



# 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  $30.6 + (20 - 16) \div 2$  or 2 ft. added to 30.6 = 32.6. For slopes of 1 on 1½ see inside of back cover.  
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# 1670

## CITY ENGINEER'S OFFICE

197+15  
54+15 5' South  
Crossing 20 W of A  
East of 6th  
75+20 A  
76+0 to 81  
Sand Rock  
40' W of 150+0/1.32  
Hold 139+30. Then E of Sand Rock  
Miss Valrie 80+10' South

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.



Proposed Sewer  
 Old Town to Pacific Beach  
 via 68' W of E of R.R.

Linda Vista Junction N.Y.

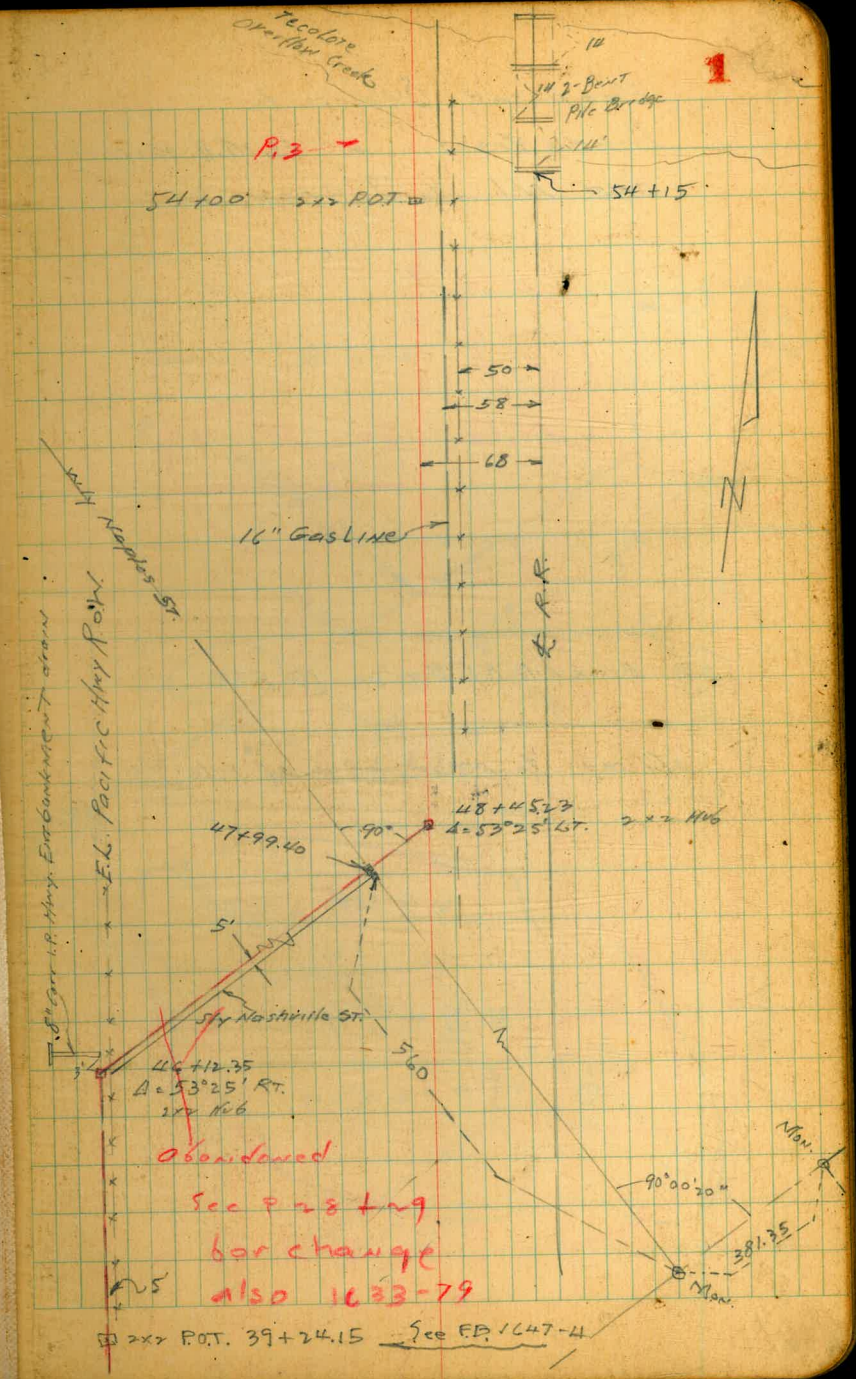
C.S.M.  
 C. S.  
 W. H.  
 E. B.

7-12-44.

**Note!**

Tecolote overflow creek at Sta. 54+65  
 should be excav. betw. RR Bridge and  
 Con. Box Culv. opposite, on Paci Hwy  
 and sewer line covered to the North  
 where it is shallow.

Fd. Con. Map. 871-31 & 1422-44+47



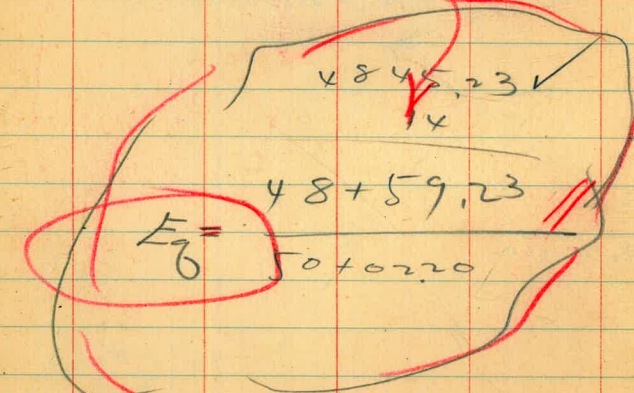
2x2 POT. 39+24.15 See FD. 1647-44



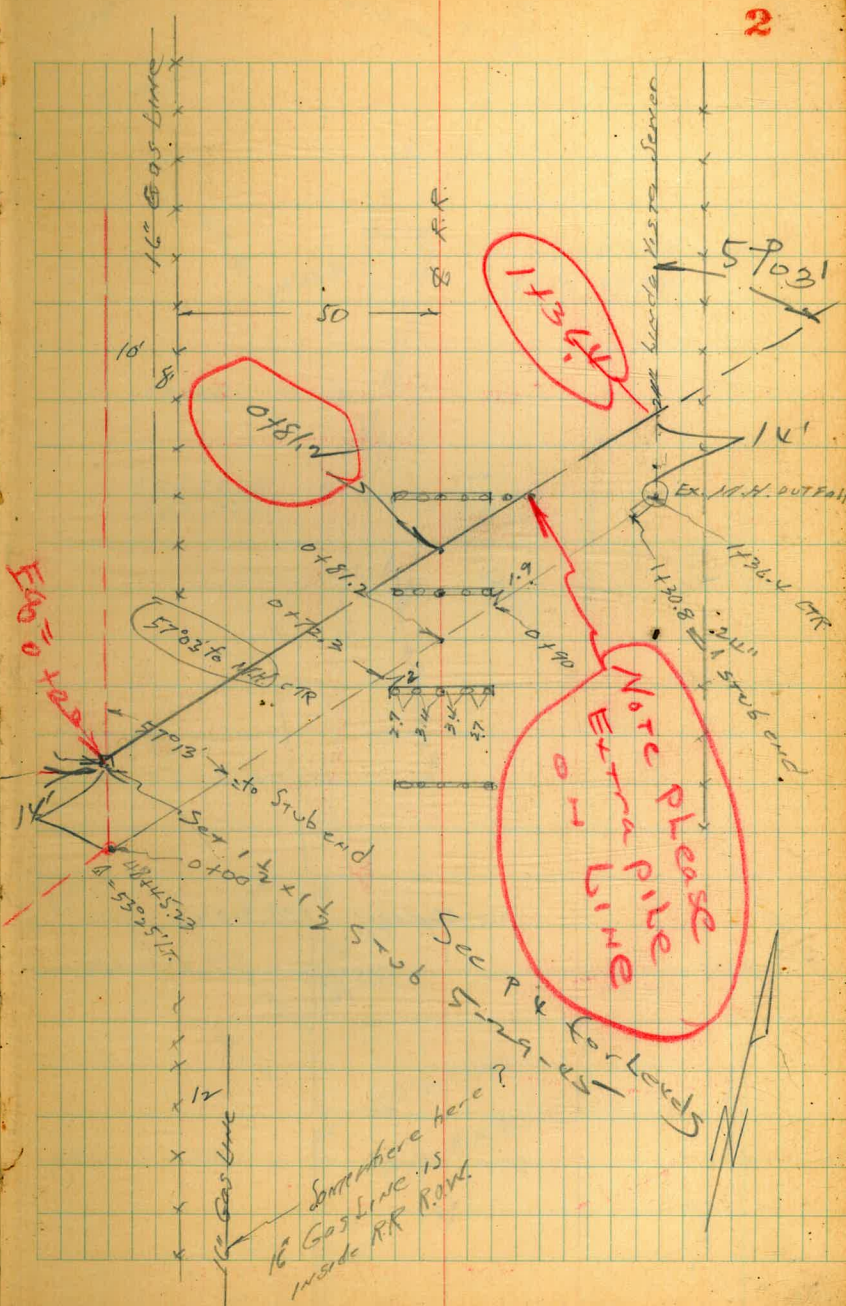
Proposed Sewer to  
Linda Vista n Ex. M.H. Outfall  
and Nly to Jettette St

N.G. See P 79

2 - Benz Pile R.R. Bridge 14' CTR.  
offsets to near edge of Piles



See P 4 for -  
New Levels  
5-29-45

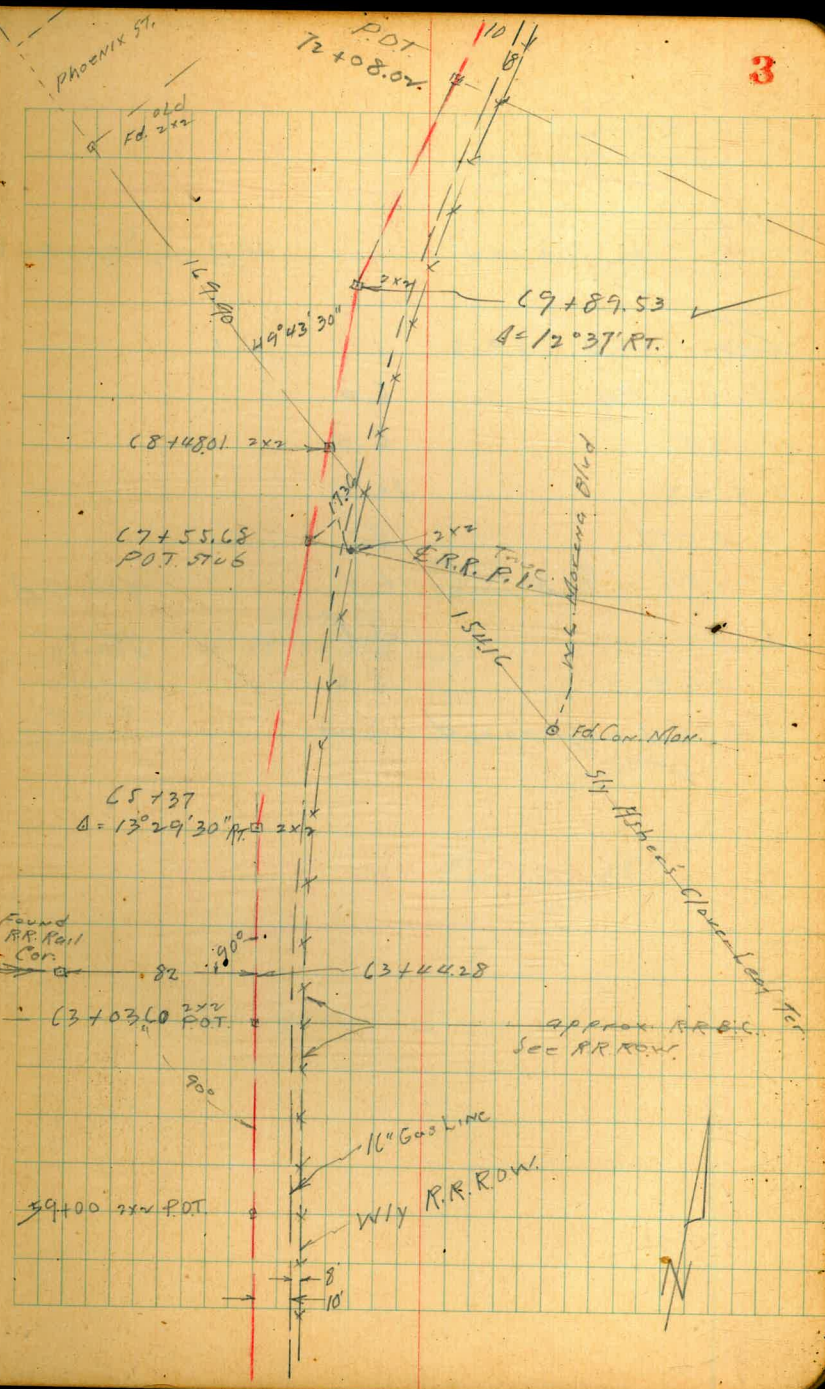
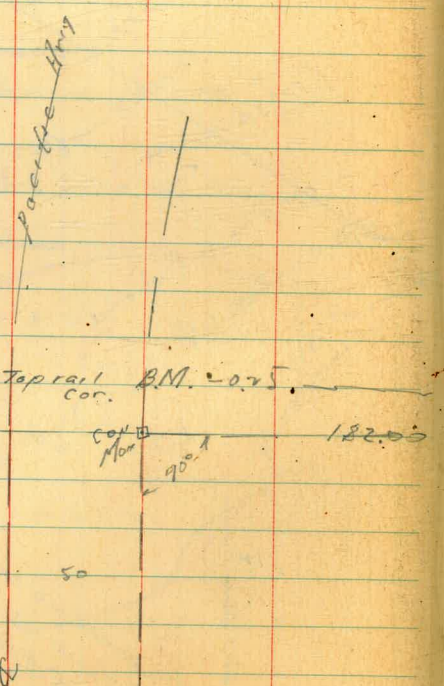


1436.4

Note please  
Extra pipe  
on line

See P 4 for levels  
Somewhere here?  
Gas Line is  
inside RR ROW.





