket fence

2+47 - 37.7' Rt to dog in 6' picket fence.



X-Section - Promontory Street
Fortuna to Pacific Beach Drive

5+09 = 37.5' Rt. to ℄ 3' conc. walk

4+97 = 37.8' Rt to ℄ 4' conc. walk

4+75 = 37.5' Rt to end 6" conc. B/K wall

X-Section - Promontory Street
Fortuna to Pacific Beach Drive

0+47	℄ 3' conc. walk		
0+48			
0+92			
0+30	℄ 3' conc. walk		
0+00	No. P.L. Fortuna St.		
0-37.5	℄ Fortuna St.		
0-61			
0-64			
0-75	So. Line P.L. Fortuna		
		7.59	44.02
B.M.	6.74	51.61	44.87

Lt.		℄			Rt.		
							6.1 / 37.5 / 43.3
8.6 / 50 / 43.0	8.7 / 37.5 / 43.9	8.6 / 20 / 43.0	8.4 / 43.2	7.9 / 20 / 43.7		6.7 / 37 / 43.3	5.3 / 50 / 43.3
8.6 / 50 / 43.0	8.1 / 37.5 / 43.1	8.3 / 20 / 43.3	8.4 / 43.2	7.9 / 20 / 43.7	6.6 / 37 / 43.0 Toe	5.7 / 39 / 43.9	4.9 / 50 / 44.2
8.3 / 50 / 42.2	8.2 / 37.4 / 43.3						
6.2 / 50 / 43.4	7.4 / 37.5 / 44.1	7.2 / 20 / 44.4	6.8 / 44.8	6.2 / 21 / 45.4	5.3 / 37.5 / 46.3	4.5 / 50 / 46.1	
7.0 / 50 / 44.5	6.4 / 37.5 / 44.9	6.1 / 20 / 45.5	5.5 / 46.1	5.2 / 20 / 46.4	5.2 / 37.5 / 46.4	4.8 / 50 / 46.8	
6.3 / 50 / 45.3	5.9 / 37.5 / 45.7	5.8 / 20 / 45.8	5.3 / 46.3	4.8 / 20 / 46.8	4.5 / 37.5 / 47.1	4.4 / 50 / 47.2	
6.2 / 50 / 45.4	5.8 / 37.5 / 45.9	5.6 / 20 / 45.7	5.2 / 46.4	4.4 / 15 / 47.2	3.9 / 37.5 / 47.4	3.9 / 39 / 47.5	
6.2 / 50 / 45.4	5.4 / 37.5 / 46.2	5.3 / 10 / 46.3	4.5 / 47.1	4.2 / 20 / 47.4	4.1 / 37.5 / 47.7	3.9 / 50 / 47.7	

51.61

Lst. in Conc. Mon. 7' Line Fortuna & Promontory
Loc. ℄ Fortuna & Ingraham

X-Section - Promontory Street
Fortuna to Pacific Beach Drive

	Lt.	℄	Rt.
2+00	43.0 / 8.6 / 50	42.9 / 8.7 / 37.5	42.7 / 8.9 / 20	42.6 / 9.0 / 20	43.0 / 8.6 / 37.5	43.2 / 8.4 / 50
1+80 = ℄ 3' Conc. Walk					43.16 / 8.45 / 37.9	43.38 / 8.23 / 50
1+55 = ℄ 8' conc. drive	43.16 / 8.45 / 50	43.07 / 8.54 / 37.6				
1+50	8.8 / 50	42.8 / 8.8 / 37.5	42.5 / 9.1 / 20	42.5 / 9.1	42.7 / 8.9 / 20	42.8 / 8.8 / 37.5	42.8 / 8.8 / 50
1+31 = ℄ 3' conc. Walk						43.07 / 8.57 / 37.5	43.25 / 8.36 / 50
1+05 - ℄ 8' conc. drive						43.33 / 8.28 / 37.5	43.52 / 8.09 / 50
1+00	42.6 / 9.0 / 50	42.5 / 9.1 / 37.5	42.5 / 9.1 / 20	42.6 / 9.0	42.6 / 9.0 / 20	43.2 / 8.4 / 37.5	43.6 / 8.0 / 50
0+87.5 - ℄ 3.5' Conc. Walk						43.45 / 8.16 / 38.5	43.72 / 7.89 / 50
0+70	42.8 / 8.8 / 50	42.6 / 9.0 / 37.5	42.6 / 9.0 / 20	42.6 / 9.0	43.1 / 8.5 / 20	43.9 / 7.7 / 37.5	44.1 / 7.5 / 50
0+57 - ℄ 11' Conc. drive						44.04 / 7.17 / 38	44.67 / 6.94 / 50
0+56 - ℄ 8' conc. drive	43.14 / 8.47 / 50	43.17 / 8.43 / 37.7					

51.61

X-Section - Promontory St
Fortuna to Pacific Beach Drive

					Lt.	℄	Rt.
3+54	℄ 8' conc. drive				6.03 / 50 → 44.75	6.23 / 37.5 → 44.55	
3+50					44.7 / 6.1 / 50	44.4 / 6.4 / 37.5	44.1 / 6.7 / 20 — 43.7 / 7.1 — 43.8 / 7.0 / 20 — 44.2 / 6.6 / 37.5 — 44.0 / 6.8 / 50
3+30	℄ 3' conc. walk				44.30 / 6.38 / 50	44.31 / 6.47 / 37.5	
3+05	℄ 8' conc. drive				44.18 / 6.60 / 50	44.03 / 6.75 / 37.5	
3+00					44.2 / 6.6 / 50	43.8 / 7.0 / 37.5	43.6 — 43.3 — 43.4 — 43.9 / 6.9 / 37.5 — 43.7 / 7.1 / 50
2+91	℄ Ribbon conc. drive						43.71 / 7.07 / 37.5 — 43.78 / 7.00 / 50
T.P.		6.74	50.78	7.57	49.04		
2+65	℄ 3' conc. walk						43.36 / 8.25 / 35.5 — 43.41 / 8.20 / 50
2+57	℄ 14.6' conc. drive				43.90 / 7.71 / 50	43.76 / 7.85 / 37.5	
2+50					43.2 / 8.2 / 50	43.5 / 8.1 / 37.5	43.3 — 43.0 — 42.8 / 8.3 / 20 — 43.6 / 8.0 / 33.5 — 43.8 / 7.8 / 50

50.78 (circled)

51.61

X-Section - Promontory St
Fortuna to Pacific Beach

	Drive	Lt.	℄	Rt.
4+97 = ℄ 9' conc. walk	47.15	47.58		
	2.63 / 50	3.20 / 37.8		
4+66 = ℄ 10' conc. drive	44.83	46.48		
	3.95 / 50	4.30 / 37.5		
4+58	6.4	45.18	45.4	45.1
	4.4 / 50	5.0 / 37.5	5.4 / 20 — 5.9 / 20	5.7 / 37.5 — 5.7 / 50
4+34 = ℄ 8' conc. drive			44.9	44.94 — 45.1
				5.84 / 37.3 — 5.88 / 50
4+08 = ℄ 5' conc. walk	45.50			44.73 — 45.88
				6.05 / 37.2 — 5.90 / 50
4+07 = ℄ 8' conc. drive	45.18			
	5.28 / 50	5.60 / 36.8	44.6	44.7
4+00	45.40	45.0	44.2	
	5.4 / 50	5.8 / 37.5	6.7 / 20 — 6.6 / 20	6.1 / 37.5 — 6.1 / 50
3+98 = ℄ 2' conc. walk	44.97	44.97	44.3	
	5.38 / 50	5.81 / 37.1	6.5 / 20	
3+80 = ℄ 8' conc. drive				44.28 — 44.50
				6.30 / 36.3 — 6.28 / 50
3+71 = ℄ 3.5' conc. walk	44.95	44.62		
	5.83 / 50	6.16 / 37.3		
			50.78 / 2	

X-Section - Promontory St
Fortuna to Pacific Beach Drive

Lt. ¢ Rt. 39

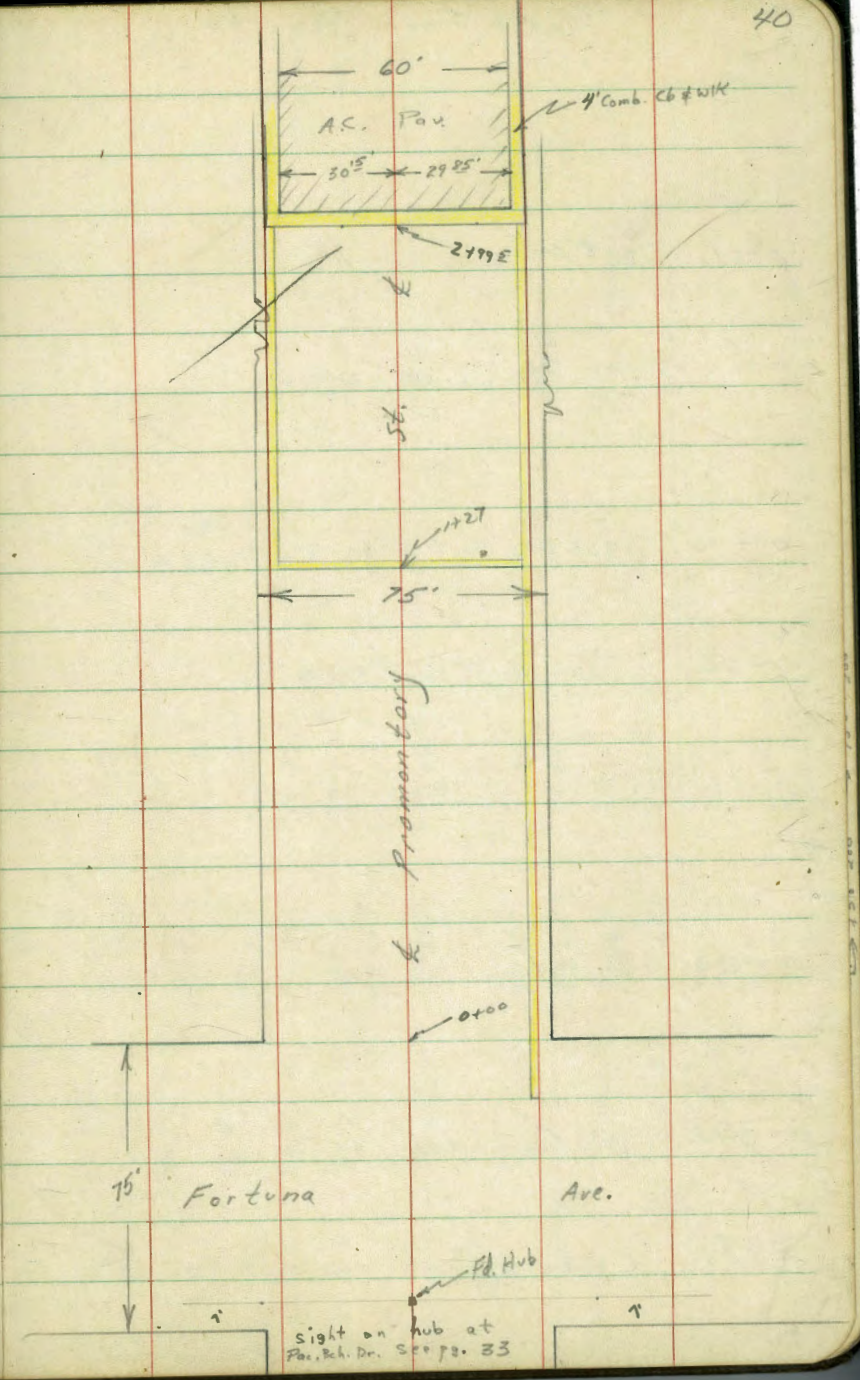
					0.01								
					46.13								
				4.88	46.14	= L.&C.T. So. P.L. Pacific Beach Dr & ¢ Ingraham							
T.P.		3.59	51.02	3.35	47.43								
6+06							53.8 +3.0/100	52.3 +1.5/50		49.5 1.3	48.1 2.7/50		47.0 3.8/100
6+00							52.20 +1.4/100	50.3 0.5/50		48.3 2.5	46.9 3.9/50		46.4 4.4/100
5+69							52.20 +1.4/100	50.0 0.8/50	48.5 2.3/20	47.8 3.0	47.5 3.3/20	46.6 4.2/50	45.8 5.0/100
5+65							+2.5/100	0.4/50	1.9/20	48.1 2.7	47.7 3.1/20	47.1 3.7/50	46.3 4.5/100
5+25.17 = So. Prop. Line Pacific Beach Dr.						48.9 1.9/50		48.0 2.8/37.5	47.5 3.3/20	46.7 4.1	46.5 4.3/20	46.3 4.5/37.5	46.3 4.5/50
5+09 = ¢ 3' conc. walk						45.87 4.81/50		45.92 4.86/37.5					
5+00						48.4 2.4/50		47.25 3.6/37.5	46.6 4.7/20	46.1 4.7	45.8 5.0/20	45.8 5.0/37.5	45.9 4.9/50

