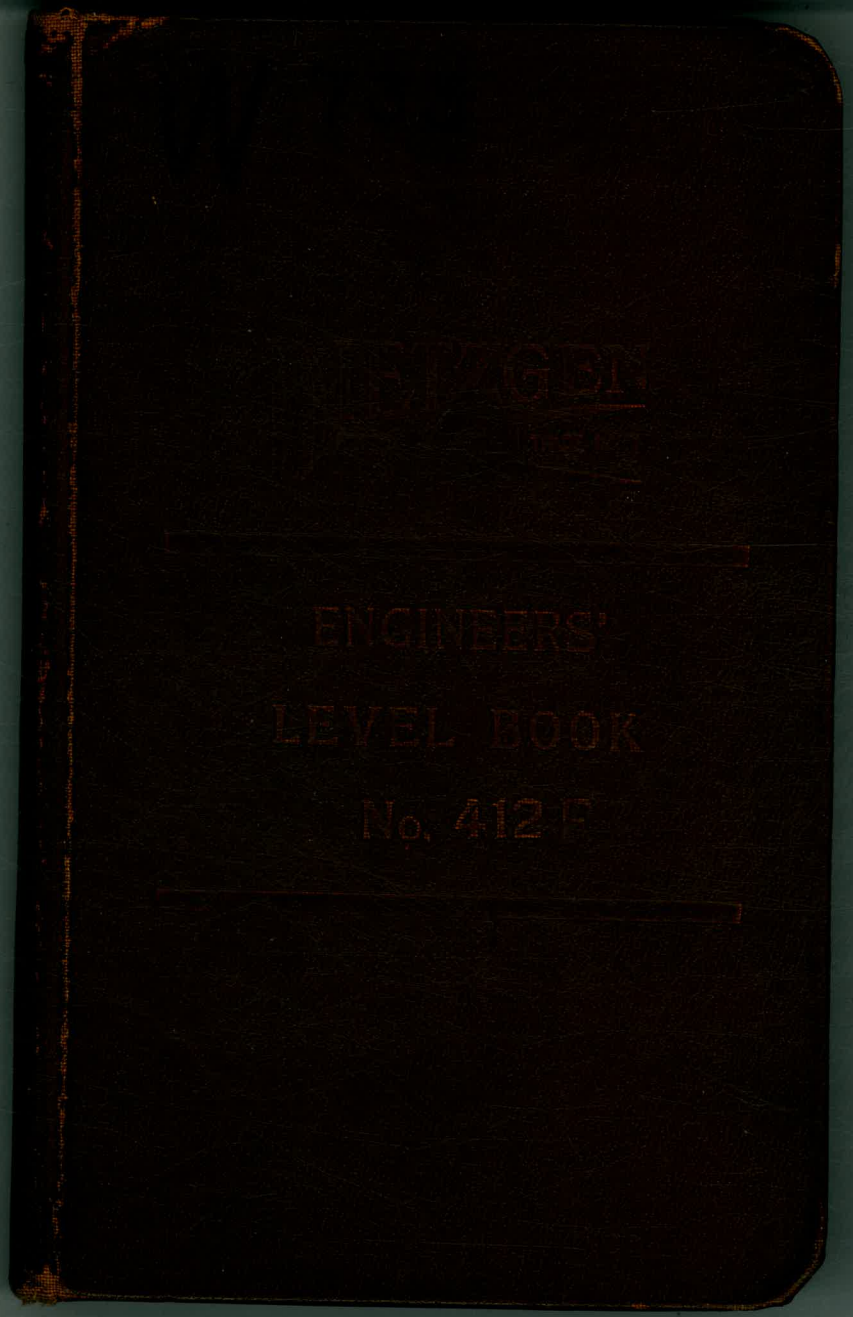

ENGINEERS'
LEVEL BOOK
No. 412 F

#733

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.

I ndexed to page 18 ind 4/27/48 mwd

Indexed to page 47 " 6/14/48 mwd

Indexed to page 64 - 8/5/48 mwd

✓ page 69 9/3/48 mwd

✓ page 74 10/19/48 mwd

Profile & Cuts - Missouri - Jewel to Lamont	1-2
Alley bet. 42nd & Marlborough Wightman to Polk (inc. Meter Boxes)	3-7
Milton St. Water Grades	8-10
Kurtz St. Water Grades	11-13
Polk to Wightman Alley bet. 40th & Central	16-17
clear. & Defl. San Dieguito Dam	14-15-18
McCauley St. water grades	19-21
Soledad Terrace Relocation of pipelines	23-40
Commercial St. grades	41-42
Lake Hodges Wells #2 - 3-11-52	43-47
Law St. Water Grades from Jewell to Lamont	47-48
Alley bet. 44th & Highland from Dwight to Wightman	49-50
PROFILE - PIPE LINE FROM NEAR SAN DIEGO AQUEDUCT TO LAKE HODGES (Well #1 to Hodges)	52-56
Traverse for Pipeline from Aquaduct to Lake	52-61
Profile Well #1 to Well #2	58
OZARK ST. for Const. by City Not Imperial	62-63
Alley from Mission Beach Blvd. to Bayard & Missouri between Diamond	64
Profile Lake Hodges Well #3 Well #2 Aquaduct to rd.	65-67
profile & Alignment from Hodges Aquaduct 14" P.L.	68-69
" " 30" P.L.	70-71
	72-74

Levels - 4' offsets & cuts
Missouri St - Jewel to Lamont

3-25-48 Rainey King Baker 1

						Cut
						N.W. Cor Diamond & Gresham
B.M.	12.39	82.70		70.31		
T.P.	6.33	88.00	1.03	81.67		
T.P.	11.67	98.99	0.68	87.32		
T.P.	10.22	108.69	0.52	98.47		
11+50			8.6	100.1	100.6	3.0
11+00			8.4	100.3	101.0	3.0
10+75 F.H. ¢			7.2	101.5	101.2	0.3
10+75 F.H. 5' off			7.4	101.3	101.2	0.1
10+50			6.5	102.2	101.6	4.1
10+00			5.7	103.0	102.4	4.1
9+50			5.3	103.4	103.3	3.6
9+00			4.6	104.1	104.3	3.3
8+50			4.1	104.6	105.2	2.9
8+00			3.0	105.7	106.4	2.8
7+50			1.1	107.6	107.6	3.5
T.P.	12.96	120.89	0.76	107.93		

		120.89			
7+00			11.5	109.4	109.1
6+50			9.4	111.5	110.8
6+00			8.1	112.8	112.2
5+50			6.7	114.2	113.8
5+00			5.4	115.5	115.4
5+00 ± F.H.			5.7	115.2	115.4
5+00 - 5.2 F.H.			5.9	115.0	115.4
4+50			3.8	117.1	116.7
4+00			2.4	118.5	117.8
3+50			1.7	119.2	118.5
3+00			1.5	119.4	119.0
2+50			1.6	119.3	119.2
2+00			1.6	119.3	119.3
1+50			1.6	119.3	119.0
1+00			1.5	119.4	118.4
0+50			1.7	119.2	117.3
T.P.			4.94	115.95	

cuts	2
3.8	
4.2	
4.1	
3.9	
3.6	
fo.2	
fo.4	
3.9	
4.2	
4.2	
3.9	
3.6	
3.5	
3.8	
4.5	
5.4	

Alley from Wightman to Polk 42nd, Marlborough

Water Grades

+El Cajon

BM BP SW Cor. Marlborough				365.14		
	4.29	369.43				
T.P. #1			3.06	366.37		
	1.00	367.37				
T.P. #2			8.55	358.82		
	4.22	363.04				
T.P. #3			4.50	358.54		
	4.73	363.27				
0+00			5.2	358.1	358.3	3.3 4' N3Prop line Polk
0+50			5.1	358.2	358.1	3.4
1+00			4.9	358.4	358.0	3.9
1+50			4.8	358.5	357.8	4.2
2+00			4.5	358.8	357.7	4.6
2+50			4.3	359.0	357.5	5.0
3+00			4.6	358.7	357.4	4.8
3+50			5.2	358.1	357.2	4.4
4+00			5.5	357.8	357.1	4.2
4+50			5.8	357.5	356.9	4.1

cuts

Mar. 31, 1948 Rainey King Baker

		36.327				
5+00			6.3	357.5	356.5	3.5
5+50			6.6	357.7	356.4	3.8
6+00			7.7	355.6	355.2	3.9 End 4' N.P. Prop Line Unit.
T.P.			8.36	354.91		5' N. Prop Line Unit
	2.89	357.80				
0+00			2.9	354.9	354.8	3.6 6' N.-S. Prop Line Unit.
0+50			3.3	354.5	354.2	3.8
1+00			4.0	353.8	353.5	3.8
1+50			4.2	353.6	353.4	3.7
2+00			4.6	353.2	353.2	3.5
2+50			4.6	353.2	352.9	3.8
3+00			4.7	353.1	352.8	3.8
3+50			4.4	353.4	353.1	4.2
4+00			4.7	353.1	352.8	4.0
4+50			5.2	352.6	352.4	3.7
5+00			5.1	352.7	352.2	4.0

		357.80			
5+50			5.6	352.2	351.8
6+00			7.2	350.6	350.1
E Curb	Return	Unit	2.90	354.90	354.80

3.9

4.0 6' NN Propline Nightman

Meter Boxes from P345

Rainey
King
Baker

6

BM BP N.W Cor. Unk. + Mark				352.87		
	6.40	359.27				
		2'S	4.9	354.4		0.2
0+55	E	2'N	4.9	354.4	354.2	0.2
		2'S	5.3	354.0		0.2
0+67	W	2'N	5.2	354.1	353.8	0.3
		2'S	5.5	353.8		0.2
1+04	E	2'N	5.4	353.9	353.6	0.3
		2'S	5.6	353.7		0.2
1+25	E	2'N	5.6	353.7	353.5	0.2
		2'S	5.8	353.4		0.2
1+57	W	2'N	5.8	353.5	353.2	0.3
		2'S	5.8	353.5		0.1
1+80	E	2'N	5.9	353.4	353.4	0.0
		2'S	5.9	353.4		0.0
1+83	E	2'N	5.8	353.5	353.4	0.1
		2'S	6.1	353.2		0.1
1+83	W	2'N	6.0	353.3	353.1	0.2
		2'S	5.8	353.5		0.3
2+31	E	2'N	5.8	353.5	353.2	0.3
			6.1	353.2		0.2
2+32	W		6.2	353.1	353.0	0.1
			6.0	353.3		0.1
2+49	E		6.0	353.3	353.2	0.1
			6.1	353.2		0.1
2+68	E		6.0	353.3	353.1	0.2
T.P.			5.92	353.35		
	4.00	357.35				
			4.1	353.3		0.4
2+72	W		4.2	353.2	352.9	0.3
			4.3	353.1		0.1
3+31	E		4.3	353.1	353.0	0.1

		357.35				
		2'S	4.4	353.0		0.4
3+60	W	2'N	4.5	352.9	352.6	0.3
		2'S	4.3	353.0		0.3
3+79	E	2'N	4.2	353.1	352.7	0.4
		2'S	4.5	352.9		0.5
4+29	W	2'N	4.4	353.0	352.4	0.6
		2'S	4.6	352.8		0.2
4+51	E	2'N	4.6	352.8	352.4	0.2
		2'S	4.7	352.7		0.2
4+77	E	2'N	4.7	352.7	352.5	0.2
		2'S	4.7	352.7		0.4
4+86	W	2'N	4.7	352.7	352.3	0.4
		2'S	5.3	352.1		0.3
5+56	W	2'N	5.2	352.2	351.8	0.4
		2'S	7.0	350.4		0.2
6+04	E	2'N	6.9	350.5	350.2	0.3
		2'S	5.2	352.2		0.1
5+33	W	2'N	5.1	352.3	352.1	0.2
on			7.01	350.34		
5+50			5.08	352.27		

Merlin Dr. from Kenwood st to Iona Dr.
Haff 10' E. ℄

B.M. Lt.	℄ merlin	3's.s. line		Kenwood st.		
	12.36	221.60		209.24		
0+50			9.3	212.3	212.5	3.2
1+00			5.5	216.1	216.2	3.4
1+50			1.5	220.1	220.0	3.6
T.P#1			0.14	221.46		
	12.96	234.42				
2+00			10.6	223.8	223.6	3.7
2+50			7.2	227.2	226.8	3.9
3+00			4.4	230.0	229.6	3.9
3+50			1.6	232.8	232.0	4.3
T.P#2			0.37	234.05		
	10.97	245.02				
4+00			10.1	234.9	234.4	4.0
4+50			7.7	237.3	236.8	4.0
5+00			5.4	239.6	239.2	3.9
5+50			3.0	242.0	241.6	3.9
6+00			0.4	244.6	244.0	4.1

		245.02				
T.P.#3			0.34	244.68		
	12.56	257.24				
6+50			10.1	247.1	246.4	4.2
7+00			8.0	249.2	248.6	4.1
7+50			5.6	251.6	251.1	4.0
8+00			3.5	253.7	253.2	4.0
8+50			1.4	255.8	255.2	4.1
I.P.#4			0.28	256.96		
	12.96	269.92				
9+00			12.1	257.8	257.1	4.2
9+50			10.1	259.8	259.4	3.9
10+00			8.1	261.8	261.4	3.9
10+50			5.9	264.0	263.2	4.3
11+00			4.1	265.8	265.5	3.8
11+50			1.8	268.1	267.6	4.0
T.B.M. Set I.P.#5			0.44	269.48		
	12.03	281.51				

on C.L. Hub Cor. Lots 12-13

	cuts
T.P	4.3
	4.3
6	4.2
7	4.3
7	4.2
8	
8	
T.	
9	
9	
10	
10	
11	
11	
12	

		281.51			
12+00			10.9	270.6	269.8
12+50			8.3	273.2	272.4
13+00			6.0	275.5	274.8
13+50			3.5	278.0	277.2
14+00			1.2	280.3	279.6
T.P.# 6.			12.72	268.79	
	0.05	268.84			
T.P.# 7			12.76	256.08	
	0.70	256.78			
T.P.# 8			12.57	244.21	
	0.25	244.46			
T.P.# 9			12.72	231.74	
	0.24	231.98			
T.P.# 10			12.46	219.52	
	1.11	220.63			
T.P.# 11			11.39	209.24	corr. 209.24

Kurtz St. Water Grades

B.M. N.W. Cor. Kurtz Rosecrans +				2.97	
	4.13	7.10			
0+00					
		5' off	4.6	2.5	
0+45	F.H.	℄	4.6	2.5	2.3
0+40	Prop line		5.0	2.1	2.3
0+50			4.7	2.4	2.4
1+00			4.8	2.3	2.6
1+50			4.9	2.2	2.7
2+00			4.7	2.4	2.8
2+50			4.9	2.2	2.9
3+00			4.9	2.2	3.0
3+50			5.1	2.0	3.1
4+00			5.0	2.1	3.2
4+50			5.2	1.9	3.2
5+00			5.2	1.9	3.2
5+50			5.2	1.9	3.0
6+00			5.3	1.8	2.8
T.P. #1			5.26	1.84	?
	5.18	7.02			

cuts	5 14' S ℄		Rainey King Baker
	int. w/existing line Rosecrans		
0.2			
0.2			
3.3			
3.2			
3.0			
3.1			
2.8			
2.7			
2.4			
2.4			
2.2			
2.2			
2.4			
2.5			