Phoenix St.

old Ed. 2nd

POT 72+08.04

16.940

$\Delta = 43^\circ 30''$

(9+89.53)  
 $\Delta = 12^\circ 37' RT.$

(8+48.01) 2x2

(7+55.68)  
POT 5705

15' RR. P.L.

15' RR. P.L.  
15' RR. P.L.  
15' RR. P.L.  
15' RR. P.L.  
15' RR. P.L.  
15' RR. P.L.  
15' RR. P.L.  
15' RR. P.L.

Fd. Cor. Man.

(5+37)  
 $\Delta = 13^\circ 29' 30'' RT.$

Found RR Rail Cor.

82

(3+44.28)

(3+03.60) 2x2  
POT

APPROX RR SEC.  
SEE RR ROW.

16" Gas Line

(29+00) 2x2  
POT

W/1/ RR ROW.





Change Tecolote Sewer

See P. 7 for changed sketch

5-29-45

14 + 59.23

50 + 0.77 = 0 + 0.00

6.50 10.6

0 + 0.00 = Eq. 6.0

0 + 35 6.0

0 + 45 10.3

0 + 57 8.1

0 + 81.7 2 R.R. 6.7

1 + 00 3.1

1 + 25 5.5

1 + 36.4 = ground 5.3

4.1 See P. 6 on ground

4.1

ground

Rails =  
same  
elev.

N.G. see P. 79

4

77 + 70.77

∠ 89° 58' 30" R.

10

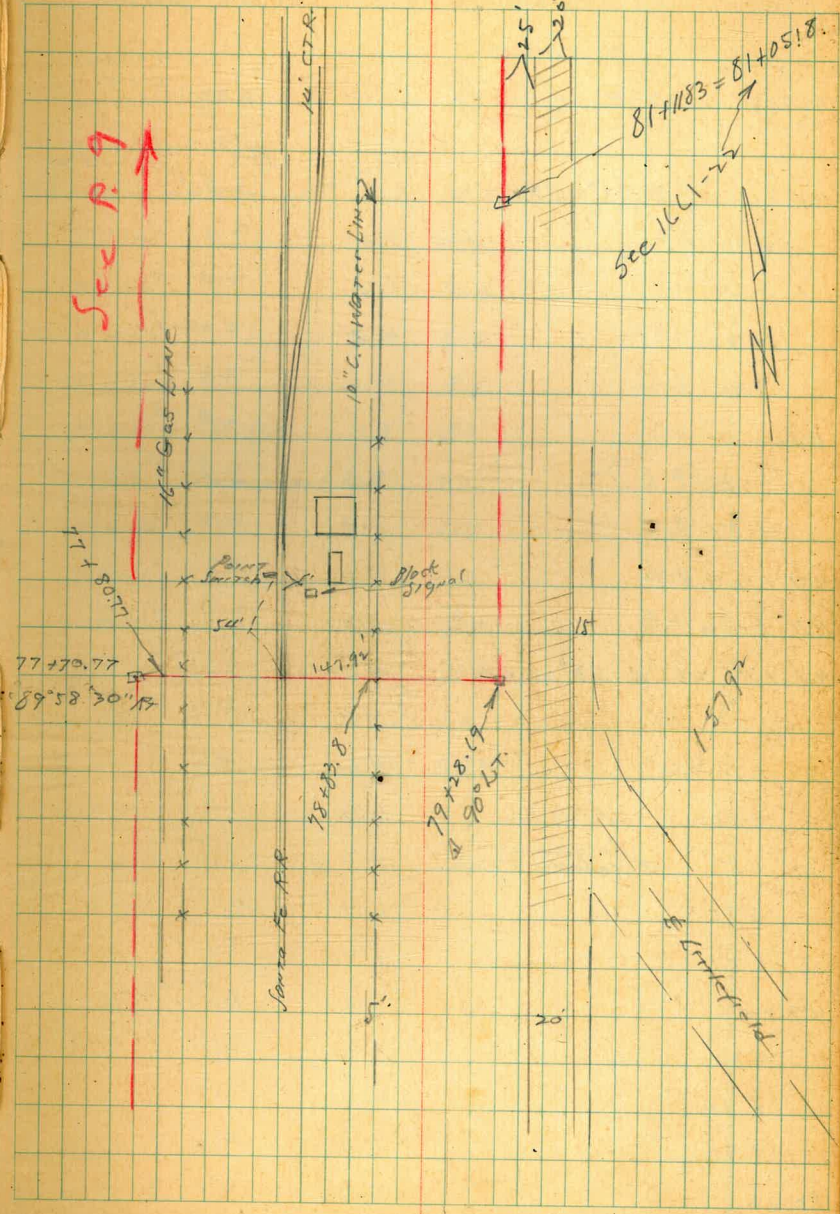
16" Gas Line

W.L. R.R. ROW

P.B.T. 75100



Sec R. 9





E Sewer Levels Sketch p.1

B.M. X TOP  
E.W. hdwl.  
1000.44m

3.35

9.03

5.8

Acceler.  
Culv.  
1647-66

Stagn.  
Invert. W.

46+1235	Δ 53° 25' RT.	6.5	2.5	✓
+50		7.0	2.0	✓
+64		6.6	2.4	✓
+70		4.8	4.2	✓
+90		4.6	4.4	✓
47		6.1	2.9	✓
+50		5.5	3.5	✓
+87		5.8	3.2	✓
47+99.4		4.2	4.8	✓
48+20		5.3	3.1	✓
48+45.23	Δ 53° 25' LT.	4.9	4.1	✓
+50		4.9	4.1	✓
+70		4.2	4.8	✓
+80		6.0	3.0	✓
+83	Present Accelerate Creek	8.3	0.7	✓
+91	" "	8.4	0.6	✓
+97		7.3	1.6	✓
49+06		4.2	4.8	✓
+30		4.5	4.5	✓
+40		2.7	6.3	✓
+50		5.0	4.0	✓
50+00		5.5	3.5	✓

Linda Vista Junction

6

Levels on Branch Line to Ex. M.H.

Sketch p.1

903

48+45.23	0+100	4.9	4.1	✓
0+22		4.2	4.8	✓
0+50		3.3	5.7	✓
0+60		6.0	3.0	✓
0+72.3		8.4	0.6	✓
0+81.7	ERR.	8.0	1.0	✓ creek
"	Top rail El.	2.05	6.98	✓
0+90		6.4	2.6	✓
1+00		5.0	4.0	✓
+10		5.0	4.0	✓
+14		7.8	1.2	✓
+30		7.2	1.6	✓
1+30.8	FL. 24" STUB END	5.84	3.19	✓

See other Book for FL. of M.H. 1+36.4  
on Linda Vista Sewer outfall

1647  
13



9.03

50 + 50		5.6	3.4	✓
51		6.2	2.8	✓
T.P.	6.08	$\langle 9.36 \rangle$	5.75	$\langle 3.28 \rangle$ ✓
51 + 50		7.0	2.4	✓
52		6.9	2.5	✓
+ 50		7.5	1.9	✓
53		7.6	1.8	✓
+ 50		7.8	1.6	✓
54	217 P.O.T.	7.92	$\langle 1.44 \rangle$	✓ B.M.
+ 50		8.6	0.8	✓
+ 65		9.7	- 0.3	✓
+ 80		10.1	- 0.7	✓
55		9.3	0.1	✓
+ 50		8.9	0.5	✓
56		9.4	0.0	✓
T.P.	8.07	$\langle 8.71 \rangle$	8.72	$\langle 0.64 \rangle$ ✓
+ 50		8.5	0.2	✓
57		8.9	- 0.2	✓
+ 50		8.8	- 0.1	✓
58		9.1	- 0.4	✓

 $\langle 8.71 \rangle$ 

7

58 + 50		9.2	- 0.5	✓
59		9.5	- 0.8	✓
+ 50		9.3	- 0.6	✓
60		9.3	- 0.6	✓
+ 50		9.5	- 0.8	✓
61		10.1	- 1.4	✓
+ 50		10.2	- 1.5	✓
T.P.	5.89	$\langle 4.74 \rangle$	9.86	$\langle - 1.15 \rangle$
62		6.5	- 1.8	✓
+ 50		6.6	- 1.9	✓
63		6.7	- 2.0	✓
check to	B.M. Top P.R.R. rail Cor. 87 W of Sta. 63 + 47.8 1647-66	4.99	- 0.25	$\langle - 0.25 \rangle$
63 + 50		7.0	- 2.3	✓
64		7.1	- 2.4	✓
+ 50		7.1	- 2.4	✓
65		7.2	- 2.5	✓
+ 37 $\Delta$	13° 29' 30" RT	7.0	- 2.3	✓
+ 50		7.0	- 2.3	✓
66		7.3	- 2.6	✓
+ 50		6.7	- 1.5	✓
67		6.5	- 1.8	✓



T.P.	11.35	$\langle 4.74 \rangle$ $\langle 10.06 \rangle$	6.03	$\langle -1.79 \rangle$	
67 +50			11.0	-0.9	✓
68			9.5	0.6	✓
+50			8.2	1.9	✓
69			7.6	2.5	✓
+50			6.4	3.7	✓
69 +89.53	$\Delta 12^\circ 37'$ Rt.	6.61	$\langle 3.45 \rangle$	Hub	
70			6.2	3.9	✓
+50			5.1	5.0	✓
71			4.8	5.3	✓

T.P.	441	$\langle 10.86 \rangle$	361	$\langle 6.45 \rangle$	
+50			5.2	5.7	✓
72			5.0	5.9	✓
+50			5.0	5.3	✓
73			6.2	4.1	✓
+50			6.1	4.8	✓
74			6.7	4.2	✓
+50			6.7	4.2	✓
75			7.38	3.48	✓

T.P. Hub 12.58  $\langle 16.06 \rangle$  7.38  $\langle 3.48 \rangle$  ✓  
 75+00  
 P.O.T.

$\langle 16.06 \rangle$

75+50		12.6	3.5	✓
76		12.7	3.4	✓
+50		11.5	4.6	✓
77		10.2	5.9	✓
+50		10.8	5.3	✓
77 +70.77	$\Delta 89^\circ 58' 30''$ Rt.	11.1	5.0	✓
+80.77	Int. 16" gasline	10.3	5.8	ground
"	Top 16" "	12.8	3.3	✓
78		8.8	7.3	✓
118		8.7	7.4	✓
+30		6.8	9.3	✓
+36.4	Top W rail	4.95	11.11	✓
+41.1	" " " "	4.95	11.11	✓
+50		5.9	10.2	✓
+60		6.8	9.3	✓
+70		4.6	11.5	✓
+83.8	approx. 10" water 2.8 deep	3.9	12.2	ground
79		2.5	13.6	✓
79 +28.67	$\Delta 90^\circ$ Lt.	2.5	13.6	✓
+50		2.5	13.6	✓
80		2.8	13.3	✓
+50		3.0	13.1	✓
81		3.3	12.8	✓
81 +11.83	See other Book Eq. 81 + 0.5.18	3.0	13.1	✓

Strike Tel. Pole NW Con  
 Check to Littlefield + Marsden Blvd. 1.67  $\langle 14.44 \rangle$  14.43



Survey Cont'd Nly, 18' W  
of West R.R ROW line  
of Santa Fe.  
from P. 3-4-5 This Book

Measure  
SUMMERMEYER  
8-25-44.

4" Sewer from Bay Shore Manor Ct.  
to MISSION Bay about 4' deep

78+60

96+50 P.O.T.

91+50

4" Sewer

83+18.5 Cobble Stone  
ditch



Pole 2.5 RT to W. side

16" Gas

W. to R.R. Row

8

10

77+70.7 Hub

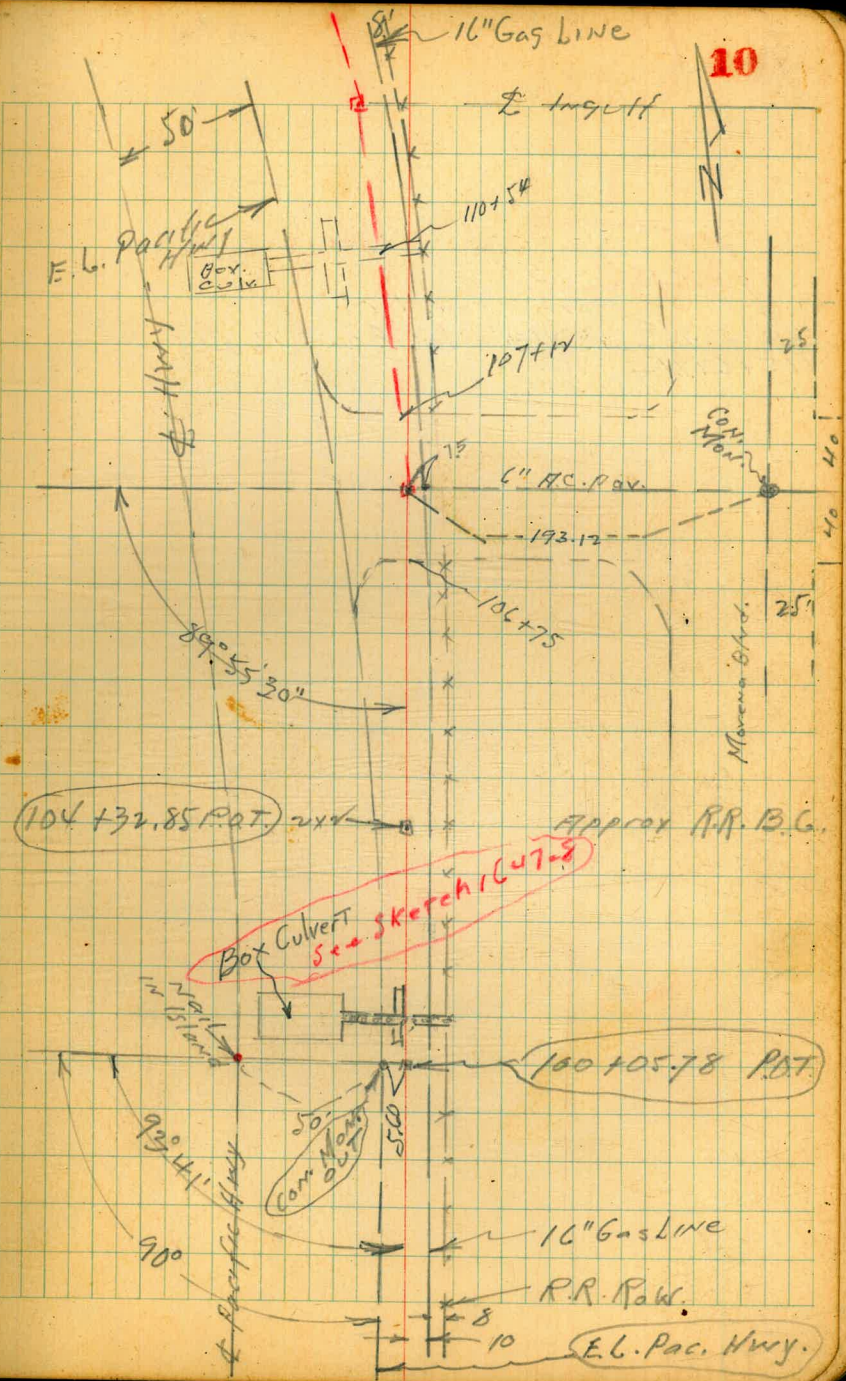


111+27.37 Δ C° 08' LT. 1 1/2 x 1 1/2 stub  
E Inguilt Prod. W/ly

110+54 E Cobble ditch Sketch 1647-8

106+94.58 = Δ C° 20' LT. = E Jellotte stub in par.

