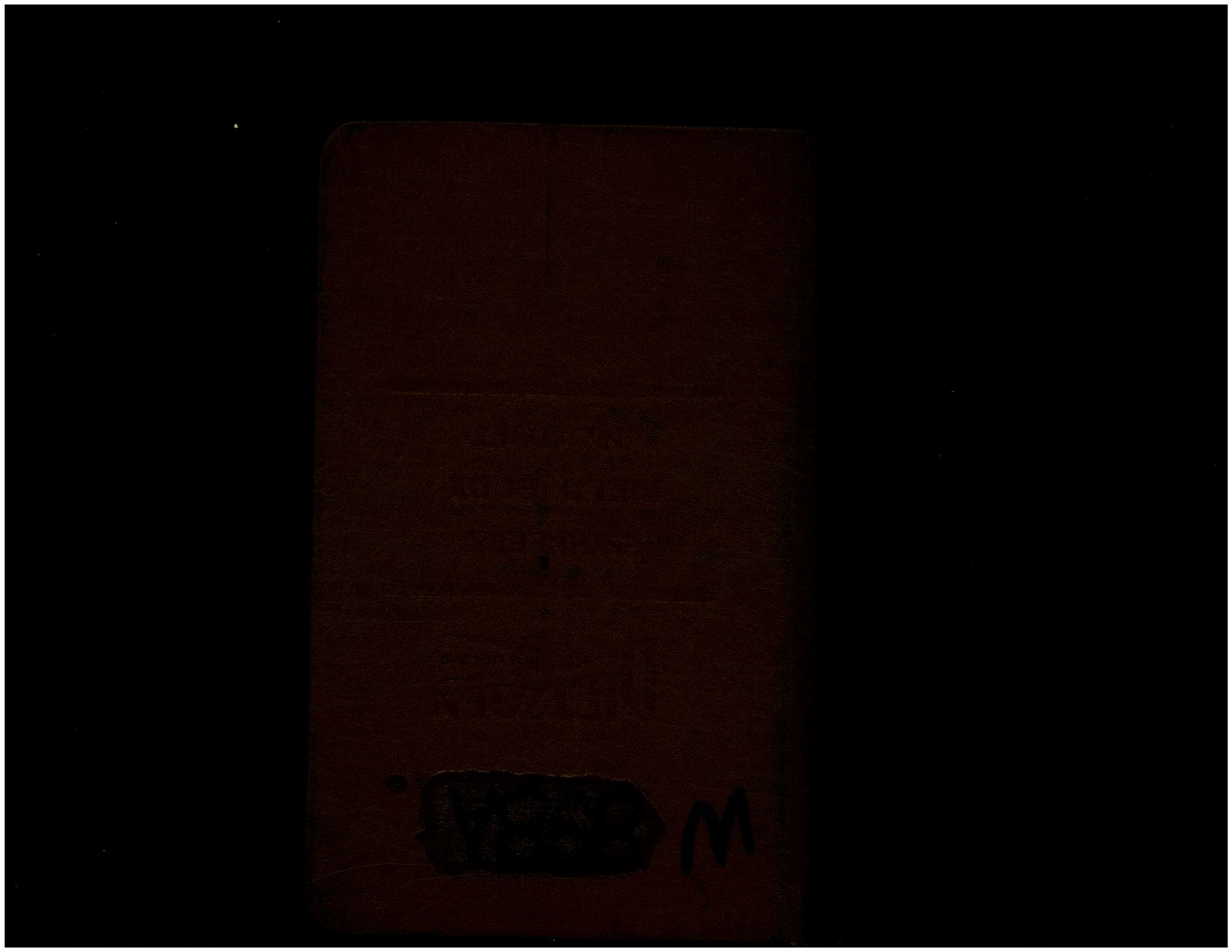
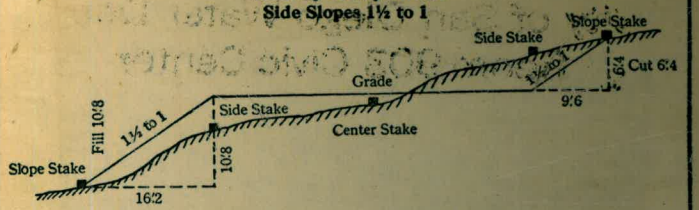


DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width

Side Slopes 1½ to 1



In the figure above: Opposite 6 under "Cut or Fill" and under .4 read 9'6 the distance from the side stake to the slope stake at right. Opposite 10 under "Cut or Fill" and under .8 read 16'2, the distance from the side stake to the slope stake at the left.

Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

EUGENE DIETZGEN CO.

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.

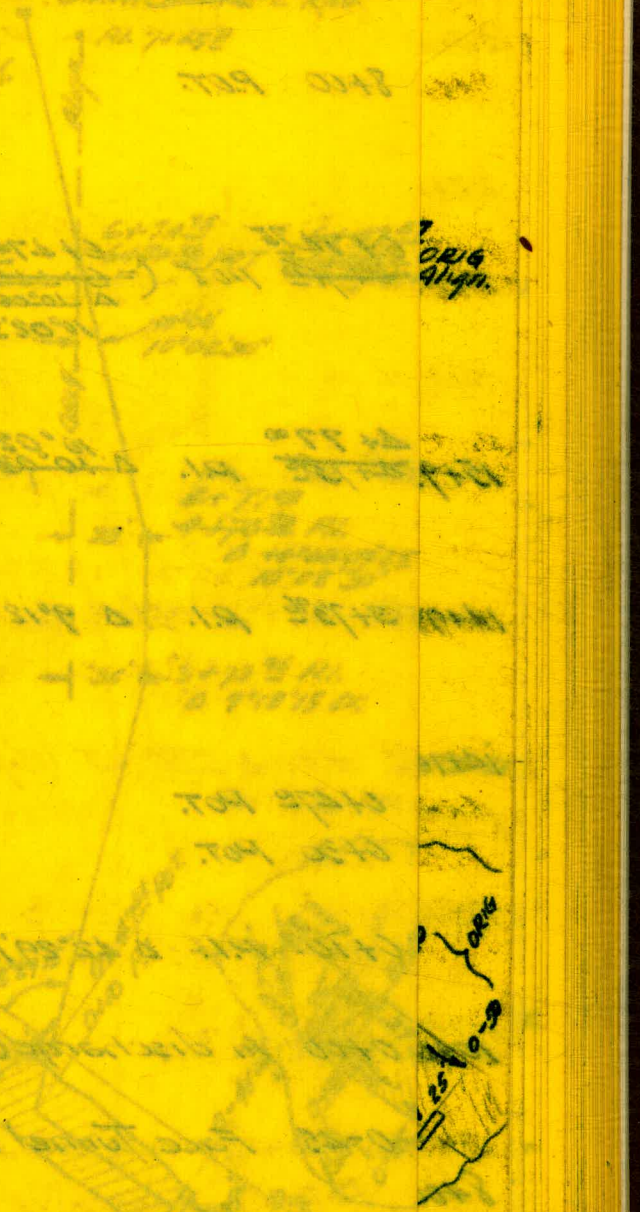
Made in U. S. A.

INDEX

San Vicente Aqueduct Conn. Rev. Align. 1-6

" " " " ; & Profile 6-30

alice



1

San Vicente Aqueduct Conn. R-2 Revised Alignmt.

8+00 P.O.T.

6+74.75 P.O.T. (= 6+47.47 Orig. Align.)
Δ 10°26' RT to P.I. 7+45.21
10°02'30" RT.

S 70°00' E

4+77.00 P.I. Δ 10°02'30" LT.

S 60°10' E

3+73.96 P.I. Δ 9°12'15" LT.

S 51°00' E

0+47.72 P.O.T.
0+30 P.O.T.

0+10 P.I. Δ 42°29'15" RT. (N.T. Sta.)

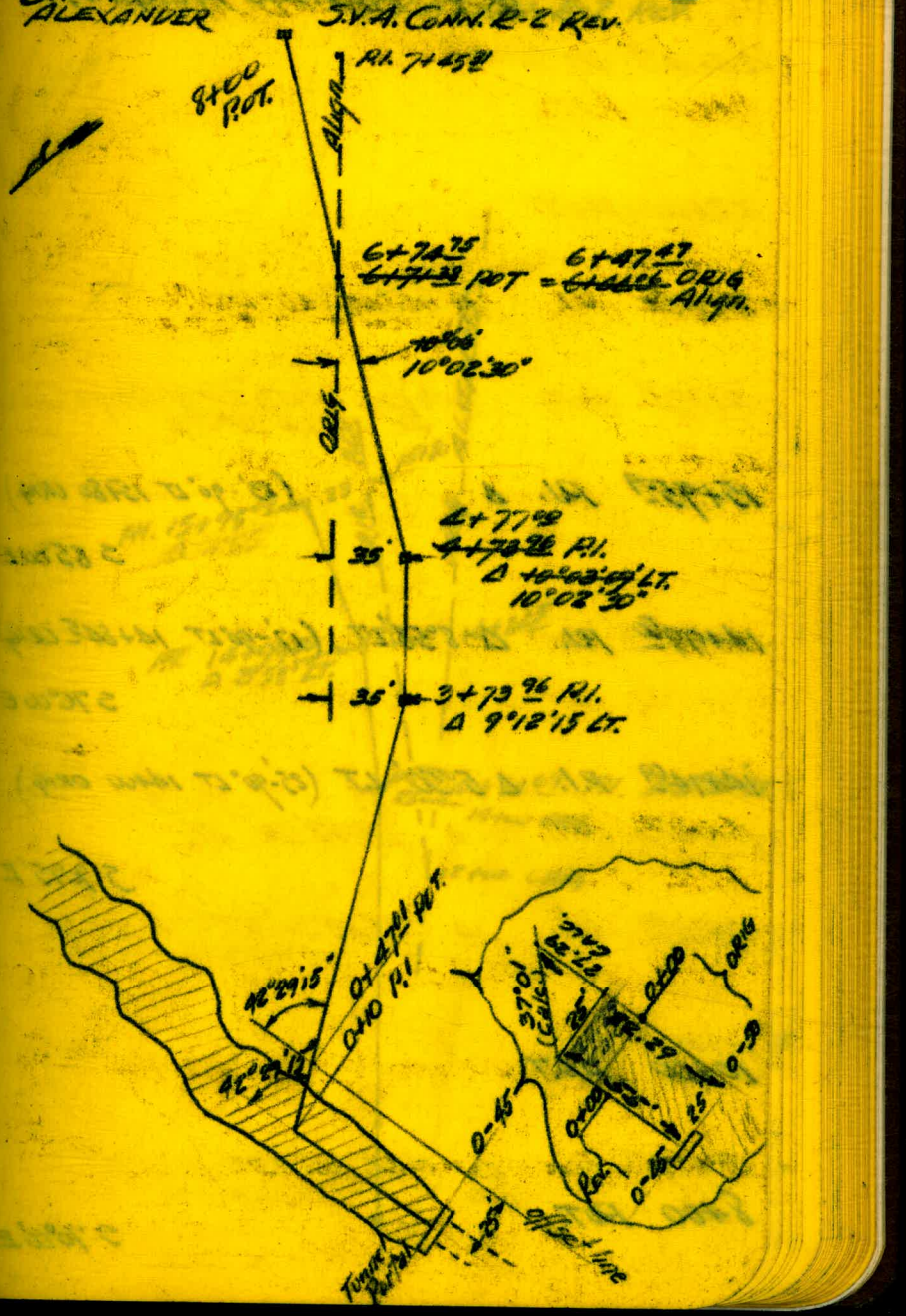
0+00 In discharge Channel (N.T. Sta.)

0-45 Face Tunnel Portal

Sept. 28, 1954
Beatty
Morey
Alexander

1

S.V.A. Conn. R-2 Rev.



2 SAN VICENTE AQUEDUCT CONN. R-2 REVISED ALIGN'MT.

15+95.9 Rt. Δ (23°-30' LT 15+80 ORIG)

S 85°00 E

14+99.5 Rt. Δ 8°58' LT (17°-30' LT 14+84.5 ORIG)

S 76°00 E

14+14.9 Rt. Δ 5°30' LT (25°-30' LT 14+00 ORIG)

S 70°15' E

10+00 P.O.T.

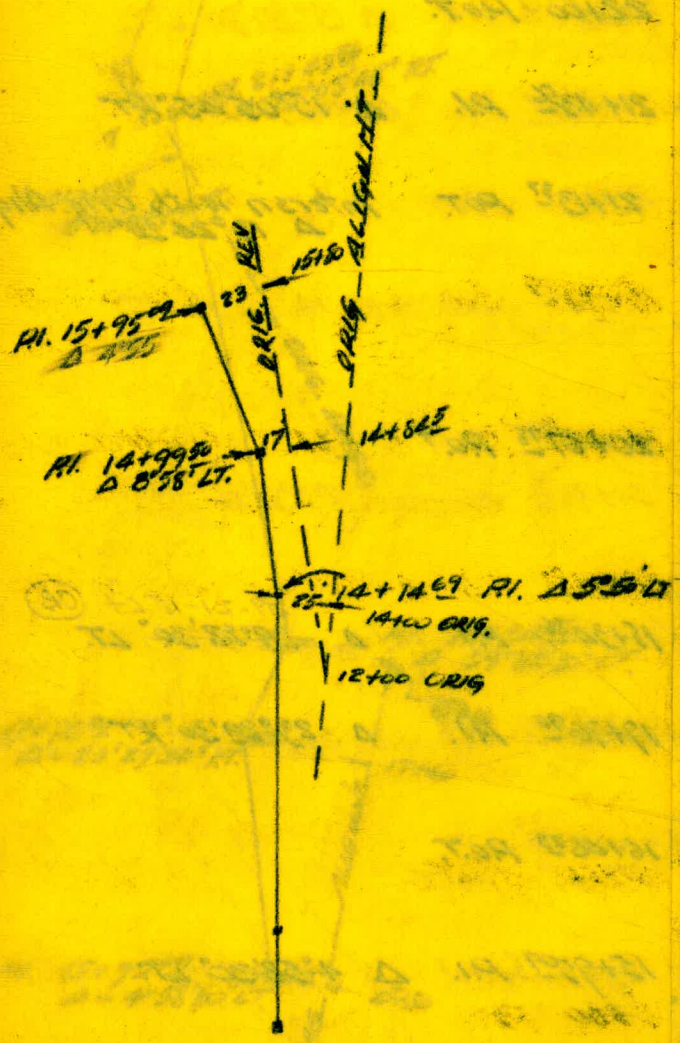
8+00 POT.

S 70°00 E

SEPT. 28, 1954
JANE LARTY

2

S.V.A CONN. R-2 REV.



San Vicente Aqueduct Conn. R-2 Rev. Alignment

24+14.75 P.I.

22+00 R.O.T.

21+43.76 P.I. Δ 15°05'45" RT.

21+13.37 P.O.T. Intersection with Orig. Align. Δ 13°24'30"

20+67.75 R.O.T.

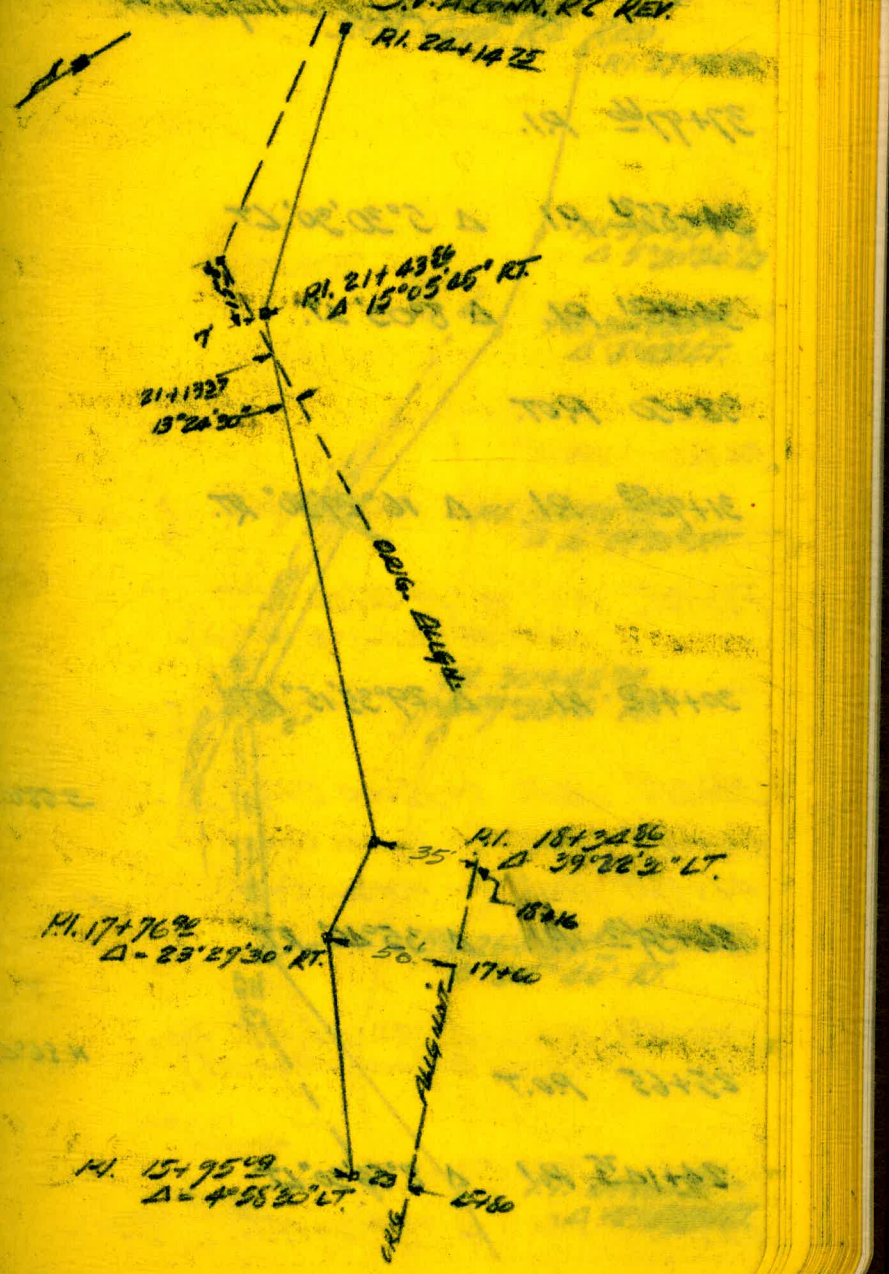
18+34.86 P.I. 39-21-N L4 (CB) Δ ~~39°32'30"~~ LT.