7.02

6+50	5.0	2.0	2.8	2.7
7+00	4.9	2.1	2.8	2.8
7+50	5.3	1.7	2.7	2.5
8+00	5.5	1.5	2.6	2.6
8+50	5.5	1.5	2.6	2.6
9+00	5.5	1.5	2.6	2.6
9+50	5.4	1.6	2.4	2.7
10+00	5.4	1.6	2.3	2.8
10+50	5.8	1.2	2.2	2.5
11+00	5.9	1.1	2.0	2.6
11+50	5.9	1.1	1.9	2.7
12+00	6.0	1.0	1.8	2.7
12+50	6.3	0.7	1.8	2.4
13+00	5.9	1.1	1.7	2.9
13+50	5.7	1.3	1.9	2.9
14+00	5.7	1.3	2.3	2.5
14+50	5.1	1.9	2.6	2.8
	4.2			

					cuts
	7.02				
14+80		4.2	2.8	2.8	3.5
Scurb Pacific + Kurtz		3.80	3.22		
Smith St.					
	7.02				
0+00		5.5	1.5	2.2	Int. w/proposed line
0+40 FH.	50ft Q	3.6 4.5	3.4 2.5	2.2	1.2 0.3 Kurtz St.
0+50		5.1	1.9	2.4	3.0
1+00		4.8	2.2	2.6	3.1
1+50		4.4	2.6	2.8	3.3
2+00		4.3	2.7	3.1	3.1
2+50		4.2	2.8	3.4	2.9
3+00		3.7	3.3	3.6	3.2
3+21.5		3.9	3.1	3.8	2.8
		3.92	3.70		

San Dieguito 4-16-48

Water El. 246.90

Buttress		Arch #	
#1	O.K.		
#2	.01 E.		
#3	.01 E		
#4	O.K.		
#5	O.K.	6	O.K.
#6	O.K.	7	O.K.
#7	O.K	8	O.K.
#8	.01 E.		
#9	.015 E		
#10	O.K.		
#11	O.K		
#12	.005 W		
#13	O.K.		

Rainey King Baker

B.M.	5.10	255.10		2.50
#1			4.90	250.20
#2			4.92	250.18
#3			4.91	250.19
#4			4.96	250.14
#5			5.05	250.05
Arch #6			4.12	250.98
#6			5.00	250.10
Arch #7			4.10	251.00
#7			5.03	250.07
Arch #8			4.07	251.03
#8			5.05	250.05
#9			5.01	250.09
#10			4.98	250.12
#11			4.96	250.14
#12			5.03	250.07
#13			5.10	250.00

Void D.15 See

San Dieguito

4-16-48

BM				250.00
	4.99	254.99		
Butt #12			4.91	250.08
" #11			4.85	250.14
" #10			4.88	250.11
" #9			4.91	250.08
" #8			4.95	250.04
Arch #8			3.97	251.02
T.P.			4.95	250.04
	5.12	255.16		
Arch #7			4.17	250.99
Butt #7			5.10	250.06
Arch #6			4.21	250.95
Butt #6			5.09	250.07
Butt #5			5.15	250.01
Butt #4			5.06	250.10
Butt #3			5.00	250.16
Butt #2			5.02	250.14
Butt #1			4.99	250.17
B.M.			5.16	

Alley - Polk - Whitman
Between 40th & Central
Profile 4' off sets.

						Cuts	Rainey King Baker	4-22-48		¢ 5' E ¢ Alley	16
B.M.	3.69	355.83		352.14	Central & Uni	N.W. Cor B.P.					
	5.49	360.73	0.59	355.24	3						
0+00			3.60	357.1	356.9	3.7	Prop line polk			curb	
+50			2.8	357.9	356.4	5.0					
1+00			3.3	357.4	355.9	5.0					
+50			3.8	356.9	355.4	5.0					
2+00			4.3	356.4	354.9	5.0					
+50			4.7	356.0	354.4	5.1					
3+00			4.9	355.8	353.9	5.4					
+50			5.3	355.4	353.4	5.5					
4+00			6.3	354.4	352.9	5.0					
+50			6.9	353.8	352.4	4.9					
5+00			8.0	352.7	351.9	4.3					
+50			8.8	351.9	351.4	4.0					
6+00			9.5	351.2	350.9	3.8					
T.P.	4.68	355.82	9.59	351.14							

		355.82									
0+00			5.5	350.3	350.4	3.4					
+50			5.2	350.6	349.8	4.3					
1+00			4.8	351.0	349.2	4.3					
+50			4.9	350.9	348.6	5.8	-0.9	4.9			
2+00			4.8	351.0	348.0	6.5	-1.8	4.7			
+50			5.1	350.7	347.4	6.8	-1.8	5.0			
3+00			5.4	350.2	346.8	6.9	-1.8	5.1			
+50			5.9	349.9	346.2	7.2	-1.8	5.4			
4+00			6.6	349.2	345.6	7.1	-1.8	5.3			
+50			7.8	348.0	345.0	6.5	-1.8	4.7			
5+00			9.2	346.6	344.4	5.7	-0.9	4.8			
+50			10.1	345.7	343.8	5.4					
6+00			12.0	343.8	343.3	4.0					
			12.51	343.31	CURB						
T.P.	5.30	356.10	5.02	350.80							
B.M.			3.96	352.14	352.14						

3-20-48

Water el. 242

Buttress	
1	OK
2	OK
3	OK
4	OK
5	OK
6	.01 W
7	.02 W
8	.005 E
9	.01 E
10	OK
11	.005 W
12	.01 W
13	OK
Arch	
6	.005 W
7	OK
8	.005 W

San Dieguito Pad

copied from scratch

Ramey
King
Baker

18

Butt.	
13	250.00
12	250.09
11	250.15
10	250.12
9	250.07
8	250.04
7	250.06
6	250.08
5	250.03
4	250.11
3	250.17
2	250.15
1	250.17
Arch	
8	251.02
7	250.99
6	250.96

McCauley St.
Water grades

℄ 10's ℄ street

Conc. Mon N.E.		Clore + McCauley Corner		114.32		
	4.42	118.74				
T.P.			12.46	106.28		
	2.10	108.38				
15+00			13.3	95.1	92.0 ~~95.0~~	6.6
14+50			11.9	96.5	96.0	4.0
14+00			8.7	99.7	100.0	3.5
13+50			5.5	102.9	104.4	3.5
13+00			1.6	106.8	109.0	3.5
T.P.			0.42	107.96		
	12.31	120.27				
12+50			8.4	111.9	113.5	3.5
12+00			3.9	116.4	117.0	3.5
T.P.			0.15	120.12		
	12.50	132.62				
11+50			11.2	121.4	120.8	4.1
11+00			6.3	126.3	126.0	3.8
10+50			1.2	131.4	131.2	3.7

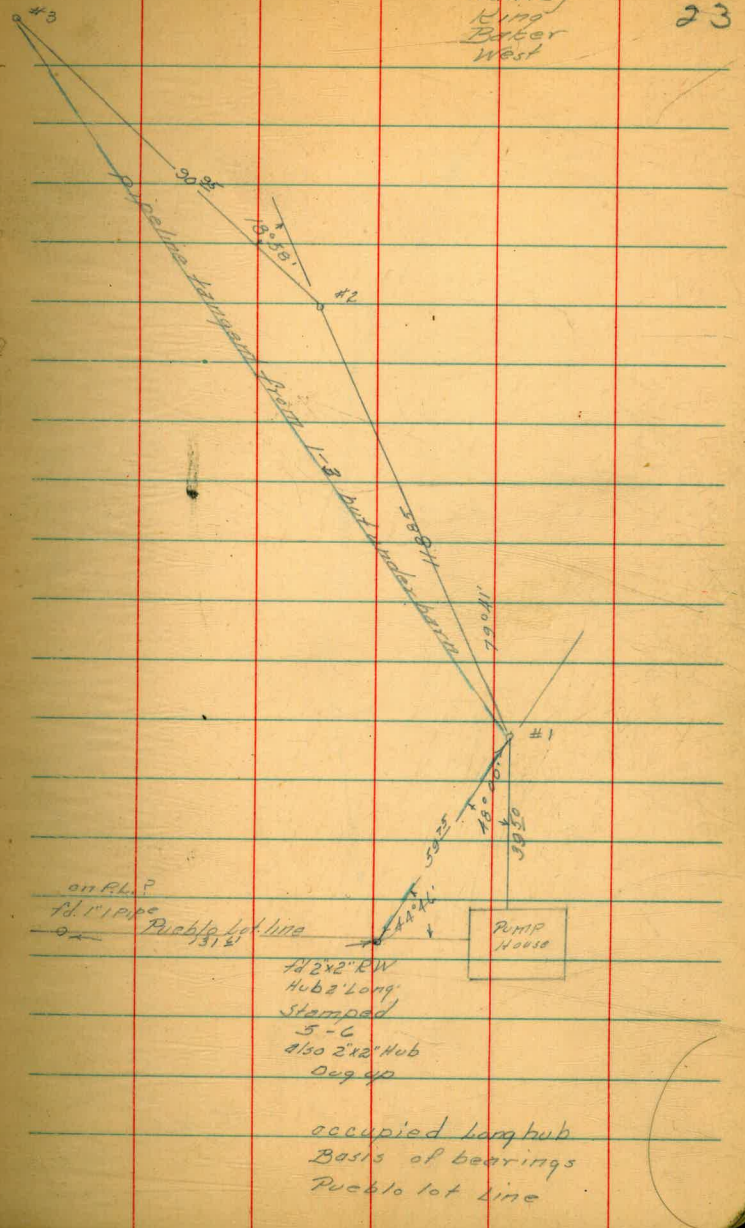
		132.62				
T.P.			0.00	132.62		
	11.15	143.77				
10+00			7.3	136.5	136.0	4.0
9+50			2.9	140.9	141.0	3.6
T.P.			0.13	143.64		
	6.38	150.02				
9+00			5.3	144.7	144.6	3.6
8+50			3.3	146.7	146.6	3.6
8+00			4.1	145.9	145.6	3.8
7+50			6.6	143.4	143.4	3.5
7+00			9.5	140.5	140.2	3.8
6+50			12.9	137.1	136.5	4.1
TP			12.92	137.10		
	2.62	139.72				
6+00			6.2	133.5	133.0	4.0
5+50			9.3	130.4	130.4	3.5
5+00			11.2	128.5	128.5	3.5
4+50			12.8	126.9	126.7	3.7

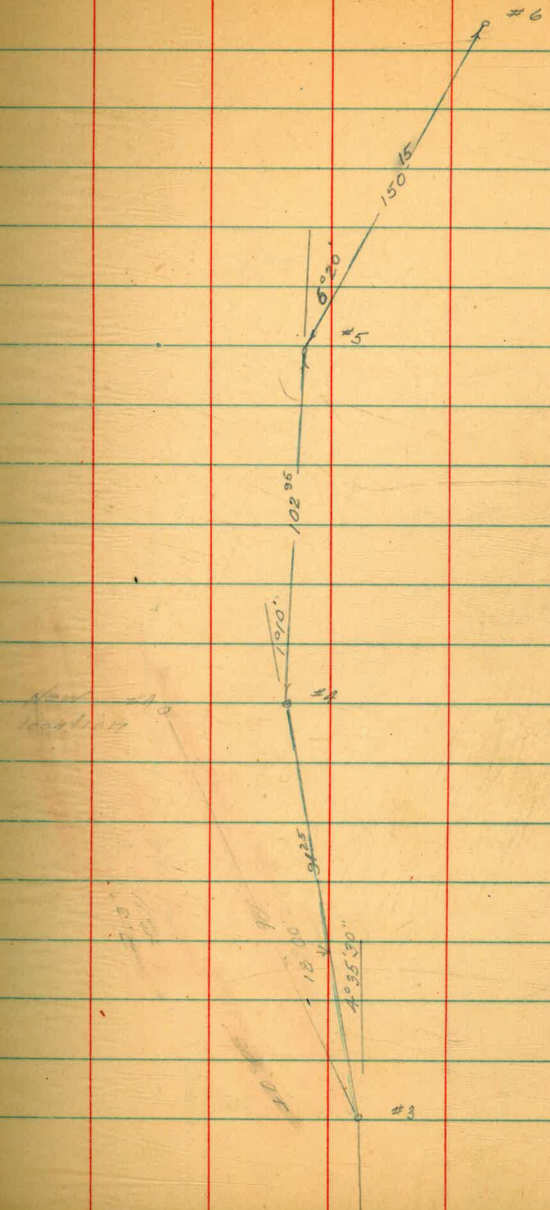
				199.4 126.9		
		139.72				
TP	1.52	128.44	12.80	126.92		
4+00			3.1	125.3	125.0	3.8
3+50			4.7	123.7	123.2	4.0
3+00			6.5	121.9	122.0	3.4
2+50			6.7	121.7	122.0	3.2
2+00			6.1	122.3	122.3	3.5
1+50			5.6	122.8	122.7	3.6
1+00			5.2	123.2	123.0	3.7
0+50			4.5	123.9	123.4	4.0
0+00			3.5	124.9		
T.P. E Curb C			5.49	123.03 122.95		
5' off FH ℄ E line Mendota				122.0 121.7	122.0	c 0.0 f 0.3
E line Tustin			℄ 5' off	143.4 144.8	145.2	f 1.8 f 0.4

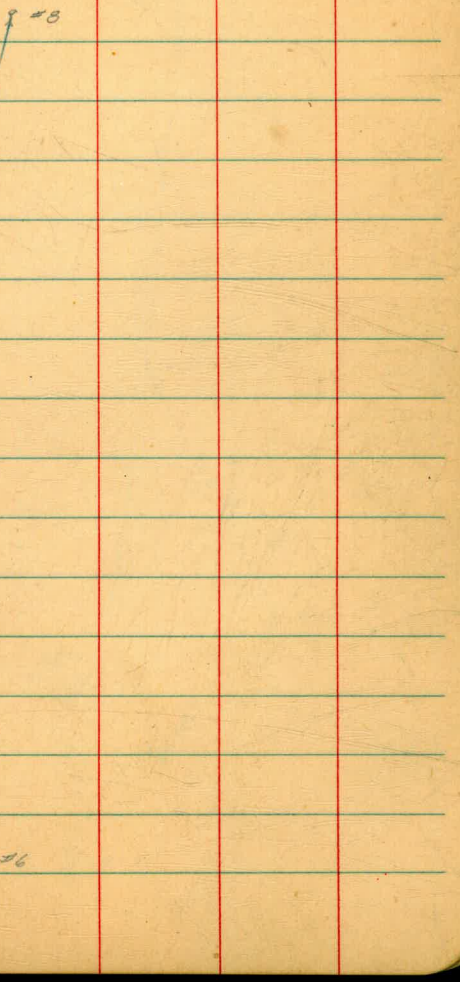
Soiled ad Terrace
Location of existing
Pipelines