Intersect Com. Cobble ditch 100+48  
Hwy B.C. LT.  
See F.B. 1647-8 for Sketch





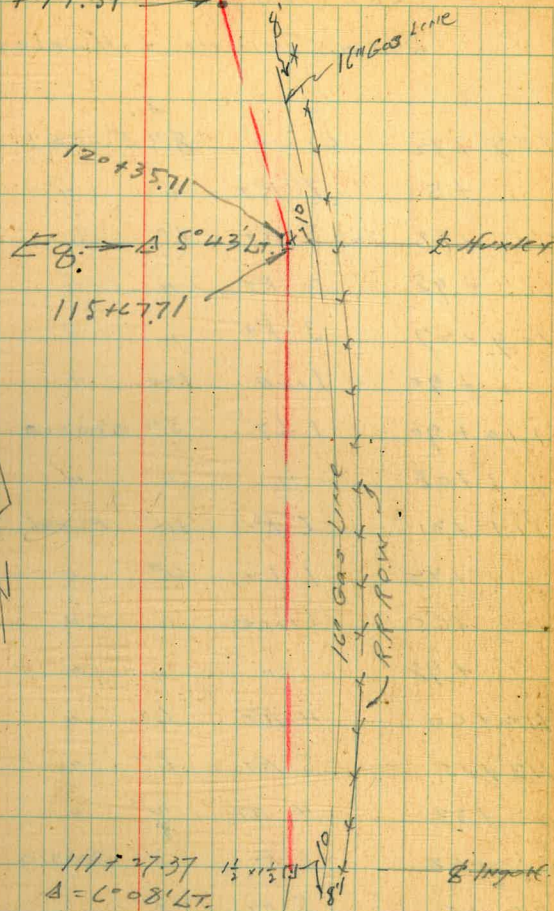
Sec 1661-73

other sta. to N.  
120+35.71  $\Delta$  5°43' Lt = Eq.  $1\frac{1}{2} \times 1\frac{1}{2}$  stub  
115+67.71  $\Delta$  sta. to S.

FB. 1661-73

old sta. 121+99.59

Nail P.O.T. 11





Location of Trees in State Park  
Betw. Telford & Huxley

108 + 32	LINE	8" <sup>di.</sup> Eucal.
+ 50	7 RT	" "
108	5 RT	6" "
+ 98	2 RT	" "
109 + 27	3 RT	" "
+ 90	LINE	10" "
+ 10 + 90	1 LT	5" acacia
111 + 08	"	" "
111 + 31	6 RT	10" Eucal.
+ 45	1 LT	4" "
+ 65	LINE	" "
+ 98	"	" "
112 + 60	4 RT	6" "
113 + 15	5 RT	8" "
+ 33	4 RT	2" "
+ 58	6 RT	3" acacia
114 + 25	5 RT	3" "
+ 54	2 RT	" "
+ 74	"	" "
+ 95	LINE	" "
115 + 15	2 RT	4" Eucal.
+ 35	LINE	2" "
+ 55	1 LT	4" "



Screen Levels

Sketch P. 9

T.P. Hub 9.03 <12.51> 3.48 <sup>7.5+5.0</sup> P. 8

77 & 70.77 old apt P. 5 7.5 5.0 ✓

78 8.1 4.4 ✓

+50 7.9 4.6 ✓

79 8.2 4.3 ✓

+50 7.9 4.6 ✓

T.P. 5.89 <11.15> 7.25 <5.21>

80 6.4 4.7 ✓

+50 6.2 5.0 ✓

81 5.9 5.2 ✓

+50 5.7 5.4 ✓

82 5.6 5.5 ✓

+50 6.4 4.7 ✓

83 7.5 3.6 ✓

+0.8 7.8 3.3 ✓

+15.5 9.4 1.7 ✓

+17 Cobble storm 12.2 -1.0 ✓

+20 ditch 12.2 -1.0 ✓

+21.5 9.5 1.6 ✓

+30 8.4 2.7 ✓

<11.15>

+50 8.3 2.8 ✓

84 8.3 2.8 ✓

+50 8.2 3.0 ✓

85 8.5 2.6 ✓

T.P. 7.92 <11.38> 7.69 <3.21>

+50 9.0 2.4 ✓

86 8.5 2.9 ✓

+50 7.9 2.5 ✓

87 7.4 4.0 ✓

+50 7.5 3.9 ✓

88 7.1 4.3 ✓

+50 6.0 5.4 ✓

89 5.8 5.6 ✓

+50 5.3 6.1 ✓

90 5.2 6.2 ✓

+50 5.2 6.0 ✓

91 6.2 5.0 ✓

+50 5.5 5.9 ✓

92 5.1 5.8 ✓

+50 6.2 5.2 ✓

93 6.4 5.0 ✓

T.P. 1.58 <7.52> 5.24 <5.91>



7.5

93 + 50		3.1	4.4	✓
94		3.3	4.2	✓
+ 50		3.6	3.9	✓
95		4.2	3.3	✓
+ 50		4.2	3.1	✓
96		4.7	2.8	✓
+ 50		4.5	3.0	✓
97		4.9	2.6	✓
+ 50		5.1	2.4	✓
98		5.4	2.1	✓
+ 50		5.8	1.7	✓
99		5.9	1.6	✓
+ 50		6.0	1.5	✓
100		5.2	2.3	✓
T.P.	5.28 $\langle 8.01 \rangle$	5.19 $\langle 2.33 \rangle$		✓
+ 29		5.9	2.1	✓
+ 44		5.3	2.7	✓
+ 45	Cobble ditch	7.8	0.2	✓
+ 48	"	8.2	- 0.2	✓
+ 52		7.6	0.4	✓
101		5.6	2.4	✓
+ 50		4.9	3.1	✓
102		5.2	2.8	✓

14

8.0

+ 50		4.9	3.1	✓
103		4.9	3.1	✓
+ 50		4.9	3.1	✓
104		4.4	3.6	✓
+ 50		4.0	4.0	✓
105		3.6	4.4	✓
+ 50		3.2	4.8	✓
106		2.8	5.2	✓
T.P.	6.15 $\langle 12.21 \rangle$	1.95 $\langle 6.06 \rangle$		
+ 50		6.2	5.8	✓
+ 65		6.4	5.8	✓
+ 70		5.5	6.7	✓
+ 75	edge Pav	5.6	6.6	✓
106 + 94.58 A	Control	5.4	6.8	✓
107 + 112	edge Pav	5.6	6.6	✓
+ 15		4.8	7.4	✓
+ 50		4.7	7.5	✓
108		5.7	6.5	✓
+ 50		6.1	6.1	✓
109		6.1	6.1	✓
+ 50		5.1	7.1	✓
T.P.	5.21 $\langle 10.55 \rangle$	6.87 $\langle 5.34 \rangle$		

# Jokers  
Block  
on Pav.



$\langle 10.55 \rangle$ 

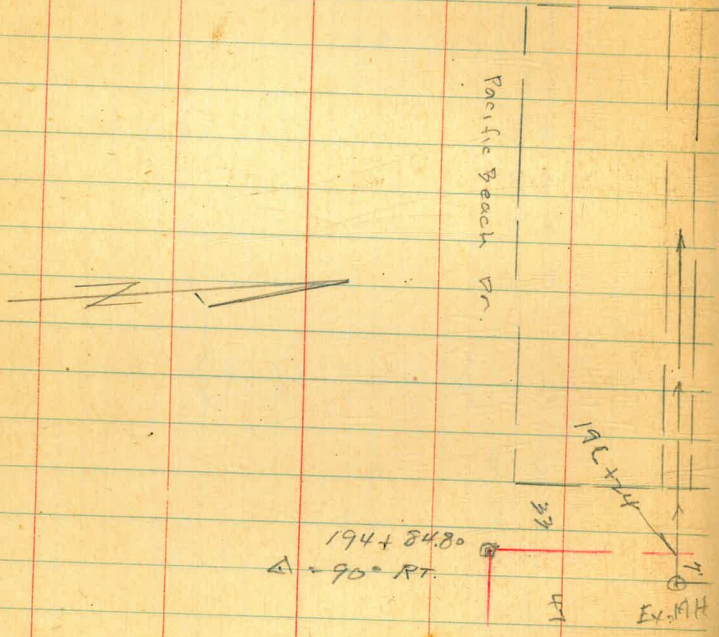
110			2.7	7.8	✓
+47	Calle de rey		3.7	6.8	✓
+48	Calle de rey		9.2	1.3	✓
+54	"	"	9.2	1.3	✓
+60	"	"	9.2	1.3	✓
+61	"	"	6.2	4.3	✓
+70			3.8	6.7	✓
111			2.0	8.8	✓
+27.37	Δ 6°08' LT		1.7	8.8	✓ d/1904
+50			2.0	8.5	✓
112			3.1	7.4	✓
+50			3.1	7.4	✓
TP	7.48	$\langle 13.37 \rangle$	4.66	$\langle 5.89 \rangle$	✓
113			5.9	7.5	✓
+50			5.4	8.0	✓
114			3.7	9.7	✓
+50			2.9	10.5	✓
115			3.1	10.3	✓
+50			1.7	11.7	✓
115 + 67.71			0.55	$\langle 12.82 \rangle$	✓ stub
120 + 35.71 = Δ	5°43' LT				12.81

See FB 1661-23



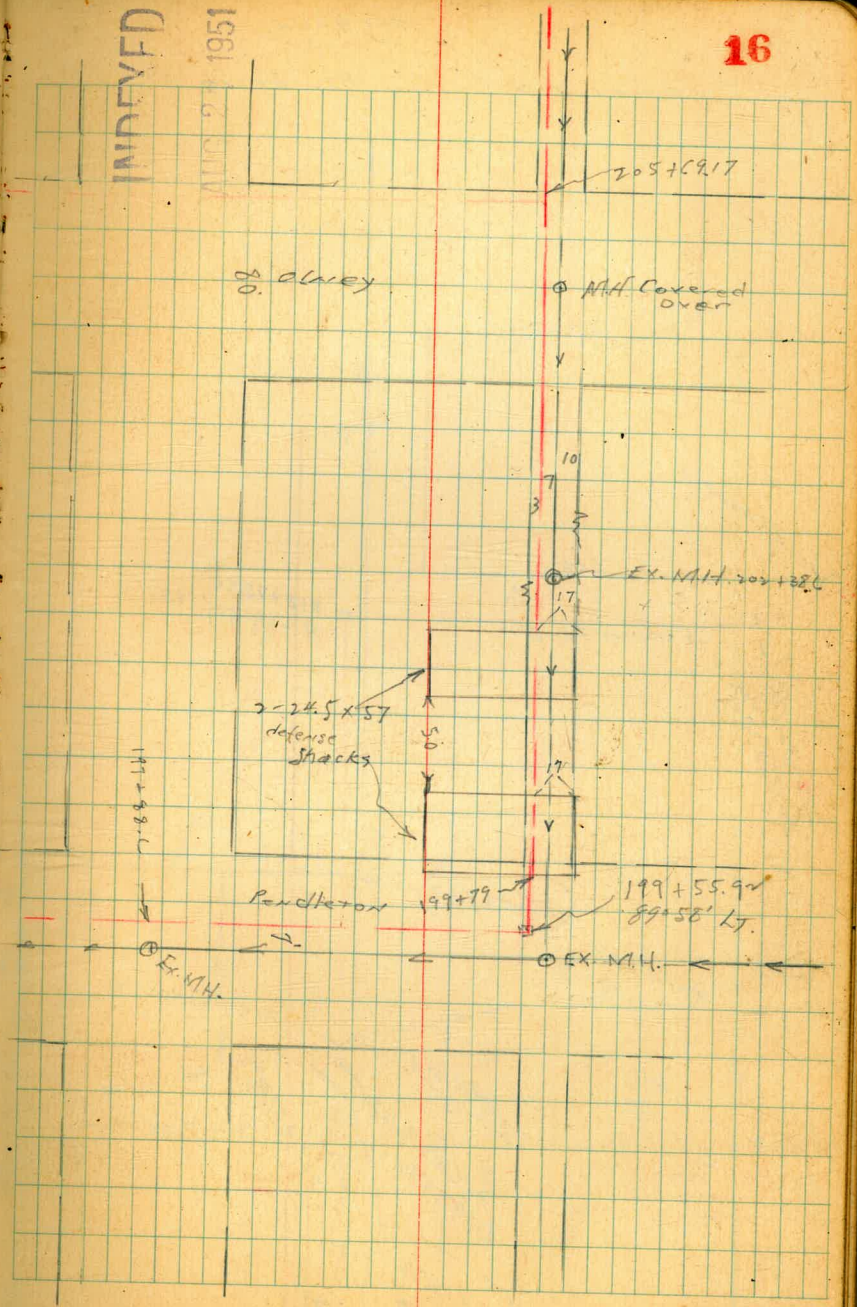
Proposed change in lower line  
 Sewer front Pendleton + Pac. Beach Dr  
 to Pump House E. end La Playa