50.78

X-Sect. Promontory
(Fortuna south to Pavement)

10-10-49
Robert
Hendricks
Greer
Bunch
W.O. 25020

Map 895



Cont'd. From Page 40

		Lt.	℄	Rt.
0+01	26± Rt Fire plug			
0+06	S. Prop. Line Fortuna			
0-10	30± Rt East Edge 3' walk (Beginning N. & So. walk			
0-12	38± Rt. P. Pole #P1549			
0-17				
0-20				
0-37.5	℄ Fortuna			
BM	643 51.30		44.87	

L & C.T. ℄ Fortuna & Ingraham

Cont'd From Page 41

2+00				
1+50				
T.P.	4.28	47.73	7.85	43.45
1+27	North Edge 4' cone. Walk (E & W) [32.9' Lt & 3' walk Running N & S]			
1+14				
0+97				
0+50				

51.30

43.0	42.8	42.6	42.8	42.78	42.9	43.1	
4.7	4.9	5.1	4.9	4.95	4.8	4.6	
50	37½	32.9 Wlk.		32 Wlk.	37½	50	
43.2	43.1	42.97	43.4	43.5	43.15	43.2	
4.5	4.6	4.76	4.3	4.2	4.58	4.5	
50	37½	32.9 Wlk		19	32 Wlk	50	
		47.73					
43.3		43.20	43.44	43.60	43.5		
8.0		8.10	7.86	7.70	7.8		
50		37½		32	50		
43.5		43.1	44.1	44.21	44.47	44.37	
7.8		7.6	7.2	7.09	7.6	8.0	7.6
50		37½		32 Wlk.	50	60	87
47.3		47.04	47.1	46.9	45.5	45.21	43.4	45.5
4.0		3.9	4.2	4.4	5.8	6.09	7.9	7.8
50		37½		11	29	32 Wlk	60	82
47.7		47.7	47.1	46.8	46.47	46.5	43.8	43.9
3.6		3.6	4.2	4.5	4.83	4.8	7.5	7.4
50		37½		29	32 Wlk.	34	57	84

51.30

Cont'd From Page 42

				Start. B.M.
check			2.29	44.87 = 44.87
T.P.	4.18	47.16	4.75	42.98
3+53 ±				
3+03 ±	Gutter			
3+03 ±	Curb			
2+99 ±	Begin 4' Walk & Curb			
2+85				
2+50				

47.73

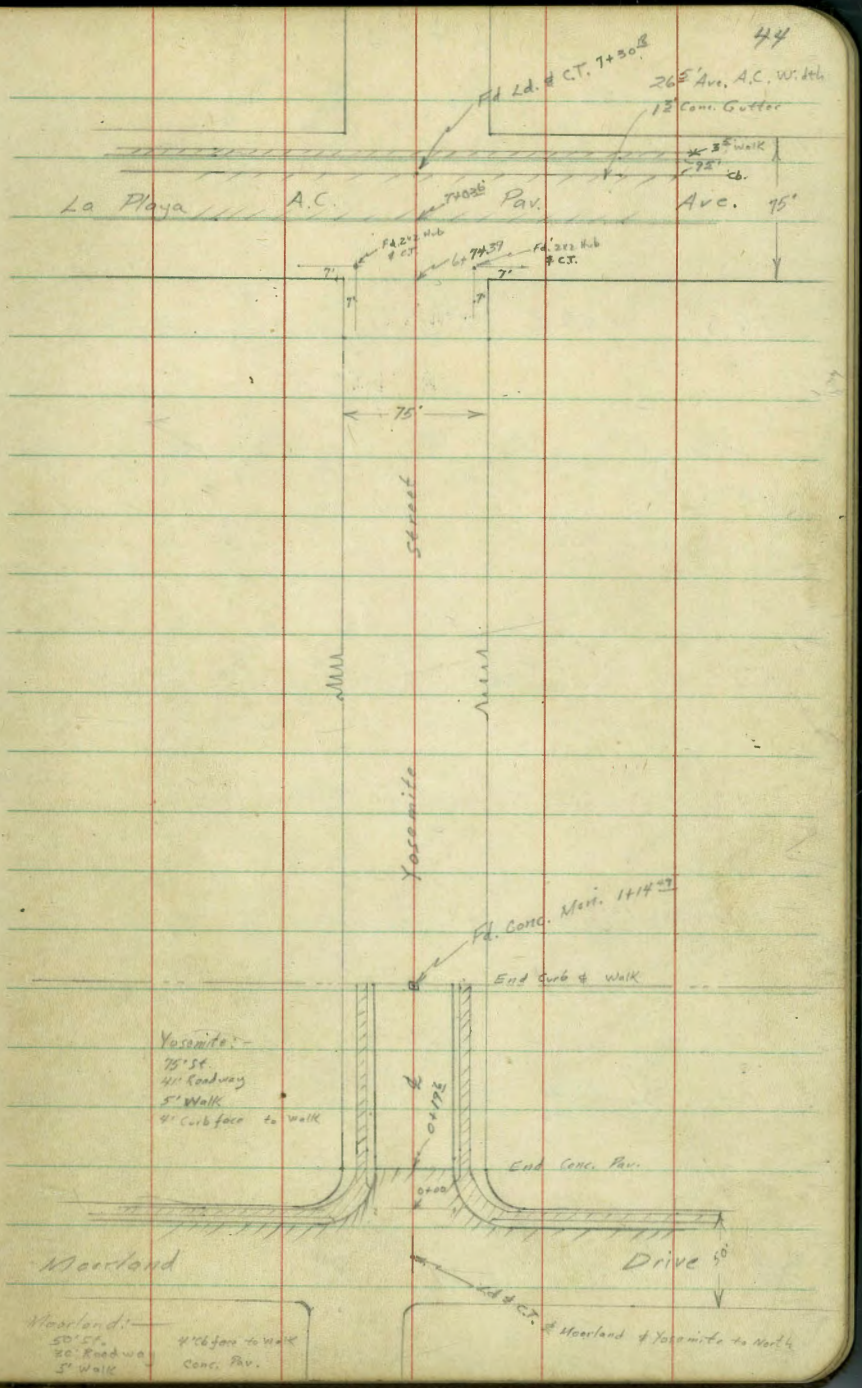
40.62	40.53	40.15	39.73	39.74	40.45	40.92	41.00	
7.11	7.20	7.57	8.00	7.99	7.28	6.81	6.73	
34 1/5	30 1/5 CB	30 1/5 Gutter	10		29 2/5 4-ct	29 2/5 CB	33 1/2	
			40.78	40.48	40.82			
			6.95	7.25	6.91			
			30 1/5		29 2/5			
		41.35	41.27	40.80	41.25	41.35		
		6.38	6.46	6.93	6.48	6.58		
		34 1/5	30 1/5		29 2/5	33 1/2		
	41.3	41.4	41.42	40.87	41.39	41.15	41.9	
	6.4	6.3	6.81	6.86	6.34	6.42	5.8	
	50	37 1/2	34 1/5 Edge WIK		33 1/2 Edge WIK	37 1/2	50	
	41.5	41.7	41.59	41.7	41.63	41.7	42.0	
	6.2	6.1	6.14	6.0	6.10	6.0	5.7	
	50	37 1/2	32 1/2 WIK		32 WIK	37 1/2	50	
	42.1	42.2	42.24	42.3	42.18	42.0	42.0	
	5.6	5.5	4.49	5.4	5.45	5.3	5.1	
	50	37 1/2	32 1/2 WIK		32 WIK	37 1/2	50	

47.73

X- Section Yosemite St.
Moorland Dr. to La Playa St.

12-7-49
Roberts
Garber
Moore
Clark
W.O. # 3407

T.P. 1273 & 1276



Cont'd From Page 44

1+00			
0+80	20.5 Lt & 17' Drive open in curb		
0+50			
0+19 Lt	Pav. Edge		
0+00	North Prop. Line Moorland		
0-10	Curb Line Moorland		
0-25	℄ Moorland Drive		
BM	0.41	34.09	33.68.

Lt.		℄			Rt	
28.11	27.59	27.59	27.6	27.39	27.79	27.80
5.98	6.5	6.5	6.5	6.7	6.3	6.29
20.6	20.6	10.2		10.2	20.4	20.4
Cb	Gutt				Gutt	Cb (Drive)

27.85
6.24
20.5
cb.

28.85	27.89	27.99	27.99	27.89	27.49	27.93
5.24	6.2	6.1	6.1	6.2	6.6	6.6
20.6	20.6	10.2		10.2	20.5	20.5
cb	Gutt				Gutt.	Cb

29.40	28.91	28.90	28.71	28.93	27.99	28.40
4.69	5.18	5.19	5.38	5.66	6.10	5.69
20.8	20.8	10.25		10.25	20.3	20.3
Cb	Gutt				Gutt.	Cb
B.C.	B.C.				B.C.	B.C.

30.36	29.87	29.55	29.17	28.97	28.66	28.31	27.94	27.57	27.39	27.85	26.17	26.69
3.73	4.22	4.54	4.92	5.12	5.43	5.78	6.15	6.52	6.90	6.24	7.92	7.40
100	100	50.5	50.5	37.5	20.5		20.5	37.5	50.5	50.5	100	100
Cb	Gutt	B.C.	Gutt B.C.						Gutt B.C.	Cb B.C.	Gutt	Cb

30.15	29.25	29.03	28.67	28.44	28.00	27.63	27.42	26.31
3.74	4.84	5.06	5.42	5.45	6.09	6.46	6.67	7.78
100	50	37.5	20.5		20.5	37.5	50	100

34.09
N.W.B.P. Ingraham & Moorland

Cont'd From Page 45

1+72 21.6' Lt. Center 14" Pepper tree

1+50

1+42 37.5' Rt & 25' Conc. Walk

1+37 23.5' 6" Shrub?

1+25 37.5' Rt & 8.5' Conc. Drive

1+24 29.5' Lt & Double Ribbon Drive { 2' Strips 6.5' Overall

1+14.49 End Cb. & Walk

1+03 20.4' Rt & 18.5' Drive Open. in Cb.