17+76.90 P.I. Δ 23°29'30" RT.

16+46.33 R.O.T.

15+95.09 P.I. Δ 4°58'30" LT.

S.V.A. Conn. R2 Rev.



San Vicente Aqueduct Conn
R2 Rev. Alignmt

2.

37+97.66 P.I.

2 34+85.21 P.I. Δ 5°30'30" LT

2. 34+36.21 P.I. Δ 8°03' LT.

2 32+50 P.O.T.

31+92.23 P.I. Δ 16°29'30" RT.

2

30+48.20 P.I. Δ 29°35'15" RT

S 58°0

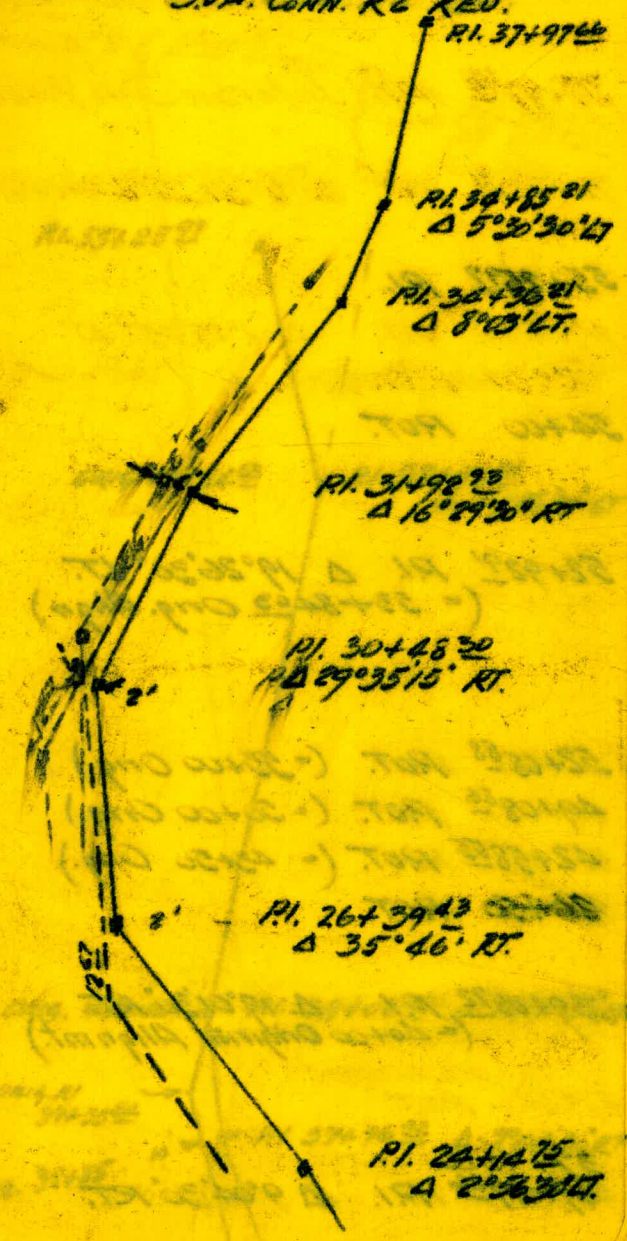
1

1; 26+39.43 P.I. Δ 35°46' RT.

1 25+65 P.O.T N 86°45

1. 24+14.75 P.I Δ 2°56'30" LT.

Sept. 30, 1934
Sunic party



5 SAN VICENTE AQUEDUCT CONN. R-2 REV. ALIGN'MT.

53+25.22 PI.

54+00 ROT.

52+92.91 PI. Δ 19°26'30" LT.
(= 53+84.63 Orig. Align)

52+08.88 ROT. (= 53+00 Orig.)
49+08.86 ROT. (= 50+00 Orig.)
42+58.52 ROT. (= 43+50 Orig.)
40+50 ROT.

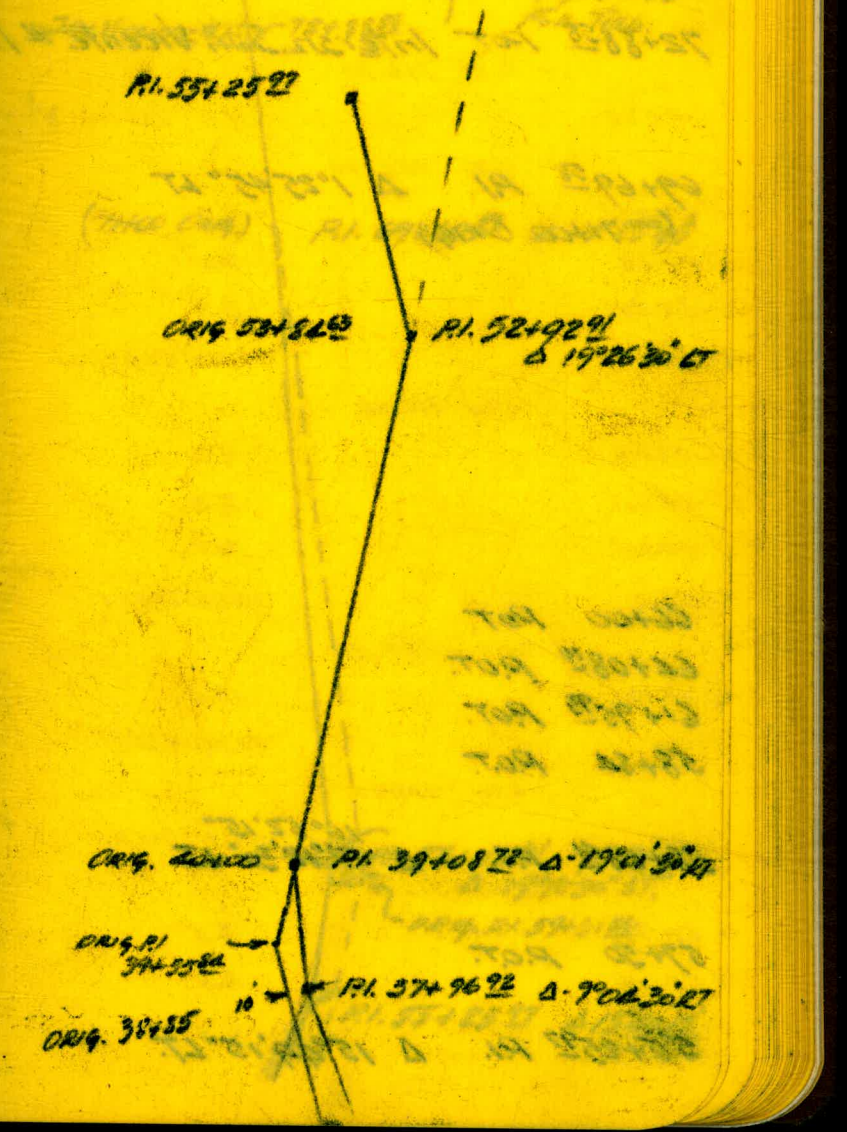
39+08.72 PI. Δ 19°01'30" Rt.
(= 40+00 Original Alignmt.)

37+96.92
~~37+97.42~~ PI. Δ 9°04'30" RT.

SCALE
OCT. 1, 1954
SAME PARTY

5

SV.A. CONN. R2 REV.



San Vicente Aqueduct Conn. R2 Rev. Alignment

75+00.95 POT. Intersn San Vicente #2

72+88.53 POT. Intersn San Vicente #1.

69+69.53 P.I. Δ 1°25'45" LT
(= 71+00 Orig)

66+00 POT.
64+08.10 P.O.T.
61+95.93 P.O.T.
58+84 P.O.T.

58+08.41 P.I. Δ 16°52'15" / 17°12'30" LT.

57+30 P.O.T.

55+25.97 P.I. Δ 15°49'15" LT.

OCT. & 1958
5,
BOOTY
SHORT
MARTELL
ALEXANDER

SVA. Conn. R-2 Rev.

San Vicente #2 ℄ 75+00.95

See FD 869-
pg. 51-53
For Ties.

San Vicente #1 ℄ 72+88.53

(71+00 Orig.) P.I. 69+69.53 Δ 1°25'45"

P.I. 58+08.41 16°52'15"
Δ 17°12'30" LT.
Orig. P.I. 59+31.84

P.I. 55+25.97 Δ 15°49'15" LT.

San Vicente Aqueduct Connection

Rev & Prof. to ℄ X Sections

		765.66	
	0.89	766.55	
P.I. 0+30			10.11 756.44
	0.46	756.90	
P.C. 0+47.01			0.7
0+65			3.2
0+74			3.3
T.P.			12.99 744.41
	0.17	744.58	
0+86			4.3
1+00			7.2
1+25			13.7
T.P.			12.52 732.06
	3.80	735.86	
1+50			13.6
T.P.			12.96 722.90
	4.32	727.22	
T.P.			12.27 714.95
	1.82	716.77	
1+70			9.8
1+75			8.2
1+90			6.3

9-28-54

Work
Kemp
Holohan

El. top So. portal

716.77

2+00		7.0	
2+05		4.8	
2+20		1.6	
T.P.		0.18	716.59
	9.77	726.36	
2+50		6.5	
3+00		1.8	
3+50		3.0	
3+55		3.1	
3+73		5.97	720.39
	1.71	722.10	
4+00		2.0	
4+15		11.3	
4+22		16.7	
4+28		14.7	
4+33		9.8	
4+50		3.5	
T.P.		1.67	720.43
	11.59	732.02	
T.P.		0.25	731.77
	5.06	736.83	
4+77.0		9.51	
5+00		3.5	

9-28-54

	736.88	
T.P.		0.14 736.60
	12.40 749.07	
5+07		13.5
5+13		12.6
5+20		10.5
5+34		8.4
5+50		5.2
5+80		1.6
T.P.		1.04 748.03
	7.21 755.24	
P.O.T.		
5+98.62		6.05 749.19
6+18		3.6
6+50		4.4
6+74.75		5.4
7+00		4.4
7+07		3.1
7+50		5.7
7+75		5.2
8+00		7.56 747.68
		12.93 742.31
	0.20 742.51	

9-28-54

Lt.

4.4
~~5.4~~ 11.7 16.2
0. 15'. 28.

5.7 12.9 15.5
0. 19'. 25.

5.2 9.7 13.7 15.7
0 10. 20. 25.

9-28-54

		742.51	
8+50		7.0	
8+60		10.0	
8+75		13.0	
T.P.		12.70	729.81
	0.71	730.52	
9+00		5.3	
9+91		9.2	
9150		8.8	
9+75		7.2	
10+00		9.2	
10+14		13.0	
		12.83	717.69 ~~707.69~~
	1.18	718.87	
10+92		13.0	
		12.64	706.03
	0.53	706.56	
10+50		4.1	
10+60		7.8	
10+72		12.5	
		12.40	694.16
	1.36	695.52	

625.52

10+92		10.7
11+00		12.3
T.P.		12.89 682.63
	0.40 689.03	
11+40		12.5
		12.84 670.19
	1.79 671.98	
11+50		6.0
11+57		8.4
~~0.85~~		8.95 663.03

combine 9-29-54

0.85 663.88

11+75		9.0
11+90		7.8
12+00		11.2
		12.57 651.31
	1.16 652.47	
12+15		5.8
12+27		11.2
		12.50 639.97
	6.54 646.51	

Left

10/0	6.2/16	3.6/26
11.2/0	14.5/16	11.3/27

646.51

12+50	11.2
12+75	11.4
12+92	12.2
13+00	9.6
13+09	10.9
13+15	8.2
13+25	6.0
13+50	3.1
13+78	2.1
14+00	3.6
P.I. 14+14.69	4.19 642.32
0.92 643.24	
14+32	3.0
14+50	9.5
14+51	12.0
14+59	9.9
14+60	9.2
14+68	12.6
14+72	12.5
14+76	7.2

Left

11.2/0	11.8/7	6.9/25	10.6/36	
11.4/0	13.4/10	12.6/11	13.1/11	15.2/36
9.6/0	11.9/20	14.8/28		
6.0/0	8.8/18	10.0/27		
13+50 2.1/0	7.4/25			
3.6/0	5.6/19	14.3/28		

643.24

14+92.50 0.87 642.37

13.03 655.40

0.10 655.30

12.85 668.15

15+50 11.3

1.09 667.06

Pl. 13.16 680.22

15+95.09 9.49

16+00 ~~7.8~~ ~~6.2~~

16+05 6.7

16+25 3.9

P.O.T.

16+47 46.23 2.43 677.79

6.12 683.91

16+50 6.0

16+75 7.0

17+00 5.3

17+50 4.2

Pl.

17+77.70 3.36 680.53

4.15 684.68

17+77.70 4.2

17+97 3.1

9-29-54

16+46

6.0/0 7.9/7 11.4/19 14.5/27

5.5/0 8.6/10 11.7/14 14.5/21 16.8/31

11+60 9.2/0 6.1/5 8.4/14 ~~12.6~~ 13.6/26

686.5 678.1 675.2 671.5 669.2

12/0 6.6/7 9.5/15 13.2/22 15.5/29

Red. 4-26-55
Ayling

		684.68	
18+00			3.3
			8.93 676.25
	2.36	678.61	
18+50			11.0
			12.45 666.16
	3.80	669.96	
18+61			10.5
18+71			5.2
18+82			0.2
	~~12.73~~	~~681.90~~	0.19 669.77
	12.13	681.90	~~0.79~~
			0.77 681.13
	12.60	693.73	
18+90			12.6
18+97			2.7
19+00			8.9
			0.23 693.50
	12.42	705.92	
19+25			11.3
19+50			2.1
			0.75 ~~705.17~~

9-29-54

Left

Pt. of angle $\frac{3.3}{0}$ $\frac{5.3}{4}$ $\frac{7.5}{8}$ $\frac{16.2}{26}$

$\frac{11.0}{0}$ $\frac{15.0}{13}$ $\frac{17.4}{20}$ $\frac{19.9}{23}$

Set T.B.M. on rock 18+60, 20' Rt. creek bottom.

Right Left

$\frac{9.0}{25}$ $\frac{4.8}{72}$ $\frac{8.9}{0}$ $\frac{11.2}{73}$ $\frac{12.6}{28}$

$\frac{+9.1}{26}$ $\frac{+2.0}{26}$ $\frac{0.5}{14}$ $\frac{2.1}{8}$ $\frac{2.1}{0}$ $\frac{4.9}{15}$ $\frac{2.8}{23}$

Contour profiles

9-30-54

		705.17
	12.94 718.11	
19+60		2.2
19+73		1.2
19+83		0.1
		0.10 718.01
	12.16 730.17	
20+00		0.4
20+11		2.5
		0.25 729.92
	12.28 742.20	
20+50		3.7
20+60		0.3
		0.06 742.14
	12.13 754.27	
20+67.78		10.5
20+84		1.0
21+00		3.0
21+19		0.2
		0.57 753.70
	5.71 759.41	

15

Right Left

+0.4/23 2.0/17 3.7/7 6.4/0 10.0/13 12.9/20 14.2/25

3.7/0 8.0/11 10.4/17 12.8/26

3.0/0 8.8/14 14.0/26

759.41

P.I.