CGM 9-19-44



See 1647-40  
 → ← 1315

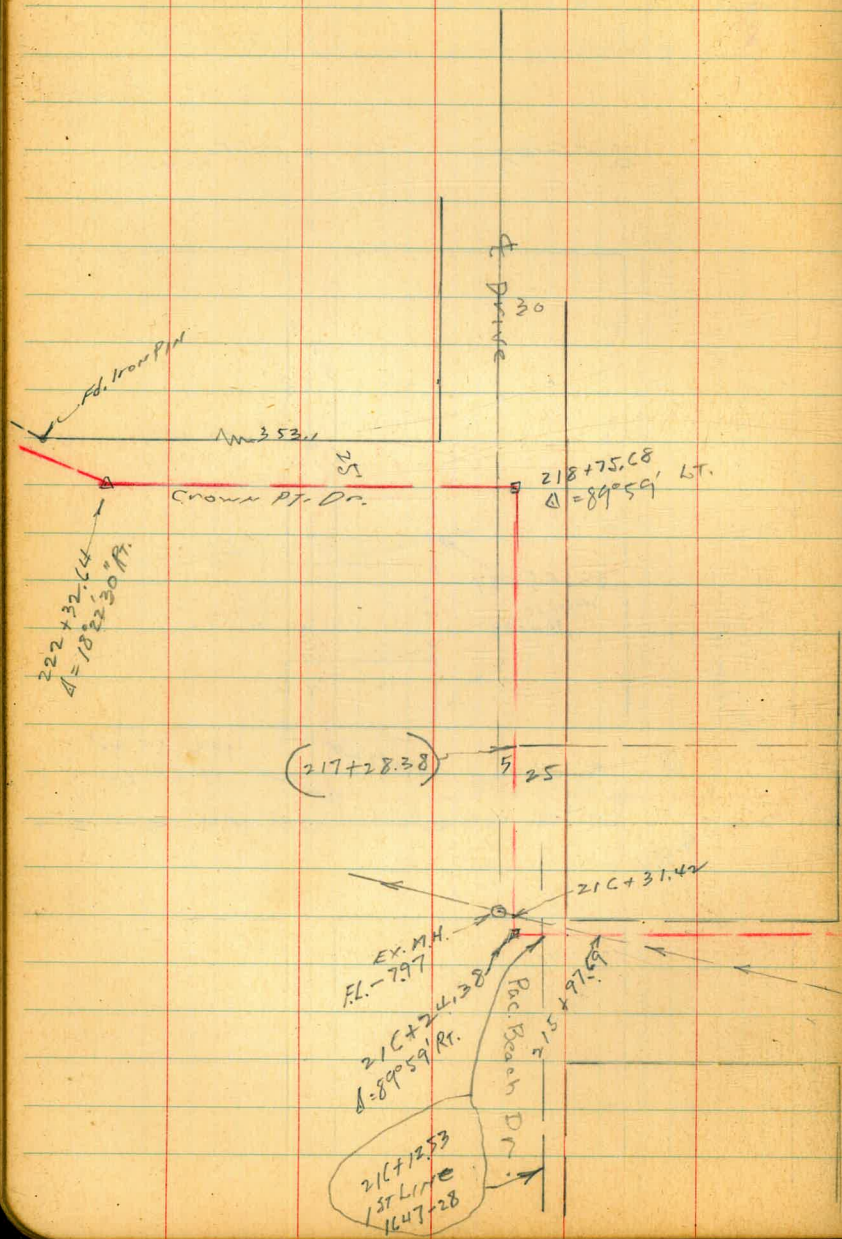
INDEXED  
 AUG 23 1951



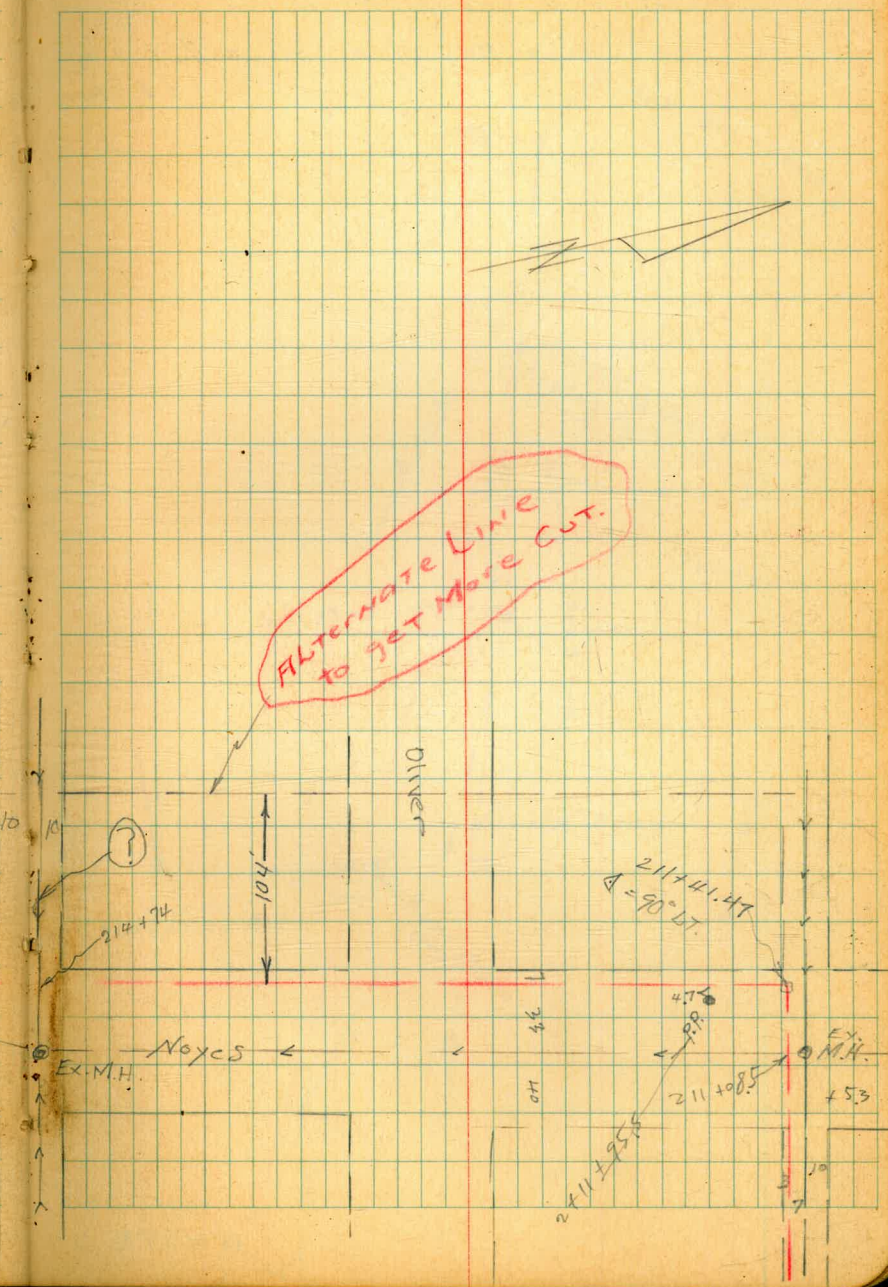


9-19-44.

Sewer via Crown Pt. Drive

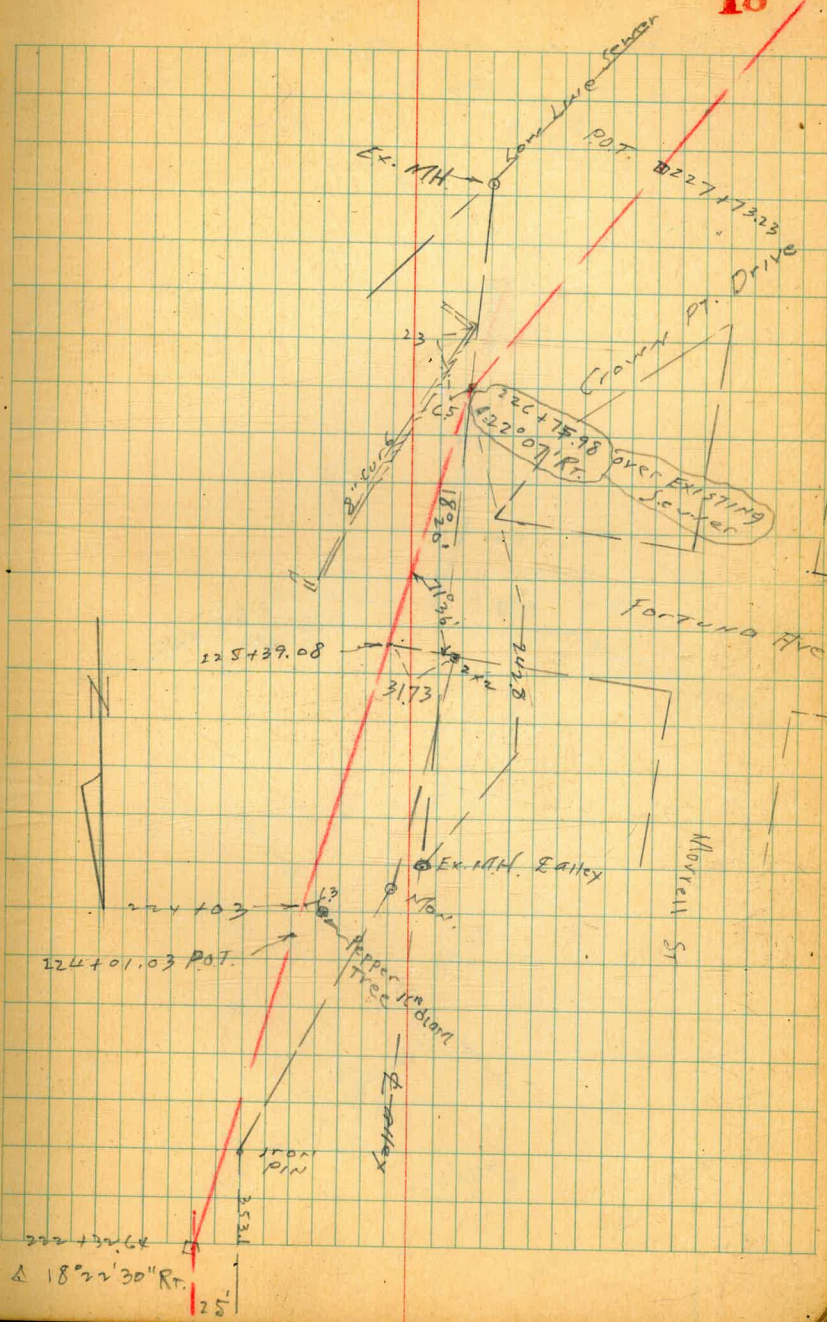


17





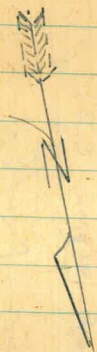
Sewer via Crown Pt. Drive  
 on Steep Bay Slope, about 4/10 to  
 1:1 Slope



$\Delta 18^{\circ}22'30''$  Rt.



Sever via steep bay slope  
on Crown Pt. Drive



235+41.3C  
 $\Delta = 18^{\circ}05' \text{LT.}$

EX. M.H.

231+21.50 POT

227+73.73 POT

$\Delta = 41^{\circ}31'$

19

EX. M.H.

Low Line Sewer  
39.5

240+89.31  
 $\Delta = 29^{\circ}51' \text{LT.}$

$\Delta = 69^{\circ}13'$

238+51.6  
 $\Delta = 46^{\circ}31'30'' \text{RT.}$   
POT.

Pump House  
on La Playa Ave.  
E. end.



242+99.08

M.H.

39.5

240+89.31  
 $\Delta = 29^{\circ}51' \text{LT.}$

$\Delta = 69^{\circ}13'$



Sewer Levels, Sketch P. 16

B.M. Mon.  
16.85 S. of  
197+79.19

194+84.30	Δ 90° RT.	5.7	- 2.1	✓	1647-30 11/10/44 Keller & M.
195		5.6	- 2.0	✓	
150		4.8	- 1.2	✓	
196		4.3	- 0.7	✓	
724	cross Sewer	4.2	- 0.6	✓	
"	7' E. = M.H.	2.87	0.76	✓	R.M.
"	" "	8.57	- 4.94	✓	F.L.
150		4.4	- 0.8	✓	
197		4.4	- 0.8	✓	
150		4.5	- 0.9	✓	
T.P.	4.9 ~	4.51	- 0.85	✓	
188.6		4.9	- 0.9	✓	
"	7' E. M.H.	3.98	+ 0.06	✓	R.M.
"	" "	8.13	- 4.59	✓	F.L.
198		4.9	- 0.9	✓	
150		4.9	- 0.9	✓	
175		4.5	- 0.5	✓	
199		3.6	+ 0.4	✓	
155.92	Δ 89° 58' LT	3.2	+ 0.8	✓	
M.H.	7' E + 7' N of Δ	3.64	+ 0.40	✓	R.M.
"	" "	7.99	- 3.95	✓	F.L.