34.09

29.19 49 50

28.69 5.4 37.5

28.09 6.0 21

27.99 6.6 20.5

27.49 6.6

27.09 7.0 20.5

27.39 6.7 22.5

27.49 6.6 37.5

27.89 6.2 50

27.57 6.52 37.5 Conc.

27.89 6.20 50 Conc.

27.53 6.56 37.5 conc.

27.89 6.20 50

28.37 5.72 37.5 conc.

28.09 6.00 29.5 conc.

52 50

28.39 5.1 37.5

28.13 5.96 29.5 Walk

28.05 6.04 24.5 Walk

27.97 6.12 20.5 Cb

27.49 6.6 20.5 Gutt

27.59 6.5 10.2

27.59 6.5

27.29 6.8 10.2

27.09 7.0 20.5 Gutt

26.97 7.12 20.5 Cb

27.04 7.05 24.5 Walk

27.09 7.00 29.5 Walk

26.76 7.33 20.4 Drive

34.09

Cont'd From Page 46

2+84	37.5' Rt. ℄ 8.5' Conc. Drive			
2+82	37.5' Lt. ℄ 7' Conc. Drive			
2+52	37.5' Rt ℄ 2.5' Conc. Walk			
2+50				
2+28	37.5' Rt ℄ 7' Conc. Drive			
2+00				
T.P.	4.80	32.38 ↑ 34.09	6.51	27.58

27.49 / 4.89 / 37.5 conc.
27.60 / 4.78 / 50 conc.

29.04 / 3.34 / 50 conc.
28.68 / 3.70 / 37.5 conc.

27.43 / 4.95 / 37.5 conc.
27.53 / 4.85 / 50 conc.

28.38	28.28	27.98	27.78	27.48	27.08	27.48	27.38	27.38
4.0	4.1	4.4	5.1	4.9	5.3	4.9	5.0	5.0
50	37.5	22	20		19	24	37.5	50

27.36 / 5.02 / 37.5 conc.
27.33 / 5.05 / 50 conc.

28.38	27.98	27.88	27.18	27.58	27.28	27.48	27.08	27.08
4.0	4.4	4.5	5.2	4.8	5.1	4.9	5.3	5.3
50	37.5	22	19		17	20	37.5	50

32.38 ↑

Cont'd From Page 47

4+48

4+23 33' Lt. & 2.5' Conc. Walk

4+00

3+63 37.5' Rt & 8.5' Conc. Drive

3+50 37.6' Rt. & 2.5' Conc. Walk

3+00

2+99 37.6' Rt. & 3' Conc. Walk

32.38

28.18	28.58	28.58	27.48	27.58	27.28	27.88	28.18	28.18
4.2	3.8	3.8	4.9	4.8	5.1	4.5	4.2	4.2
50	37.5	21	19		17	22	37.5	50

28.39	28.44	28.48
3.99	3.74	3.90
50 Conc	37.5 Conc.	33 Conc

29.18	28.98	28.78	27.68	27.88	27.38	28.28	28.28	27.98
3.2	3.4	3.6	4.7	4.5	5.0	4.1	4.1	4.4
50	37.5	21	19		18	26	37.5	50

28.07	28.12
4.31	4.26
37.5 Conc.	50 conc.

29.08	28.68	28.38	27.58	27.88	27.48	27.88	27.98	27.38	28.12
3.3	3.7	4.0	4.8	4.5	4.9	4.5	4.4	4.40	4.26
50	37.5	21	20		17	25	37.6	37.6 Conc.	50 conc.

28.78	28.38	28.18	27.38	27.78	27.48	27.68	27.58	27.68
3.6	4.0	4.2	5.0	4.6	4.9	4.7	4.8	4.7
50	37.5	22	19		25	26	37.5	50

27.56	27.68
4.82	4.70
37.6 conc.	50 conc.

32.38

Cont'd From Page 48

5+63 27' Lt Center 14" Pepper Tree

5+50

5+46 37.6' Rt & 2.5' Conc. Walk

5+36 37.6' Rt & 8.5' Conc. Drive

5+00

4+72 36.2' Lt & 2.6' Conc. Walk

4+50

32.38

25.78 25.68 26.08 26.98 26.68 27.38 27.78
6.6 6.7 6.3 5.4 5.7 5.0 4.6
50 37.5 19 20 37.5 50

27.68 28.09
4.70 4.34
37.6 50
conc. Conc.

27.78 28.08
4.60 4.30
37.6 50
conc. conc.

26.48 26.88 27.28 27.48 26.98 27.68 28.08 27.88
5.9 5.5 5.1 4.9 5.4 4.7 4.3 4.5
50 37.5 20 16 25 37.5 50

27.99 27.37
4.94 5.01
50 36.3
Conc conc.

27.48 27.58 27.48 27.58 27.28 27.88 28.18 28.18
4.9 4.8 4.9 4.8 5.1 4.5 4.2 4.2
50 37.5 19 17 22 37.5 50

32.38

Cont'd From Page 49

		Lt.	℄	Rt
6+93	38½' Lt. Center P. Pole #JP1647	25.45 5.0 50	24.75 25.35 24.65 24.25 24.35 24.25 4.7 5.1 5.8 6.2 6.1 6.2 37.5 32 27 16 29	24.75 24.55 5.7 5.9 37½ 50
6+86	27' Lt. Center 24" Cypress Tree			
6+74 39	20½' Lt. Center 3' Euc. Tree So. Prop. Line La Playa	25.65 25.75 4.8 4.7 50 37½	25.65 24.95 24.95 24.65 4.8 5.5 5.9 5.8 24 19 15	25.05 25.35 24.95 5.4 5.1 3.5 23 37.5 50
6+70	22' Rt Center Fire Hydrant			
T.P.	3.02 30.45 4.95 27.43		30.45	
6+50		26.28 6.1 50	25.98 25.48 25.38 24.88 24.78 24.48 6.4 6.9 7.0 7.5 7.6 7.9 37.5 33 25 20 20	24.48 24.58 7.9 7.8 37.5 50
6+42	26' Lt. Center 26" Euc. Tree			
6+08	27' Lt Center 40" Eucalyptus Tree			
6+00		26.28 6.1 50	25.42 25.02 25.98 25.98 25.48 6.9 7.3 6.4 6.4 6.9 37.5 21 6 24	26.08 26.48 6.3 5.9 37.5 50
5+91	39½' Rt & 2½' Conc. Walk			26.28 26.52 6.10 5.8 39.4 50 conc conc.
	32.38		32.38	

Cont'd From Page 50

7+29 88	Curb Line			
7+28 88	Edge Conc. Gutter			
7+16 1	& Par. Strip			
T.P. (7+03 6	5.62 & Yosemite	30.12	24.50 Edge Par.	
Check		1.94	33.68	= 33.68
T.P.	8.59	35.62	3.42	27.03
7+09				
7+03 6	Par. Edge			
6+98				

30.45

Lt

24.80	25.29	24.52	25.02	24.40	24.89	24.72	24.42
5.32	5.83	5.60	5.10	5.12	5.23	5.90	5.90
100	100	37.5	37.5	Gutt	cb	37.5	37.5
Gutt	cb	Gutt	cb			cb	Gutt

24.84	24.60	24.49	24.28
6.28	5.52	5.68	5.84
100	37.5		37.5

24.509	24.76	24.58	24.47	24.16
5.08	5.36	5.54	5.65	5.96
100	37.5		37.5	100

30.12

Rt

24.52	24.01
5.60	6.11
100	100
cb	Gutt

24.05
6.07
100

(51)

Starting BM

25.02	24.83	24.74	24.71	24.68	24.64	24.61	24.58	24.52	24.45	24.29
5.43	5.62	5.69	5.74	5.79	5.81	5.84	5.87	5.93	6.00	6.11
100	50	37.5	20.5	10.25		10.25	20.5	37.5	50	100

24.90	24.67	24.61	24.57	24.52	24.50	24.45	24.39	24.29	24.31	24.15
5.55	5.78	5.84	5.88	5.93	5.95	6.00	6.06	6.16	6.14	6.30
100	50	37.5	20.5	10.25		10.25	20.5	37.5	50	100

24.55	25.35	24.25	24.45	24.15	24.05	24.15
5.9	6.1	6.2	6.0	6.3	6.4	6.3
50	37.5	20		20	37.5	50

30.45

Survey for 36" drain
4-17-50 at Catalina Blvd. & Jennings

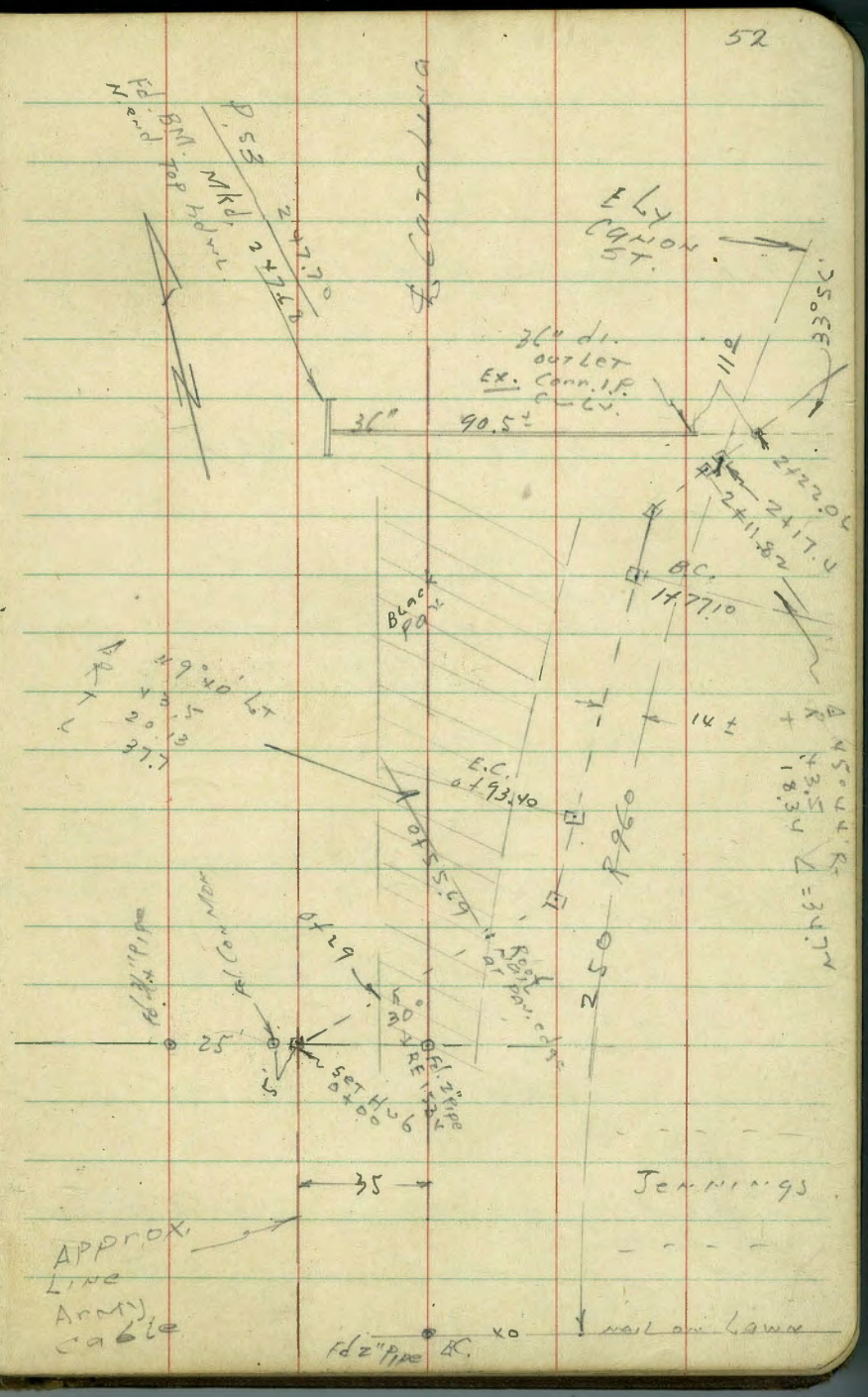
Moore
Beggs
Crawford

W.O. 20658

□ Set Hubs & disks

Note. Large water Line
and H.P. Gas
on Catalina Blvd. ?