21+43.56		2.45	756.96
21+50		2.0	
21+81		2.7	
22+00		7.2	
22+13		12.0	
		12.53	746.88
	0.77 747.65		
22+36		8.0	
	~~.54~~	12.78	734.87
	0.59 735.41		
22+50		1.2	
22.60		5.5	
22+70		9.0	
		12.61	722.80
	0.16 722.96		
23+00		11.4	
		12.70	710.26
	0.09 710.35		
23+11		3.0	
23+25		11.3	
		11.20	699.15

9-30-54

9-30-54

		699.15
	0.30	699.45
23+43		5.5
23+50		7.8
23+54		11.7
	12.68	686.77
	6.42	693.19
23+62		11.6
23+71		11.6
23+80		6.0
23+91		4.4
24+00		1.7
	0.40	692.79
	12.20	704.99
P.I. 24+14.75		10.75
		694.24
24+50		3.0
	0.51	704.48
	12.42	716.90
24+76		0.6
	0.63	716.27
	13.00	729.27
24+90		5.7
25+00		1.0

729.27

0.71 728.56

12.38 740.94

25+18 5.4

25+32 0.0

0.03 790.91

12.11 753.02

25+50 6.2

25+60 3.1

0.03 752.99

0.29 759.28

25+90 4.5

26+00 3.6

26+22 1.1

Pl.
26+39 63

5.76 753.52

1.95 759.97

26+50 1.2

26+71 1.6

27+00 4.8

27+25 10.0

12.69 742.28

0.04 742.32

27+50 2.9

9-30-54

		742.32	
28+00			13.3
			13.31 729.01
	3.77	732.78	
28+11			6.4
28+26			10.6
28+50			4.7
28+70			0.5
			0.19 732.59
	12.55	745.14	
29+00			5.0
			0.22 744.92
	11.77	756.69	
29+22			10.4 ~~16.7~~
29+50			6.8
30+00			2.6
30+19			2.4
P.I. 30+48.30			4.63 752.06
	6.57	758.63	
30+80			4.6
31+00			4.3
31+50			4.1
31+60			5.5

		758.63	
31+92.93			6.28 752.35
	1.19	753.54	
32+00			1.1
32+35			4.3
32+50			6.1
			12.82 740.72
	0.34	741.06	
32+73			4.2
33+00			10.7
			12.75 728.31
	0.38	728.69	
33+36			13.2
			12.81 715.88
	0.44	716.32	
33+42			2.0
33+50			6.5
			12.14 704.18
	0.02	704.20	
33+68			3.1
33+76			5.3
			8.88 695.32
	0.13	695.44	

Continue Profile

695.94

33+90		9.8	
34+00		8.1	
		12.89	682.55
	0.42	682.97	
34+28		8.0	
		12.76	670.21
	0.93	671.14	
P.I.			
38+36.21		2.56	668.56
39+50		9.8	
39+53		11.0	
34+59		11.4	
34+61		10.6	
		0.05	671.09
	12.37	683.46	
P.I.			
34+85.21		12.15	671.31
35+00		6.5	
		0.02	683.44
	12.48	695.92	
35+25		11.3	
35+33		9.4	
35+50		2.7	
		0.30	695.62
	10.16	705.78	

705.78

35+62		9.0
35+83		3.9
		0.13 705.65
	10.84 716.49	
36+00		8.1
36+22		2.1
		0.31 716.18
	12.58 728.76	
36+89		7.7
36+50		4.2
		0.19 728.57
	1.68 730.25	
P.T. 37+00		0.95 727.80
	12.53 750.33	
37+20		8.5
37+50		2.0
		0.18 750.15
	1.57 737.72	
37+80		6.0
P.I. 37+92		6.07
38+00		6.6
38+13		4.6
38+50		4.2

10-1-54

10-1-57

737.72

39+00		7.5	
P.I.			
39+08.12		8.50	749.22
	0.90 750.12		
39+50		8.7	
39+79		6.0	
40+00		7.3	
40+17		9.0	
40+41		11.7	
		12.70	737.42
	0.45 737.87		
P.O.T.			
40+50		1.2	
41+00		10.5	
		12.59	725.28
	0.14 725.42		
41+30		2.9	
41+50		7.3	
		12.70	712.72
	0.71 713.43		
41+87		5.6	
42+00		7.7	
42+28		13.0	
		12.83	700.60
	0.40 701.00		

10-1-54

	701.00		
42+34		2.9	
42+50		7.3	693.7
		11.89	689.11
	0.21	689.32	
43+00		7.6	
		12.94	676.38
	0.62	677.00	
43+30		4.0	
43+50		9.6	
		12.63	664.37
	0.21	664.58	
43+71		2.6	
44+00		9.9	
		12.62	651.96
	0.30	652.26	
44+29		4.7	
44+50		8.6	
44+70		12.9	
		12.66	639.60
	0.54	640.14	
44+85		5.5	
45+00		10.7	629.4

640.14

12.89 627.25

0.58 627.83

45+15	3.0
45+50	7.3
45+59	1.9
45+65	12.9
45+76	10.3
45+84	10.1
46+00	6.4
46+07	5.8
46+10	3.7
46+26	10.7
46+44	6.8
46+50	7.6 620.7
46+55	4.8
46+65	9.3
46+78	9.3
46+93	4.5
47+00	1.3

0.44 627.39

11.86 639.25

41+33	3.5

25

		632.25	
47+50			0.6
	12		0.04 639.21
	12.91	692.12	
48+00			9.4
48+18			8.3
48+50			2.0
48+70			0.6
			0.21 651.91
	12.78	664.66	
48+82			12.8
48+98			8.8
49+00			6.9
49+05			5.2
49+15			5.3
49+40			0.3
			0.27 664.39
	13.06	677.45	
49+50			11.5 666.0
49+78			8.1
49+88			5.0
50+00			3.2
50+29			0.6

26

		677.45	
			0.55 676.90
	11.26	688.16	
50+50			9.2
50+77			3.6
			0.24 687.92
	12.40	700.32	
51+00			10.9
51+24			3.0
51+35			0.5
			0.14 699.88
	12.77	712.65	12.77
51+50			9.9
51+80			0.8
			0.30 712.35
	12.30	724.65	
52+00			4.6
			0.60 724.05
	11.96	736.01	
52+20			10.5
52+40			3.6
52+50			0.9 735.11
			0.36 735.68
	12.34	747.99	

10-9-57

747.99

52+82		3.1	
		0.11	747.88
	11.39	759.27	
53+02		7.0	752.3
53+21		5.5	
53+23		3.9	
53+36		1.4	
		0.85	758.42
	9.80	768.22	
53+50		8.4	
53+80		5.6	
54+00		2.9	
		5.34	762.88
	1.33	764.21	
54+13		2.7	
54+50		6.4	
55+00		11.0	
55+10		13.1	
		12.86	751.35
	1.44	752.79	
P.I. 55+25.97		4.45	748.34
55+50		7.1	

base 10'x10'x10' rock

P.I.
52+92.91 P.I. Top rock 755.12 Elev.
base of rock

pile of 5 6'x6'x6' rocks

base 6'x6'x6' rock

752.79

12.92 739.87

54+97 0.33 740.20

56+80 3.3

56+06 5.7

56+21 9.9

56+50 13.6

12.42 727.78

0.92 728.86

56+62 3.7

56+65 4.8

57+00 5.0

57+08 7.8

12.38 716.32

1.83 714.15

57+13 9.5

57+23 12.9

57+33 9.3

57+50 7.5

57+69 12.6

57+80 12.56 717.59

1.73 715.32

57+89 6.1

10-4-54

Continued on ... page ...

713.32

57+91		9.1	
58+00		11.9	
		12.02	701.30
	0.90	702.20	
58+06.41		0.24	
" " .		3.0	
58+26		8.1	
		12.36	687.84
	0.63	690.47	
58+50		0.7	
58+62		4.7	
58+84		11.7	
		12.76	677.71
	0.26	677.97	
58+90		1.6	
58+96		6.2	
59+00		8.9	
		12.70	665.27
	0.22	665.49	
59+11		4.4	
59+23		9.2	
59+36		13.3	
		12.89	652.60
	0.76	653.36	

10-9-54

RAILROAD CURVE
AND
CTION TABLES

Top 2x3x4' rock
Ground

Continued in F.B. 873
pgs 55-62

F.B. 898 A

pp (1-6)

Final Stations (based on Field Survey)

1

San Vicente Aqueduct Conn. R-2 Revised Alignmt.

8+00 P.O.T.

6+74.75 ~~6+71.38~~ P.O.T. (= 6+47.47 ~~6+44.06~~ Orig. Align.)
Δ 10°06' RT to P.I. 7+45.31
10°02'30" RT.

S 70°00' E

4+77.00 ~~4+73.96~~ P.I. Δ 10°02'30" LT ~~10°03'07" LT.~~

S 60°10' E

3+73.96 P.I. Δ 9°12'15" LT.

S 51°00 E

0+97.01 ~~0+97.12~~ P.O.T.

0+30 P.O.T.

0+10 P.I. Δ 42°29'15" RT. (Not set)

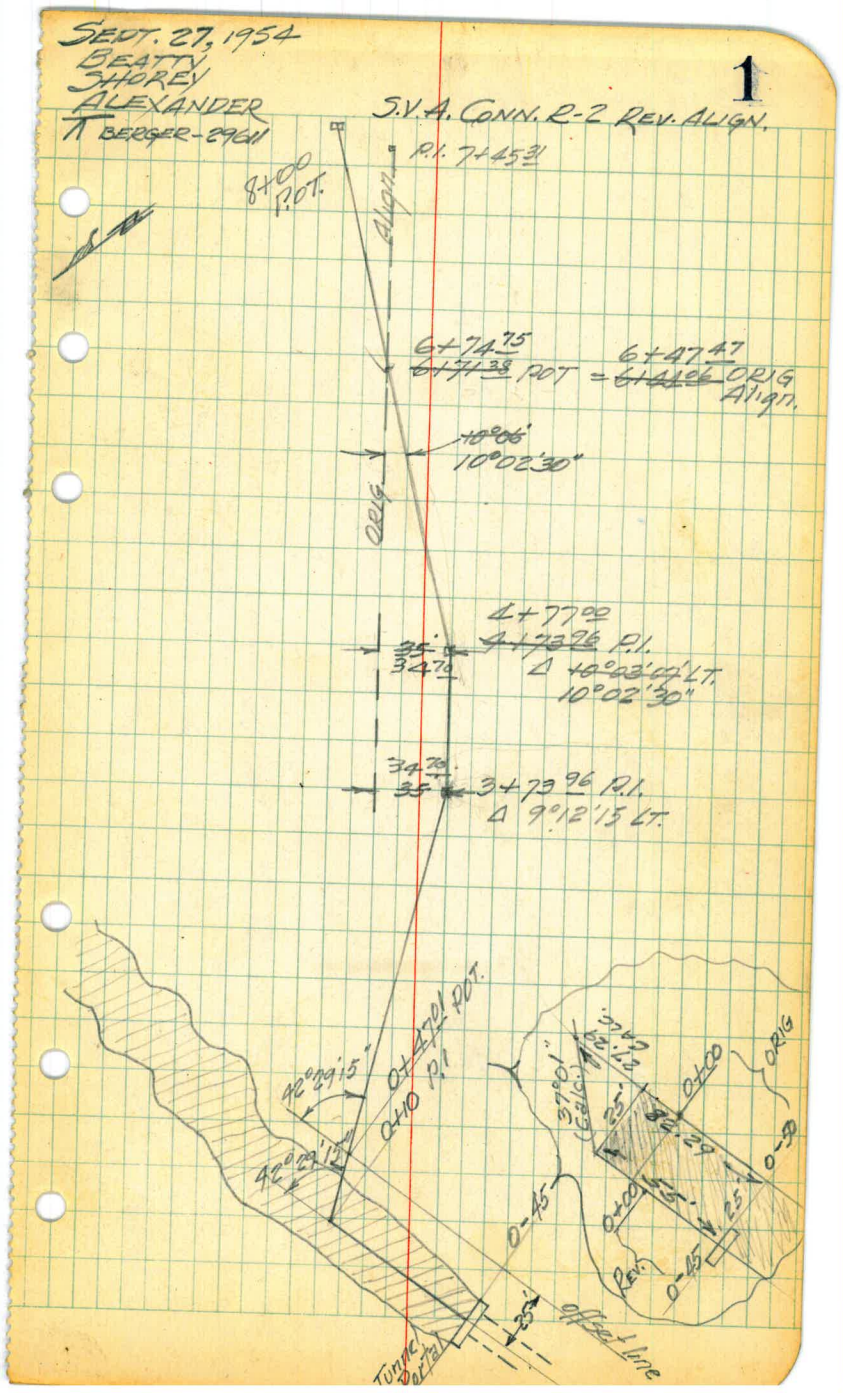
0+00 In discharge Channel (Not set)