4.04

200+0.0		3.0	+ 1.0	✓
150		3.1	+ 0.9	✓
T.P.	3.0 ~	3.33	0.71	✓
185		2.7	+ 1.1	✓
201		3.2	+ 0.6	✓
120		4.4	- 0.6	✓
150		4.6	- 0.8	✓
200		4.8	- 1.0	✓
138.5		4.7	- 0.9	✓
"	7' N M.H.	2.50	+ 1.27	✓
"	" "	6.67	- 2.90	✓
150		4.9	- 1.1	✓
203		5.0	- 1.2	✓
150		3.8	0.0	✓
204		1.9	+ 1.9	✓
T.P.	9.90 ~	12.5	2.52	✓
120		9.2	3.2	✓
150		8.5	3.9	✓
175		8.1	4.3	✓
205		6.8	5.6	✓
110		6.1	6.3	✓



(12.42)

205 + 50	5.5	6.9	✓
206	5.2	7.0	✓
+ 50	4.2	8.2	✓
207	4.0	8.4	✓
+ 50	3.8	8.6	✓
208	2.1	10.3	✓
+ 50	0.5	11.9	✓

T.P. 276 (14.79) 039 (12.03) ✓

209	2.2	11.6	✓
+ 50	3.2	11.6	✓
210	5.0	8.8	✓
+ 50	8.9	5.9	✓
+ 75	10.7	A.1	✓
211	11.2	3.6	✓
+ 08.5	11.2	3.6	✓
" 7' N M.H.	10.55	A.14	P.M.
" " "	15.95	- 1.16	FL
211 + 41.47 Δ = 90° LT.	11.0	3.8	✓
" 50' W	7.5	7.3	✓
" 104' W	3.4	11.4	See sketch
212	11.3	3.5	✓
" 104' W	2.7	12.1	✓
+ 50	10.3	A.5	✓
" 104' W	3.5	11.3	✓

Alternate line Δ

(14.79)

21

213	10.6	4.2	✓
" 104' W	5.3	9.5	✓
+ 50	12.0	2.8	✓
" 104' W	7.4	7.4	✓
214	13.6	1.2	✓
" 104' W	9.8	5.0	✓

T.P. 7.57 (9.54) 12.82 (1.97)

214 + 50	9.8	- 0.3	✓
" 104' W	5.7	+ 3.8	✓
+ 74 Cross Sewer	6.2	3.3	✓
" 104' W	10.5	- 1.0	✓
" 33' E M.H.	10.30	- 0.7	P.M.
" " "	17.25	- 7.71	FL
215	11.4	- 1.9	✓
" 104' W	6.9	+ 2.6	✓
+ 50	11.7	- 2.2	✓
" 104' W	6.3	+ 3.2	✓
+ 97.69 Cross Ex. Sewer	11.4	- 1.9	✓
" 104' W	5.1	+ 4.4	✓
216 + 24.38 Δ 89° 59' RT.	10.0	- 0.5	✓
+ 31.42 Cross Ex. Sewer	8.9	+ 0.6	✓
" 5' So. M.H.		- 7.97	EL. FL.
+ 46	7.3	+ 2.2	See 1047



9.54

216 +75		5.9	3.6	✓
217		7.7	2.3	✓
128.38 = Δ on	ALTECHANG LINE	7.1	2.4	✓
+50		5.9	3.6	✓
+75		6.6	2.9	✓
218		8.1	1.4	✓
+50		8.4	1.1	✓
+70		2.4	7.1	✓
218 +75.68 = Δ 89°59' LT.		2.0	7.5	✓
T.P.	9.28	2.4	7.50	AP Drive Stub
219		9.4	7.4	✓
+50		9.2	7.6	✓
220		7.1	9.7	✓
+50		5.3	11.5	✓
221		4.1	12.7	✓
+50		3.4	13.4	✓
+75		3.7	13.1	✓
222		4.5	12.3	✓
+32.64 Δ = 18°22'30" RT.		5.3	11.5	✓
+50		5.1	11.7	✓
223		5.2	11.6	✓
+50		6.0	10.8	✓
+70		8.1	8.7	✓
224		8.8	8.0	✓

T.P.	8.88	6.64	10.14	14.78 19.02
+25		9.7	9.3	✓
+50		9.7	9.3	✓
+65		9.5	9.5	✓
+75		8.8	10.2	✓
225		8.7	10.3	✓
+50		7.8	11.2	✓
226		6.8	12.2	✓
+50		6.0	12.4	✓
226 +75.98 = Δ 22°07' RT		6.3	12.7	over Ex. Sewer
227		5.5	13.5	✓
+25		4.2	14.8	✓
+50		2.3	16.7	✓
+70		1.9	17.1	✓
+82		2.1	16.9	✓
228		5.8	13.2	✓
T.P.	5.46	8.25	10.77	16.23
+35	2	6.7	9.5	✓
"	10 RT	2.4	13.8	✓
"	5 LT	8.5	7.7	✓
+65	2	11.2	5.0	✓
"	5 LT	13.1	3.1	✓
"	10 RT	6.0	10.2	✓



16.23

229	♀	14.7	1.5	✓
"	5 LT	17.0	-0.8	✓
"	10 RT	9.8	6.4	✓
+50	♀	14.7	1.5	✓
"	5 LT	17.1	-0.9	✓
"	10 RT	10.1	6.1	✓
230	♀	13.3	2.9	✓
"	7 LT	18.0	-2.4	✓
"	10 RT	9.4	6.8	✓
+50	♀	12.6	3.6	✓
"	8 LT	18.3	-2.1	✓
"	10 RT	7.2	9.0	✓
231	♀	12.8	3.4	✓
"	5 LT	14.6	1.6	✓
"	10 RT	8.2	8.0	✓
231 +21.5	♀ orca Ex. Sewer	14.7	1.5	P.O.T. ✓
"	5 LT	16.3	-0.1	✓
"	10 RT	9.0	7.2	✓
+50	♀	11.9	4.3	✓
"	5 LT	17.3	-1.1	✓
"	10 RT	7.5	8.7	✓
232	♀	10.4	5.8	✓
"	5 LT	13.3	2.9	✓
"	10 RT	5.3	10.9	✓
+45	♀	9.0	7.2	✓
"	5 LT	13.3	2.9	✓
"	10 RT	3.3	12.9	✓

16.23

23

232 +50	♀	11.1	5.1	✓
"	5 LT	15.4	0.8	✓
"	10 RT	3.2	13.0	✓
TP 7.00		<del>15.06</del> 8.17	<del>18.06</del>	✓
233	♀	10.9	4.2	✓
"	5 LT	14.8	0.3	✓
"	10 RT	3.1	12.0	✓
+50	♀	10.9	4.2	✓
"	5 LT	15.8	-0.7	✓
"	10 RT	2.8	12.3	✓
234	♀	12.2	2.9	✓
"	5 LT	15.1	0.0	✓
"	10 RT	4.6	10.5	✓
+50	♀	13.2	1.9	✓
"	5 LT	16.5	-1.4	✓
"	10 RT	4.9	10.2	✓
+90	♀	10.5	4.6	✓
"	5 LT	13.5	1.6	✓
"	10 RT	3.8	11.3	✓
235 +20	♀	5.4	9.7	✓
"	5 LT	9.3	5.8	✓
"	5 RT	1.8	13.3	✓



15.00

235 + 41.36 = Δ 18° 5' LT	11.5	10.6	✓
" 5 LT	8.4	6.7	✓
" 5 RT	0.1	14.7	✓
+70 E	8.0	6.5	✓
" 5 LT	11.4	3.7	✓
" 5 RT	5.3	9.8	✓
236 E	8.2	6.9	✓
" 5 LT	10.4	4.7	✓
" 5 RT	5.1	10.0	✓
+40 E	11.9	3.2	✓
" 5 LT	15.0	0.1	✓
" 5 RT	8.8	6.3	✓
+70 E	13.3	1.8	✓
" 5 LT	15.8	-0.7	✓
" 10 RT	6.1	9.0	✓
237 E	15.0	0.1	✓
" 5 LT	15.5	-0.4	✓
" 10 RT	7.8	7.3	✓
+14 E	14.6	0.5	✓
" 5 LT	16.6	-1.5	✓
" 10 RT	6.2	8.9	✓
+40 E	10.0	5.1	✓
" 5 LT	14.4	0.9	✓
" 10 RT	2.4	12.7	✓

15.00

+60 E	4.2	10.9	✓
" 5 LT	8.0	7.1	✓
" 7 RT	+1.0	16.1	✓
T.P. 6.90	<u>19.40</u>	2.56	<u>12.50</u>
+70 E	3.9	15.5	✓
" 5 LT	9.0	9.8	✓
" 5 RT	2.0	16.8	✓
+74 E	9.4	10.0	✓
" 5 LT	9.0	9.8	✓
" 5 RT	6.8	12.6	✓
+80 E	6.3	13.1	✓
" 5 LT	6.3	13.1	✓
" 5 RT	4.8	14.6	✓
+82	2.7	16.7	✓
" 5 LT	4.2	15.2	✓
" 5 RT	4.3	15.1	✓
238 E	3.0	15.8	✓
" 10 LT	9.1	10.3	✓
" 5 RT	3.1	16.3	✓
+15 E	3.8	15.6	✓
" 18 LT	5.1	14.3	✓
" 5 RT	3.4	16.0	✓ <small>Partial Slope</small>



19.40

238 + 32	E	2.1	17.3	✓	RIM Slope
"	15 LT	6.1	13.3	✓	RIM Slope
"	5 RT	1.9	17.5	✓	
+44	E	6.3	13.1	✓	
"	6 LT	7.7	11.7	✓	
"	5 RT	5.1	14.3	✓	
238 + 51.6	A 46° 3' 30" RT	10.9	8.5	✓	E
"	5 LT	13.8	5.6	✓	
"	5 RT	7.5	11.9	✓	
+70	E	11.7	7.7	✓	
"	5 RT	10.6	8.8	✓	
"	5 LT	14.6	4.8	✓	

T.P.	241	12.58	9.3	10.17	5706 Δ 240 + 89.31
+77	E	8.2	3.8	✓	
"	5 LT	9.8	2.8	✓	
"	5 RT	6.4	6.2	✓	
239	E	6.8	5.8	✓	
"	5 LT	13.0	-0.4	✓	
"	5 RT	2.9	9.7	✓	
+50	E	8.8	3.8	✓	
"	5 LT	11.0	1.6	✓	
"	5 RT	6.0	6.6	✓	

25

12.58

240	E	6.6	6.0	✓	
"	5 LT	12.2	0.4	✓	
"	5 RT	3.5	9.1	✓	
+25	E	7.2	5.4	✓	
"	5 LT	11.0	1.6	✓	
"	5 RT	1.8	10.8	✓	
+50	E	5.2	7.4	✓	
"	5 LT	8.6	4.0	✓	
"	5 RT	0.8	11.8	✓	
240 + 89.31	A = 29° 5' 16"	2.4	10.2	✓	E
"	5 LT	3.8	8.8	✓	
"	5 RT	40.7	13.3	✓	
241 + 0.9	E	2.1	10.5	✓	
"	5 LT	5.3	7.3	✓	
"	5 RT	1.1	11.5	✓	
+37	E	6.9	5.7	✓	
"	5 LT	10.8	1.8	✓	
"	5 RT	2.8	9.8	✓	
+75	E	12.8	-0.2	✓	
"	5 LT	15.2	-2.6	✓	Place 5 on C Compters ✓ here
"	5 RT	9.3	3.3	✓	
242	E	12.3	0.3	✓	
"	5 LT	15.2	-2.6	✓	
"	5 RT	7.4	5.2	✓	



12.58

242 + 37	E	2.3	4.3	✓	
"	5 LT	13.2	-0.6	✓	
"	5 RT	5.2	7.4	✓	
+ 65	E	6.8	5.8	✓	
"	5 LT	9.6	3.0	✓	
"	5 RT	0.0	12.6	✓	
+ 80	E	3.0	9.6	✓	
"	5 LT	6.6	6.0	✓	
"	5 RT	+1.0	13.6	✓	
243 + 15	E	1.5	11.1	✓	
"	5 LT	5.2	7.4	✓	
"	5 RT	+2.3	14.9	✓	
+ 50	E	3.9	8.7	✓	
"	5 LT	8.8	3.8	✓	
"	5 RT	+1.7	14.3	✓	
+ 80	E	5.2	7.4	✓	
"	5 LT	9.6	3.0	✓	
"	5 RT	0.3	12.3	✓	
243 + 99.68	ground	6.5	6.1	✓	
"	Top N. Cor. Tank	4.8	7.8	✓	
T.P.	10.89	<21.80>	1.67	<10.91>	✓
T.P.	6.98	<28.21>	0.57	<21.23>	✓
check to Spike in PP.			4.46	<23.55>	✓
1647-61					
23.55					
23.68					



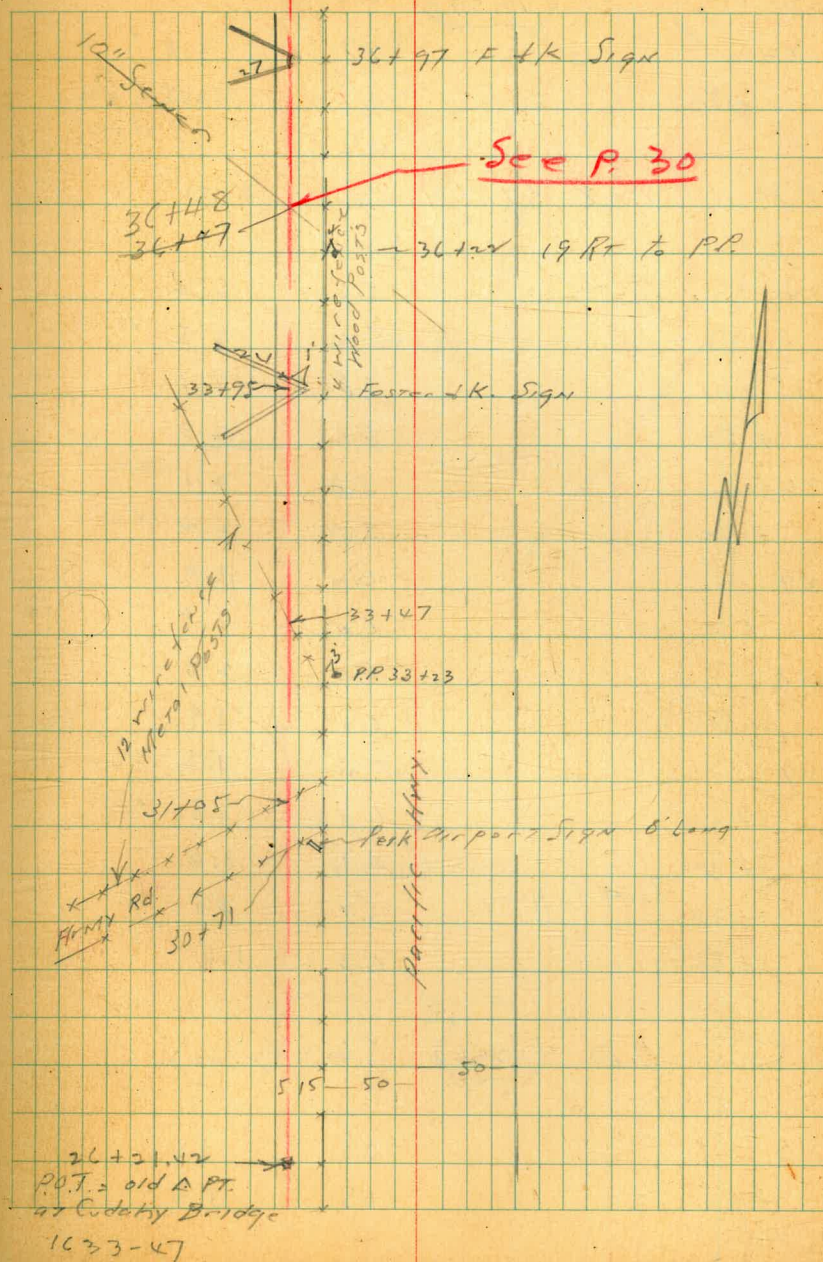
Moore  
South of Hwy. Old Town to Pacific Beach Sewer  
W.E.M.  
10-20-44. Via W. side Pacific Hwy.