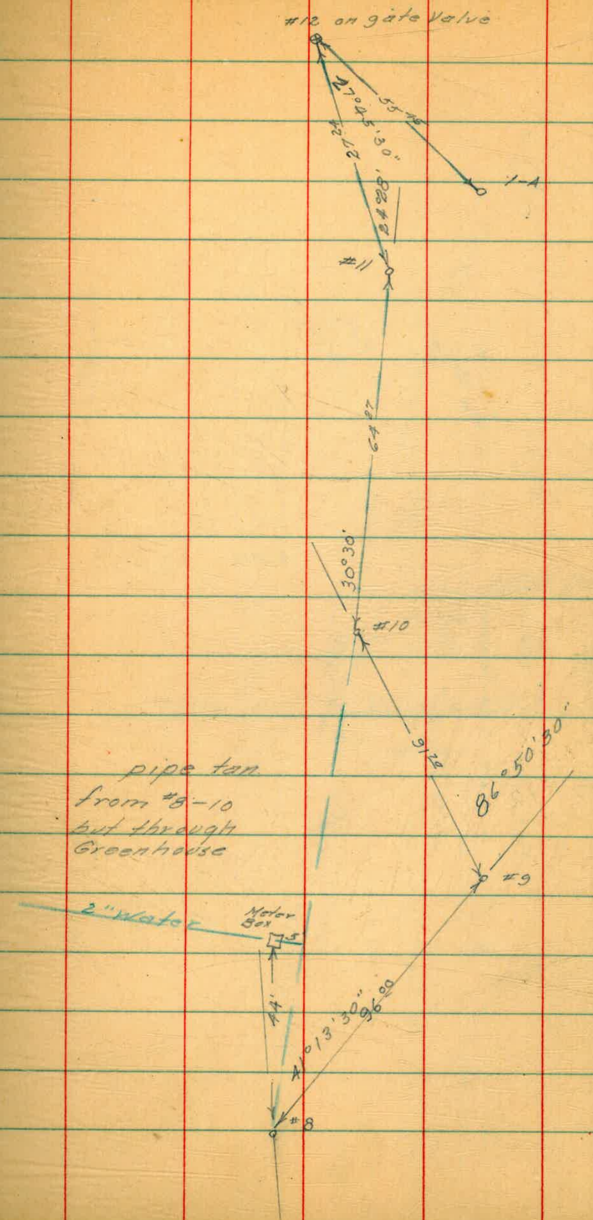
Rainey
King
Baker
West

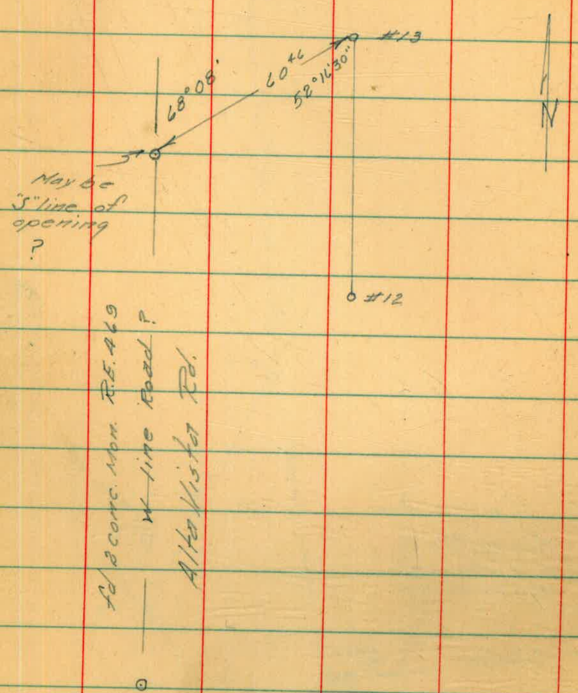
23

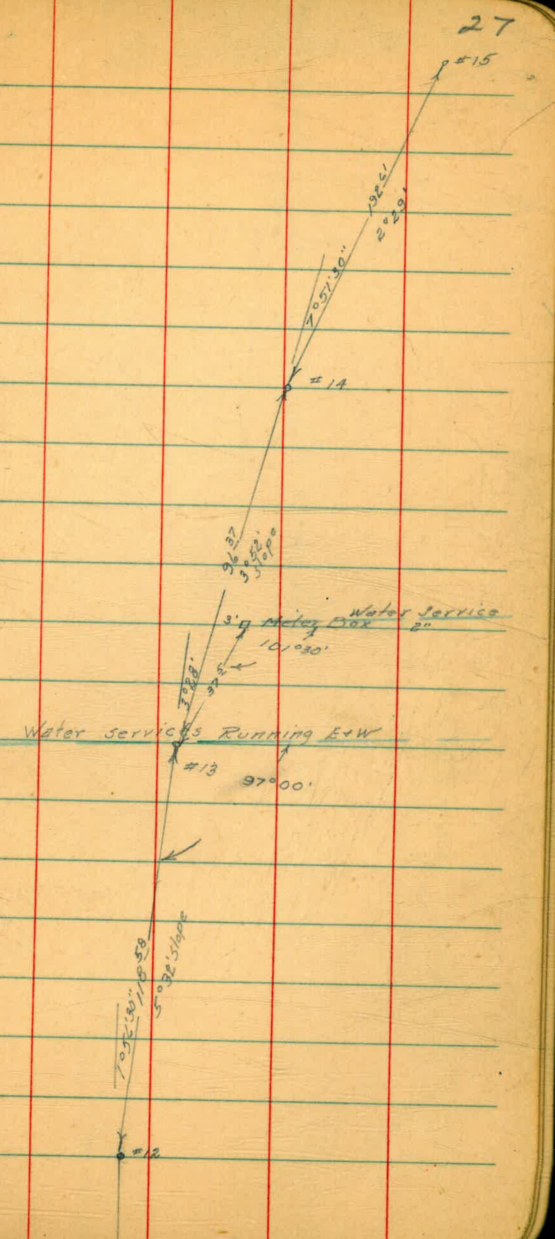


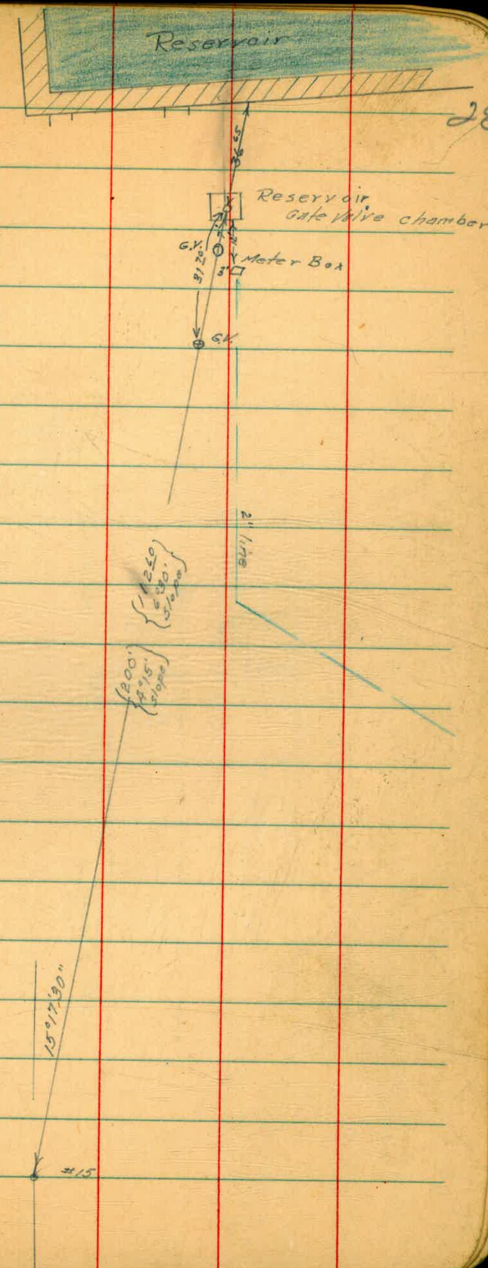

#6
150.15
6°20'
#5
102.95
1°10'
#4
94.25
18.00
4°35'30"
#3

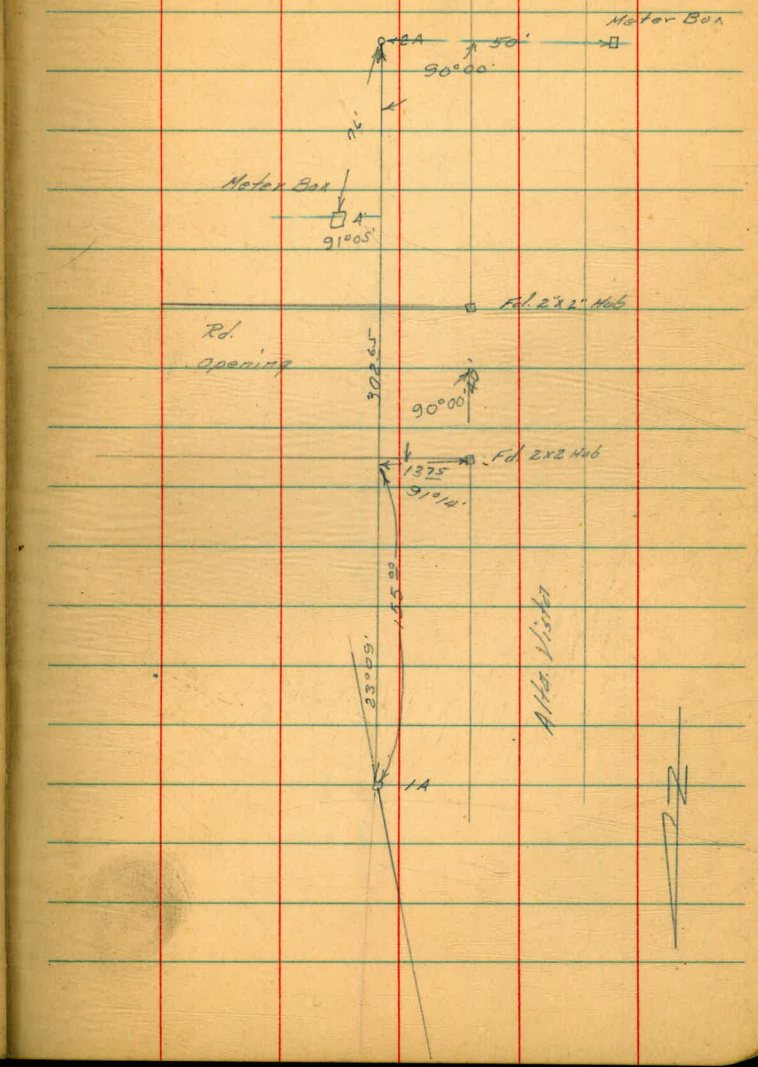

#8
181.90
64°5'30"
#7
92.90
2°03'
#6

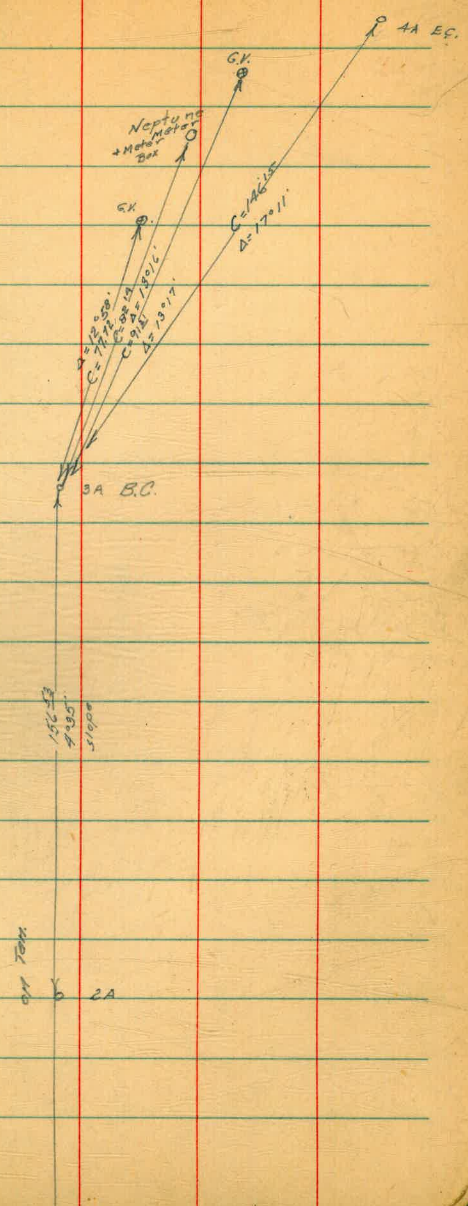

#12 on gate Valve
1-A
27°45'30"
#11
30°30'
#10
86°50'30"
#9
pipe tan.
from #8-10
but through
Greenhouse
2" water
Meter
Box
#8


#13
68°08'
60.46
52°16'30"
N
May be
5" line of
opening
?
#12
Fd 2 conc. Mon. R.E. 469
W line Road P.
Alta Vista Rd.