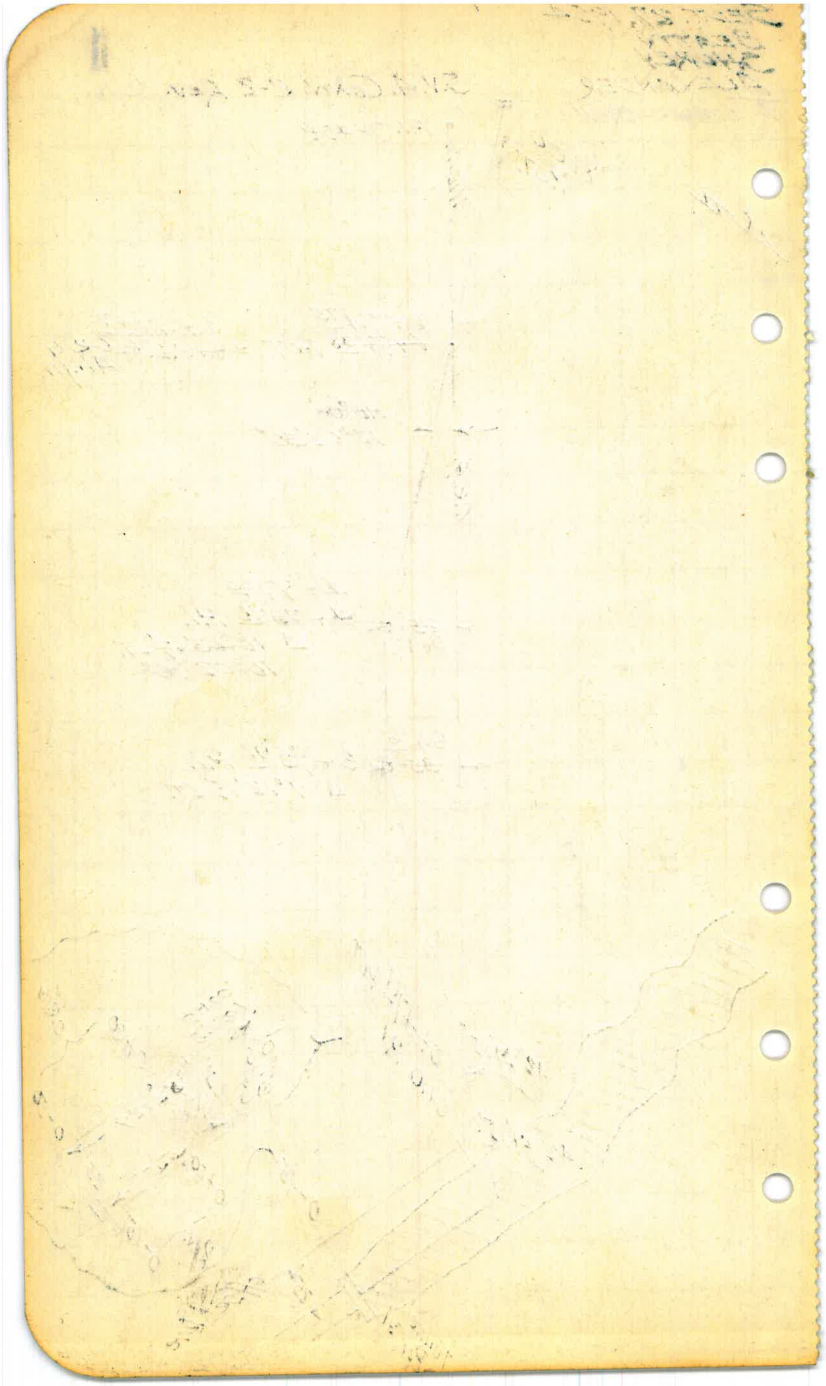
0-45 Face Tunnel Portal

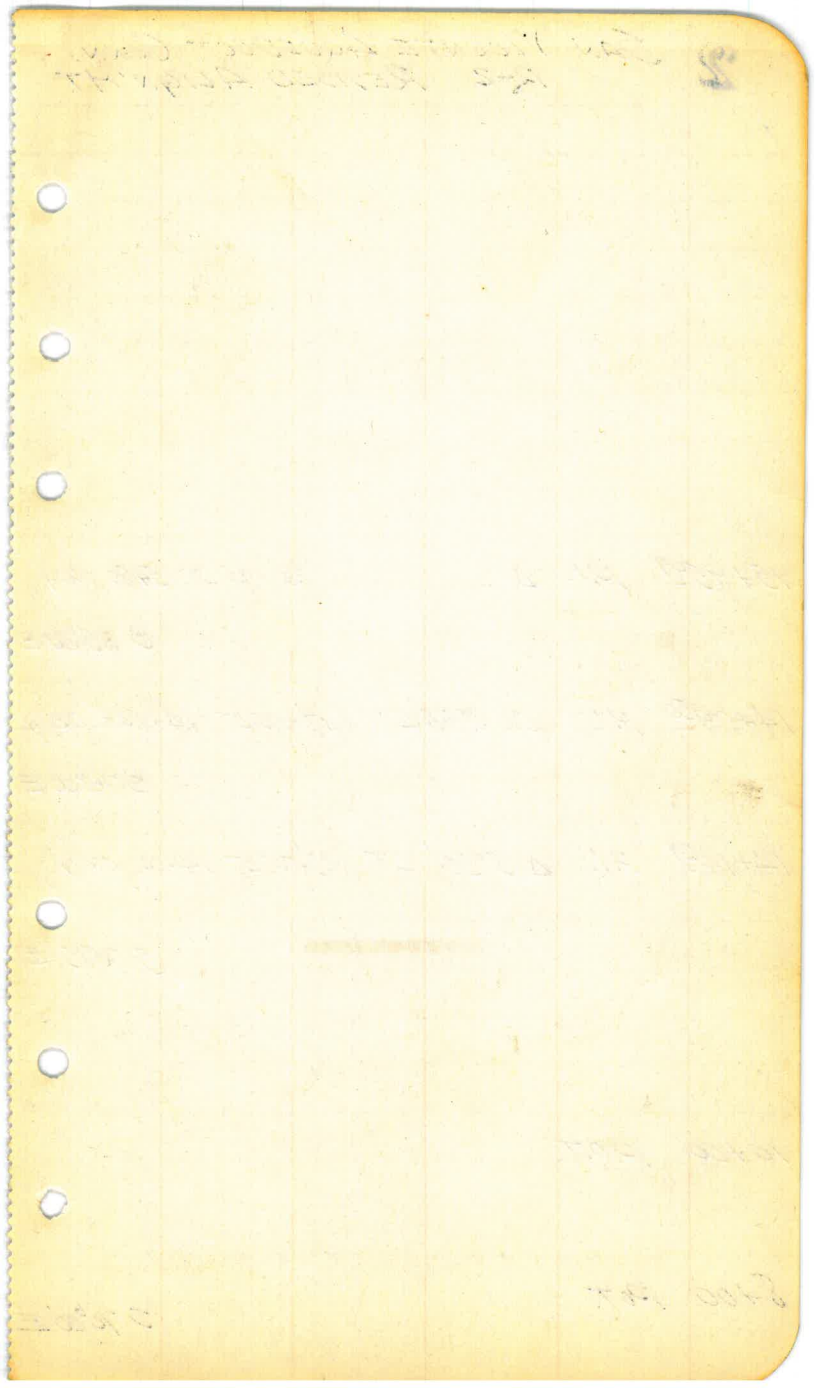
SEPT. 27, 1954
BEATTY
SHOREY
ALEXANDER
& BERGER - 2961

1

S.V.A. CONN. R-2 REV. ALIGN.







2 SAN VICENTE AQUEDUCT CONN. R-2 REVISED ALIGN'MT.

15+95.09 P.I. Δ (23'-90° LT 15780 ORIG.)

S 85°00 E

14+99.50 P.I. Δ 8°58' LT (17'-90° LT 14+84.5 ORIG)

S 76°00 E

14+14.69 P.I. Δ 5°50' LT (25'-90° LT 14+00 ORIG.)

S 70°15' E

10+00 P.O.T.

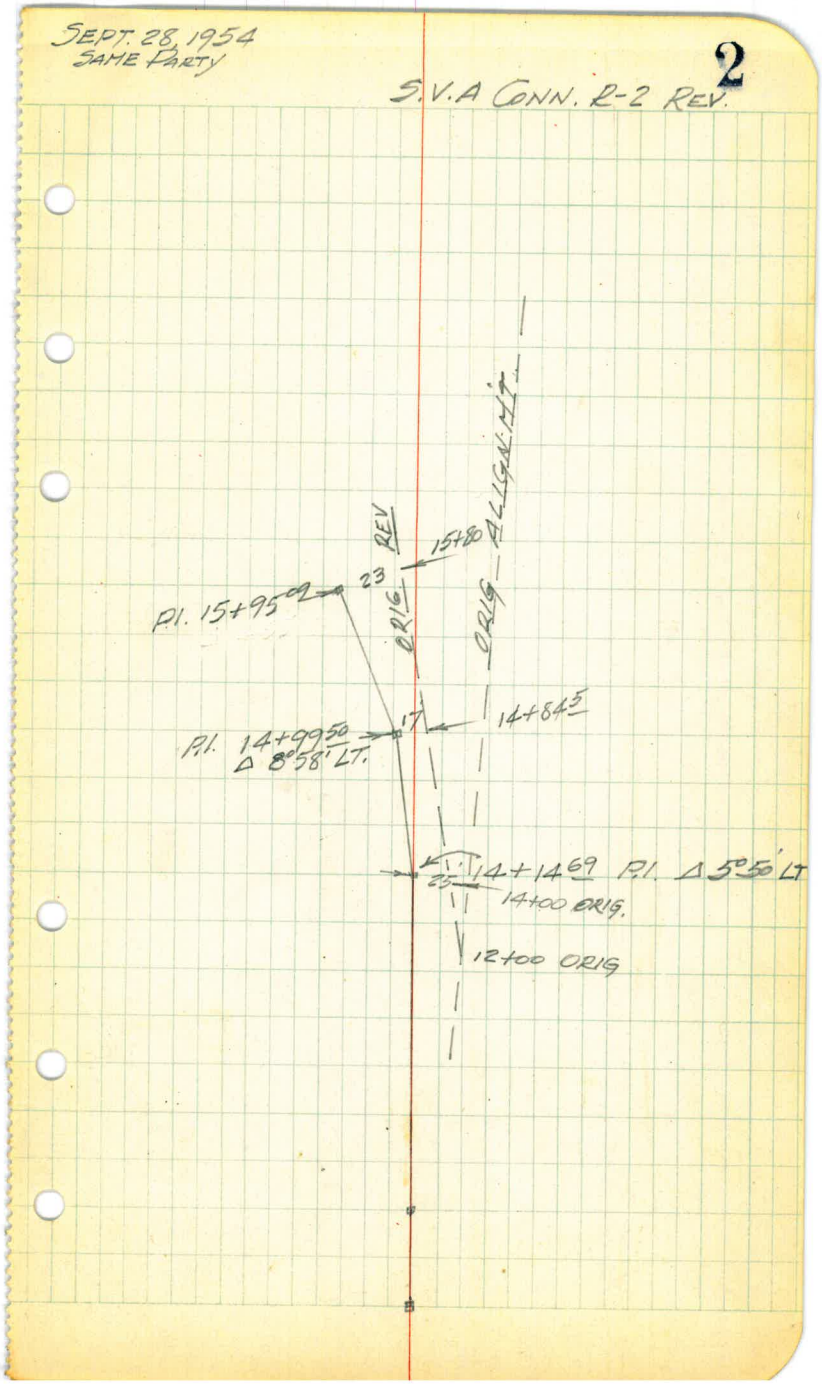
8+00 P.O.T.

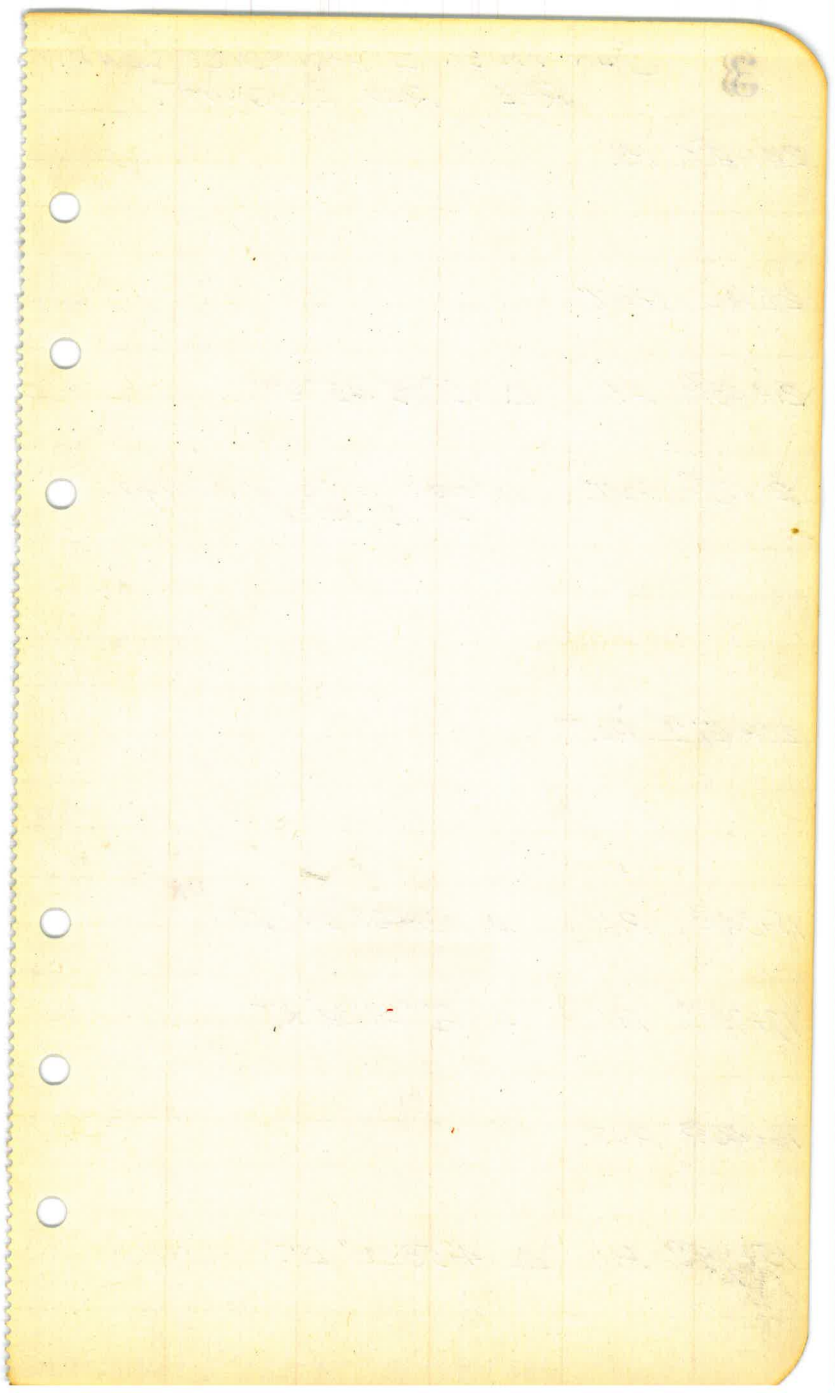
S 70°00 E

SEPT. 28, 1954
SAME PARTY

2

S.V.A CONN. R-2 REV.





3

SAN VICENTE AQUEDUCT CONN.
R-2 REV. ALIGNMT.

24+14.25 P.I.

22+00 P.O.T.

21+43.76 P.I. Δ 15°05'45" RT.

21+13.37 POT. Intersin with Orig. Align.
Δ 13°24'30"

20+67.78 P.O.T

18+34.86 P.I Δ ~~39°22'30"~~ LT. OK

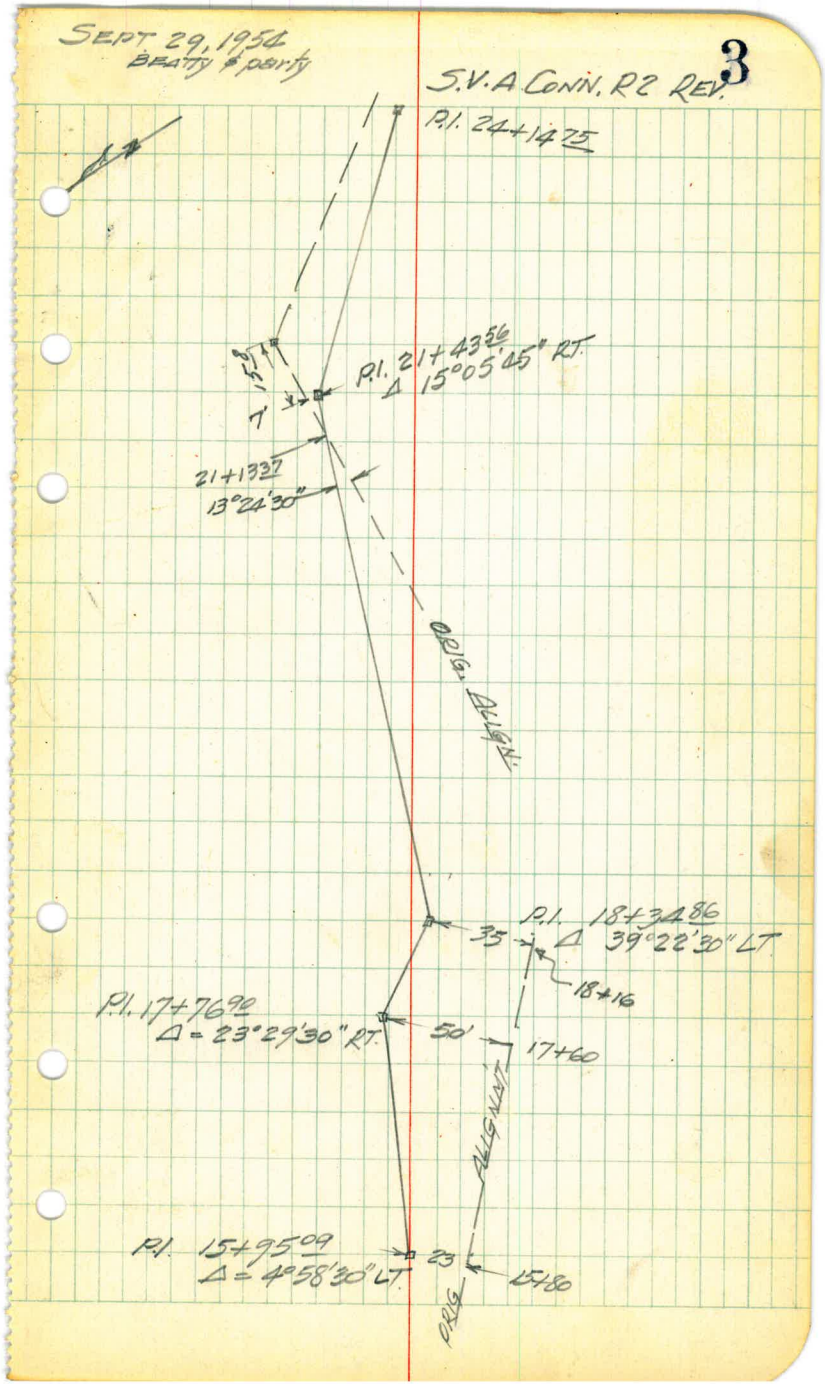
17+76.90 P.I. Δ 23°29'30" RT.

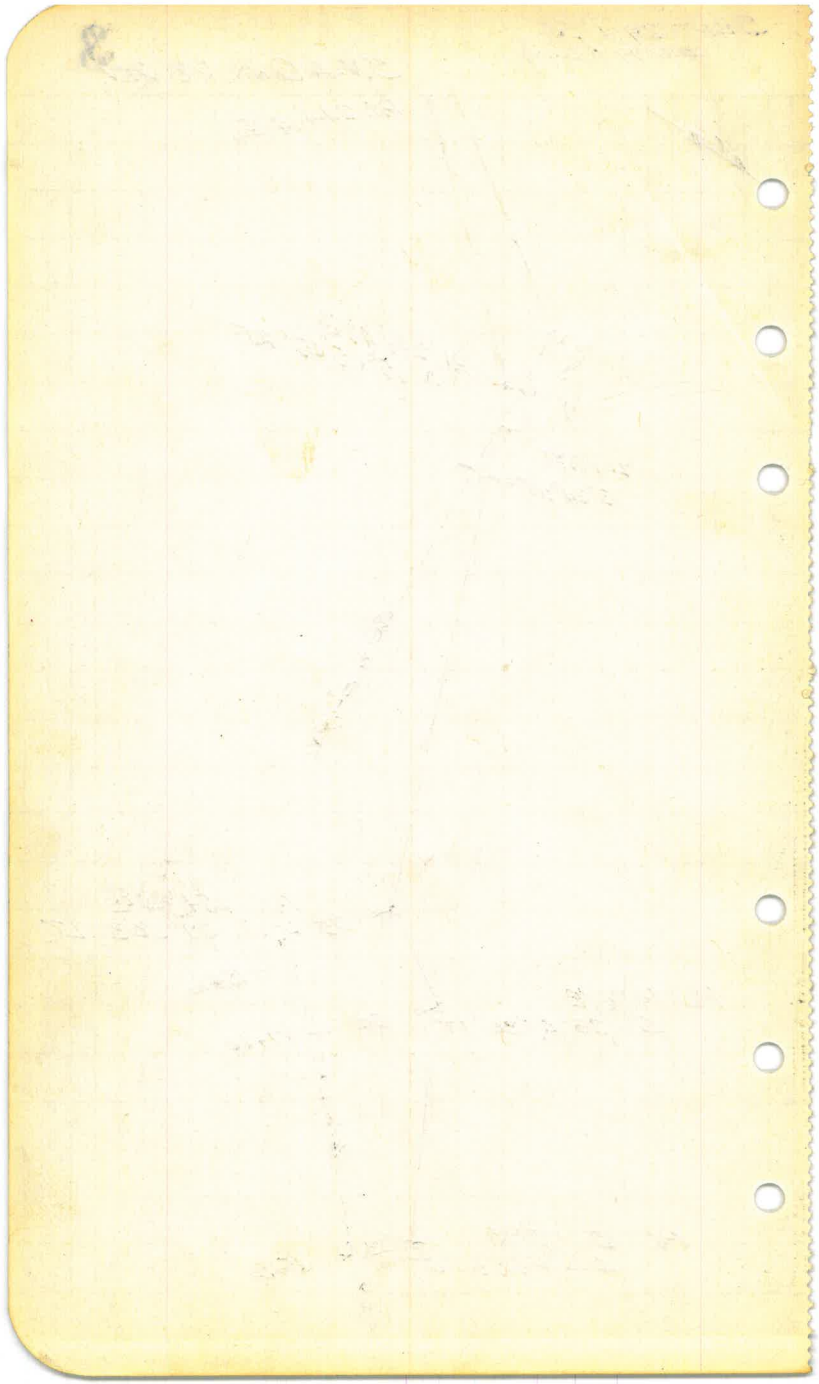
16+46.23 P.O.T.