Cont'd. from F.B. 1633-47

For P.P. Location See

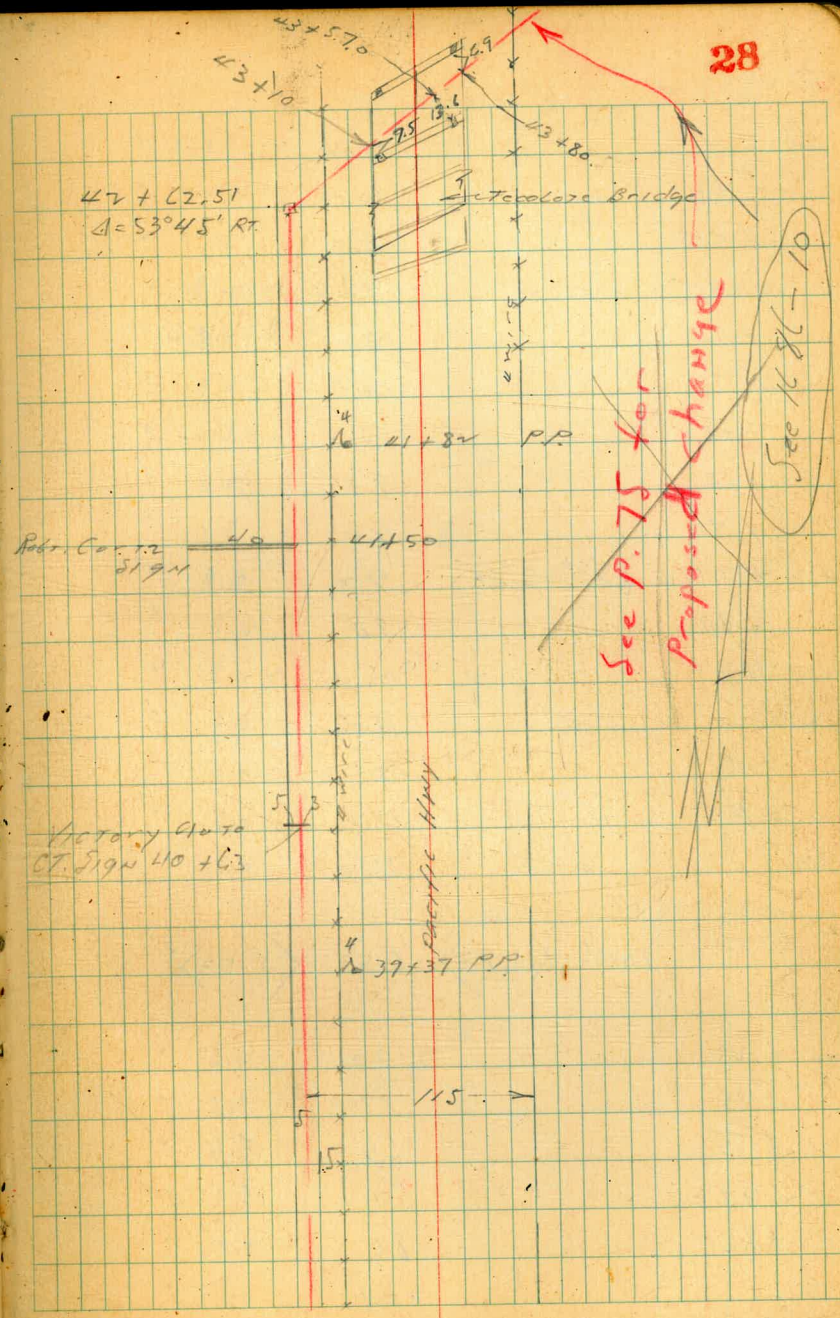
Cuddeby Brz B.M. Sq. Bolt	0.90	12.59	11.69	F.B. 1647 P.C.S.
26+50		12.0	0.6	✓ 10/31/44 m
27		11.8	0.8	✓
+32		12.1	0.5	✓
+60		9.7	2.9	✓
28		9.5	3.1	✓
+50		9.5	3.1	✓
29		9.5	3.1	✓
+50		9.4	3.2	✓
30		9.4	3.2	✓
+50		9.5	3.1	✓
+75		9.6	3.0	✓
+80		8.5	4.1	✓
31		9.1	3.5	✓
+30		9.4	3.2	✓
+37 RAMP Rd. to Airplane Beach		7.4	5.2	✓
+52 Sta.		7.3	5.3	✓
+60		9.6	3.0	✓
32		9.7	2.9	✓
+50		9.6	3.0	✓

BMBP E c6 Tecolote  
1647-66 Bridge 27  
7.85



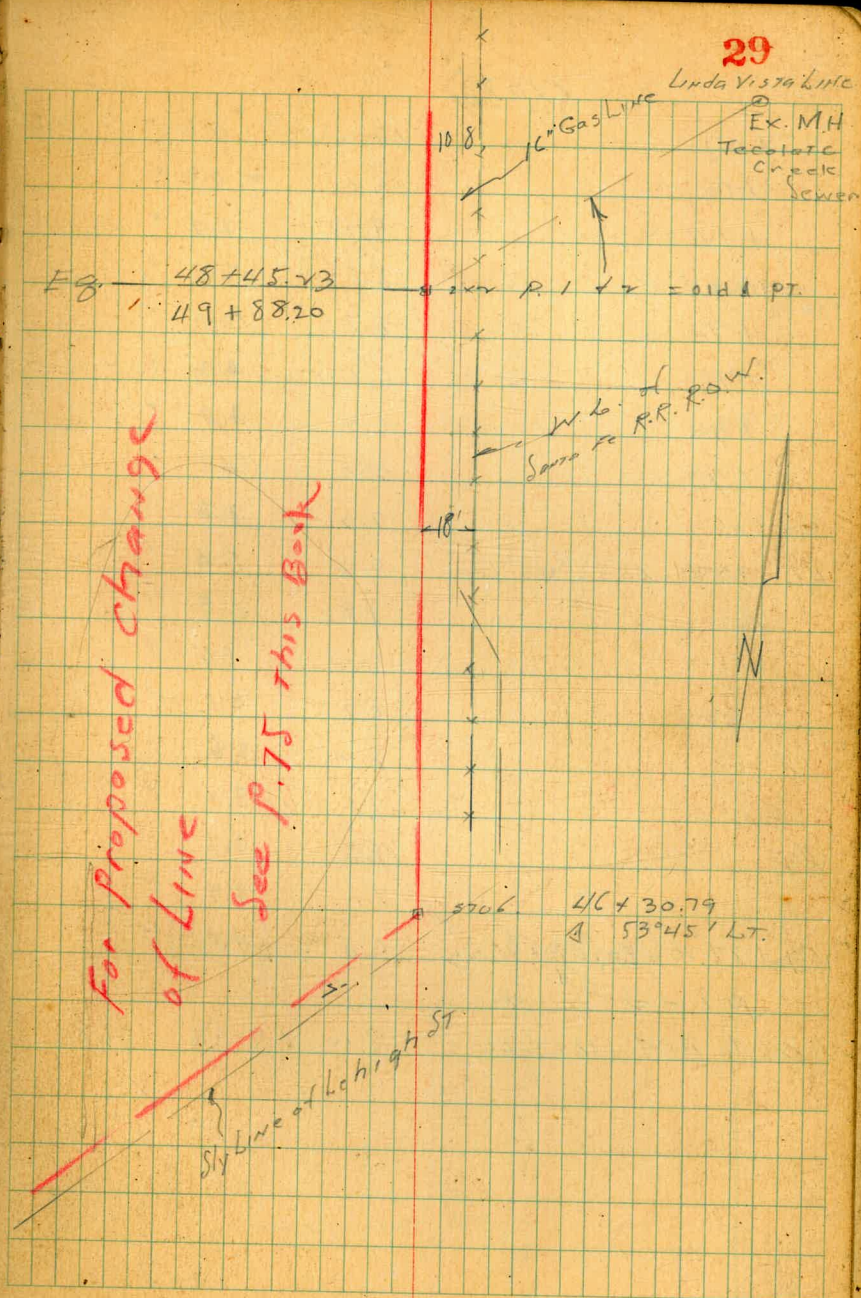


		$\langle 12.59 \rangle$		
33		9.8	2.8	✓
+50		10.1	2.5	✓
T.P.	1.48	$\langle 7.80 \rangle$	6.21	$\langle 6.38 \rangle$ ✓
34		5.5	2.4	✓
+50		5.2	2.5	✓
35		5.8	2.1	✓
+50		5.6	2.3	✓
36		5.8	2.1	✓
+50		5.7	2.2	✓
37		6.0	1.9	✓
+50		6.0	1.9	✓
38		5.9	2.0	✓
+50		6.0	1.9	✓
39		6.2	1.7	✓
+22		6.1	1.8	✓
+32		4.3	3.6	✓
+49	RAMP to Hwy	3.9	4.0	✓
+56		6.3	1.6	✓
T.P.	9.80	$\langle 17.06 \rangle$	5.60	$\langle 2.26 \rangle$ ✓
40		10.5	1.6	✓
+50		10.5	1.6	✓





	$\langle 12.09 \rangle$			
41		10.4	1.7	✓
+40		10.2	1.9	✓
+55		9.4	2.7	✓
+75		9.8	2.3	✓
+95		13.0	-0.9	✓
✓2		12.4	-0.3	✓
+05		12.3	-0.2	✓
+15		9.5	2.6	✓
+40		9.0	3.1	✓
✓2 + 62.51	$\Delta 53^\circ 45' RT$	9.3	2.8	✓
+70		9.8	2.3	✓
+70		12.4	-0.3	✓
✓3		11.6	0.5	✓
+15		12.1	0.0	✓
+70		11.6	0.5	✓
✓4		11.4	0.7	✓
T.P	5.30	$\langle 10.83 \rangle$	6.53	$\langle 5.53 \rangle$
+23		10.0	0.8	✓
+45		7.7	3.1	✓
+55		5.2	5.6	✓
+72		5.7	5.1	✓
+81		8.6	2.2	✓
✓5		10.1	0.7	✓





110.83

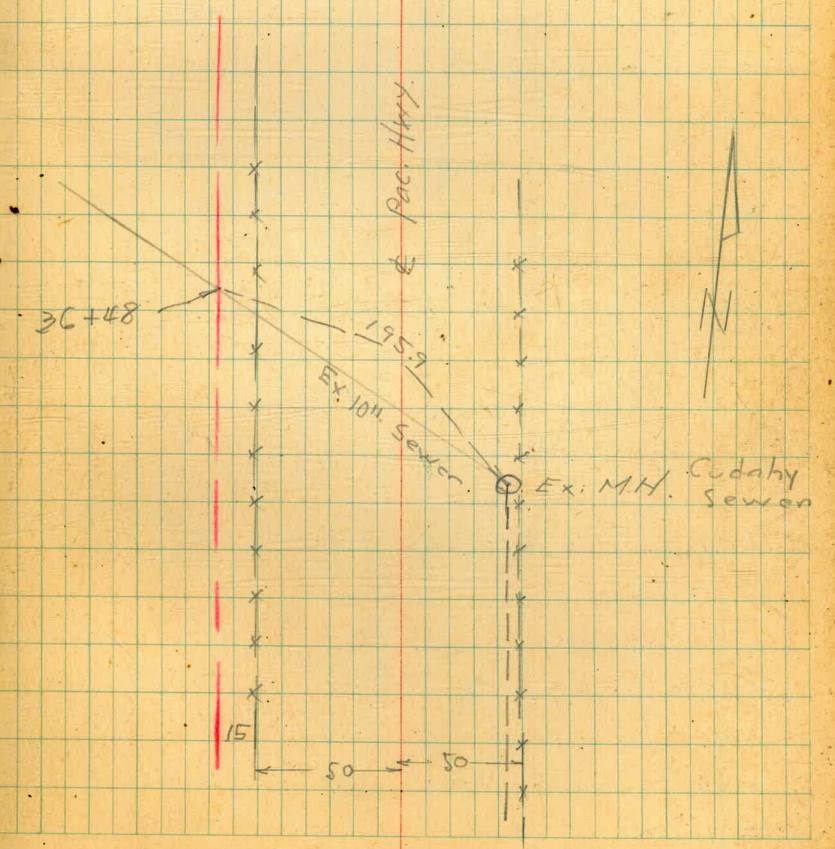
45+07	10.2	0.6	✓
+10	11.6	-0.8	✓
+14	9.7	1.1	✓
+30	8.5	2.3	✓
+70	8.8	2.0	✓
+78	6.6	4.2	✓
+90	6.4	4.4	✓
+98	6.7	4.1	✓
46+06	9.2	1.6	✓
46+3079 Δ 53°45'47"	9.4	1.4	✓
+50	9.9	0.9	✓
47	9.2	1.6	✓
+50	8.7	2.1	✓
48	8.2	2.6	✓
+50	7.8	3.0	✓
49	7.5	3.3	✓
+50	7.1	3.7	✓
49+88.70 = Eq. 48 + 45.23	6.8	4.0	✓

P.I. + 2 this OK  
 check to BM 1047-66 5.14 (5.69) 5.68

EL. Cudaby Sewer 30

at 36+48 Main Trunk Sewer  
 8-9-45 See p. 27

BM. BP 104	8.89			E. of Tecolote Bridge 1147-66
36+48 Top 10" pipe	9.77			-0.88
T.P. 357	11.57	0.89		8.60 (-1.88 PL)
R.I.M. Ex. M.H.	8.94			2.63
F.L. " "	13.12			-1.55





Proposed change of Trunk Sewer Line  
 Beg at Greenwood and Jefferson  
 to S.D. River Dyke.