South Line Colonial Manor



Levels for drain

0+29	Wedge Blk Pav.					
0+18	Shoulder Old Fill					
0+11	8' Lt to S. Side 4.5 d. Palms					
0+00	V.S. Cable approx 36" deep					
	X.S.	252.26				
T.P.			6.70	247.70	Phelps 247.68	Found Mkd BM N. end inlet hdwl existing Culv. across Catalina
T.P.	2.55	254.40	8.51	251.85		
T.P.	3.53	260.36	5.96	256.83		
BM. NW BP Catalina Blvd. and Santa Barbara	2.11	262.79		260.68	Record	Mkd on Cu 06 by BLISS 260.66

Lt	℄	Rt
	249.3 3.0	
247.2 5.1 10	249.5 2.8	249.5 2.8 10
247.3 5.0 8	247.8 4.5	249.1 2.6 10
	247.5 4.8	
	252.26	

1+50

1

0+93.40 E.C.

0+74.54 ℄ curve

0+57.7 E. edge Blk. Pav.

0+55.69 BC L7

0+40.5 ℄ Pav

℄

247.4
4.9

247.7
4.6

247.7
4.6

248.0
4.3

248.11
4.5

248.2
4.1

248.9
3.4

25+22.6

		L T.	℄	R T.
2+22.06	Increase Line of Existing 36" C.M.P.	244.03 8.23 FL. INLET 36"	243.7 8.6 11 ground FL. 36" Pipe OUTLET	240.70 11.56 11 243.2 9.1
2+17.4	E Ly Cañon St		243.3 9.0	
2+11.82	E.C.	243.9 8.4 10	243.7 8.6	243.5 8.8 12
2+03.2	℄ of Tel. Co. D.M.	246.8 5.5 12	244.5 7.8 6	244.2 8.1
1+94.5		247.0 5.3 10	245.1 6.6 6	244.1 8.2 10 245.6 6.7
1+85.8		247.1 5.2 10	247.5 4.8	245.9 6.4 10 248.3 4.0 10
1+77.10	BCR T	247.0 5.3 15.5 E. edge Blk Pav	247.4 4.9	℄ Tel. P. 8.9
				248.1 ℄ S1 1247 H 4.2 10

25+26

3+22

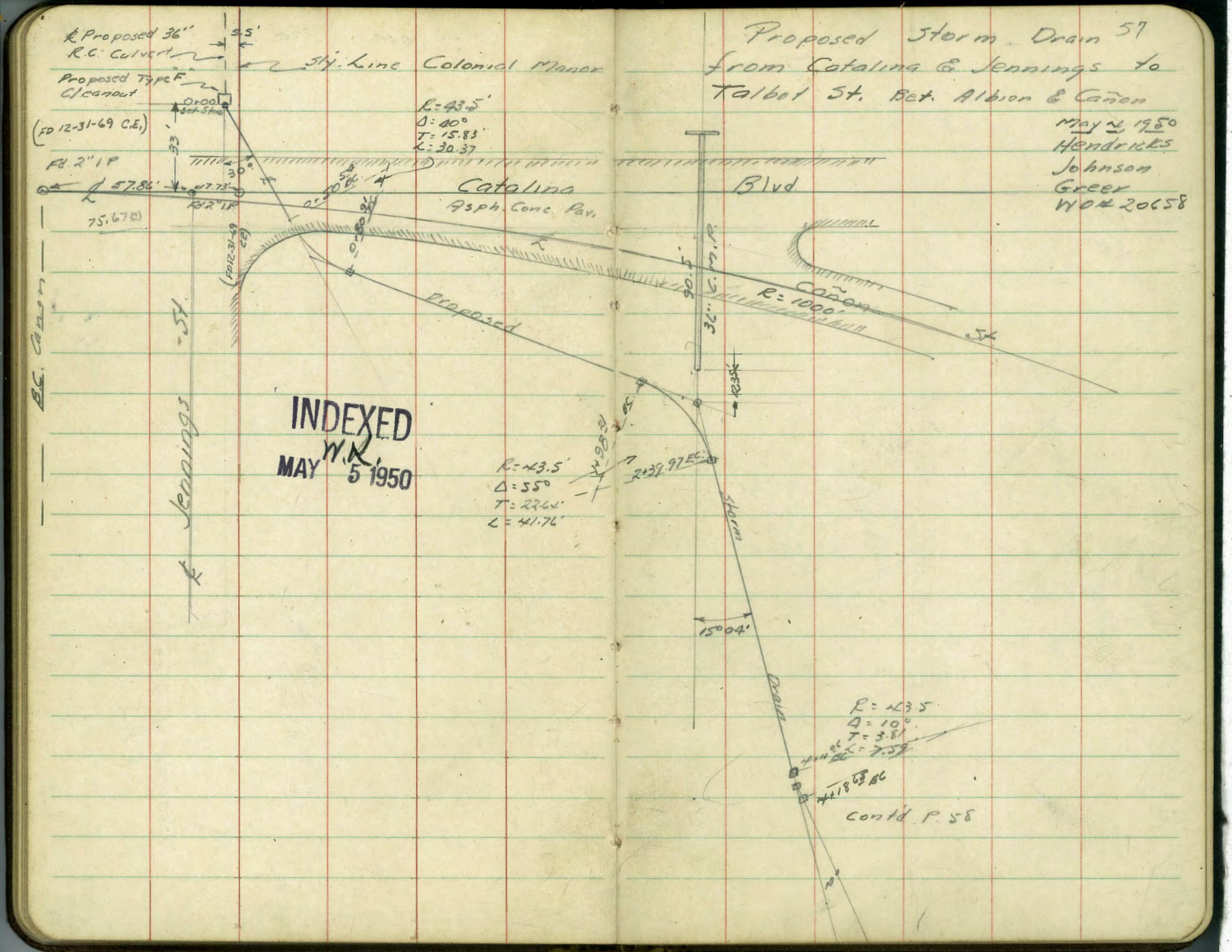
2+72

238'
14.2

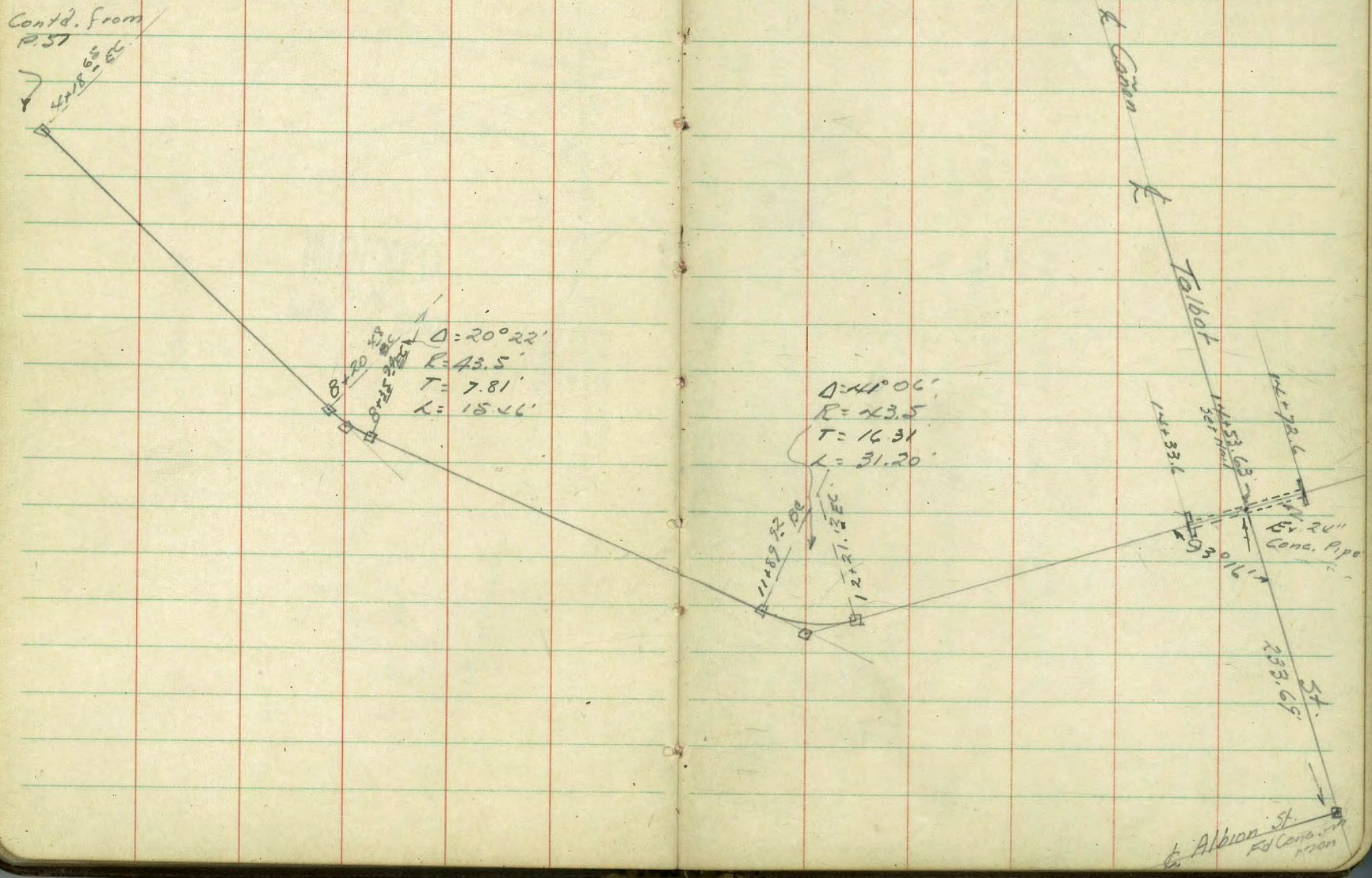
240'
12.0

252.26

REDUCED # 1250
P.V.S.