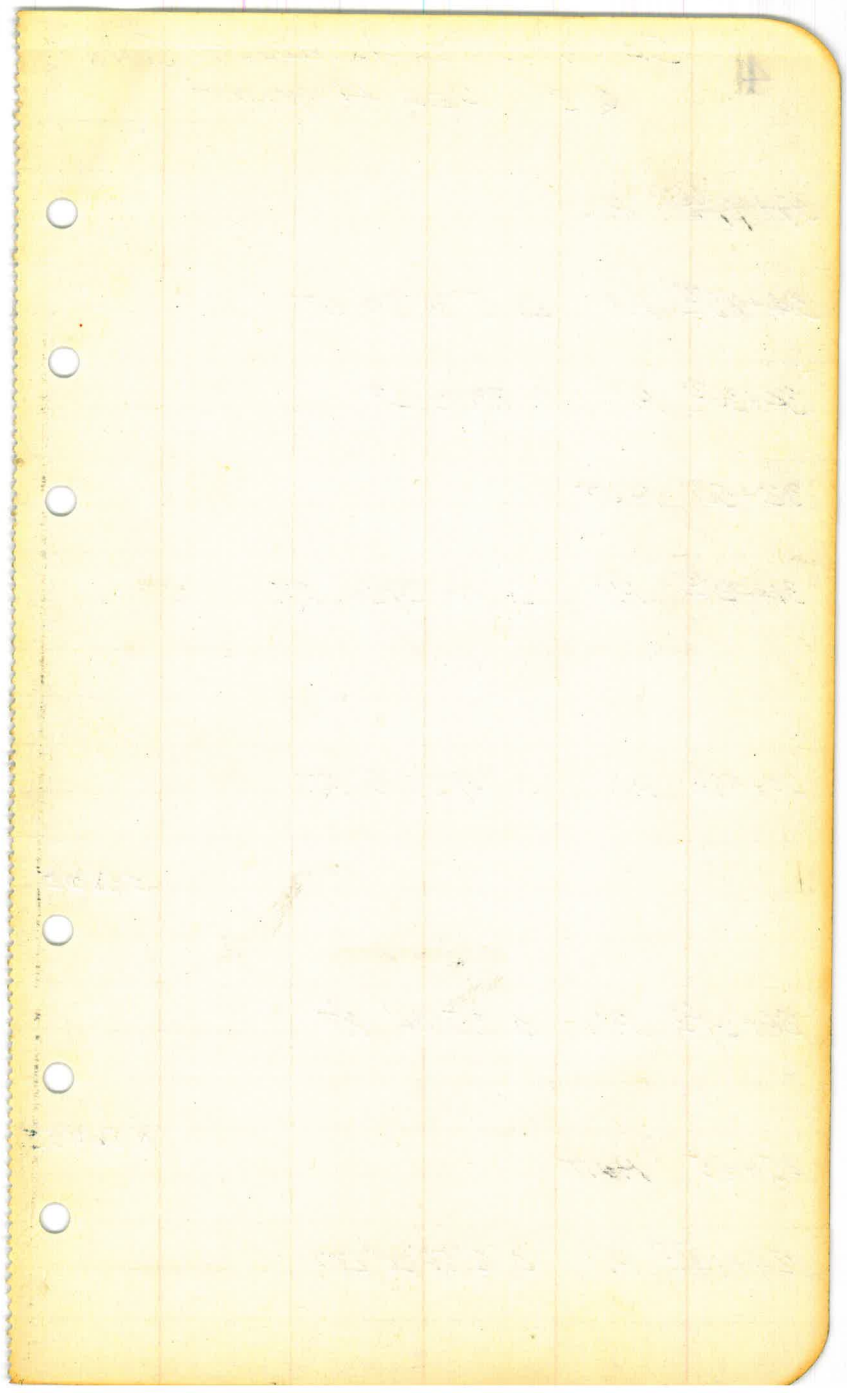
15+95.29 P.I. Δ 4°58'30" LT.

SEPT 29, 1954
BEATTY & DOBIE

S.V.A CONN. R2 REV. 3







4

SAN VICENTE AQUEDUCT CONN
R2 REV. Alignmt

~~37+99.46~~ P.I.

34+85.21 P.I. Δ 5°30'30" LT

34+36.21 P.I. Δ 8°03' LT.

32+50 P.O.T.

31+92.93 P.I. Δ 16°29'30" RT.

30+48.30 P.I. Δ 29°35'15" RT

S 58°30 E

26+39.43 P.I. Δ 35°46' RT.

N 86°45 E

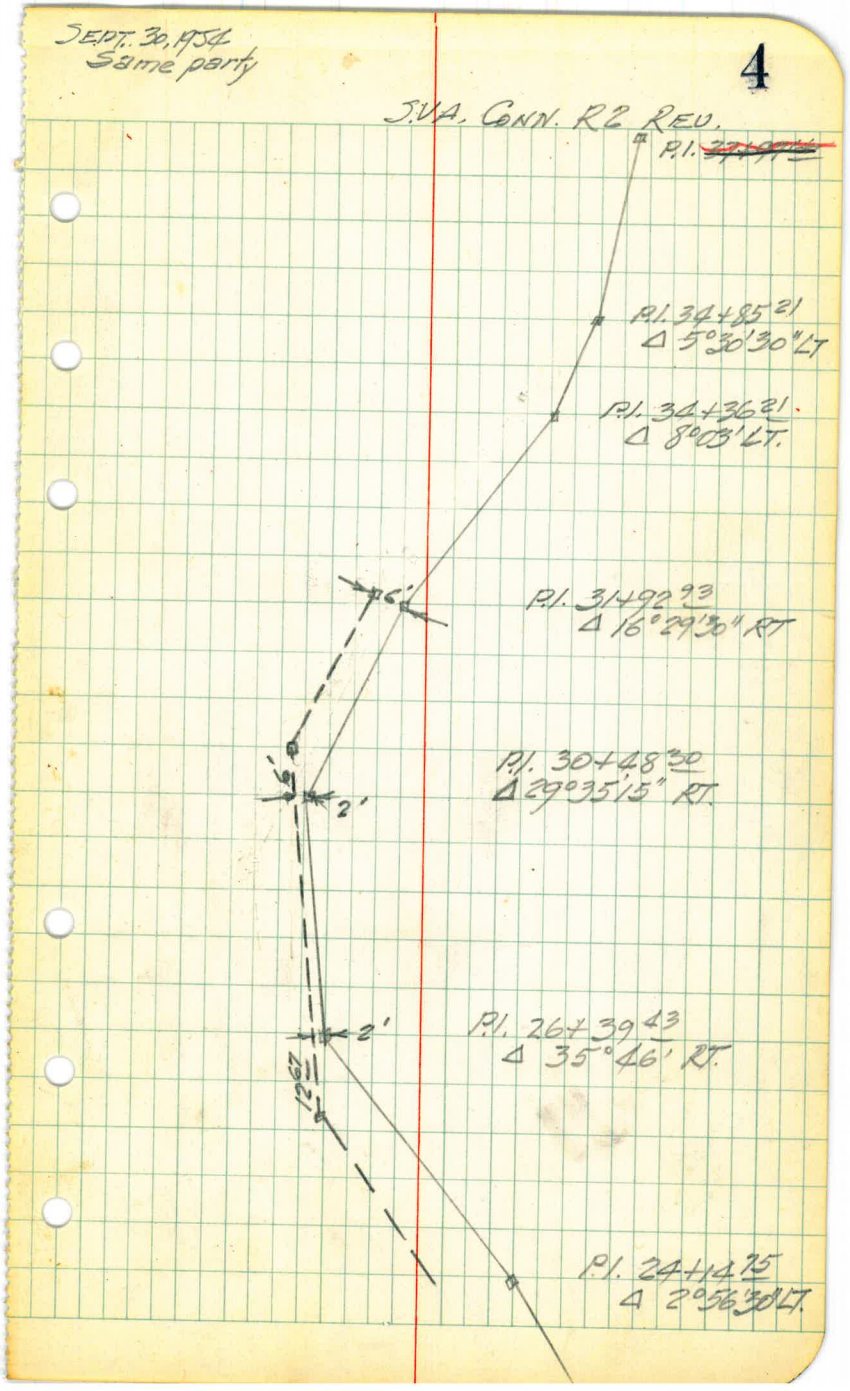
25+65 P.O.T

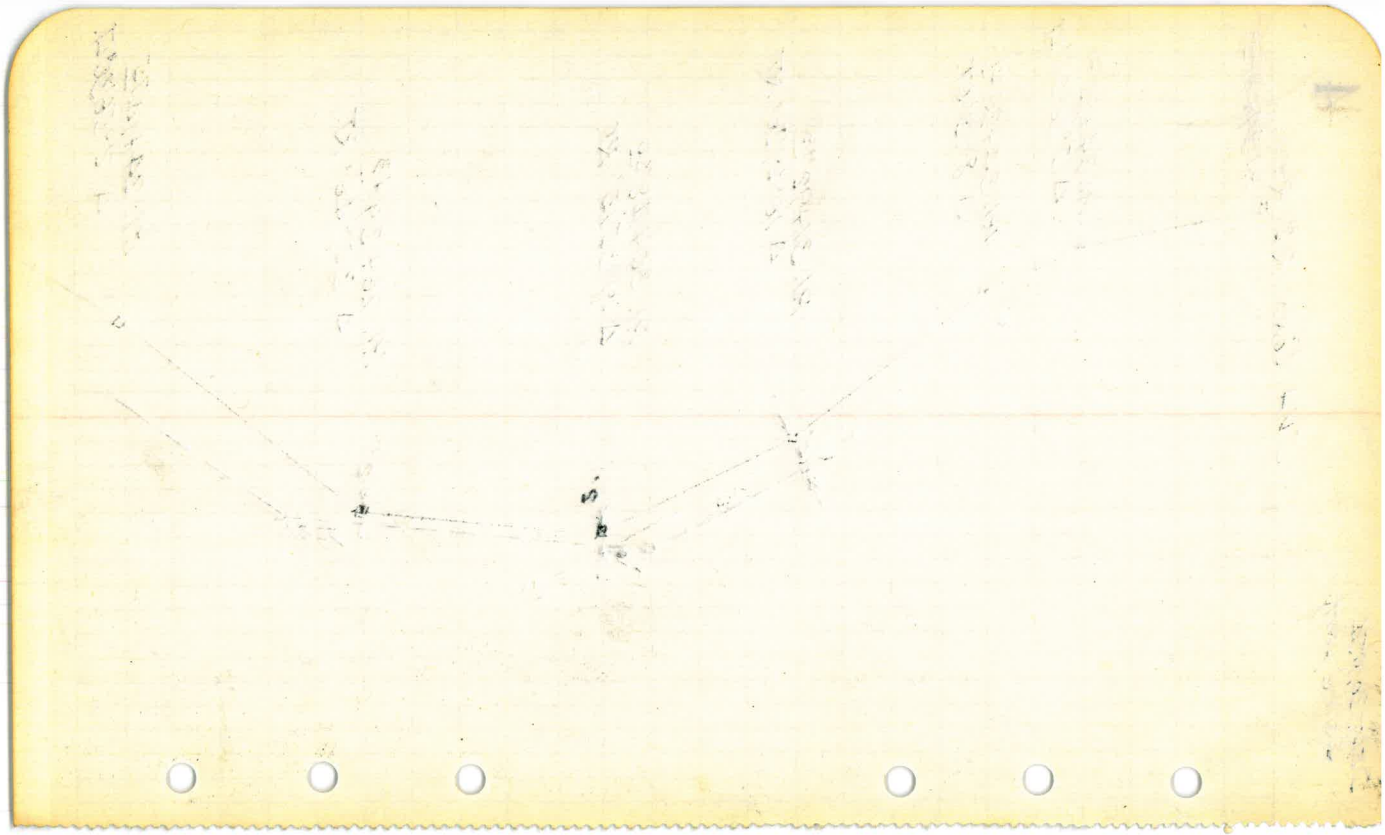
24+14.75 P.I Δ 2°56'30" LT.

SEPT. 30, 1954
Same party

4

J.V.A. CONN. R2 REV.





5 SAN VICENTE AQUEDUCT CONN. R-2 REV. ALIGN'MT.

55+25.97 P.I.

54+00 P.O.T.

52+92.91 P.I. Δ 19°26'30" LT.
(= 53+84.63 Orig. Align.)

52+08.88 P.O.T. (= 53+00 Orig.)
49+08.86 P.O.T. (= 50+00 Orig.)
42+58.53 P.O.T. (= 43+50 Orig.)
40+50 P.O.T.

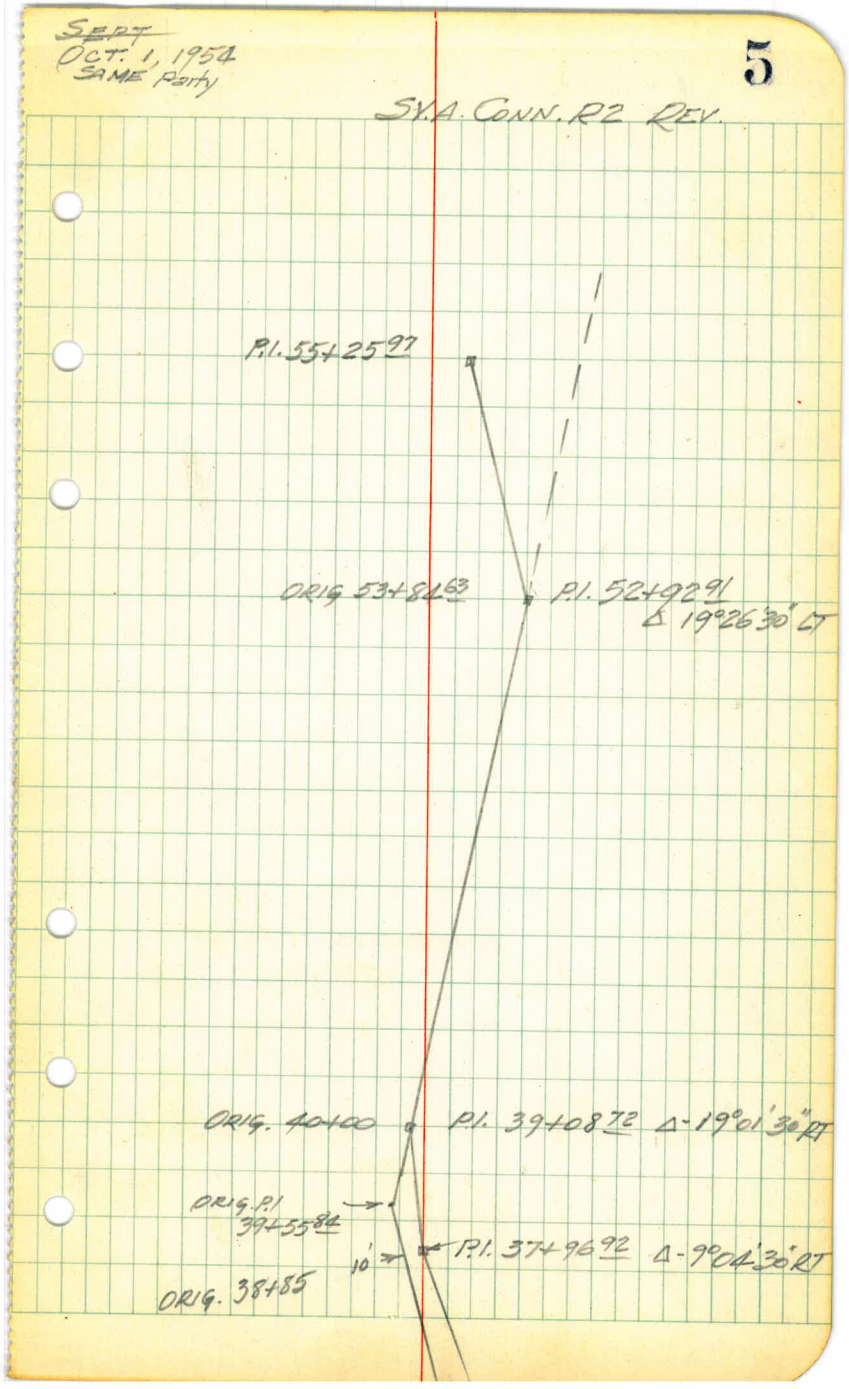
39+08.92 P.I. Δ 19°01'30" RT.
(= 40+00 Original Alignmt.)