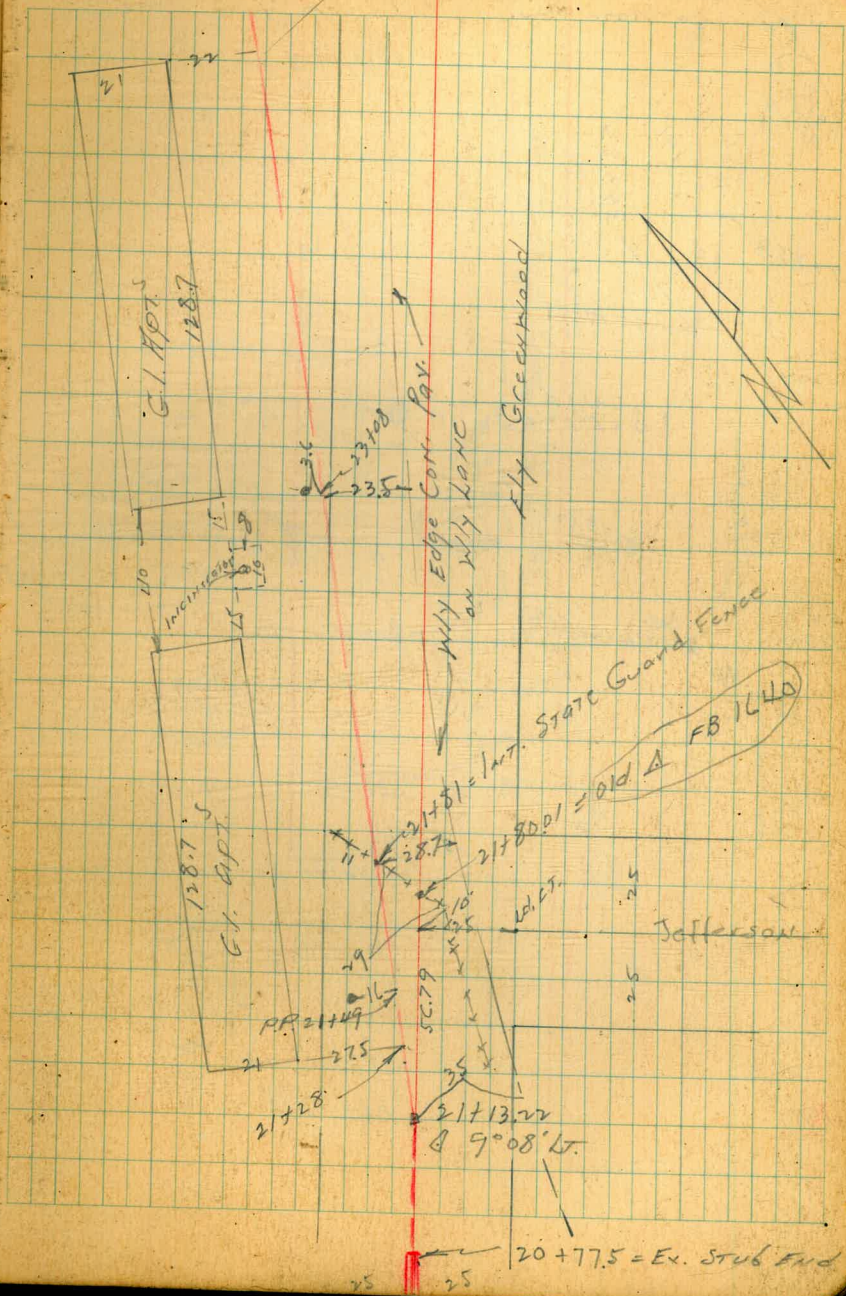
BM, I.D. C.T.				
in curb	5.18	$\langle 8.29 \rangle$	3.02	E Greenwood H. K...
T.P.	5.17	$\langle 9.62 \rangle$	4.75	$\langle 3.45 \rangle$
T.P.	5.81	$\langle 9.78 \rangle$	4.65	$\langle 3.97 \rangle$

20 + 77.5	Ex. Stub end	5.5	4.3	✓
21 + 13.22	$\Delta$ 9°08' LT	5.6	4.2	✓
+ 80		5.6	4.2	✓
22		5.2	4.6	✓
+ 50		4.7	5.1	✓
23		4.5	5.3	✓
+ 50		4.5	5.3	✓
24		4.4	5.4	✓
+ 50		4.3	5.5	✓
25		4.0	5.8	✓

T.P. I.D. C.T.	3.63	$\langle 10.66 \rangle$	2.75	$\langle 7.03 \rangle$	E Congress Fly Greenwood
25 + 15	oil Pav.	5.0	5.7	✓	
+ 25.10	" "	4.9	5.8	✓	
+ 41	" "	5.2	5.6	✓	
+ 24	" " Bench	4.7	6.0	✓	
25 + 61	$\Delta$ 6°58' LT	6.0	4.7	✓	

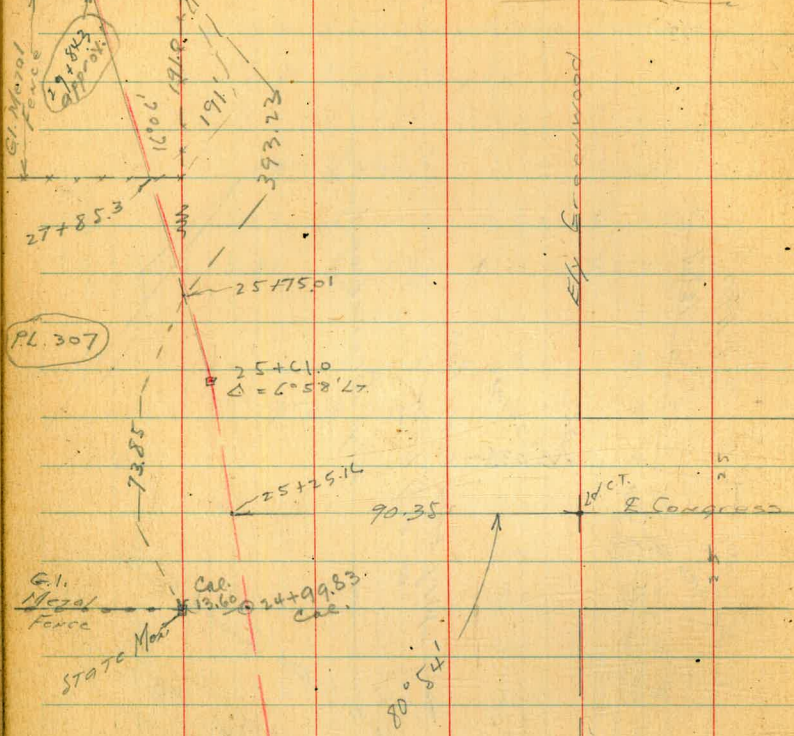
To 77.38

Csm  
 Clint  
 W.F.M.  
 10-26-44 **31**

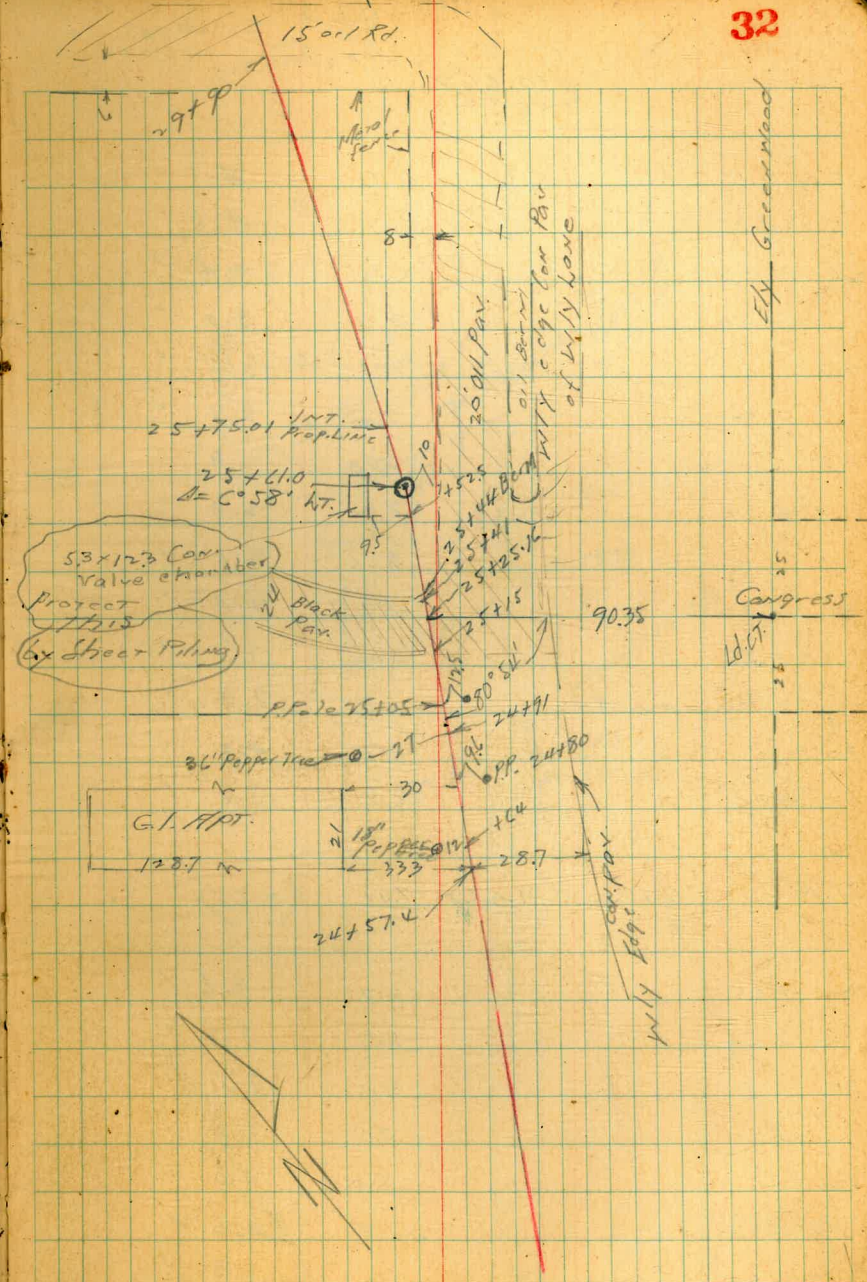
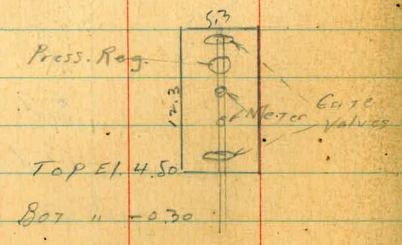




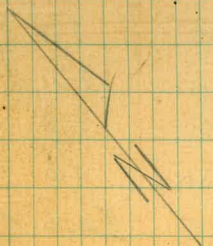
PL. 306  
29+90  
5' oil Rd.  
Calc. this Tie  
State Med.  
Sec FB 271-29  
Sketch for TIES



Can. Valve Box on Congress



G.I. Mezel Force  
128.7 m



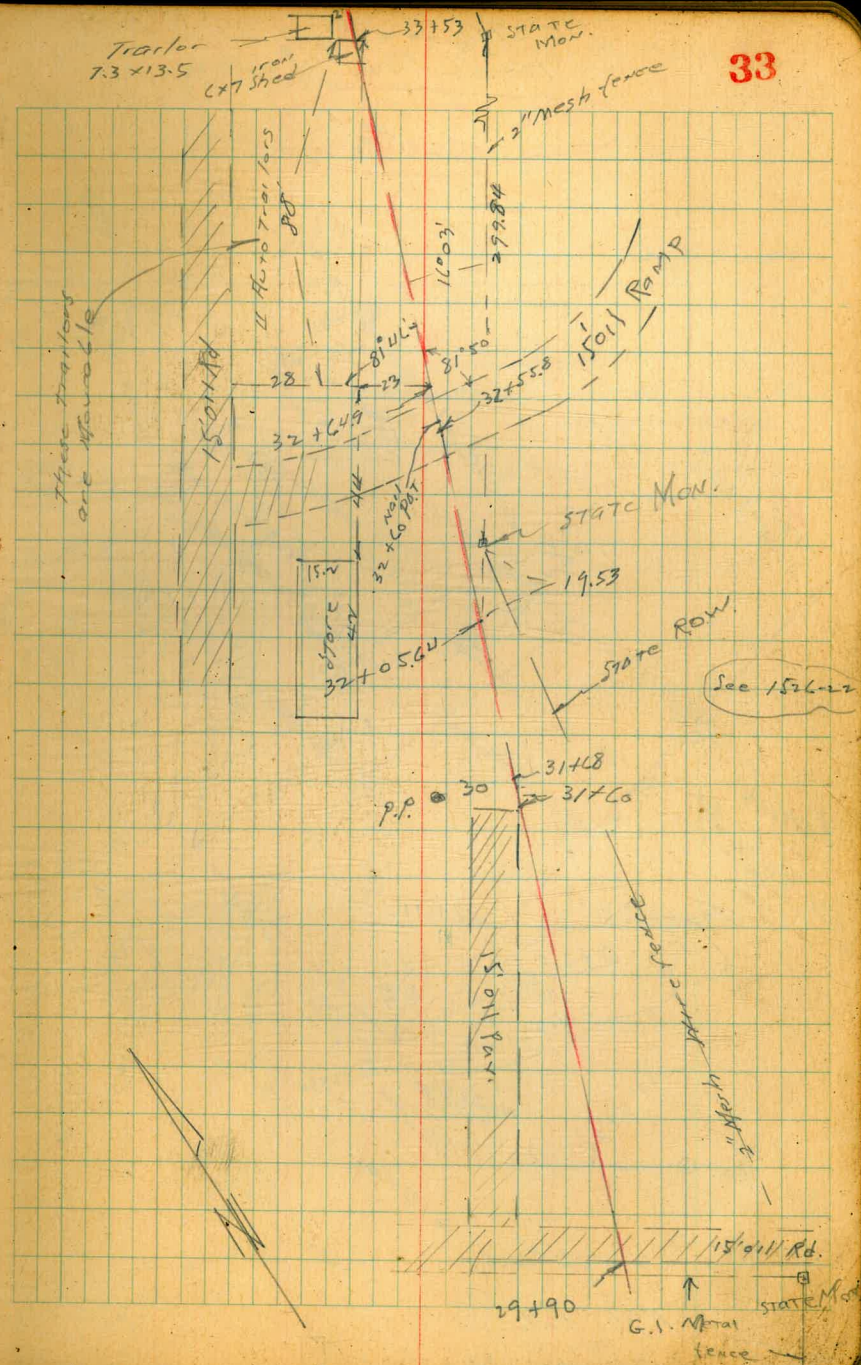


41. Fwd. P. 91  
 (10.65)

25	+ 75	6.6	4.1	✓	
	+ 87	6.1	4.6	✓	
26		6.3	4.4	✓	
	+ 50	7.7	3.0	✓	
27		7.1	3.6	✓	
	+ 50	7.0	3.7	✓	
28		7.8	2.9	✓	
	+ 50	8.4	2.3	✓	
29		8.5	2.1	✓	
	+ 50	8.3	2.4	✓	
	+ 85	8.0	2.7	✓	
	+ 90	edge oil Rd.	6.8	3.9	✓
30		" "	6.7	4.0	✓
	+ 06	" "	6.9	3.8	✓
TP	571	(9.24)	7.11	(2.55)	✓
	+ 15		5.7	3.6	✓
	+ 50		5.5	3.8	✓
31			5.0	3.7	✓
	+ 50		5.5	3.8	✓
32			5.0	4.3	✓
	+ 38		4.8	4.5	✓
	+ 49	edge oil Rd.	1.0	8.3	✓

To T<sub>g</sub> 36.