#15
192.51
2°29'
7°51'30"
#14
96.37
3°52' Slope
3'
Meter Box
Water service
2"
101°30'
37.28'
37.5
Water services Running E+W
#13
97°00'
7°52'30"
118.58
5°32' Slope
#12

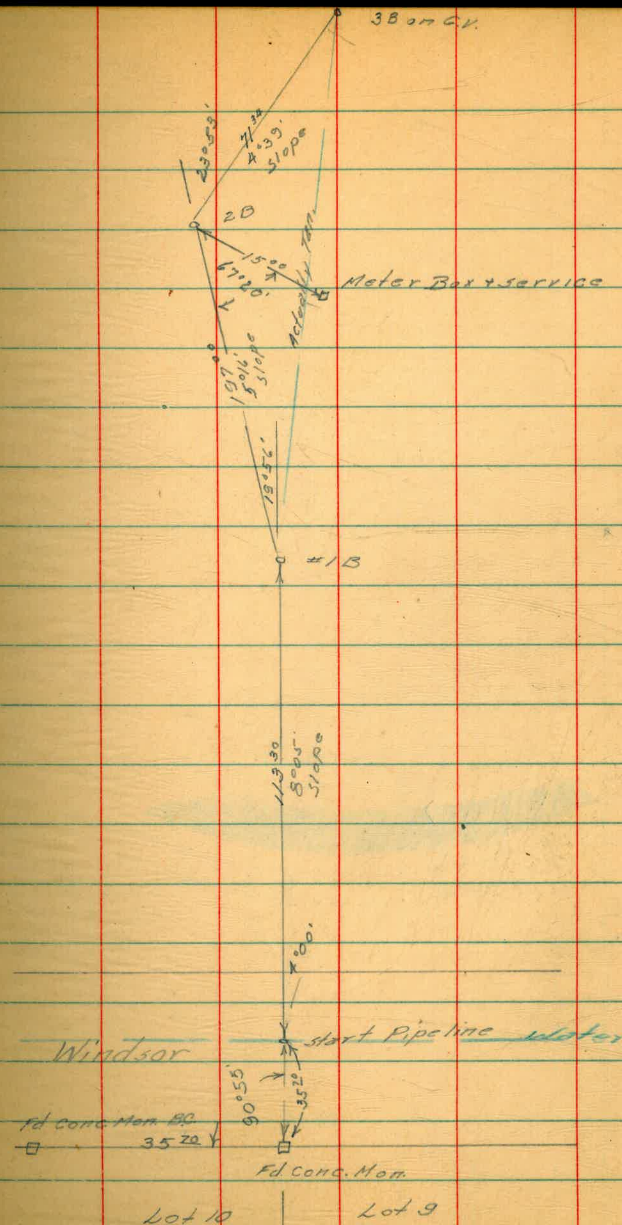

Reservoir
36.65
Reservoir
Gate Valve chamber
G.V.
Meter Box
3"
31.70
G.V.
2" line
200'
4°15'
slope
15°17'30"
#15

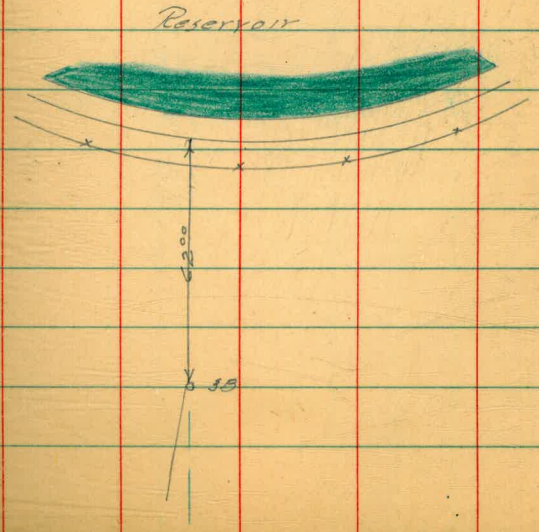

Meter Box
2A
50'
90°00'
72'
Meter Box
1A
91°05'
Fd. 2"x2" H46
Rd.
Opening
302.67'
90°00'
Fd. 2x2 H46
137.5
91°12'
145.00'
23°09'
Alley Visible
1A

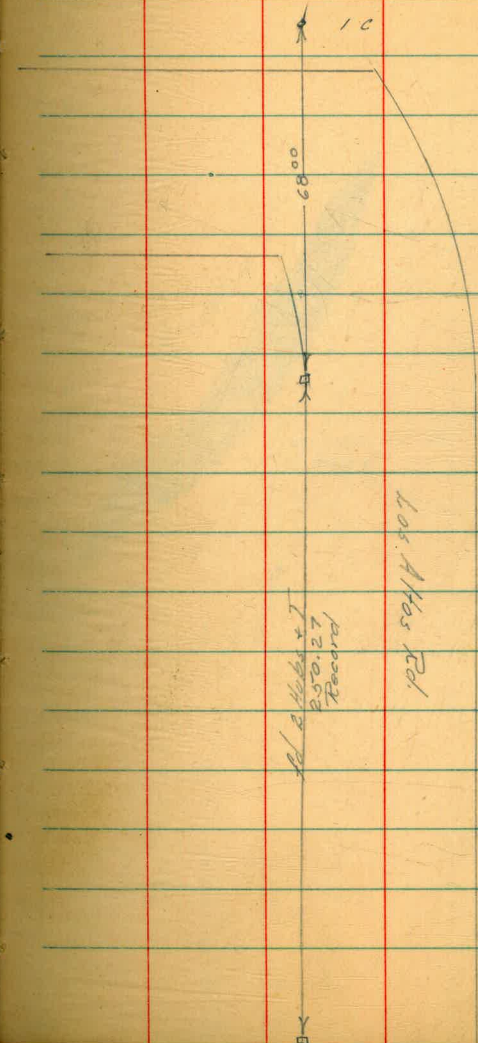


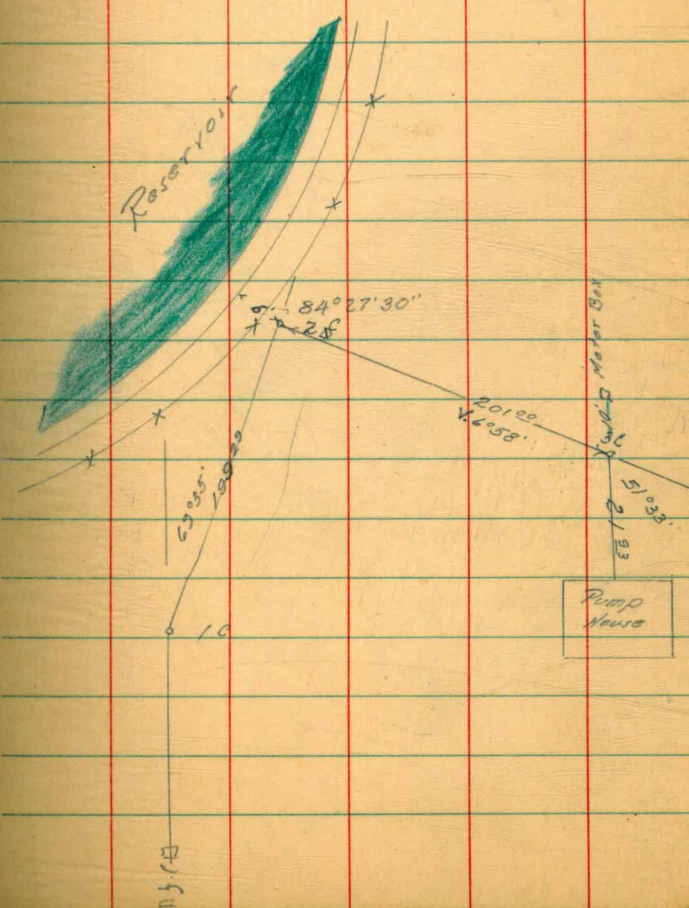
4A E.C.
G.V.
Neptune Meter
+ Meter Box
G.V.
C=146.15
Δ=17°11'
Δ=12°58'
Δ=13°16'
Δ=13°17'
3A B.C.
2A


End of line
29.33
AA.E.C.
Semi Tan.
Chord


3B on C.V.
23°53'
71.34
4°39' slope
2B
15.00
67°20'
Meter Box + service
197.00
5°16' slope
#1B
113.30
8°05' slope
start Pipeline water
Windsor
90°55'
35.20
Fd. Conc. Mon.
Lot 10
Lot 9

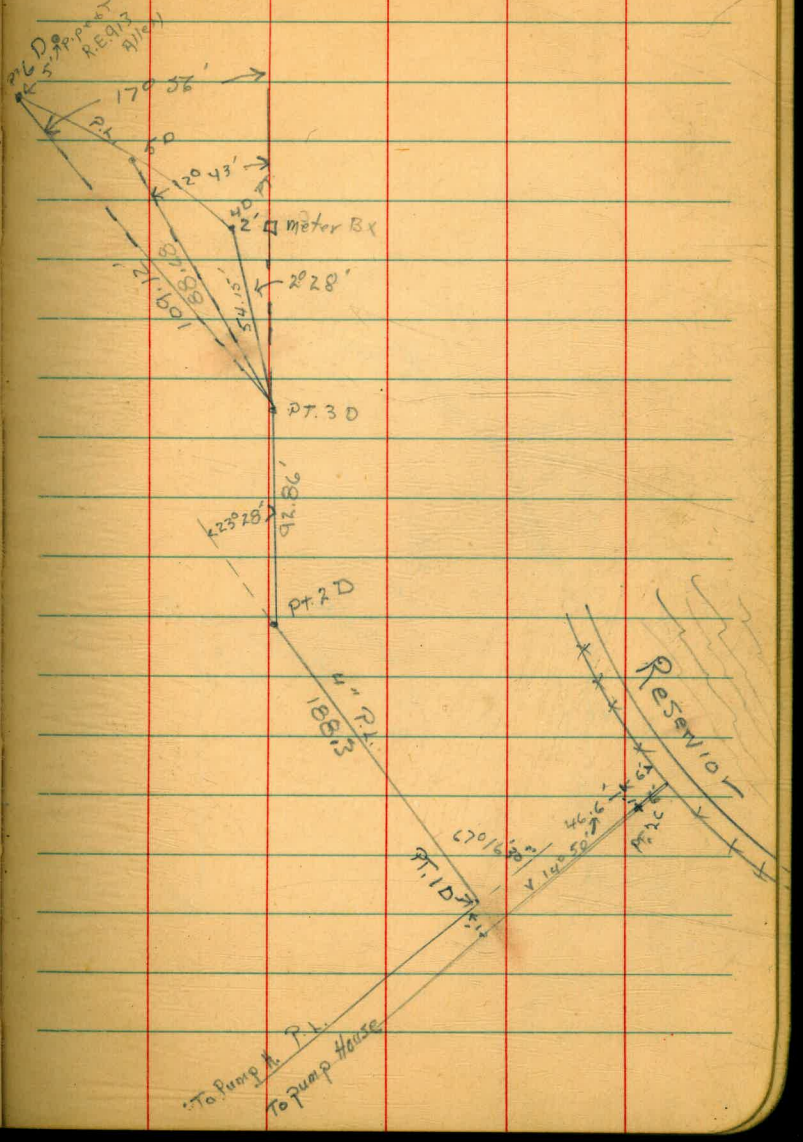

Reservoir
6200
39


1 C
68.00
250.27
Record
Los Altos Rd.

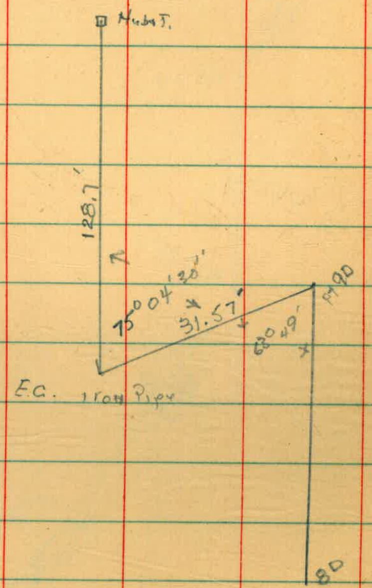

Reservoir
84°27'30"
Meter Box
Pump House

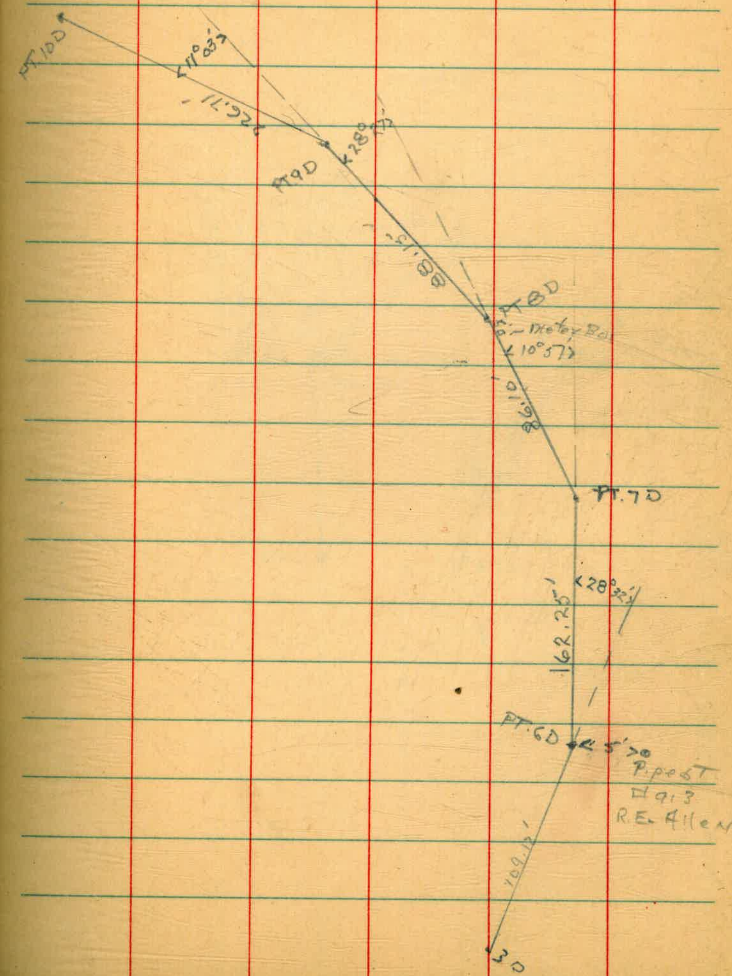
Soledad Terrace

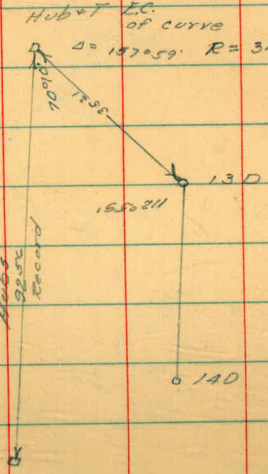
4" P.L. W.D.