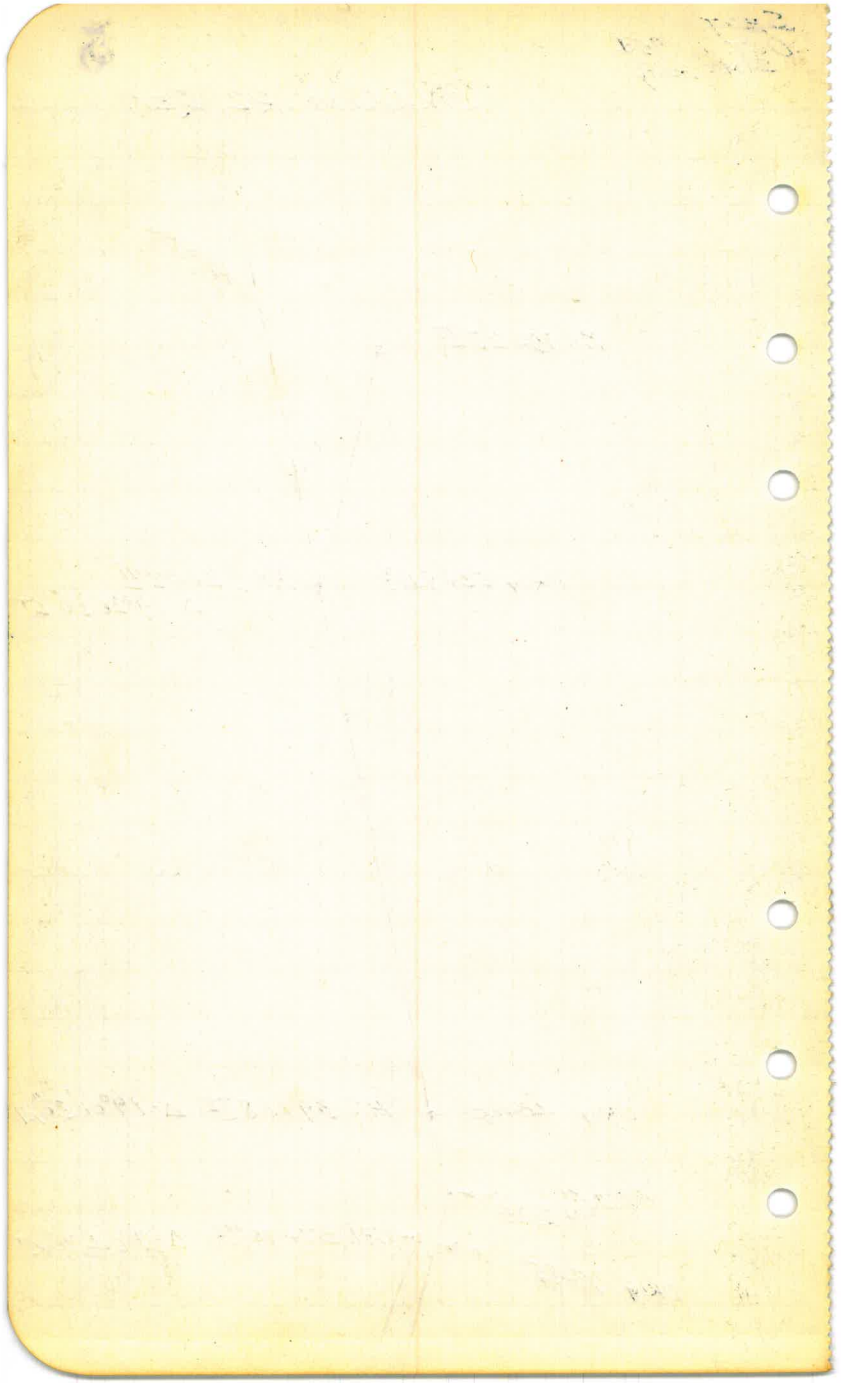
37+96.92
~~37+97.44~~ P.I. Δ 9°04'30" RT.

SEPT
OCT. 1, 1954
SAME Party

5

SY. A. CONN. R2 REV.





6 San Vicente Aqueduct Conn.
R2 Rev. Alignment

75+00.95 POT. Intersn San Vicente #2

72+88.58 POT. Intersn San Vicente #1

69+69.58 P.I. Δ 1°25'45" LT
(= 71+00 Orig)

66+00 POT.
64+08.9 P.O.T.
61+95.93 P.O.T.
58+84 P.O.T.

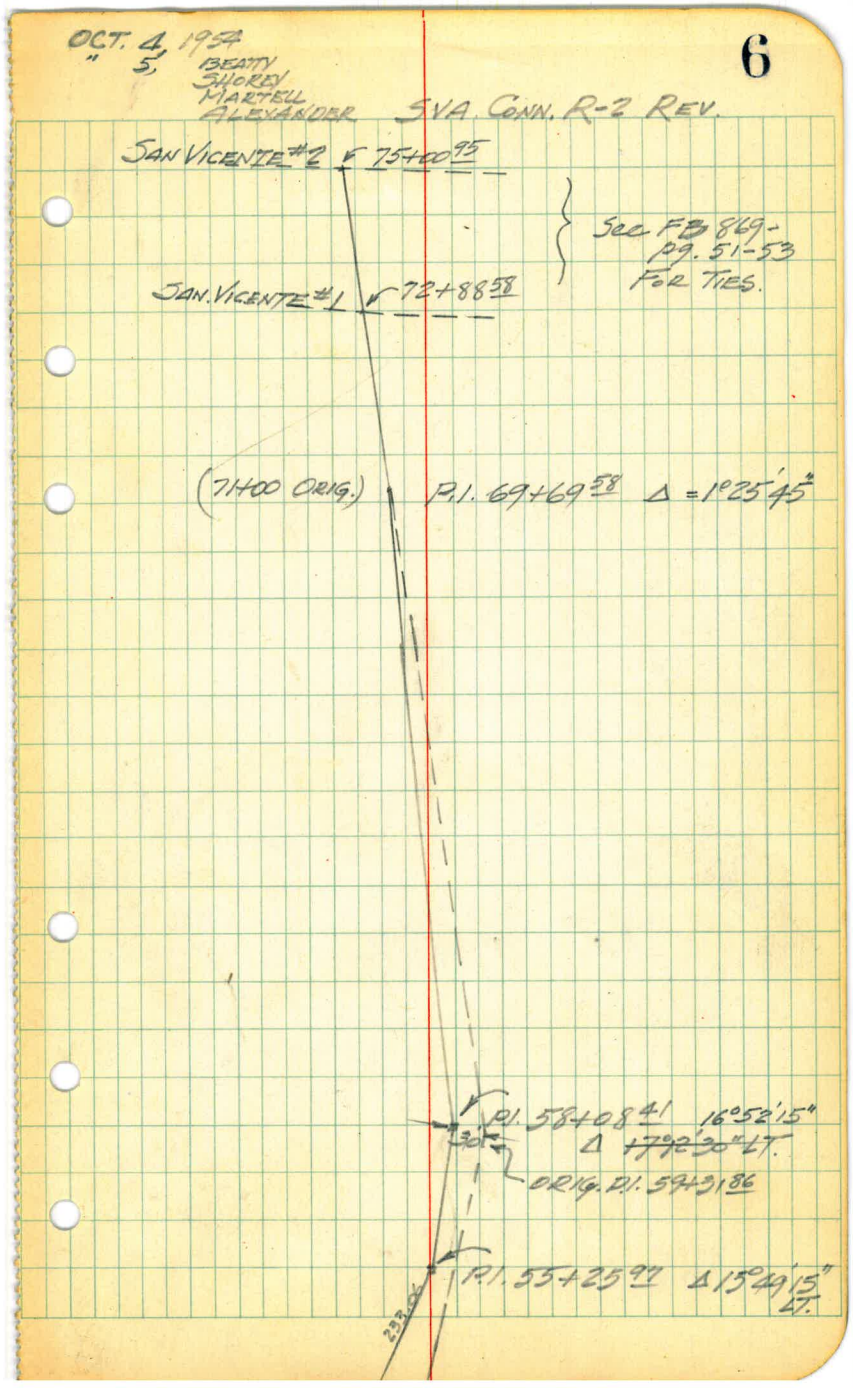
58+08.41 P.I. Δ 16°52'15" / 17°42'30" LT.

57+50 P.O.T.

55+25.97 P.I. Δ 15°49'15" LT.

OCT. 4 1954
" 5
BEATTY
SHOREY
MARTELL
ALEXANDER

SVA. CONN. R-2 REV.



F.B. 898A

pp 7-30

Final Alignment Profile

(based on Field Survey)

Cont. F.B. 873
pp. 55-62

7

San Vicente Aqueduct Connection

Rev. & Profile & X Sections

			765.66	
	0.89	766.55		
P.I. 0+30			10.11	756.44
	0.46	756.90		
P.O.T. 0+47.01			0.7	756.2
0+65			3.2	753.7
0+74			9.3	747.6
T.P.			12.49	744.41
	0.17	744.58		
0+86			4.3	740.28
1+00			7.2	737.38
1+25			13.7	730.88
T.P.			12.52	732.06
	3.80	735.86		
1+50			13.6	722.26
T.P.			12.96	722.90
	4.32	727.22		
T.P.			12.27	714.95
	1.82	716.77		
1+70			4.8	711.97
1+75			8.2	708.57
1+90			6.3	710.47

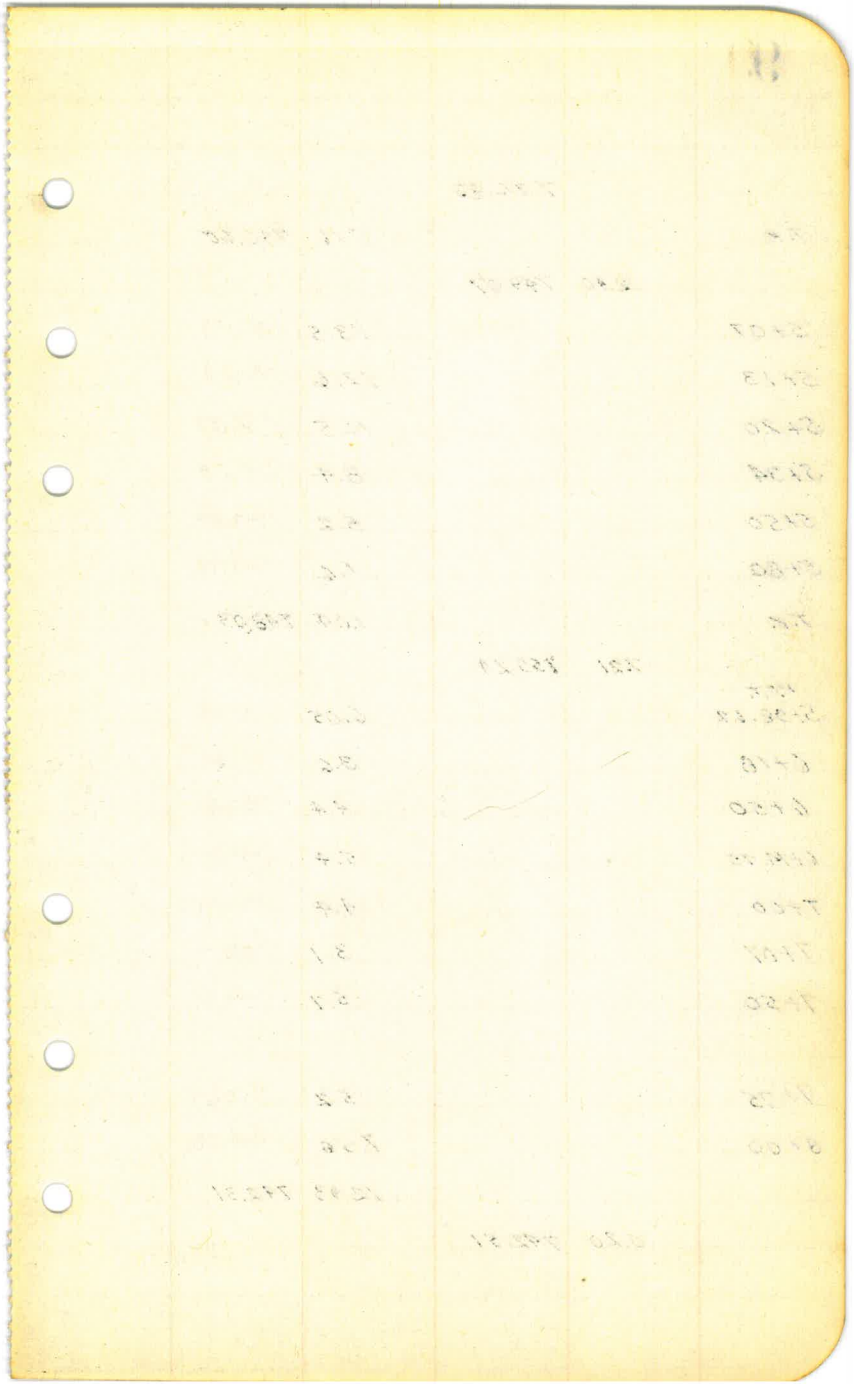
9-28-54

Wert
Kemp
Holahan

El. top So. portal

		716.77			
2+00			7.0	709.77	
2+05			4.8	711.97	
2+20			1.8	714.97	
T.P.			0.18	716.59	
	9.77	726.36			
2+50			6.5	719.86	
3+00			1.8	724.56	
3+50			3.0	723.36	
3+55			3.1	723.26	
3+73 ℄ Pt. 96			5.97	720.39	
	1.71	722.10			
4+00			9.0	713.10	
4+15			11.3	710.80	
4+22			16.7	705.40	
4+28			14.7	707.40	
4+33			9.8	712.30	
4+50			3.5	718.60	
T.P.			1.67	720.43	
	11.59	732.02			
T.P.			0.25	731.77	
	5.06	736.83			
℄ 4+77.0			9.51	727.32	
5+00			3.5	733.33	

9-28-54



		736.83			
T.P.			0.16	736.67	
	12.40	749.07			
5+07			13.5	735.57	
5+13			12.6	736.47	
5+20			10.5	738.57	
5+34			8.4	740.67	
5+50			5.2	743.87	
5+80			1.6	747.47	
T.P.			1.04	748.03	
	7.21	755.24			
P.O.T. 5+98.62			6.05	749.19	
6+18			3.6	751.64	
6+50			4.4	750.84	
6+74.75			5.4	749.84	
7+00			4.4	750.84	
7+07			3.1	752.14	
7+50			5.7	749.54	
7+75			5.2	750.04	
8+00			7.56	747.68	
			12.93	742.31	
	0.20	742.51			

9-28-54

750.84 LL.

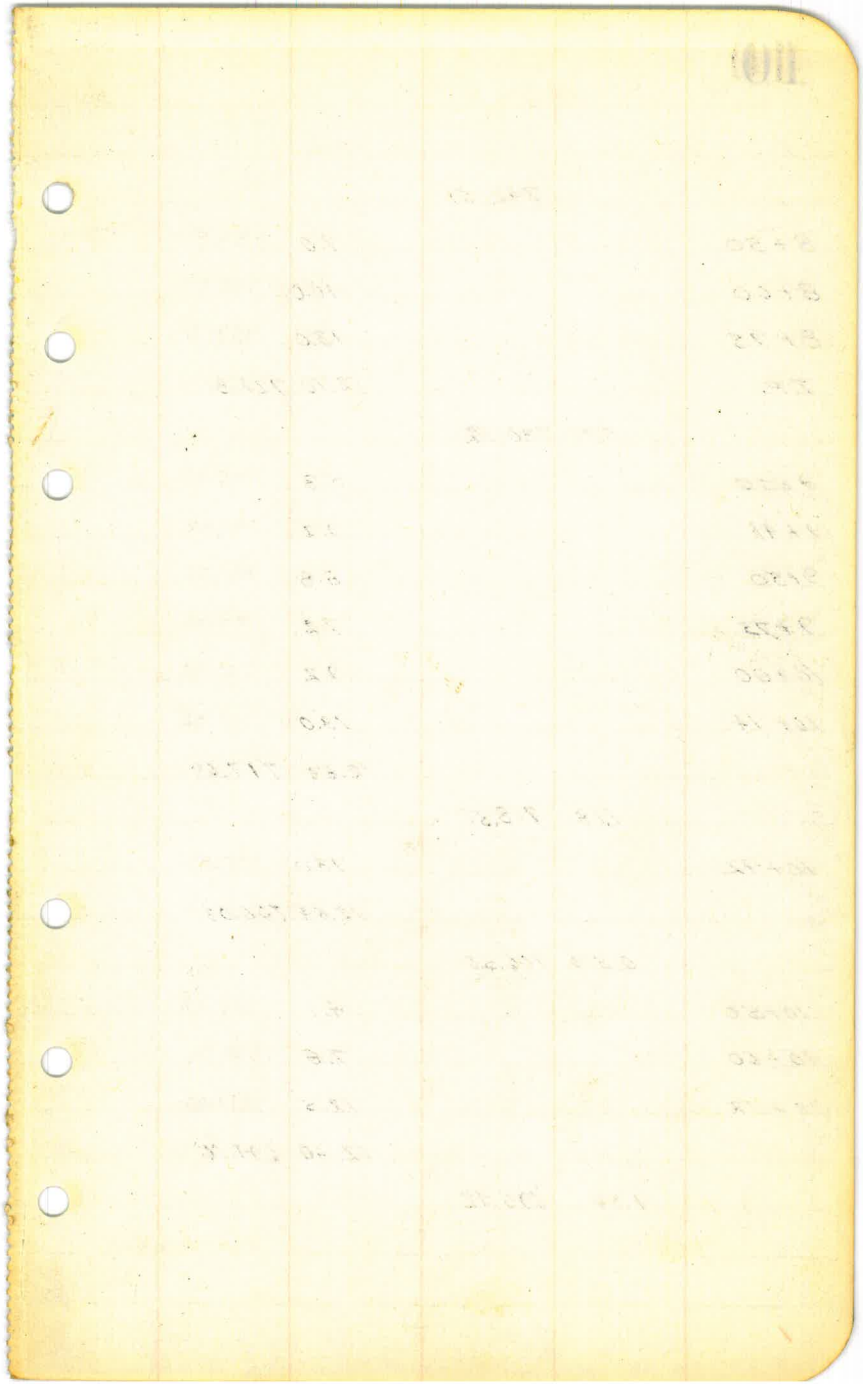
4.9 / 0. 11.9 / 15. 16.2 / 28.