℄ Proposed 36" R.C. Culvert
5.5'
3½ Line Colonial Manor
Proposed Type "F" Cleanout
Drop Set Stone
(FD 12-31-69 C.E.)
Fd. 2" I.P.
33'
30°
℄ 57.86'
N7.73'
Fd 2" I.P.
75.67 (R)
(FD 12-31-69 C.E.)
Catalina
Asph. Conc. Pav.
R=43.5'
Δ=40°
T=15.83'
L=30.37'
Proposed
Jennings
St.
INDEXED
MAY W.R. 5 1950
R=43.5'
Δ=55°
T=22.64'
L=41.76'
Proposed Storm Drain 57
from Catalina & Jennings to
Talbot St. Bet. Albion & Cañon
May ℄ 1950
Hendricks
Johnson
Greer
WO# 20658
Blvd
℄ W.P.
90.5'
32'
Cañon
R=1000'
St.
12.33'
2+39.97 EC
Storm
15.04'
Circuit
R=43.5'
Δ=10°
T=3.81'
L=7.58'
1+68 BC
Cont'd P. 58

Proposed Storm Drain
Cont'd from R 57

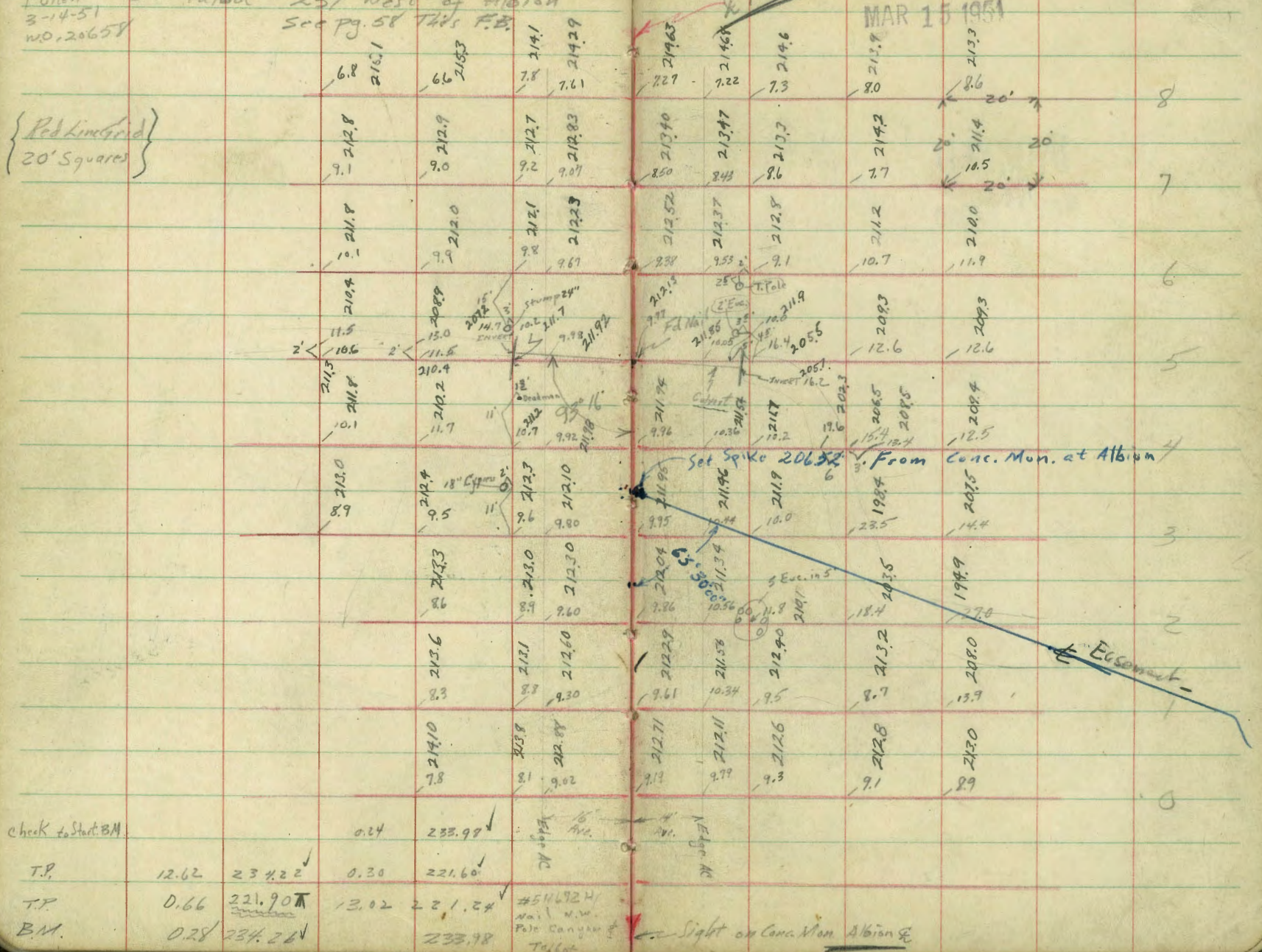


Roberts
Moore
Pullen
3-14-51
W.O. 20658

Topog of Area Around Culvert In Talbot 234' West of Albion

See Pg. 58 This F.B.

{Red Line Grid 20' Squares}



check to Start B.M.			0.24	233.98	
T.P.	12.62	234.22	0.30	221.60	
T.P.	0.66	221.90	13.02	221.24	#511692 H/ Nail N.W. Pole Canyon & Talbot
B.M.	0.28	234.24		233.98	

20005

Survey for Boundary of Police Pistol Range - See Hard Copy for Topo.