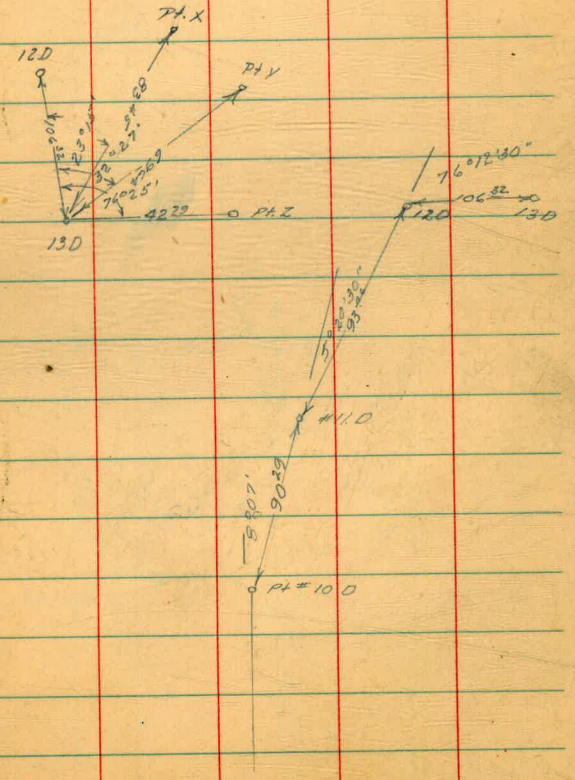
#D Line
4" Line


Hub T.
128.7'
31.57'
PT 9D
8D
E.C. Iron Pipe

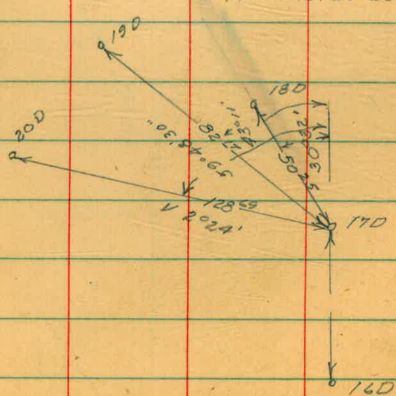

PT.10D
226.71'
PT9D
PT 8D
Meter Box
PT.7D
162.25'
PT.6D
Pipe PosT
#913
R.E. Allen
3D

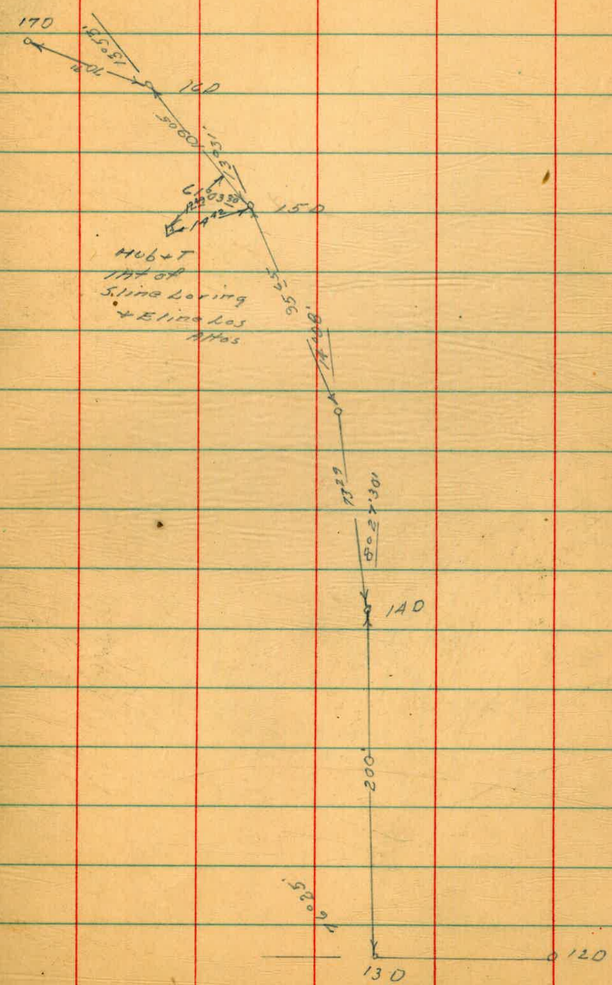


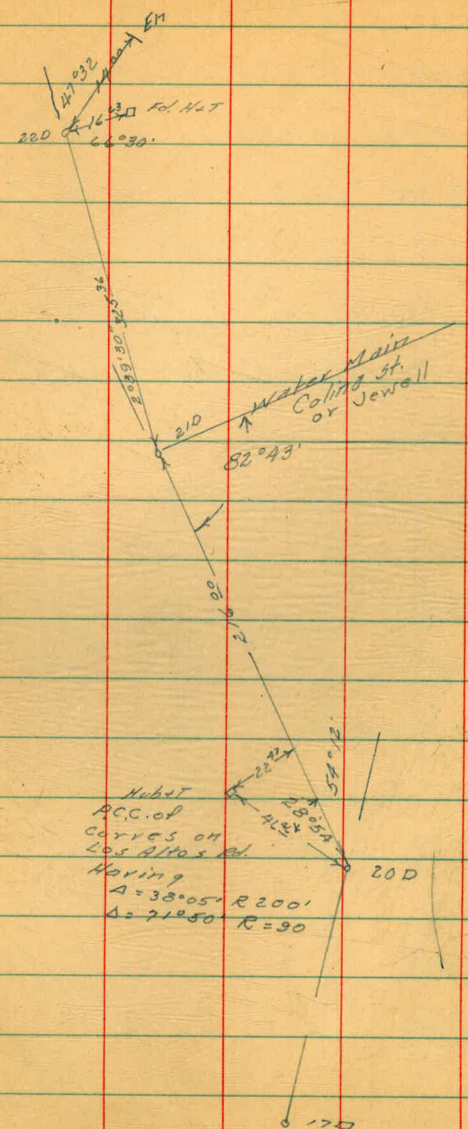
Note: Pts. X & Y are 2 Pts



Line actually on curve
with E.C. at 20D






EM
47°32
16.63
Fd. H&T
220
66°30'
2°39'30" 325.36
210
Water Main
Colina St.
or Jewell
82°43'
216.00
22.47
54°12'
Hub&T
P.C.C. of
curves on
Los Altos Rd.
Having
Δ = 38°05' R 200'
Δ = 71°50' R = 90
28°05A
20D
17D

Commercial St for Const.

				59.20		
	5.74	64.94				
160+50[31] B.C.			2.7	62.2	54.9	7.3
160+75			2.8	62.1	54.7	7.4
161+00			2.9	62.0	54.6	7.4
161+25			3.1	61.8	54.4	7.4
161+50			3.3	61.6	54.3	7.3
161+75			3.4	61.5	54.1	7.4
162+00			3.6	61.3	54.0	7.3
162+24[55] E.C.			3.8	61.1	53.9	7.2
162+50			4.0 ~~3.8~~	60.9	53.8	7.1
163+00			4.3 ~~4.0~~	60.6	53.6	7.0
163+50			4.5 ~~4.3~~	60.4	53.6	6.8
164+00			4.9	60.0	53.6	6.4
164+50			5.4	59.5	53.6	[illegible]
165+00			5.5	59.4	53.6	5.8
165+50			6.1	58.8	53.6	7.4
166+00			6.5	58.4	53.3	7.3

Con

~~N.W. bolt Comm & 26th~~				~~59.20~~		
		64.94				
166+49[03]			6.9	58.0	52.8	7.4
166+90[23]			7.2	57.2	49.6	7.6
ck to B.M.			5.74	59.20		
Profile after Const.						
			[illegible]	65.17		
	4.04	69.21 ✓				
156+09.31			12.2	57.0		
156+41.25			10.0	59.2		
156+73			8.9	60.3		
157+106			10.1	59.1		
	6.3	69.1 ✓		62.81		
154+11 bend			8.0	61.1		
154+20			9.4	59.7		
154+51			10.3	58.8		
154+70			13.0	56.1		

Commercial St. Cuts For Const.

B.M.	3.40	8.94		5.54	No.1 in Tip Rt+212+50
213+16 BK.					
213+14.14 Ahead			4.9	4.0	-4.0
213+50			4.3	4.6	-4.0
214			3.7	5.2	-4.0
+50			4.7	4.2	-4.0
215			4.9	4.0	-4.0
+50			5.1	3.8	-4.0
216			5.7	3.2	-4.0
+50			6.4	2.5	-4.0
217			7.2	1.7	-4.0
+50			7.2	1.7	-4.0
218			7.1	1.8	-4.0
			6.39	2.55	

cut.

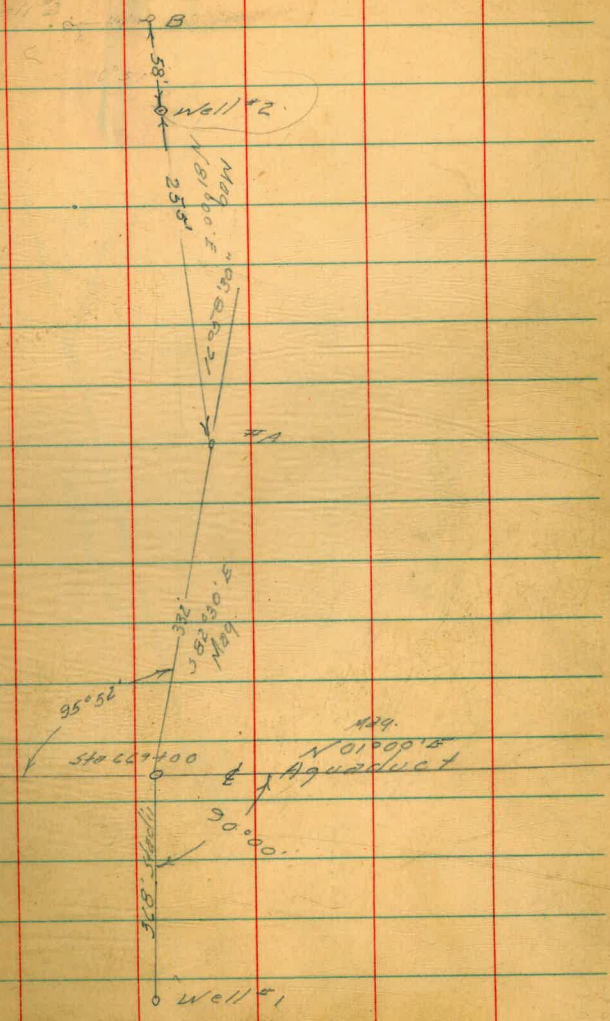
8 0
8 6
9 2
8 2
8 0
7 8
7 2
6 5
5 7
5 1
5 8

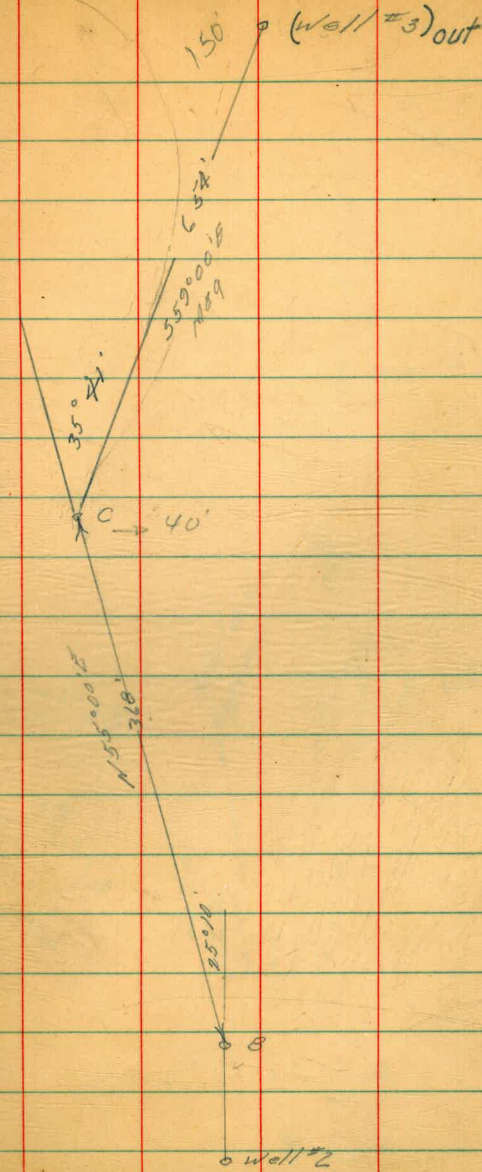
Lake Hodges
Wells #2-3-4-5-6-7

June 12, 1948

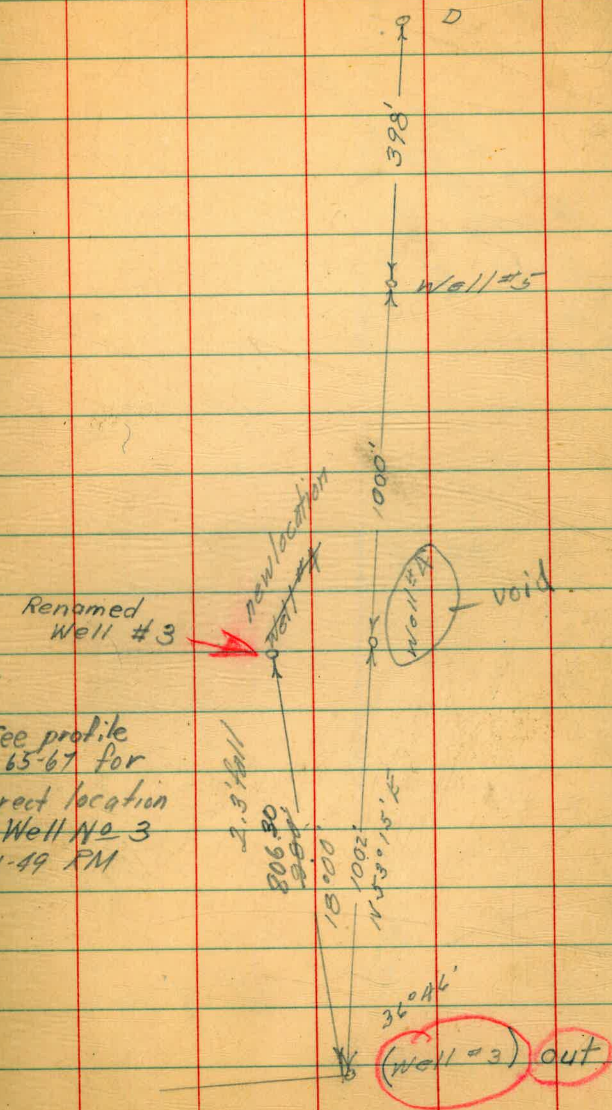
Rainey
Baker
West

43

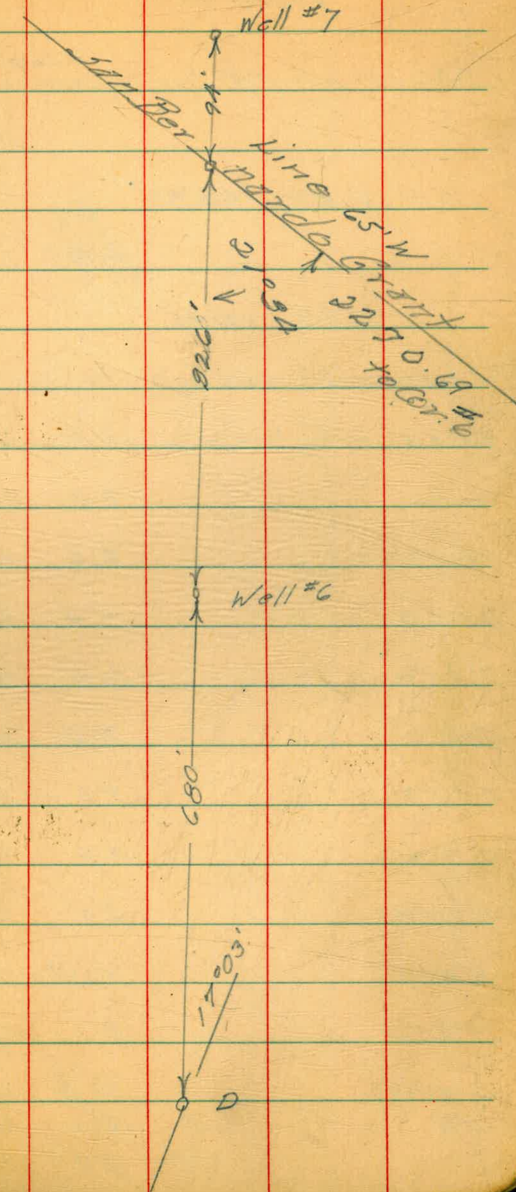




150'
(well #3) out
654'
S59°00'E
35°
C
40'
N55°00'E
368'
25°10'
B
Well #2



See profile
pg. 65-67 for
Correct location
of Well No 3
9-1-49 PM


Well #7
91'
San Bernardo Grant
Line 65' W
21°34'
2270.69 to Cor. #6
920'
Well #6
680'
17°03'
D

Low St. Water grades from Jewell to Lamont

BM. 15' on SW cor.			+ Low Lamont		
				142.36	
	6.47	148.83			
			9.87	138.96	
	2.49	141.45			
0+00					int. w/ existing line Jewell St.
0+50			10.0	131.5	131.2
1+00			7.0	134.5	132.7
1+50			6.0	135.5	133.8
2+00			5.6	135.9	134.4
2+50			6.2	135.3	134.3
3+00			7.0	134.5	134.1
3+50			7.2	134.3	134.0
4+00			7.4	134.1	133.8
4+50			7.5	134.0	133.6
5+00			7.5	134.0	133.4
5+50			7.1	134.4	133.2
6+00			5.8	135.7	134.1
L.H.		℄	4.6	136.9	135.3
		(5")	4.7	136.8	135.3

3.8	0+60. prop line
5.3	
5.2	
5.0	
4.5	
3.9	
3.8	
3.8	
3.9	
4.1	
4.7	
5.1	
1.6	
1.5	

		141.45				
6+50			4.8	136.7	135.6	4.6
7+00			3.7	137.8	138.4	2.9
7+50			1.6	139.9	141.1	2.3
T.P.			1.57	139.88		
	9.98	149.86				
8+00			7.0	142.9	144.0	2.4
8+50			3.0	146.9	146.3	4.1
9+00			1.2	148.7	147.9	4.3
9+50			1.5	148.4	148.5	3.4
10+00			1.8	148.1	148.1	3.5
10+50			3.2	146.7	146.9	3.3
11+00			4.6	145.3	144.8	4.0
11+50			8.8	141.1	142.6	C3.5
ct to BM.			7.43	142.43		

10'± 11+40 = Prop. line w/ Lamont

Coast. Alley Dwight - Wightman
44th - Highland - 6" P.L.