749.64

5.7 / 0. 12.9 / 19. 15.5 / 25.

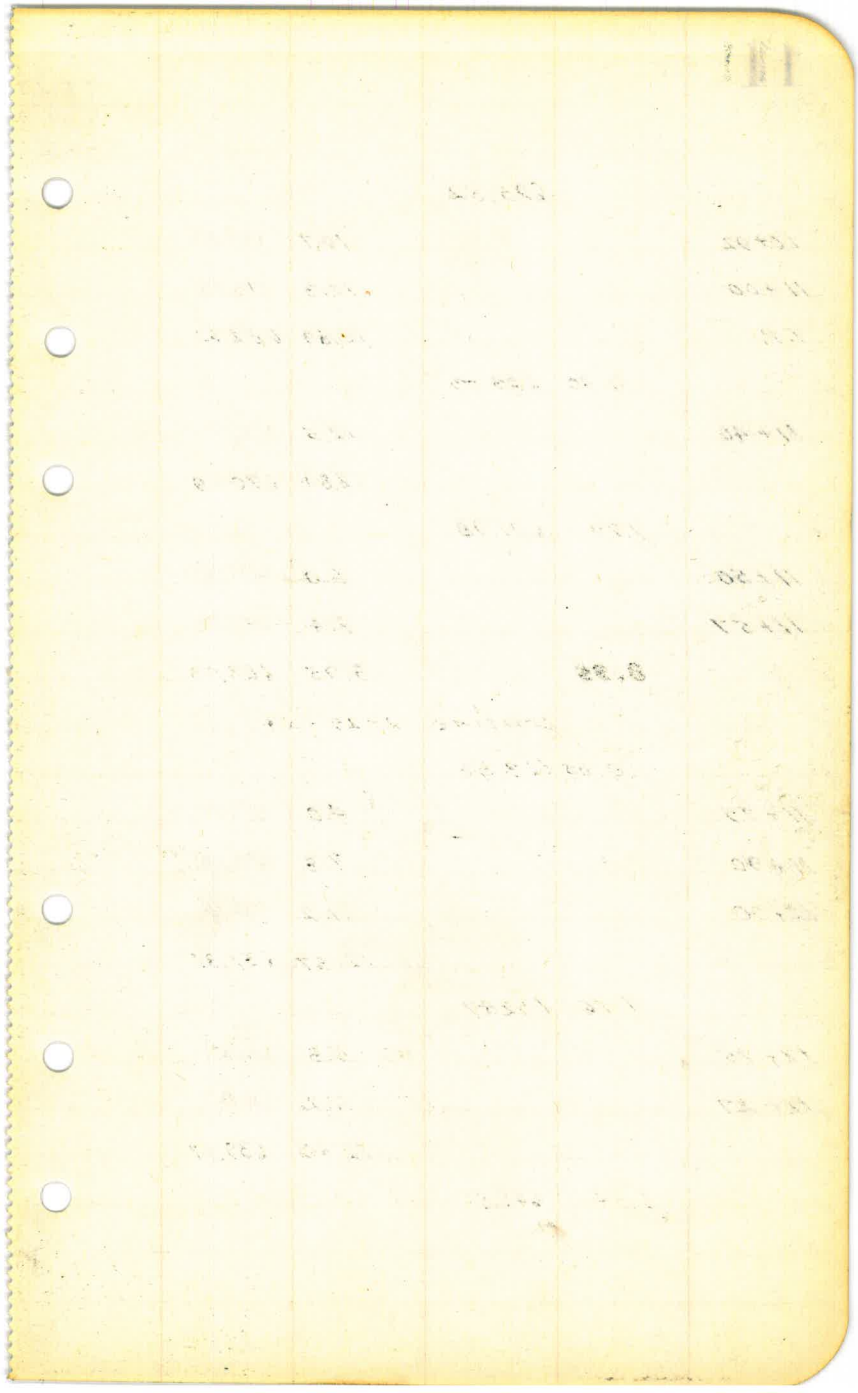
750.04

5.2 / 0 9.7 / 20. 13.7 / 20. 15.7 / 25.



		742.51		
8+50			7.0	735.51
8+60			10.0	732.51
8+75			13.0	729.51
T.P.			12.70	729.81
	0.71	730.52		
9+00			5.3	725.22
9+41			9.2	721.32
9+50			8.8	721.72
9+75			7.2	723.32
10+00			9.2	721.32
10+14			13.0	717.52
			12.83	717.69
	1.18	718.87		
10+42			13.0	705.87
			12.84	706.03
	0.53	706.56		
10+50			4.1	702.46
10+60			7.8	698.76
10+72			12.5	694.06
			12.40	694.16
	1.36	695.52		

9-28-54



		695.52		
10+92			10.7	684.82
11+00			12.3	683.22
T.P.			12.89	682.63
	0.40	683.03		
11+40			12.5	670.53
			12.84	670.19
	1.79	671.98		
11+50			6.0	665.98
11+57			8.4	663.58
			8.95	663.03
		contins	9-29-54	
	0.85	663.88		
11+75			4.0	659.88
11+90			7.8	656.08
12+00			11.2	652.68
			12.57	651.31
	1.16	652.47		
12+15			5.8	646.67
12+27			11.2	641.27
			12.50	639.97
	6.54	646.51		

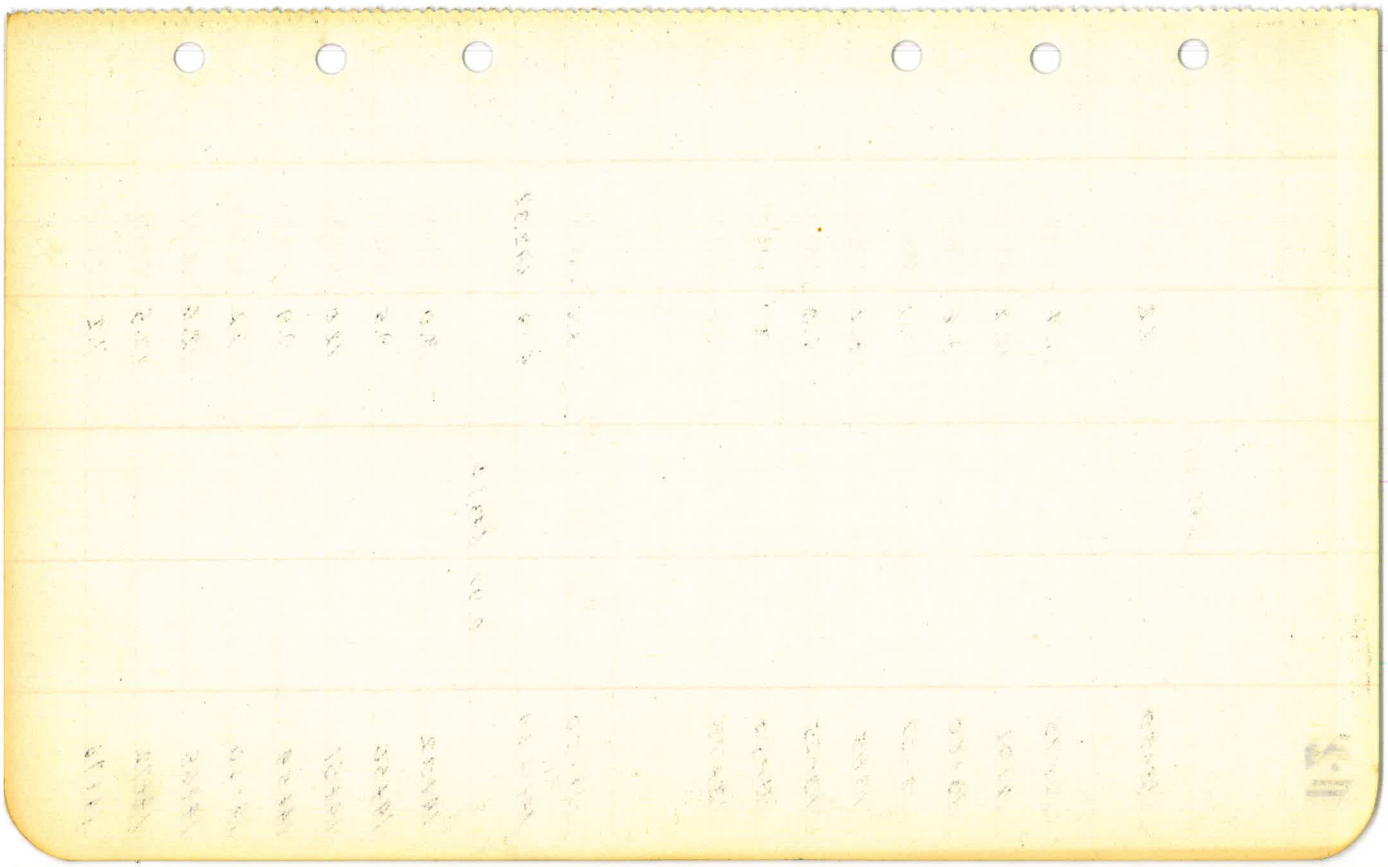
9/29/54

659.88 Left

$\frac{4.0}{0}$ $\frac{6.7}{15}$ $\frac{3.6}{26}$

652.68

$\frac{11.2}{0}$ $\frac{14.5}{18}$ $\frac{11.3}{27}$



		646.51			
12+50			11.2	635.31	
12+75			11.4	635.11	
12+92			12.2	634.31	
13+00			9.6	636.91	
13+09			10.9	635.61	
13+15			8.2	638.31	
13+25			6.0	640.51	
13+50			3.1	643.41	
13+78			2.1	644.41	
14+00			3.6	642.91	
P.I. 14+14.69			4.19	642.32	
	0.92	643.24			
14+32			3.0	640.24	
14+50			9.5	633.74	
14+51			12.0	631.24	
14+54			9.9	633.34	
14+60			9.2	634.04	
14+68			12.6	630.62	
14+72			12.5	630.72	
14+78			7.2	636.04	

9/28/54

Left

635.31

11.2/0 11.8/7 8.9/25 10.6/36

635.11

14.4/0 13.7/10 12.6/11 13.1/17 15.2/30

636.91

9.6/0 11.9/20 17.8/28

640.51

6.0/0 8.8/18 10.0/27

643.41

13750 3.1/0 7.4/25

642.91

3.6/0 5.6/14 11.3/28

		643.24			
P.I.					
14+92.50			0.87	642.37	
	13.03	655.40			
			0.10	655.30	
	12.85	668.15			
15+50			11.3	656.85	
			1.09	667.06	
	13.16	680.22			
P.I.					
15+95.09			9.49	670.73	
16+00			7.8	672.42	
16+05			6.7	673.52	
16+25			3.9	676.32	
P.O.T.					
16+46.23			2.43	677.79	
	6.12	683.91			
16+50			6.0	677.91	
16+75			7.0	676.91	
17+00			5.3	678.61	
17+50			4.2	679.71	
P.I.					
17+76.90			3.38	680.53	
	4.15	684.68			
17+76.90			4.2	680.48	
17+97			3.1	681.58	

9-29-54

Left

677.91

60/0 7.9/9 11.4/19 14.5/27

678.61

5.3/0 8.6/10 11.7/14 14.5/21 16.8/31

679.71

17+50 42/0 6.1/5 8.4/14 13.6/26

680.48

split angle 4.2/0 6.6/7 9.5/15 13.2/22 15.5/29

		684.68			
18+00			3.3	681.38	
			8.43	676.25	
	2.36	678.61			
18+50			11.0	667.61	
			12.45	666.16	
	3.80	669.96			
18+61			10.5	659.46	
18+71			5.2	664.76	
18+82			0.2	669.76	
	~~12.13~~	~~681.90~~	0.19	669.77	
	12.13	681.90	~~0.77~~		
			0.77	681.13	
	12.60	693.73			
18+90			12.6	681.13	
18+97			9.7	684.03	
19+00			8.9	684.83	
			0.23	693.50	
	12.42	705.92			
19+25			11.3	694.62	
19+50			2.1	703.82	
			0.75	705.17	

9-29-54

Left

681.38

3.3 / 0 | 5.3 / 4 | 7.5 / 8 | 16.2 / 26

667.61

11.0 / 0 | 15.0 / 13 | 17.4 / 20 | 20.4 / 29

Set T.B.M. on rock 18+60, 20' Rt. creek bottom

Right | Left

684.83

9.0 / 25 | 6.8 / 12 | 8.9 / 0 | 14.2 / 15 | 17.6 / 28

703.82

+4.1 / 26 | +2.0 / 20 | 0.5 / 14 | 2.1 / 9 | 2.1 / 0 | 4.9 / 15 | 7.2 / 25

continue profiles

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				705.17
	12.94	718.11		
19+60			9.2	708.91
19+73			4.2	713.91
19+83			0.1	718.01
			0.10	718.01
	12.16	730.17		
20+00			6.4	723.77
20+11			2.5	727.67
			0.25	729.92
	12+28	742.20		
20+50			3.7	738.50
20+60			0.3	741.90
			0.06	742.14
	12.13	754.27		
20+67.78			10.5	743.77
20+84			7.0	747.27
21+00			3.0	751.27
21+19			0.2	754.07
			0.57	753.70
	5.71	759.41		