#4693

W.O. 20006

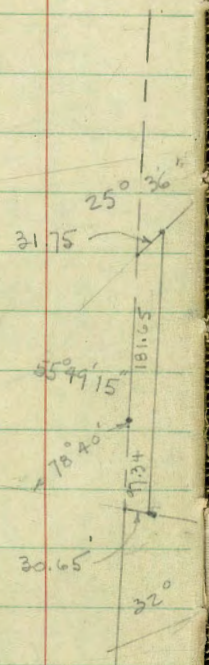
INDEXED
NOV 1 1950

10-31-50
Osborne
Hardin
Hatch
Rimmer

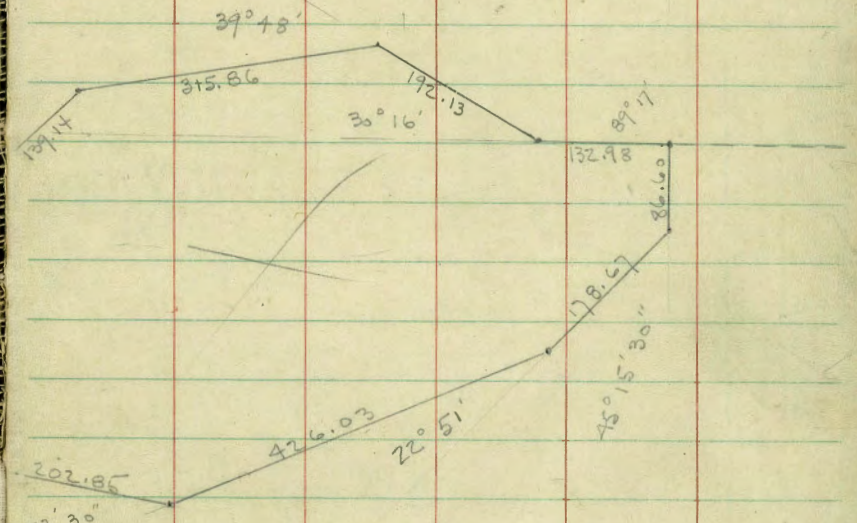
See B. 1435 - P. 5

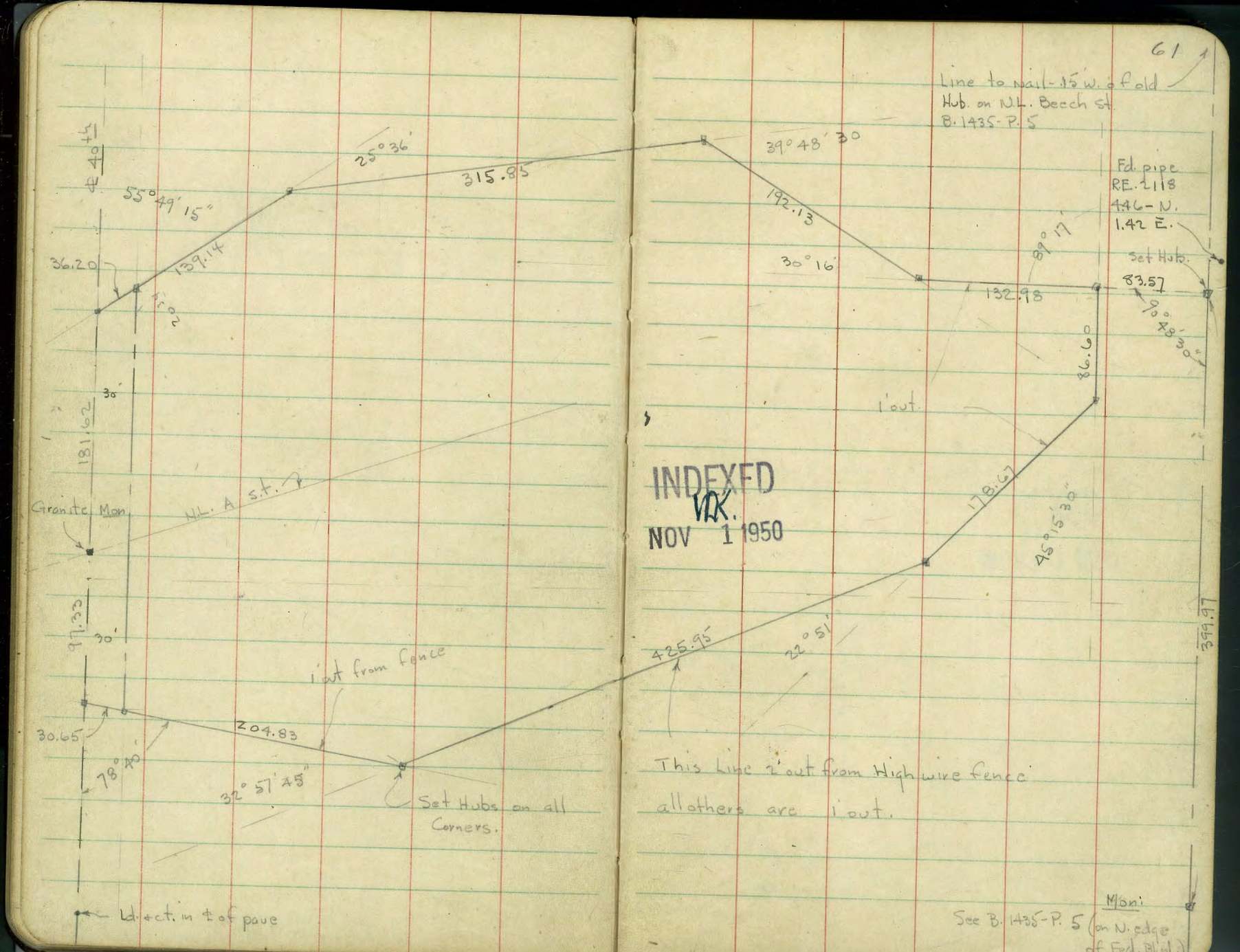
T.P. 19
1453 - 79
1448 - 73

Map # 517 - Marloo Park



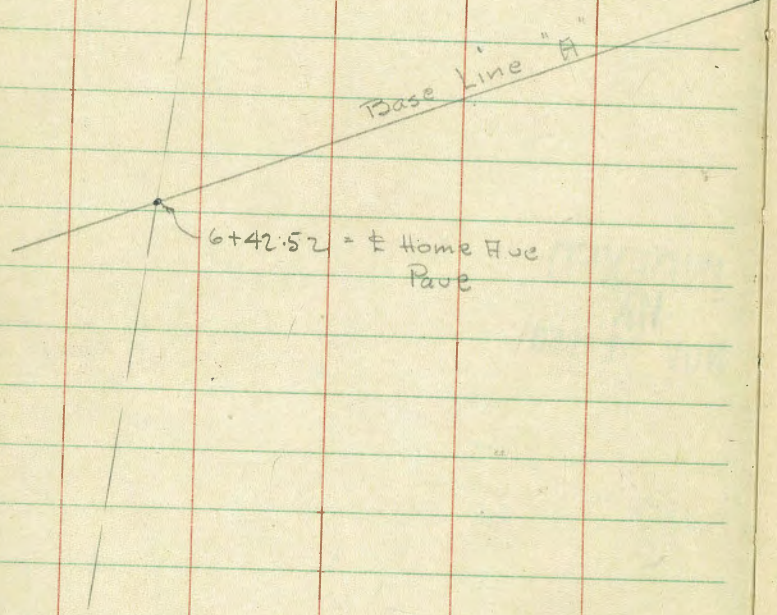
N. G. Sec. P. 61 - 63

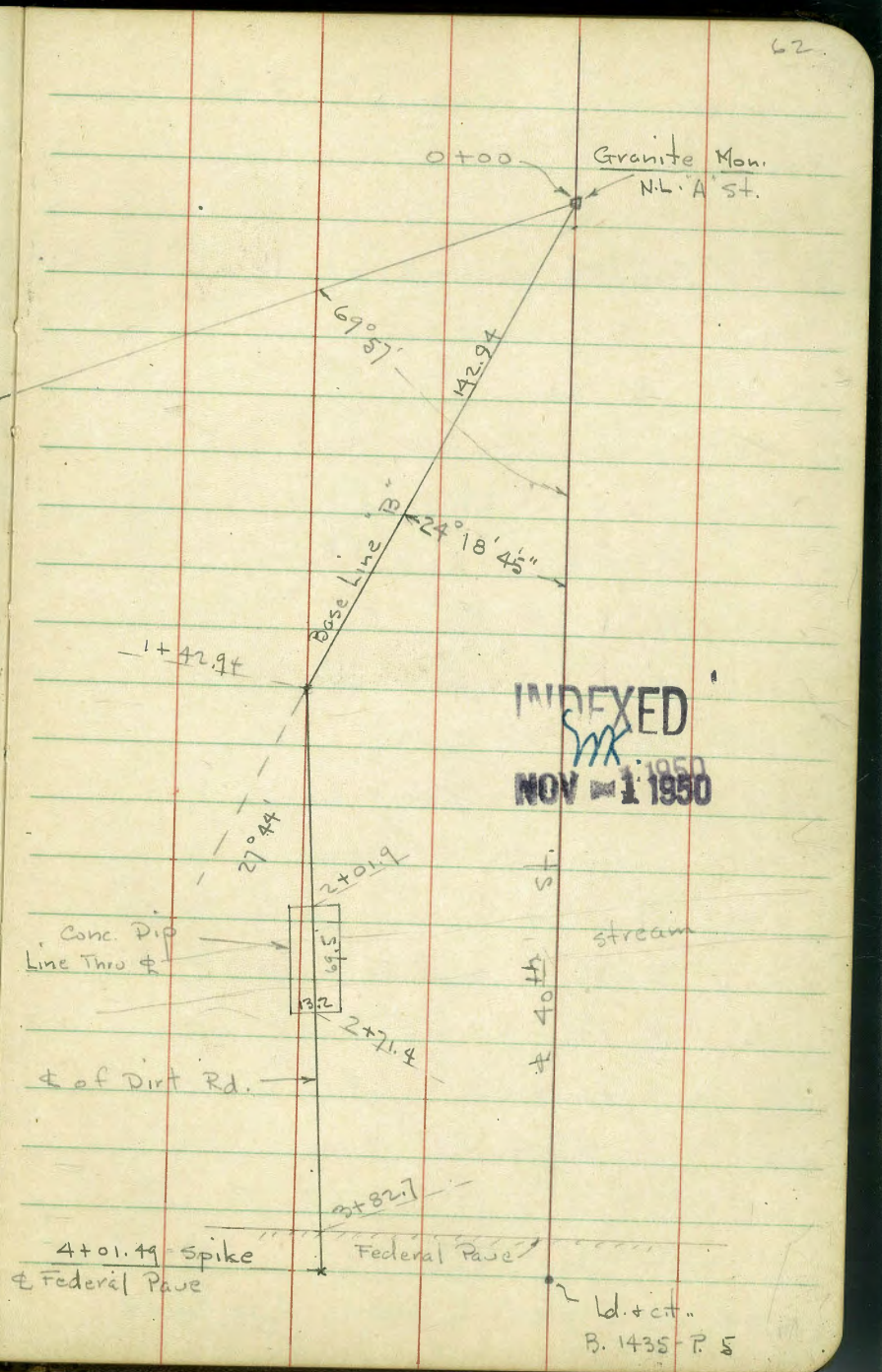



Line to nail - 15' W. of old Hub. on N.L. Beech St. B. 1435 - P. 5
39° 48' 30"
192.13
30° 16'
132.98
89° 17'
Fd. pipe RE. 2118 4.46 - N. 1.42 E.
Set Hub.
83.57
S 0° 03' 30" W
86.09
1 out.
178.67
45° 15' 30"
399.97
INDEXED
VRK.
NOV 1 1950
25° 36'
315.85
55° 49' 15"
139.14
36.20
30'
181.62
Granite Mon
N.L. A S.T.
47.33
30'
30.65
204.83
1 out from fence
78° 40'
32° 57' 45"
Set Hubs on all Corners.
425.95
22° 51'
This Line 2' out from High wire fence all others are 1' out.
Ld. ct. in ℄ of pave
Mon:
See B. 1435 - P. 5 (on N. edge of Fed. Bldg.)

Base Lines to show loc. of Exist Dirt. Access Roads.

See P. 63 for offsets To Rd.





Offsets to Existing Dirt Road from Base Line "H"

0+00 = Granite Mon. = ℄ Rd. thru Gate
+45 - 11' Rt. = ℄ 36" Euc.
1+00 = ℄ Rd.
+48 - 16' Lt. = ℄ 60" Euc.
+50 - 2' & 21' Rt. = Rd.
2 ~ 10' & 29' Rt. = Rd.
+12 - 4' Lt. = ℄ 50" Euc.
+18 - 4' Lt. = ℄ 40" Euc.
+95 - 10' Lt. = ℄ 40" Euc.
3 ~ 5' & 24' Rt. = Rd.
+58 - 7' Lt. = ℄ 24" Euc.
4 ~ 9' Lt & 9' Rt. = Rd.
+62 - ℄ 30" Iron Pipe Culvert
+68 - 8' Rt. = ℄ 40" Euc.
5 ~ ℄ & 15' Lt. = Rd.
5 ~ - 11' Rt. = ℄ 30" Euc.
6 ~ 17' Rt. & 17' Lt. = Rd.
6+23.5 = Edge Pave
6+42.52 = Spike = ℄ Home Hue Pave

Add. Elev. & Topo. Pole + Alley - Blk. 16

5129 1-27-51 7.0.