July 20-1948

Rainey King Wells

B.M.	2.90	350.43		347.53	N.W.B.P Dwight & Highland			
0+00			5.0	345.4	345.2	Cut 3.7	Prop. Line	
+50			3.6	346.8	346.3	4.0		
1+00			2.8	347.6	347.3	3.8		
+50			1.5	348.9	348.3	4.1		
2+00			1.1	349.3	349.2	3.6		
+50			0.1	350.3	349.8	4.0		
T.P.	7.90	357.96	0.37	350.06				
3+00			6.6	351.4	350.4	4.5		
+50			6.3	351.7	350.8	4.4		
4+00			5.7	352.3	351.3	4.5		
+50			5.7	52.3	351.8	4.0		
5+00			4.8	353.2	352.4	4.3		
+50			4.8	53.2	352.8	3.9		
C+00			5.1	52.9	353.1	Par. 3.5		
C+50			5.1	52.9	353.1	Par. 3.5		

		357.96				
7+00			4.0	354.0	353.5	4.0
+50			2.9	355.1	354.0	4.6
8+00			2.8	355.2	354.3	4.4
+50			2.6	355.4	354.6	4.3
9+00			2.3	355.7	354.8	4.4
+50			2.3	355.7	354.9	4.3
T.P.	4.96	360.66	2.26	355.70		
10+00			5.0	355.7	354.8	4.4
+50			5.8	354.9	354.6	3.8
11+00			5.5	355.2	354.5	4.2
+50			5.6	355.1	354.4	4.2
12+00			5.8	354.9	354.3	4.1
+50			6.3	354.4	353.8	4.1
13+00			8.8	351.9	352.6	3.5
T.P.	2.00	355.00	7.66	353.00		
			7.46	347.54	347.53	

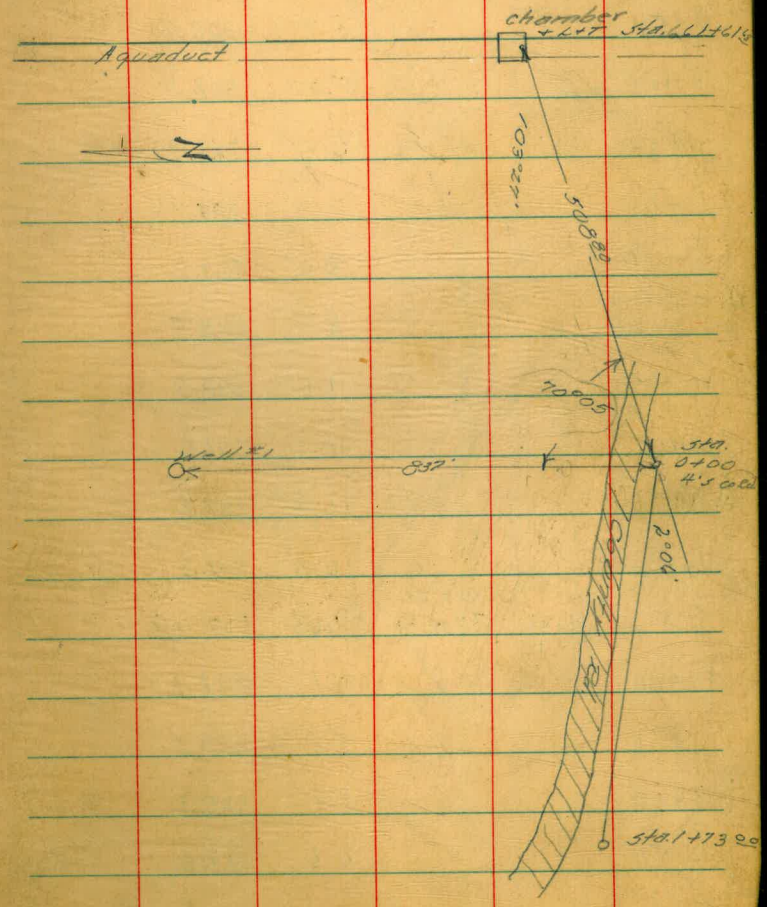
Lake Hodges
from Well #1 to road
837'

BM			319.05
	2.14	321.19	
	102' E Well #1		
Top casing test well #1		2.94	318.25
	200' E Well #1		
Top Casing test well #2		2.60	318.59
	396' E Well #1		
Top Casing test well #3		2.56	318.63

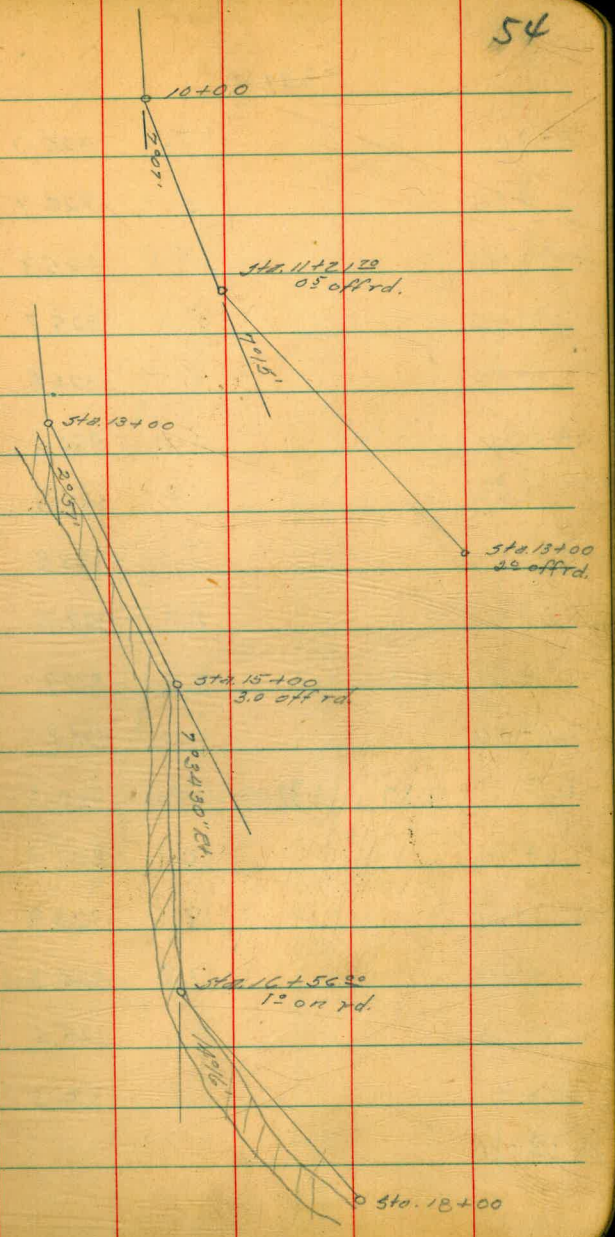
Profile E side Road from Lake Hodges to Well #1

BM plug in top of Structure Aquaduct				320.82
	12.45	333.27		
0+00			3.1	330.2
+50			2.6	330.7
1+00			1.6	331.7
+50			0.1	333.2
T.P.	1.58	334.83	0.02	333.25
1+73			1.7	333.1
2+00			1.8	333.0
+50			1.6	333.2
3+00			2.2	332.6
+50			3.5	331.3
4+00			4.8	330.0
+50			4.7	330.1
5+00			4.0	330.8
P.I. 4+78.86				
5+50			2.8	332.0
6+00			2.0	332.8

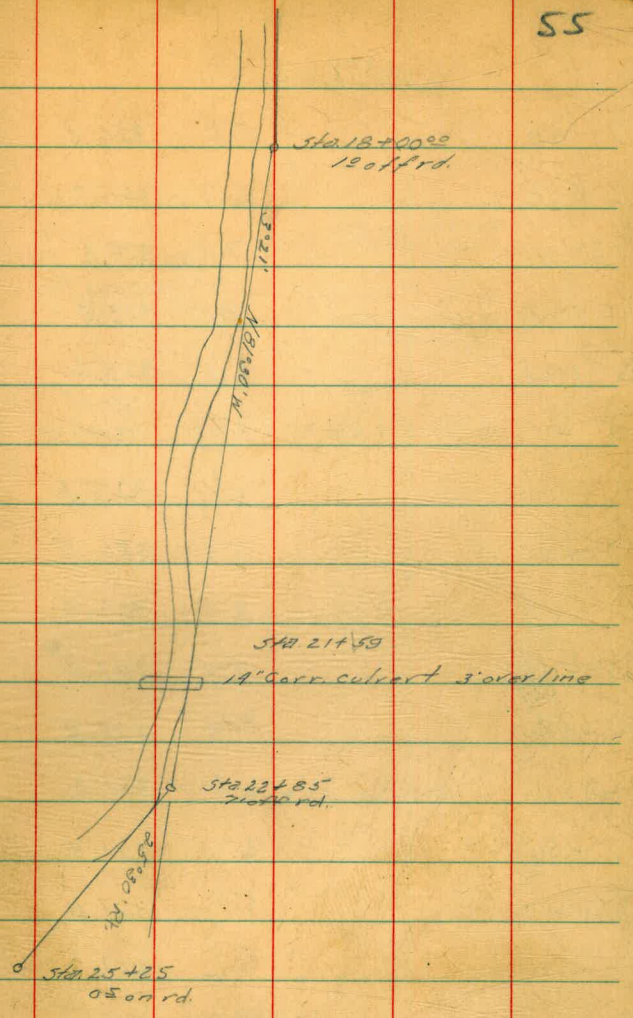
Intersection P.I. - Well #1



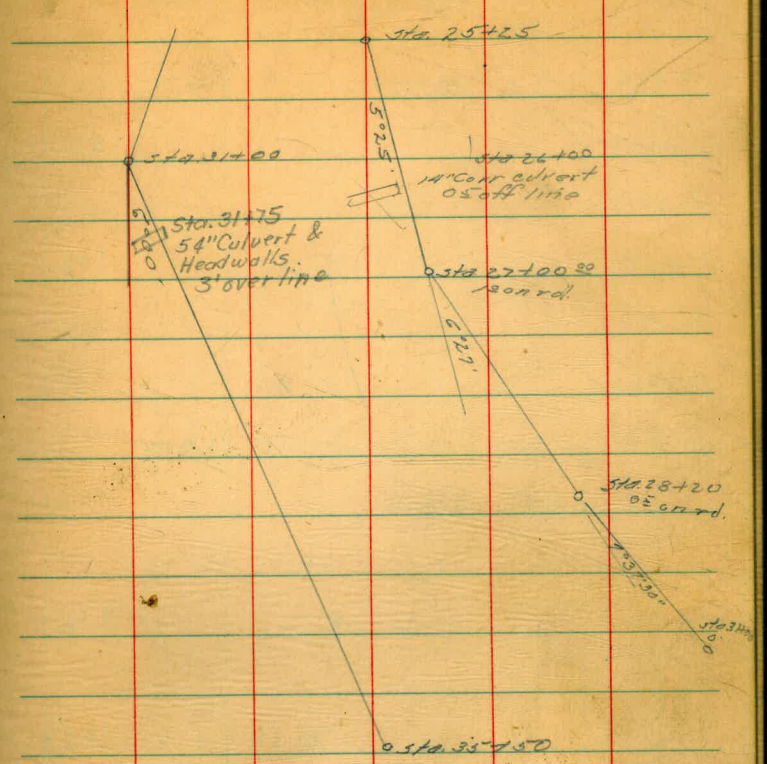
		326.21 ~~325.2~~		
14+00			5.3	320.9
+50			5.4	320.8
15+00			5.4	320.8
+50			5.5	320.7
16+00			5.5	320.7
+50			5.4	320.8
16+56			5.4	320.8
17+00			5.0	321.2
+50			3.9	322.3
18+00			3.4	322.8
+50			2.5	323.7
19+00			2.2	324.0
+50			2.4	323.8
20+00			2.5	323.7
T.P.	6.42	331.13	1.50	324.71
20+50			7.2	323.9
21+00			7.1	324.0
+50			7.1	324.0



		331.13		
22+00			7.1	324.0
+50			6.2	324.9
△ 22+85			5.8	325.3
23+00			5.4	325.7
+50			4.5	326.6
24+00			5.0	326.1
+50			5.8	325.3
25+00			7.3	323.8
△ 25+25			8.9	322.2
+50			8.9	322.2
26+00			9.2	321.9
T.P.	9.27	332.02	8.38	322.75
26+50			10.1	321.9
△ 27+00			8.8	323.2
+50			7.8	324.2
28+00			6.6	325.4
28+50			5.7	326.3
△ 28+20				



		332.02		
29+00			5.9	326.1
+50			6.3	325.7
30+00			7.2	324.8
30+50			8.1	323.9
⚠ 31+00			8.8	323.2
T.P.	3.50	327.38	8.14	323.88 ~~323.88~~
31+50			4.3	323.1
32+00			4.9	322.5
+50			5.1	322.3
33+00			5.4	321.8
33+50			5.9	321.5
34+00			6.2	321.2
+50			6.0	321.4
35+00			5.8	321.6
⚠ 35+50			5.2	322.2
			2.7	324.68