Right Left

723.77

+0.4/25 2.0/17 3.7/7 6.4/0 10.0/13 12.9/20 14.9/25

738.50

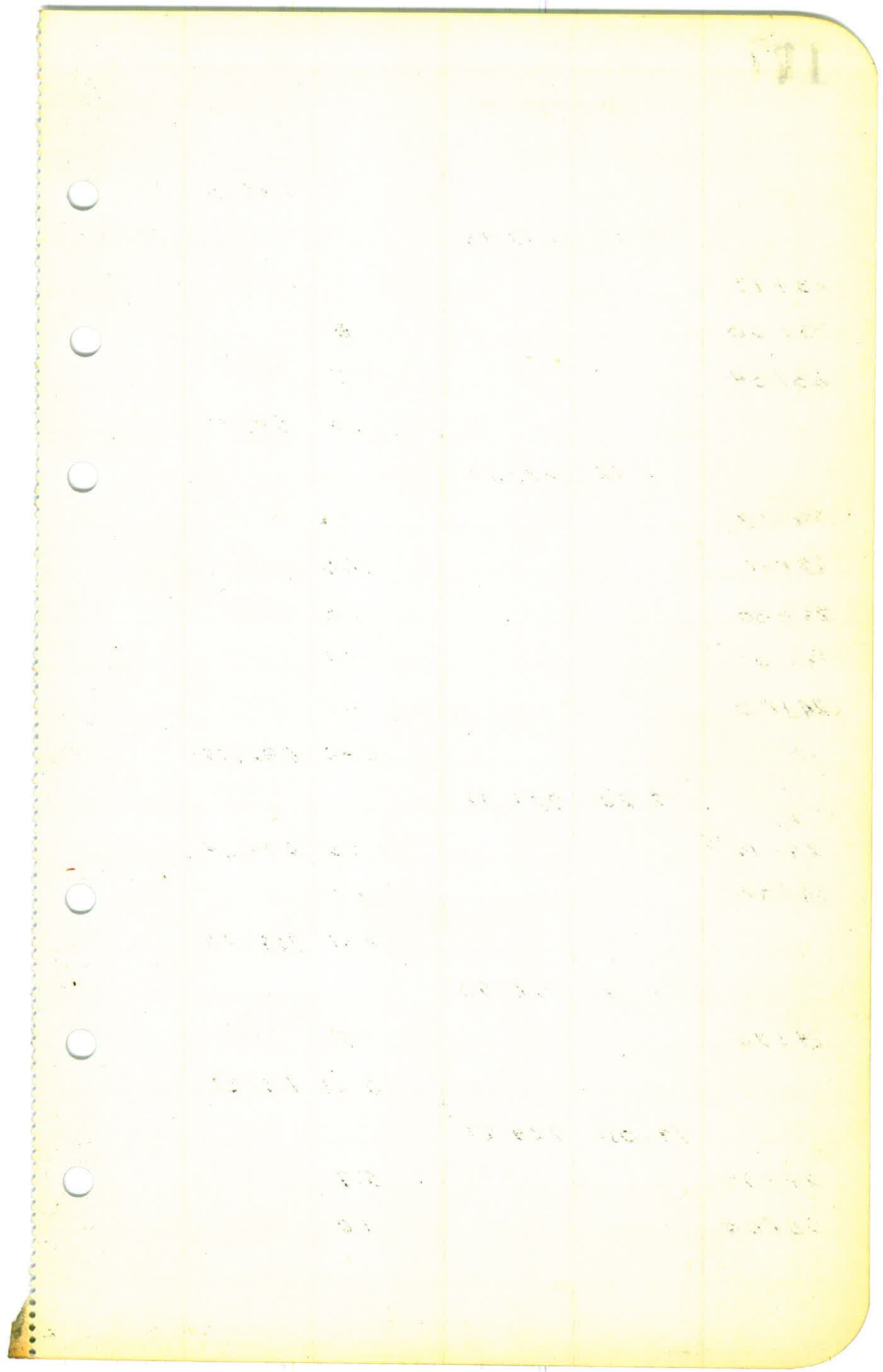
3.7/0 8.0/11 10.4/17 12.8/26

761.27

3.0/0 8.8/14 14.0/26

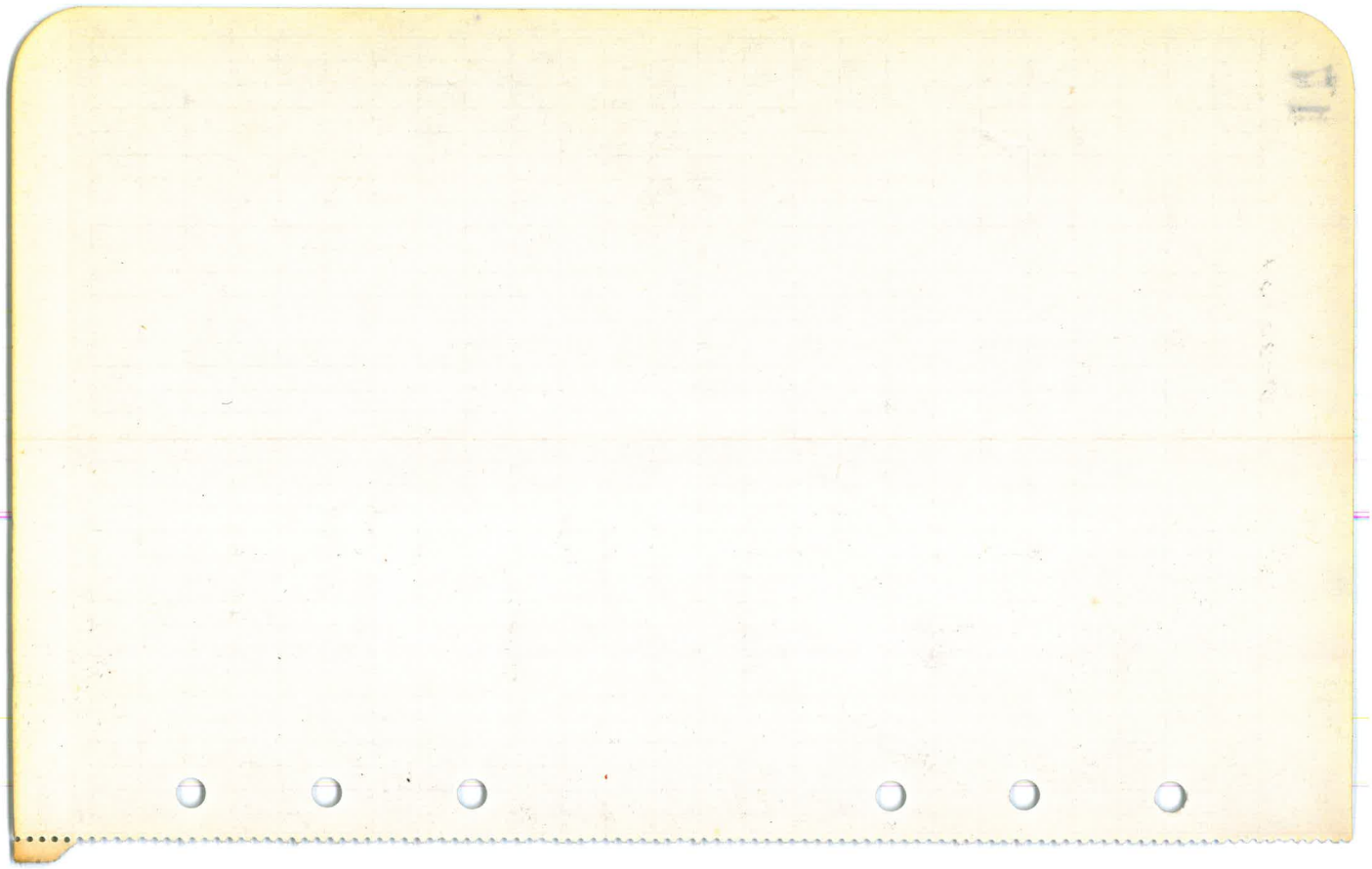
		759.41			
P.I.					
21+43.56			2.45	756.96	
21+50			2.0	757.41	
21+81			2.7	756.71	
22+00			7.2	752.21	
22+13			12.0	747.41	
			12.53	746.88	
	0.77	747.65			
22+36			8.0	739.65	
	~~0.54~~		12.78	734.87	
	0.54	735.41			
22+50			1.2	734.21	
22+60			5.5	729.91	
22+70			9.0	726.41	
			12.61	722.80	
	0.16	722.96			
23+00			11.4	711.56	
			12.70	710.26	
	0.09	710.35			
23+11			3.0	707.35	
23+25			11.3	699.05	
			11.20	699.15	

9-30-54



				699.15	
	0.30	699.45			
23+43			5.5	693.95	
23+50			7.8	691.65	
23+54			11.7	687.75	
			12.68	686.77	
	6.42	693.19			
23+62			11.6	681.59	
23+71			11.6	681.59	
23+80			6.0	687.19	
23+91			4.4	688.79	
24+00			1.7	691.49	
			0.40	692.79	
	12.20	704.99			
P.I. 24+14.75			10.75	694.24	
24+50			3.0	701.99	
			0.51	704.48	
	12.42	716.90			
24+76			0.6	716.30	
			0.63	716.27	
	13.00	729.27			
24+90			5.7	723.57	
25+00			1.0	728.27	

9-30-54



		729.27			
			0.71	728.56	
	12.38	740.94			
25+18			5.4	735.54	
25+32			0.0	740.94	
			0.03	740.91	
	12.11	753.02			
25+50			6.2	746.82	
25+60			3.1	749.92	
			0.03	752.99	
	6.29	759.28			
25+90			4.5	754.78	
26+00			3.6	755.68	
26+22			4.1	755.18	
P.I. 26+39.43			5.76	753.52	
	1.45	754.97			
26+50			1.2	753.77	
26+71			1.6	753.37	
27+00			4.8	750.17	
27+25			10.0	744.97	
			12.69	742.28	
	0.04	742.32			
27+50			2.9	739.42	

9-30-54

		742.32			
28+00			13.3	729.02	
			13.31	729.01	
	3.77	732.78			
28+11			6.4	726.38	
28+26			10.6	722.18	
28+50			4.7	728.08	
28+70			0.5	732.28	
			0.19	732.59	
	12.55	745.14			
29+00			5.0	740.14	
			0.22	744.92	
	11.77	756.69			
29+22			10.4	746.29	
29+50			6.8	749.89	
30+00			2.6	754.09	
30+19			2.4	754.29	
P.I. 30+48.30			4.63	752.06	
	6.57	758.63			
30+80			4.6	754.03	
31+00			4.3	754.33	
31+50			4.1	754.53	
31+80			5.5	753.13	

		758.63			
31+92.93			6.28	752.35	
	1.19	753.54			
32+00			1.1	752.44	
32+35			4.3	749.24	
32+50			8.1	745.44	
			12.82	740.72	
	0.34	741.06			
32+73			4.2	736.86	
33+00			10.7	730.36	
			12.75	728.31	
	0.38	728.69			
33+36			13.2	715.49	
			12.81	715.88	
	0.44	716.32			
33+42			2.0	714.32	
33+50			6.5	709.82	
			12.14	704.18	
	0.02	704.20			
33+68			3.1	701.10	
33+76			5.3	698.90	
			8.89	695.31	
	0.13	695.44			

10/1/54

Continue Profile

		695.94			
33+90			4.8	690.64	
34+00			8.1	687.31	
			12.89	682.55	
	0.42	682.97			
34+28			8.0	674.97	
			12.76	670.21	
	0.93	671.14			
P.I. 34+36.21			2.56	668.58	
34+50			9.8	661.34	
34+53			11.0	660.14	
34+59			11.4	659.74	
34+61			10.6	660.54	
			0.05	671.09	
	12.37	683.46			
P.I. 34+85.21			12.15	671.31	
35+00			6.5	676.96	
			0.02	683.44	
	12.48	695.92			
35+25			11.3	684.62	
35+33			9.4	686.52	
35+50			2.7	693.22	
			0.30	695.62	
	10.16	705.78			

10-1-54

		705.78			
35+62			9.0	696.78	
35+83			3.9	701.88	
			0.13	705.65	
	10.84	716.49			
36+00			8.1	708.39	
36+22			2.1	714.39	
			0.31	716.18	
	12.58	728.76			
36+39			7.7	721.06	
36+50			4.2	724.56	
			0.19	728.57	
	9.68	738.25			
P.O.T. 37+00			0.45	737.80	
	12.53	750.33			
37+20			8.5	741.83	
37+50			2.0	748.33	
			0.18	750.15	
	7.57	757.72			
37+80			6.0	751.72	
P.I. 37+96.92			6.07	751.65	
38+00			6.6	751.12	
38+13			4.6	753.12	
38+50			4.2	753.52	

10-1-54

		757.72			
39+00			7.5	750.22	
P.I. 39+08.72			8.50	749.22	
	0.90	750.12			
39+50			2.7	747.42	
39+79			6.0	744.12	
40+00			7.3	742.82	
40+17			9.0	741.12	
40+41			11.7	738.42	
			12.70	737.42	
	0.45	737.87			
P.O.T. 40+50			1.2	736.67	
41+00			10.5	727.37	
			12.59	725.28	
	0.14	725.42			
41+30			2.9	722.52	
41+50			7.3	718.12	
			12.70	712.72	
	0.71	713.43			
41+87			5.6	707.83	
42+00			7.7	705.73	
42+28			13.0	700.43	
			12.83	700.60	
	0.40	701.00			

10-1-54

		701.00			
42+34			2.9	698.10	
42+50			7.3	693.70	
			11.89	689.11	
	0.21	689.32			
43+00			7.6	681.72	
			12.94	676.38	
	0.62	677.00			
43+30			4.0	673.00	
43+50			9.6	667.40	
			12.63	664.37	
	0.21	664.58			
43+71			2.6	661.98	
44+00			9.9	654.68	
			12.62	651.96	
	0.30	652.26			
44+29			4.7	647.56	
44+50			9.6	643.66	
44+70			12.9	639.36	
			12.66	639.60	
	0.54	640.14			
44+85			5.5	634.64	
45+00			10.7	629.44	

10-1-54

		640.14			
			12.89	627.25	
	0.58	627.83			
45+15			3.0	624.83	
45+50			7.3	620.53	
45+59			7.9	619.93	
45+65			12.9	614.93	
45+76			10.3	617.53	
45+84			10.1	617.73	
46+00			6.4	621.43	
46+07			5.8	622.03	
46+10			3.7	624.13	
46+26			10.7	617.13	
46+44			8.8	619.03	
46+50			7.6	620.23	
46+55			4.8	623.03	
46+65			9.3	618.53	
46+78			9.3	618.53	
46+93			4.5	623.33	
47+00			1.3	626.53	
			0.44	627.39	
	11.86	639.25			
47+33			3.5	635.75	

		639.25			
47+50			0.6		638 7
	17		0.04	639.21 ✓	
	12.91	652.12 ✓			
48+00			9.4		642 1
48+18			8.3		643 8
48+50			2.0		650 1
48+70			0.6		651 5
			0.21	651.91 ✓	
	12.75	664.66 ✓			
48+82			12.8		651 9
48+98			8.8		655 9
49+00			6.9		657 8
49+05			5.2		659 5
49+15			5.3		659 4
49+40			0.3		664 4
			0.27	664.39 ✓	
	13.06	677.45 ✓			
49+50			11.5		666 0
49+78			8.1		669 4
49+88			5.0		672 5
50+00			3.2		674 3
50+29			0.6		676 9

		677.45			
			0.55	676.90✓	
	11.26	688.16✓			
50+50			9.2		679 0
50+77			3.8		684 4
			0.24	687.92✓	
	12.40	700.32✓			
51+00			10.9		689 4
51+24			3.0		697 3
51+35			0.5		699 8
			0.44	699.88✓	
	12.77	712.65✓			
51+50			9.9		702 8
51+80			0.8		711 9
			0.30	712.35✓	
	12.30	724.65✓			
52+00			4.6		719 1
			0.60	724.05✓	
	11.96	736.01✓			
52+20			10.5		725 5
52+40			3.6		732 4
52+50			0.9		735 1
			0.36	735.65✓	
	12.34	747.99✓			

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		747.99✓			
52+82			3.1		744 9
			0.11	747.88✓	
	11.39	759.27✓			
53+02			7.0		752 3
53+21			5.5		753 8
53+23			3.9		755 4
53+36			1.4		757 9
			0.85	758.42✓	
	9.80	768.22✓			
53+50			8.4		759 8
53+80			5.6		762 6
54+00			2.9		765 3
			5.34	762.88✓	
	1.33	764.21✓			
54+13			2.7		761 5
54+50			6.4		757 8
55+00			11.0		753 2
55+18			13.1		751 1
			12.86	756.35✓	
	1.44	752.79✓			
P.I. 55+25.97			4.45		748 34
55+50			7.1		745 7

base 10'x10'x10' rock

P.I.
52+92.91. P.I. Top rock 755.12 Elev.
base of rock

pile of 5 6'x6'x6' rocks

base 6'x6'x6' rock

		752.79✓			
			12.92	739.87✓	
56+07	0.33	740.20✓			
56+00			3.3		736 9
56+06			5.7		734 8
56+21			9.9		730 3
56+50			13.6		726 6
			12.42	727.78✓	
	0.92	728.70✓			
56+62			3.4		725 3
56+65			4.8		723 9
57+00			5.0		723 7
57+08			7.8		720 9
			12.38	716.32✓	
	7.83	724.15✓			
57+13			9.5		714 1
57+23			12.9		711 3
57+33			9.3		714 9
57+50			7.5		716 7
57+69			12.6		711 6
57+50			12.56	711.59✓	
	1.73	713.32✓			
57+83			6.1		707 2

10-9-54

		713.32			
57+91			9.1		704 2
58+00			11.9		701 4
			12.02	701.30 ✓	
	0.90	702.20 ✓			
58+08.41			0.26		701 9
" " "			3.0		699 2
58+26			8.1		694 1
		✓	12.36	689.84 ✓	
	0.63	690.47			
58+50			0.7		689 8
58+62			4.7		685 8
58+84			11.7		678 8
		✓		✓	
	0.26	677.97	12.76	677.71	
58+90			1.6		676 4
58+96			8.2		668 8
59+00			8.9		668 1
		✓		✓	
	0.22	665.49	12.70	665.27	
59+11			4.4		661 1
59+23			9.2		656 3
59+36			13.3		652 2
				✓	
	0.76	653.36 ✓	12.89	652.60	

10-9-54

Top 2'x3'x9' rock

Ground

758.63
7.76
750.87
.66
2.1

750.66
150.58

170

59.41
53.32
6.09

759.41
53.32
6.09

20
3
11