W.O. 20553

0+30 - Top cb. = 71.33

0+30 - Top waterpipe = 69.05

0+02 - 2' Rt. = E.C. - Top cb. = 71.78

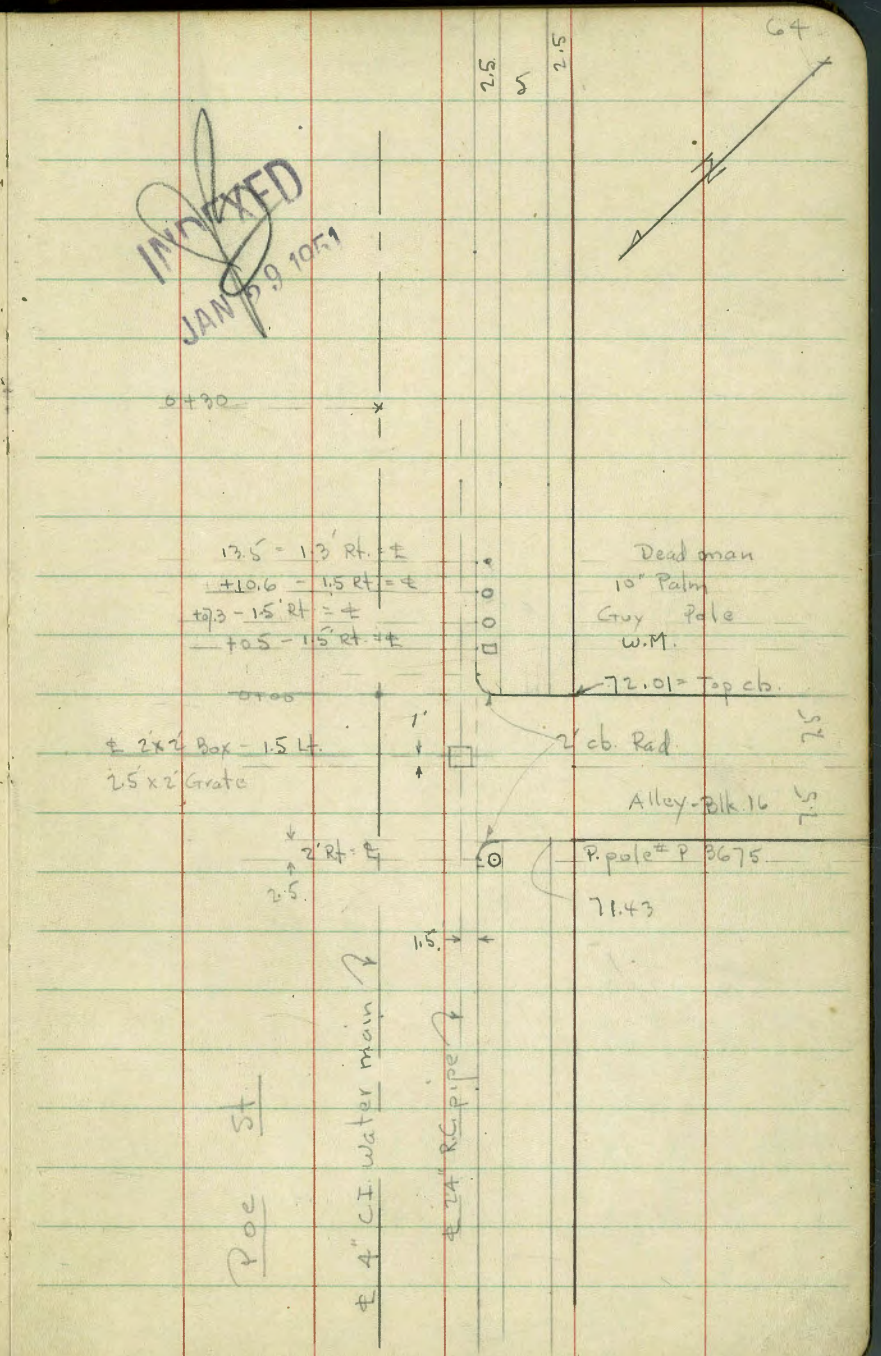
0+00 - 2' Rt. = P.C. - Top cb = 71.80

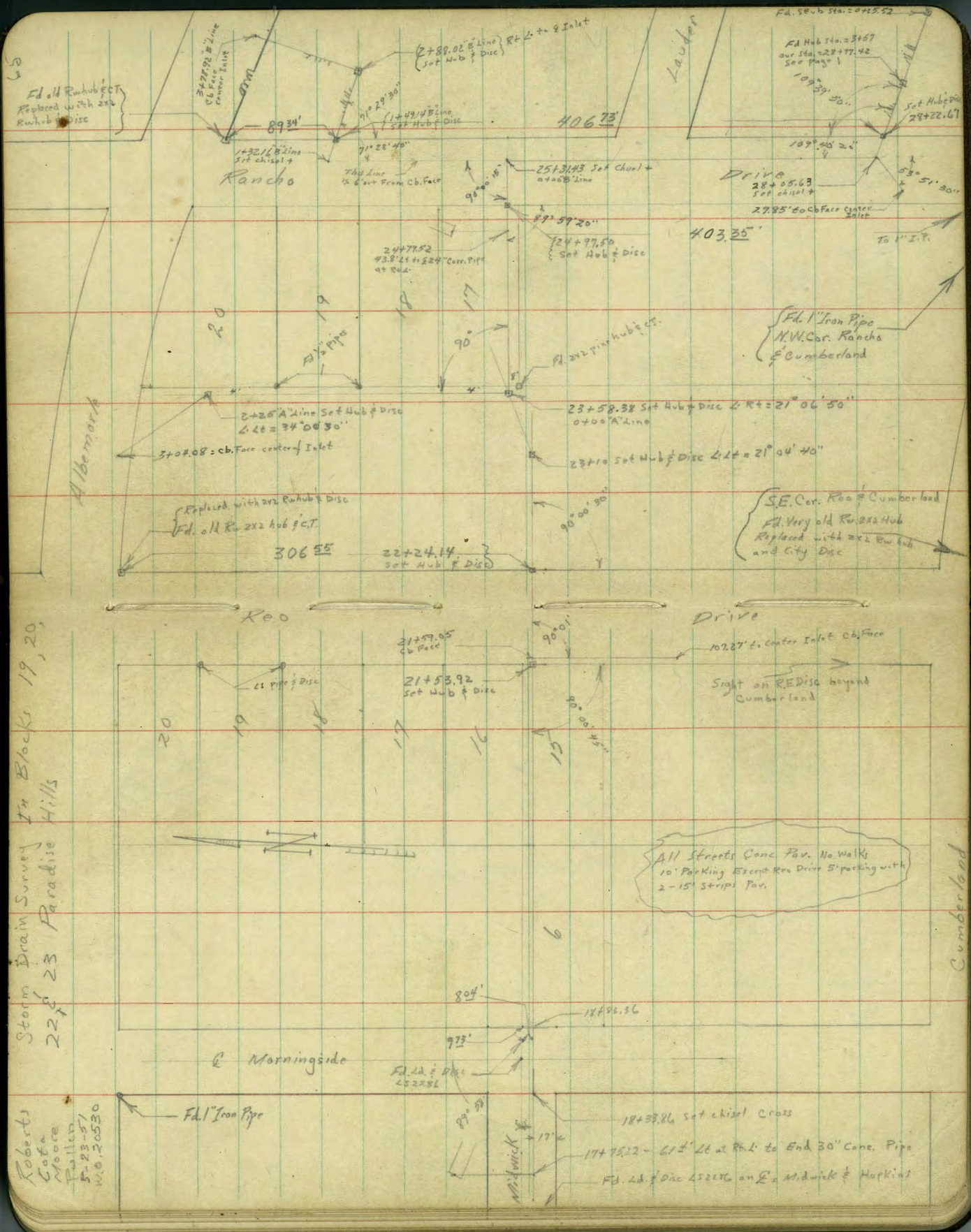
Top 4" water = 69.56 - at 0+00

I.E. of Box = 67.68

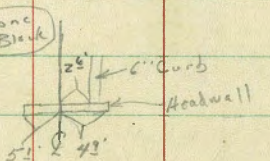
Top Grate - 2.5' out from cb. - ℄ = 71.25

Used cb. line as base



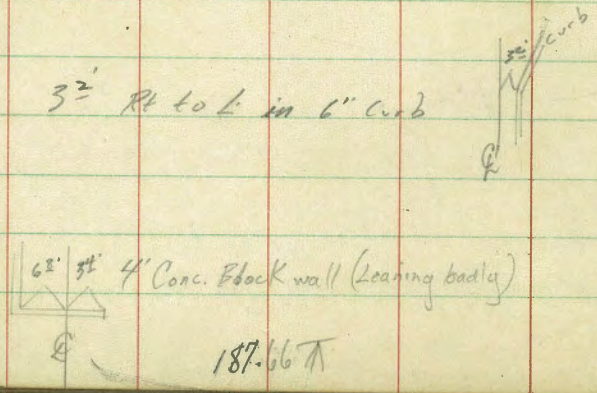

Fd. Stub Sta. = 0+25.52
Fd. old Rwhub & CT
Replaced with 2x2 Rwhub & Disc
3+27.92 "B" Line
Cb Face Center Inlet
2+88.02 "B" Line
Set Hub & Disc
Rt ⊥ to ℄ Inlet
91° 29' 30"
1+49.18 "B" Line
Set Hub & Disc
89 34'
406 73'
1+32.16 "B" Line
Set chisel +
71° 28' 40"
This Line is 6' ± from Cb. Face
Rancho
25+31.43 Set Chisel +
on 0+06 "B" Line
90° 00' 15"
89° 59' 20"
24+77.50
Set Hub & Disc
24+79.52
93.8' 21 ± ℄ 24" Conc. Pipe
at Rd.
403 35'
Fd Hub Sta. = 3+67
our Sta. = 28+77.42
See Plat "1"
109° 39' 30"
Set Hub & Disc
28+22.67
109° 40' 20"
53° 51' 30"
Drive
28+05.63
Set chisel +
27.85' to Cb Face Center Inlet
To 1" I.P.
Fd. 1" Iron Pipe
N.W. Cor. Rancho
℄ Cumberland
Fd 1" Iron Pipe
90°
Fd. 2x2 Pin Hub & CT.
2+25 "A" Line Set Hub & Disc
⊿ Lt = 34° 06' 30"
3+04.08 = Cb. Face center of Inlet
23+58.38 Set Hub & Disc ⊿ Rt = 21° 06' 50"
0+00 "A" Line
23+10 Set Hub & Disc ⊿ Lt = 21° 04' 40"
Albemarle
Replaced with 2x2 Rwhub & Disc
Fd. old Rw 2x2 hub & C.T.
306 55
22+24.14
Set Hub & Disc
90° 00' 30"
S.E. Cor. Reo & Cumberland
Fd. Very old Rw. 2x2 Hub
Replaced with 2x2 Rw hub
and City Disc
Reo
Drive
21+59.05
Cb Face
90° 00' 00"
102.27' to Center Inlet Cb. Face
Sight on RE Disc beyond
Cumberland
21+53.92
Set Hub & Disc
℄ Pipe & Disc
Storm Drain Survey
In Blocks 19, 20,
22 & 23 Paradise Hills
All Streets Conc. Pav. No Walks
10' Parking Except Reo Drive S. parking with
2 - 15' Strips Pav.
804'
18+82.36
973'
℄ Morningside
Fd. 2" ℄ Disc
L 52286
89° 58'
Fd. 1" Iron Pipe
18+38.86 Set chisel Cross
17+75.22 - 61 ± Lt at Rd. to End 30" Conc. Pipe
Fd. 2" ℄ Disc L 52276 on ℄ Midwick & Hopkins
Midwick
Roberts
Cota
Moore
Fallon
5-23-57
W.O. 20530

19+00					6.0 181.56
18+82.2	12' Lt to Hibiscus				
18+82	6' Lt to Ret Wall (Conc Block)				
18+80	10" Conc. Headwall				6.8 To Headwall 180.98
18+73.75	5' Rt to 75' Conc. Drive E. Curb Line				7.92 Gut 7.31 CB 179.74 180.35
18+58.86	℄ Morningside				8.06 179.60
18+33.86	W.L. Morningside				8.45 179.21
17+75.22	61.4' Lt to End 30" Conc. Pipe				11.65 61.4 INVERT 176.01
BM	7.88	187.66 ✓	179.78	SNBP	Midwick & Morningside See FB 208 page 72 187.66 ✓



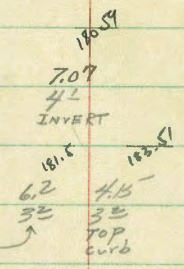
Cont'd From page 66

T.P.	11.34	196.87 ℄	2.13	185.53
20+09.4		1' Lt to shed 6.2' x 6.5' Wooden Picket Chicken Pen (Lean to)		
20+02		5' Rt center 5" Tree		
20+00				
19+90		N.E. South 3 board 3' Fence		
19+50		6.9' Rt center 4" Tobacco Tree		
19+49.5		4.1' Rt END 15" conc. pipe & begin a Jerry built wooden top & sides Culvert 2.3 x 2.3		
19+39.3		3.2' Rt to ℄ in 6" Curb		
19+28.1		4' Conc. Block wall (Leaning badly)		



187.66 ℄

184.8
2.9



This is top of Conc. Pipe, Footing of Curb is Lower Wor Ret. Wall before Culvert was extended

187.66 ℄

Contd From Page 67

T.P.	10.61	206.18 ✓	1.30	195.57
21+74.19	Edge Conc. Strip			
21+59.05	W. Curb Face Rco Drive			
21+50				
20+80				
20+44				
20+32				
20+15.70	17.9' Rt to Wooden Culvert 12' Lt to Shed 7.5' Lt to Conc. Blk Wall			

196.87 ✓

Lt Cl Rt

			195.11			
4.76						
	195.24	194.73		193.55	194.51	185.64
	1.63	2.14		3.32	2.36	11.23
	CB	Cut		Grate	107.27 CB	INVERT
2.1			194.8			
3.3			193.6			
7.6			189.3			
9.7			187.2			
	185.7		181.8			
11.2			15.1			
			179			
			Dirt	INVERT		

196.87 ✓

Cont'd From Page 68

		Lt	℄	Rt
0+52.5	14' Rt to Conc. Curbing			
0+50	"A" Line		4.9	201.3
23+58.38	0+00 = "A" Line L. Rt		6.4	199.8
23+10	L. Lt		8.4	197.8
22+50			9.9	196.3
22+20			10.5	195.68
22+19	103' Rt to Cb. 56' Lt to Cb. E. Curb Line Reo Dr.		11.11 Got. Curb Gone	195.07
22+03.95	Edge Conc. Strip		10.86	195.32
	206.18 ℄		206.18 ℄ ✓	

2+65					
2+25	L. Lt				
2+00					
T.P.	639	211.68 ℄	0.89	205.29	
1+48					
1+20					
1+13	14' Rt End Curbing begin Conc. Block Wall				
1+07.3	53' Rt to Center P. Pole # JP 88592				
1+00	"A" Line				
		206.18 ℄			

16	℄	17
3.4	208.3	
3.1	208.6	
4.0	207.68	
211.68 ℄		
0.9	205.3	
3.8	202.4	
3.3	202.9	
206.18 ℄		

Cont'd From Page 70

24+40		13.3 197.8
24+20		10.6 200.5 13.6 197.5 4
24+08	9± Rt Begin Board Fence	
24+00		10.8 200.3 13.6 197.5 6
23+67		11.4 199.9 13.7 197.7 11
23+65	12' Rt to Center P Pole # JP88591	13.2 197.9
T.P.	9.50 211.12 ℄ 10.06 201.62	211.12 ℄ ✓
3+04.08	Cb. Face Center Inlet (Albemarle) END "A" Line	208.33 3.35 207.29 1.39 204.94 6.74 Cb. Grate Invert
	211.68 ℄	211.68 ℄ ✓