Notes Reduced – RAM

Profile to ℄ creek 85' west of bridge

	5.69	310.29		305.00	
0+00			0.7		310.0
0+50			8.6		302.1
0+68			11.7		299.0
T.P. #1			11.54	299.15	
	1.12	300.27			
1+00			4.3		296.0
1+50			7.2		293.1
2+00			7.8		292.5
2+50			8.3		292.0
3+00			8.5		291.8
		300.27			
3+50			8.4		291.9
4+00			8.1		292.2
4+50			8.4		291.9
4+65	end		8.6		291.7
T.P.			2.86	297.41	
	12.02	309.43			
ck to B.M.			4.43		

Reduced 8.5.48 JK

Profile of existing 16" pipe

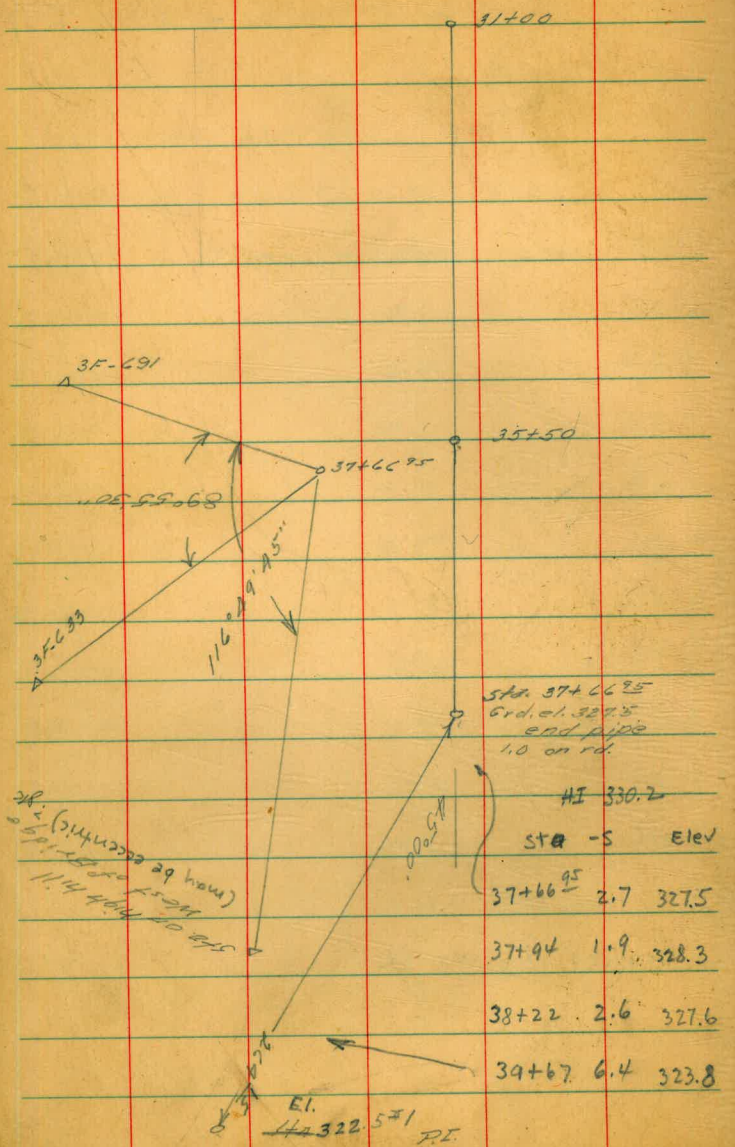
From well #1 to #2

		319.05	
	1.88	320.93	
Top casing well #2	1.32	319.61	
0+00	4.0		316.9
1+00	4.1		316.8
2+00	4.4		316.5
3+00	4.6		316.3
4+00	4.8		316.1
5+00	4.5		316.4
6+00	5.5		315.4
7+00	5.4		315.5
8+00	5.1		315.8
9+00	5.0		315.9
9+56	4.6		316.3
		318.55	
Ck to casing well #1	2.38	~~318.65~~	

cut w/ pumpline well #2

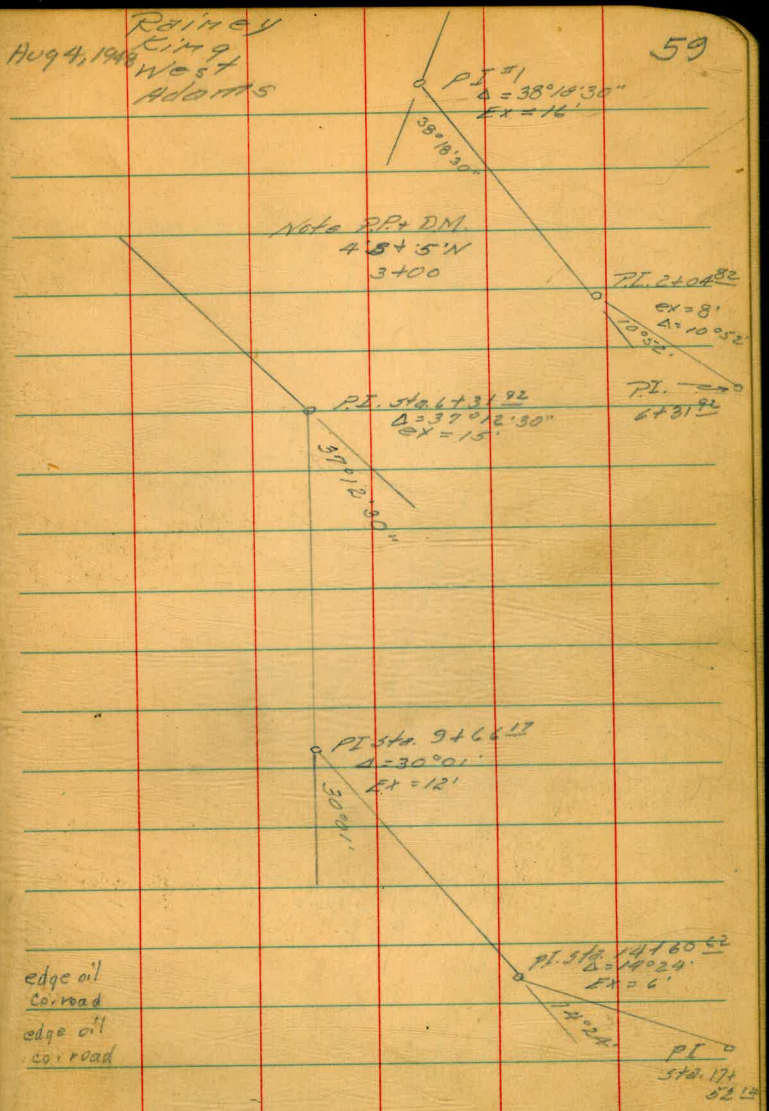
Reduced 8.5.48 JK

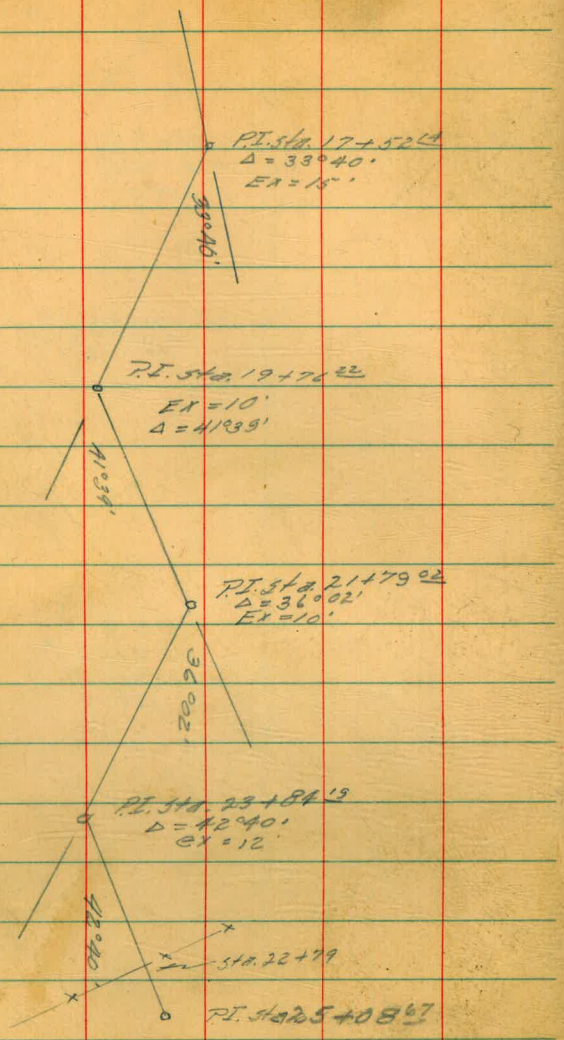
Lake Hodges cont.

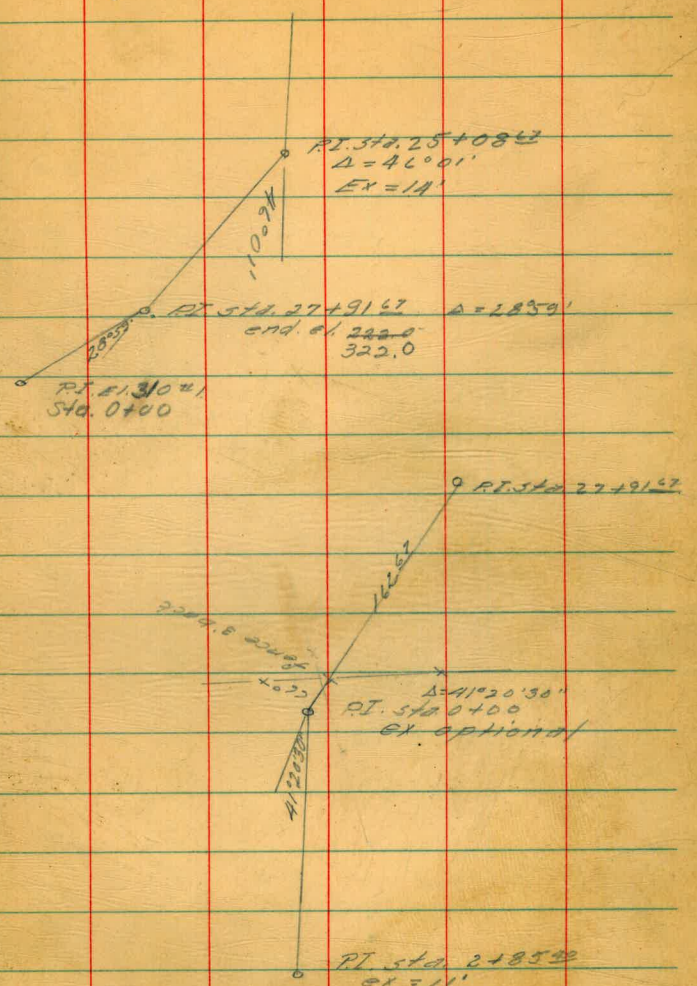


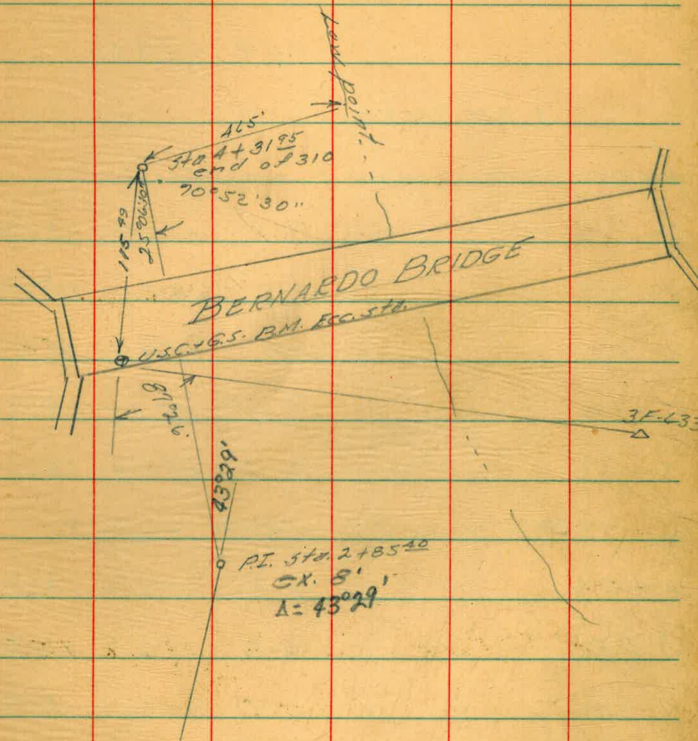
Raimey
Kirby
West
Adams

Aug 4, 1946




P.I. Sta. 17+32.44
Δ = 33°40'
Ex = 15'
33°40'
P.I. Sta. 19+76.22
Ex = 10'
Δ = 41°39'
41°39'
P.I. Sta. 21+79.02
Δ = 36°02'
Ex = 10'
36°02'
P.I. Sta. 23+84.19
Δ = 42°40'
Ex = 12'
42°40'
Sta. 22+79
P.I. Sta. 25+08.67


P.I. Sta. 25+08.67
Δ = 46°01'
Ex = 14'
46°01'
P.I. Sta. 27+91.67
end of 322.0
Δ = 28°59'
28°59'
P.I. Elev. 310.41
Sta. 0+00
P.I. Sta. 27+91.67
322.0
Δ = 41°20'30"
P.I. Sta 0+00
Ex optional
41°20'30"
P.I. Sta. 2+85.22
Ex = 11'


Low point
465'
Sta. 4+31.95
end of 310
90°52'30"
175.49
25°06'30"
BERNARDO BRIDGE
U.S.C.&G.S. B.M. Eco. sta.
3F-433
8°20'
43°29'
P.I. Sta. 2+85.40
Ex. 8'
Δ= 43°29'

Ozark St. for Const.