Contd From Page 71

25+31.43 L. Rt. = 0+00 "B" Line

25+22.40 ℄ Rancho

25+07.40 W. Curb Line

24+97.50 W. L. Rancho Drive

24+79.52 43± Lt to END 24" Corr. Pipe

24+71

24+57± 14' Rt to NW Cor. House
112' Rt END FENCE

211.12 ✓

Lt. ℄ Rt. 72

5.11 206.01

5.00 206.12

206.14
2.98 5.57 205.56
CB Gut

206.3
4.8

198.59
12.23
43±
INVERT

198.4
12.7

211.12 ✓

Contd From Page 72

T.P.	7.71	216.95 ℄	1.88	209.24
1+80	13.6' Rt to N.W. Cor House			
1+50	43.8' Lt to SW Cor House			
1+48.3	5.9' Rt to 7' Conc. Drive			
1+47.5	4.0' Lt to Fence Corner			
1+38.52	2.5' Rt to Drive Way Opening E. Curb Line Rancho			
1+32.16	"B" Line L. Rt			
1+00	"B" Line			
0+50	"B" Line			
		211.12 ℄		

Lt	℄	Rt
	208.3 2.8	
207.91 3.41 Cut	208.33 2.79 C6	
	207.97 3.15	
	206.67 4.45	
	206.16 4.96	
	211.12 ℄ ✓	

Cont'd From Page 73

		Lt	℄	Rt
	85' East to a N℄S Fence			
2+88.02	∠ Lt 90°			
			212.0	
			4.9	
2+65.8	54' Rt to NE Cor Garage			
2+45.4	63' Rt to Conc Drive	214.4	206.2	208.6
	46' Rt to NW Cor Garage	5.8	10.7	8.3
		60	30	10
2+27	64' Rt to Conc. Drive			
2+17.10	13' Lt to ℄ 18" Corr pipe (Rt 45)	206.8	205.09	210.0
		10.1	11.86	6.9
		19	13	4
			INVERT	
2+08.5	4' Lt to Fence Cor	213.4	209.4	209.8
		3.6	7.6	7.2
		31	19	7
2+03.6	14' Rt NE Cor House			
2+02.5	42.3 Lt SE Cor. House			
2+00			210.0	
			6.9	
	216.95 π		216.95 π	

Rt 74

		Lt	℄	Rt
3+70			214.6 2.4	
3+66.5	11.5' Rt END wall			
3+61.1	10 Lt to END 24" Corr. P.P.		206.84 10.11 to INVERT	212.0 5.0
3+42			211.8 5.1	
3+22.4	9.4' Rt to END FENCE Begins Conc. 4000 # BLK wall			
3+16			209.4 7.6	
3+02			210.4 6.5	
2+98			211.8 5.2	
		216.95		216.95 ✓

Cont'd From Page 75

					Lt	℄	Rt
28+12.01	E. Curb Line Rancho Dr.					204.81 205.43 7.85 7.23 Got. Cb.	
Curb	Inlet	29.85' From L.	W. Curb Line Rancho Dr.			204.93 203.94 200.34 7.73 8.72 12.32 Curb Grate Invert	
T.P.	1.84	212.66π	5.71	204.82		212.66π ✓	
28+05.43	L	Lt				204.82✓ 5.71	
27+00						205.54 4.99	
26+00						205.95 4.58	
T.P.	3.22	210.53π	9.64	207.31		210.53π ✓	
3+18.92	Curb Face Center Inlet (Albemarle) END "B" Line					214.49 213.47 207.87 2.46 3.48 9.58 Curb Grate INVERT	
		216.95π				216.95π ✓	

Cont'd From Page 76

		Lt	℄	Rt
28+92	3' Lt to Center P. Pole # 88476			
28+90			209.0 3.7	
28+75	4' Lt to Deadman			
28+72	22± Rt to NE Cor. House			
28+60			207.3 5.4	
28+58±	14± Lt to SE Cor House			
28+50	29' Rt to NW Cor House			
28+37	14± Lt to SW Cor. House			
28+23±	4± Lt to 8" Conc. Ret. Wall	208.51 #15 #13 Top	207.6 #1 #2 GRD 6.4	206.3 6.9 #10 205.8
28+13			205.7 7.0	
		212.66 ℄		212.66 ℄ ✓

Contd From Page 77

Lt ℄ Rt

check 2.27 210.39 = 210.41 SWBP Cumberland & Rancho Dr

29+20 5° Lt End conc. Ret. Wall & Fence

28+97.42 = Sta. 3+57 See Page 1

212.66 ℄

210.7

212.66 ℄

Notes Reduced .4' 2.5%

Ties on "A" St.

Set 39th & 40th on Marilou Park

Walker Pipe O/ovr 11-24-53

▲ = Fd. Granite Mon.

○ = Set 1" X 24" Galv. Iron Pipe with Cement & Disc.

Fd. 2" Y2" Hub LS 2201

Fd. 1" Pipe LS 2261 Replaced 9/15/55 C.A.

Fd. 1/2" Pipe RE 7718

Fd. 1/2" Pipe in Conc. Pav

Fd. Cut in Conc. Pav

Fd. Cut & Tack in Conc. Pav

Pk. Nail & Disc

Set Hub

Fd. Cut & Tack in Conc. Pav

Fd. Cut Lead & Federal in Conc. Pav.

Federal

Cont. P. 80

BEACH ST.

A St.

ST.

89° 51' 32"

408.75' Meas.

80'

30'

30'

90° 00'

334.07' Meas.

397 TH

89° 58' 40"

Map 517

533.90

525.03 Meas.

40 TH

300' M.P.

60' M.P.

HOME

277.43'

Δ 8° 09' 48"

N. Line P = 2.198

N " L = 306.04

N " T = 153.20

N.C. Int = 5.46

81° 40'

81° 40'

153.20'

153.20'

73° 49'

70° 56'

180.00'

31.74'

80.85'

60'

267.37'

84° 50'

7° 40'

Blvd.

134.63 Meas.

274.49'

87° 30'

95° 10' Turned

8.50'

43463

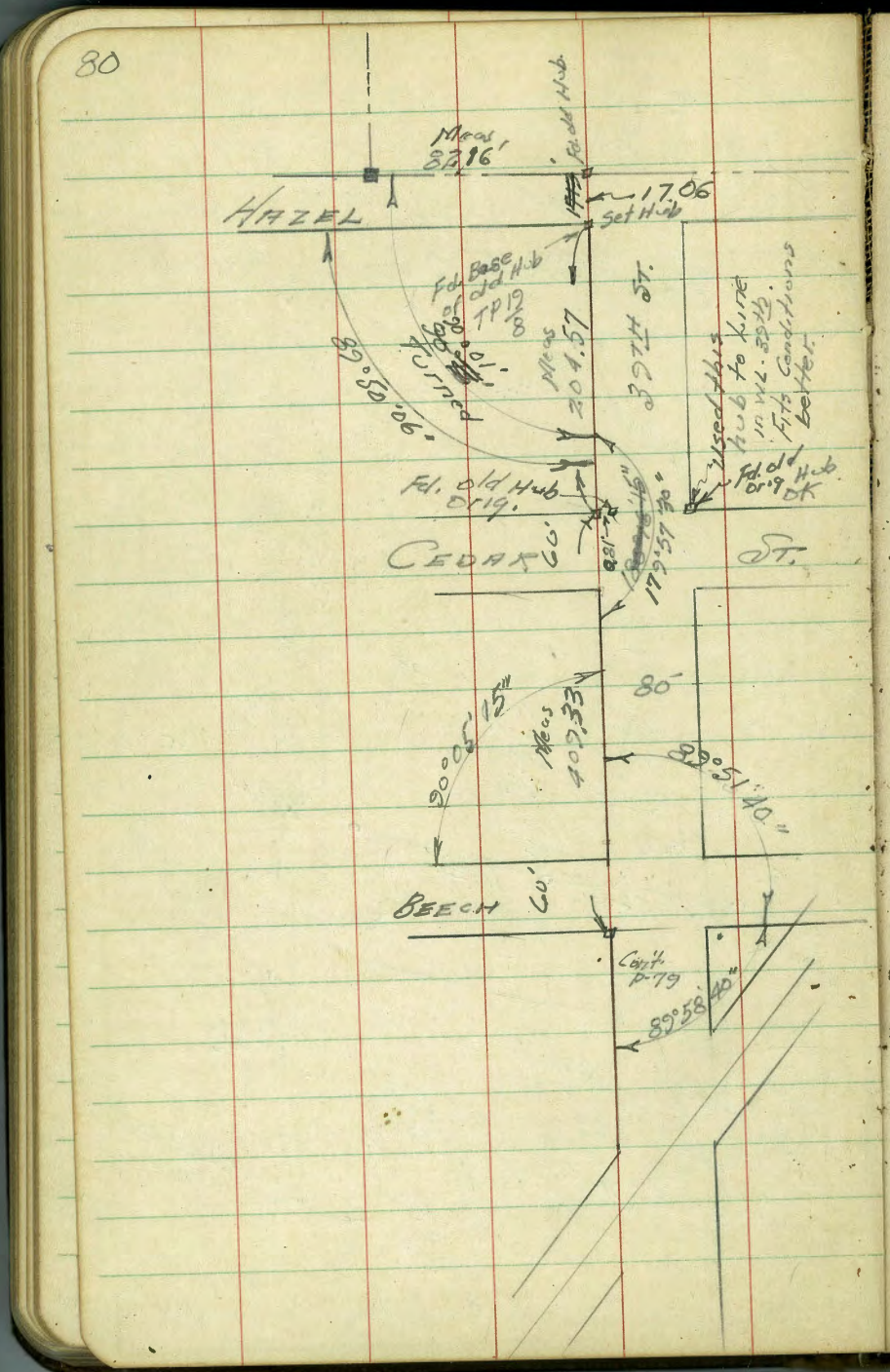
FB 1582 53

FB 1582 53

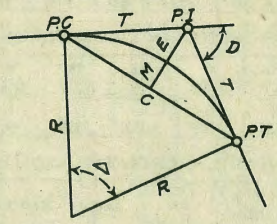
FB 1582 53

FB 1582 53

FB 1582 53



DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES



CURVE FORMULAS

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

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

Middle ordinate=M=R(1—cos. $\frac{\Delta}{2}$) (5)=Rvers $\frac{\Delta}{2}$ (6)

External=E=Ttan$\frac{\Delta}{4}$-(7)=R ÷ cos.$\frac{\Delta}{2}$—R(8)=Rexsec$\frac{\Delta}{2}$(9)

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

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.=Sta. 161+60.35 to find Sta. of P. C. and P. T. Δ=62° 10′ D=8° 20′. From Table IV for 1° curve T=3454.1 and ÷8⅓=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=½ D for 100 ft., ¼ D for 50 ft., etc. For c ft.=(in minutes) .3 x C x D° or=defl. for 1 ft. from Table III x C. For Sta. 158 of above curve=.3 x 54.5 x 8⅓=136.2′ or 2° 16.2′, or=2.50 x 54.5=136.2′ from Table III. For Sta. 159 deflection angle=2° 16.2′ +8° 20′ ÷2=6° 26.2′, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 115.37. For from Table IV for 1° curve E=960.6 for 8° 20′=960.6÷8⅓=115.27 and from Table V correction=.10 or E=115.37 ft. Or suppose Δ=32° and E is measured and found to be 42 ft. What is D? From Table IV E=230.9 and ÷42=5.5 or D=5° 30′.

3+796
2+883
913

4+58.15
3+796
7845

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)÷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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