B.M.	S.E. Cor. 49th chiseled X +	Imp.		148.51		
	12.10	160.61				
			0.64	159.97		
	3.04	163.01				
0+00						int. w/. cu. ons side imp.
0+50			3.1	159.9	160.3	3.1
1+00			3.9	159.1	159.4	3.2
1+50			4.8	158.2	158.5	3.2
2+00			5.5	157.5	157.6	3.4
2+50			6.1	156.9	156.7	3.7
2+73.59						N Line Alley Ozark st.
3+00			6.2	156.8	156.0	4.3
3+50			6.8	156.2	155.6	4.1
4+00			7.0	156.0	155.2	4.3
4+50			7.2	155.8	154.9	4.4
5+00			7.4	155.6	154.6	4.5
5+50			8.3	154.7	153.8	4.4
T.P.			8.19	154.82		
	1.45	156.27				

						Cuts
		156.27				
6+00			3.1	153.2	152.4	4.3
6+50			5.8	150.5	150.0	4.0
7+00			9.2	147.1	146.7	3.9
T.P.			12.84	143.43		
	3.82	147.25				
7+50			4.6	142.7	143.6	2.6
8+00			6.1	141.2	141.4	3.3
8+50			6.1	141.2	140.1	4.6
9+00			6.5	140.8	138.4	4.9
9+50			6.0	141.3	138.6	6.2
10+00			5.3	142.0	137.8	6.7
10+50			5.3	142.0	137.2	7.3
10+85.65	End		6.8	140.2	136.8	6.9

8/4 Rainey King West 63

Alley between Diamond & Cass

	108.05		Curb Mission Blvd. 8.0 S	
0+50		6.5	101.5	100.5
1+00		6.1	101.9	100.9
1+50		5.6	102.5	101.3
2+00		5.5	102.6	101.7
2+50		5.4	102.7	102.1
3+00		5.1	103.0	102.5
3+50		4.8	103.3	102.9
4+00		3.9	104.2	103.3
4+50		3.8	104.3	103.7
5+00		3.6	104.5	104.1
ct. Fairmeadow	St. Bayard	3.9	104.2	

& Missouri 8/6/48 Rainey King West

4.5	
4.5	
4.7	
4.4	
4.1	
4.0	
3.9	
4.4	
4.1	
3.6	

8-13-48
Entered by Meredith

Lake Hodges Wells
Profile Well #2 to Well #3

BM	3.45	323.06		319.61	319.61
0+00			6.8		316.3
0+50			6.4		316.7
1+00			5.5		317.6
1+50			5.5		317.6
2+00			5.1		318.0
2+50			4.4		318.7
3+00			4.5		318.6
3+50			4.2		318.9
4+00			4.3		318.8
4+50			4.0		319.1
5+00			4.2		318.9
5+50			4.1		319.0
6+00			5.0		318.1
TP #1	4.57	322.66	4.97	318.09	
6+50			6.3		316.4
7+00			5.2		317.5

Top of casing Well #2

End outlet

7+50			3.9		318.8
8+00			3.5		319.2
8+50			2.8		319.9
9+00			2.0		320.7
9+50			1.3		321.4
10+00			1.4		321.3
10+50			1.4		321.3
11+00			1.5		321.2
11+50			1.9		320.8
12+00			2.3		320.4
T.P.#2	4.64	325.00	2.30	320.36	
12+50			4.2		320.8
13+00			3.7		321.3
13+50			3.8		321.2
14+00			3.7		321.3
14+50			3.3		321.7
15+00			3.0		322.0
15+50			1.6		323.4

16+00			1.6		323.4
16+50			2.2		322.8
17+00			2.3		322.7
17+50			1.9		323.1
18+00			2.1		322.9
18+50			2.4		322.6
18+86.30			2.3		322.7
T.B.M.			1.84	323.16	
T.P.#3	2.48	323.62	3.86	321.14	
T.P.#4	5.68	323.75	5.55	318.07	
B.M.			4.10	319.65	

Spike in 26" Cottonwood tree near — Well No. 3

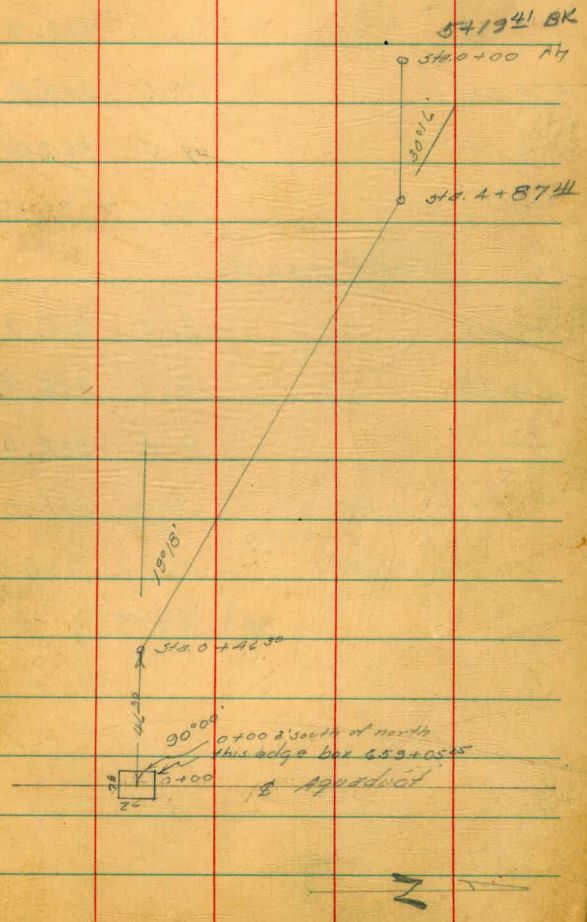
Top casing Well No. 2

Reduced 8-20-48 RM.

Sept. 2, 1948 Rainey King West

68

B.M.	Structure	Sta. 695+10.5			398.34
	1.60	399.94			
0+04			Ditch Elev. 4.1		395.8
0+39			4.6		395.3
0+46.3			5.9		394.0
0+60			8.0		391.9
T.P.			12.68	387.26	
	0.42	387.68			
1+00			2.4		385.3
1+50			9.6		378.1
T.P.			12.00	375.68	
	0.76	376.44			
1+00			4.6		371.8
2+50			11.4		365.0
T.P.			12.51	363.93	
	0.50	364.43			
3+00			5.9		358.5
3+50			12.3		352.1



		364.43			
T.P.			12.77	351.66	
	0.86	352.52			
3+75			2.8	349.7	349.7
4+00			6.5	346.0	346.0
4+08			7.1	345.4	345.4
4+15			8.5	344.0	344.0
T.P.			12.57	339.95	
	1.61	341.56			
4+45			3.7	337.9	337.9
4+50			5.1	336.5	336.5
4+72			9.6	332.0	332.0
4+87 [±] Δ P.I.			10.6	331.0	331.0
C.K. to T.B.M. on rock			8.67	332.89	

Reduced 9-3-48 RM

Lake Hodges
for Construction
by City

14"
Line

Bailey
King
Adams
Rogers

	3.34	401.68				
Top existing structure				398.34		
Proposed structure						
E.N.E. Cor.			5.87	395.81	393.23	2.58
E.S.E. Cor.			4.0	397.68	393.23	4.45
S.S.E. Cor.			2.22	399 ~~400.46~~	393.23	6.23
N.N.E. Cor.			6.81	4 395.87	393.23	1.64
N.N.W. Cor.			7.87	3 397.81	393.23	0.58
S.S.W. Cor.			2.92	398.76	393.23	5.43
W.S.W. Cor.			4.19	398.49	393.23	4.26
W.N.W. Cor.			6.57	5 398.11	393.23	1.88
0+47 82			8.0	3 6" 397.74"	392.1 395.32	1.6 f 1.6
T.R.			11.21	397.47		
	4.24	401.71	0.			
0+00 71			0.5	401.2	395.3	5.9
0+30			3.2	398.5	388.6	19.9 b.b
0+50			9.1	0 2 5 399.18	0+6 388.9	8.7
T.R.			9.06	398.65		
	1.14	399.71				
1+00			9.9	3 398.9	391.1	7.8
T.R.	0.68	383.37	11.10	382.69		

		×	383.37				Cuts	71
1+50				7.6	375.8	369.6	6.2	375.9 8.4 384.2
T.P.				12.78	371.59			
	0.43	371.02						
2+00				1.4	369.6	363.1	6.5	
2+55				9.3	361.7	356.0	5.7	
T.P.	2.65	361.21		12.46	358.56			
3+00				5.5	355.7	350.2	5.5	
T.P.				12.05	349.16			
	1.09	350.25						
3+54				2.9	347.4	343.5	3.9	
4+00				11.3	339.0	334.9	4.1	
T.P.				11.75	338.50			
	1.60	346.10						
A 4+43.7				9.4	330.7	326.7	4.0	
4+71.70				9.7	330.3	326.7	3.6	

Profile & Cuts over Hodges- 30" P.L.

King Adams 10-5-48

333.1

					T.B.M. Rock	Cuts
	4.36	337.25		332.89		
0+00			6.7	330.6	325.7	4.9
+50			5.9	331.4	325.7	5.7
1+00			4.8	332.5	325.7	6.8
+50			3.8	333.5	325.7	7.8
Δ +73			3.7	333.6	325.7	7.9
2+00			3.7	333.6	325.7	7.9
+50			3.7	333.6	325.7	7.9
3+00			4.1	333.2	325.6	7.6
+50			5.6	331.7	325.6	6.1
4+00			6.7	330.6	325.6	5.0
+50			6.5	330.8	325.6	5.2
5+00			5.8	331.5	325.6	5.9
BC.5+49.7			5.6	331.7	325.5	6.2
+25			5.4	331.9	325.5	6.4
+50			4.9	332.4	325.5	6.9
+75				333.0		7.5
6+00			3.8	333.5	325.5	8.0 / 8.0
+25			3.8			
+50			4.2	333.1	325.5	7.6
+75				332.1	325.5	6.6
7+00			6.5	330.8	325.5 / 324.4	6.4

		337.25				
EC.						
~~7+17.75 BK=~~						
7+22.75 Ah.			7.2	330.1	323.9	6.2
7+50			8.4	328.9	323.2	5.7
I.P.	0.20	329.07	8.38	328.87		
8+00			1.9	327.2	322.1	5.1
+50			3.1	326.0	321.0	5.0
9+00			4.1	325.0	319.8	5.2
9+50			5.4	323.7	318.7	5.0
10+02			5.8	323.3	318.1	5.2
+50			6.2	322.9	317.6	5.3
11+00			6.7	322.4	317.0	5.4
11+21.9			6.9	322.2	316.8	5.4
11+25			6.9	322.2	316.7	5.5
11+50			7.2	321.9	316.6	5.3
12+00			7.6	321.5	316.3	5.2
12+50			7.7	321.4	316.1	5.3

		329.07				
13+00			8.0	321.1	315.8	5.3
13+50			8.0	321.1	315.6	5.5
14+00			7.7	321.4	316.2	5.2
T.P.	4.47	325.81	7.73	321.34		
14+50			4.5	321.3	316.2	5.1
15+00			4.7	321.1	316.2	4.9
+50			4.7	321.1	316.2	4.9
16+00			4.5	321.3	316.2	5.1
16+50			4.4	321.4	316.4	5.0
16+56			4.3	321.5	316.5	5.0
T.P.			4.88	420.93	Spike	ON @ 16+56

Profile - 12' OFFSETS For Pipe Near Bernardo Bridge

King & Barnes 10-5-48

35

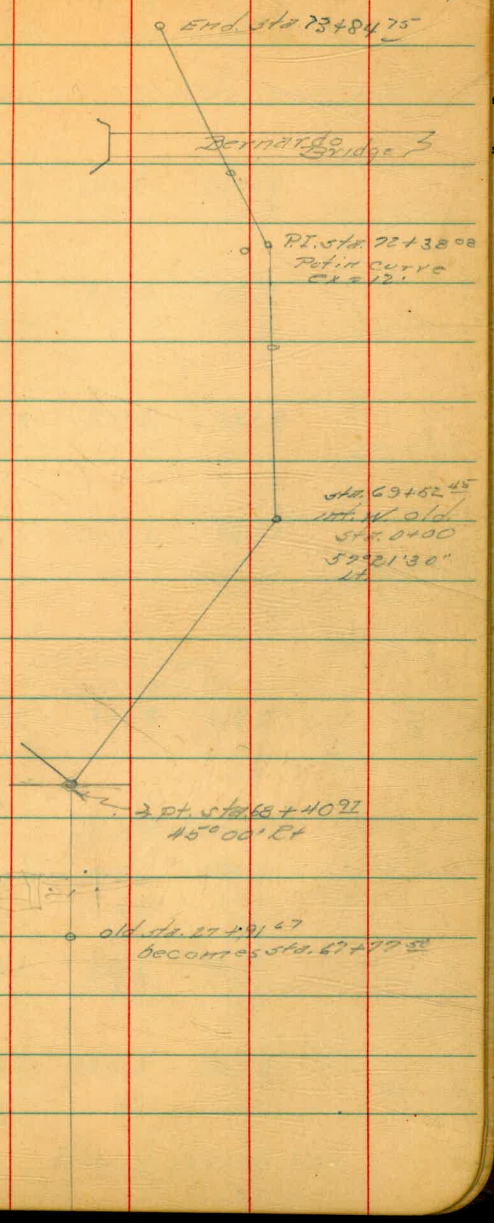
B.M.	8.91	336.45			327.54	
T.P.	0.44	324.40	12.49	323.96		
27+91.67	BK		0.6	323.8	318.0	5.8
27+91.67	Ah.		0.8	323.6	318.0	5.6
28+03.67			1.6	322.8	306.0	16.8
28+50			5.6	318.8	306.0	12.8
29+00			9.7	314.7	306.0	8.7
T.P.	4.76	317.35	11.81	312.59		
29+54.34 = 0+00 Ahead			6.5	310.9	306.0	4.9
+50			5.8	311.6	306.0	5.6
1+00			4.6	312.8	306.0	6.8
+50			3.5	313.9	306.0	7.9
2+00			3.0	314.4	305.9	8.5
+50			5.7	311.7	305.9	
2+85.40			8.3	309.1	305.9	3.2
3+00			7.6	309.9	305.9	4.0

		317.35				
3+50			5.4	312.0	305.9	6.1
4+00			3.8	313.5	309.9	7.6
4+31.95			4.7	312.7	305.9	6.8
T.P.	0.10	324.06		323.96		
BK △68+40.97			2.1	22.8	318.0	4.0
68+40.97			2.5	21.6	318.0	3.6
68+52.97			3.7	20.4	306.0	14.4
69+00			8.4	15.7	306.0	9.7
△69+52.45			13.2	10.9	306.0	4.9
70+00			12.5	11.6	306.0	5.6
70+50			11.6	12.5	306.0	6.5
71+00			10.3	13.8	306.0	7.8
T.P.	2.14	316.53	9.67	314.39		
71+50			2.1	14.4	306.0	8.4

316.53

BC. 72+00		4.5	12.0	305.9
72+38.08		3.8	12.7	305.9
EC 72+77.16		5.5	11.0	305.9
73+00		4.6	11.9	305.9
73+50		3.1	13.4	305.9
73+84.75		3.9	12.6	305.9
		11.51	305.02	305.4
	Handrail			

6.1
6.8
5.1
6.0
7.5
6.7



Sections
& Ditch #4
Sta. 68+04

			Lt.	℄	Rt.
T.P. 1.18	325.14	323.96			
				Bridge	
68+00			322.7	321.9	320.2
			2.4	3.2	4.9
			5'		12
68+04			320.8	320.2	319.3
			4.3	4.9	5.8
			5'		12
68+06			321.8	320.8	320.0
			3.3	4.3	5.1
			5'		12
68+10			321.9	321.0	320.1
			3.2	4.1	5.0
			5'		12
				Headwall	
				68+40.97	
68+40.97			321.8	320.5	319.0
			3.3	4.6	6.1
			12		12
				Headwall	
68+57.97			320.0	318.6	318.0
			5.1	6.5	7.1
			12		12
				66+62	
66+62			325.1	323.4	321.9
			0.0	1.7	3.2
			10		10
66+60			321.6	320.6	320.0
			3.5	4.5	5.1
			10		10

Reduced 10-7-48 R.M.

32514

66+58

1,3

0,3 1,3 2,8
10

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.