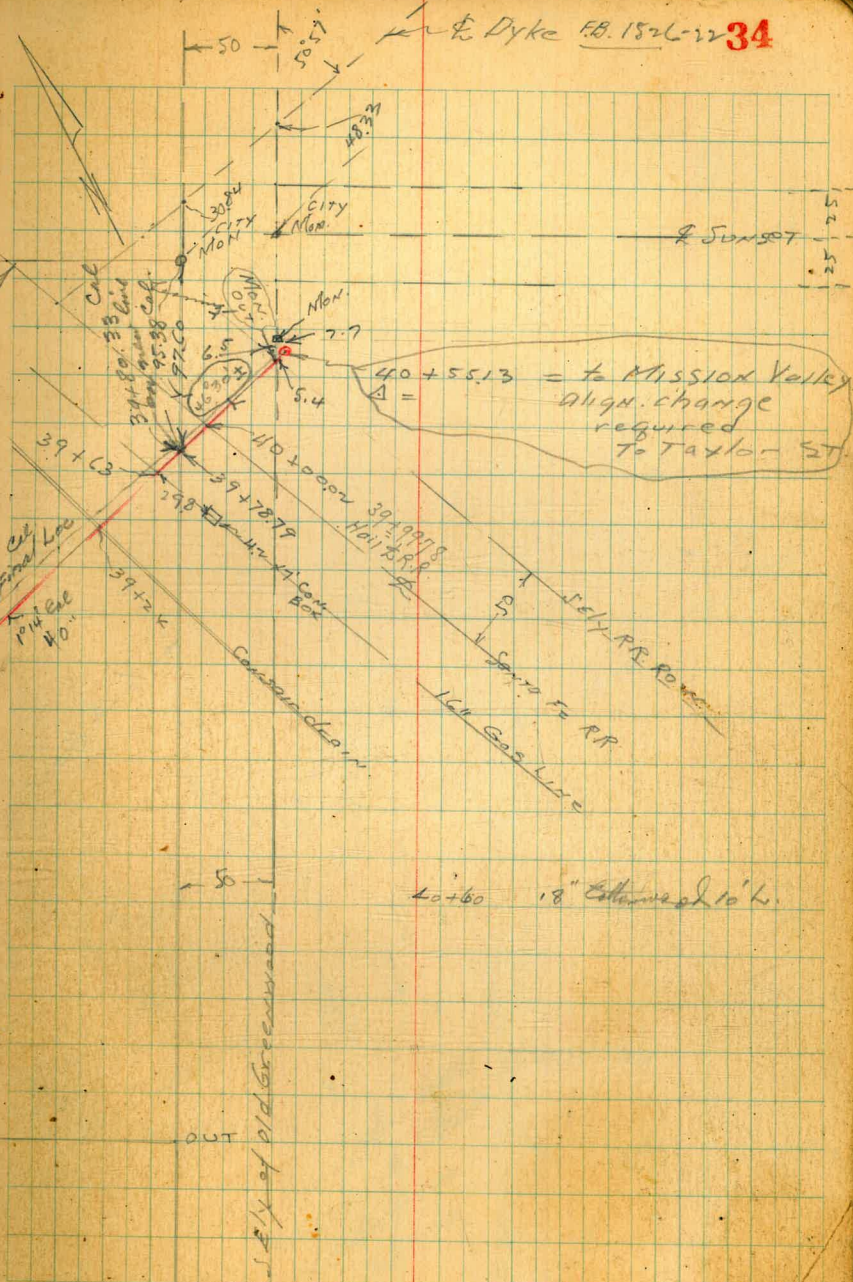
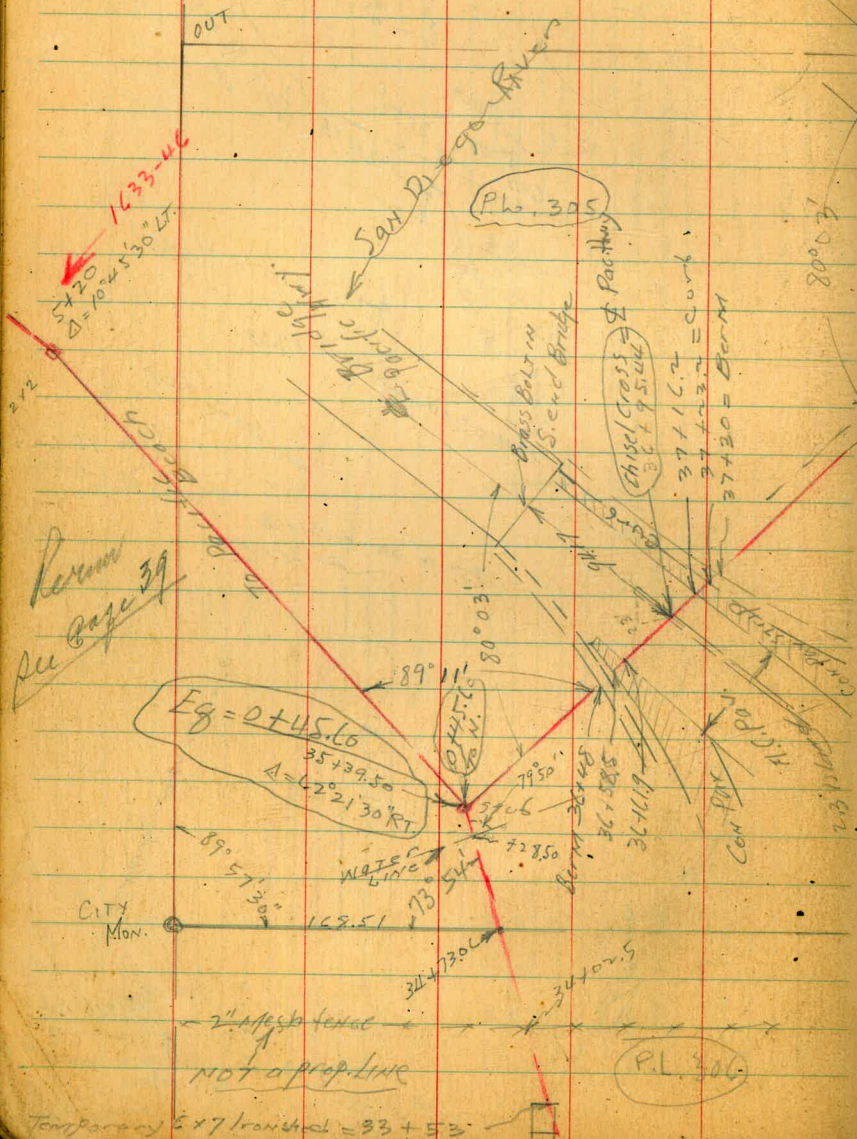
33





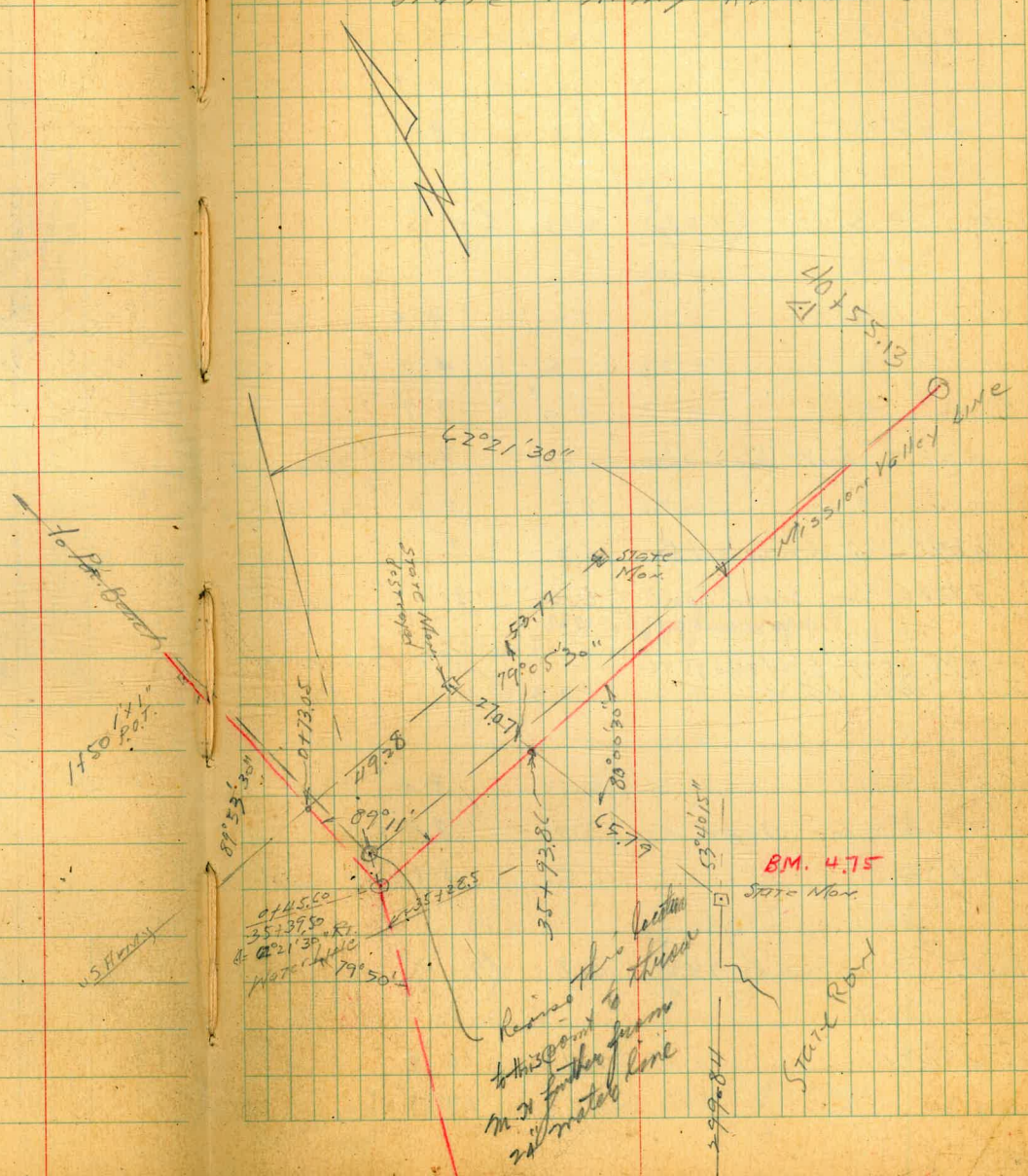
C.577 bore  
10-26-44

Sec 871-29  
1526-22





Sketch showing ties on  
State & Army R.W. Lines





H.I. Ford, P. 33.  
 (9.26)

32 + 63	edge of Rd.	1.1	8.2	✓
+ 71		4.3	5.0	✓
33		4.4	4.9	✓
+ 50		4.8	4.5	✓
T.P.	2145	(9.58)	213	(7.13)
34		5.2	4.4	✓
+ 50		5.6	4.0	✓
35 + 00		5.9	3.7	✓
+ 28.5	Int. Water Line	6.2	3.4	✓ ground
"	" " " "	9.3	0.3	✓ Top of Pipe
35 + 29.5	Δ 62" x 30" R.R.	6.3	3.3	✓
+ 93.86	Int. State Row	6.2	3.4	✓
	Calga record see Dwn. 1058-D.			
Set B.M. 2579	S. of 35 + 93.86	4.83	4.75	✓ on Brass P. on Max
Top 5790 Max				
36		6.2	3.4	✓
+ 20	Toe slope	5.9	3.7	✓
+ 30		1.5	8.1	✓
T.P.	10.23	(19.63)	0.18	(9.40)
36 + 48		2.7	16.9	✓
+ 50		1.9	17.7	✓

(19.63)

Calga  
1058-D

36 + 51		2.2	17.4	✓
+ 95.44	Top Island	1.1	18.5	✓
37 + 23.0	gut	2.0	17.6	✓
"	Top Cur 6	1.4	18.2	✓
+ 30		1.3	18.3	✓
+ 51		12.2	7.4	✓
+ 60	Toe	14.7	4.9	✓
+ 75		15.5	4.1	✓
38		15.5	4.1	✓
+ 50		15.5	4.1	✓
+ 65		16.4	3.2	✓
+ 90		17.0	2.6	✓
39 + 03		16.3	3.3	✓
+ 10		11.1	8.5	✓
+ 24	ground over drain	9.9	9.7	✓
+ 33		11.9	7.7	✓
+ 46		12.4	7.2	✓
+ 63	ground over <sup>945</sup> line	11.2	8.4	✓
+ 75		12.7	6.9	✓
+ 90		6.6	13.0	✓
	Top W. Rail R.R.	5.33	14.30	✓
40 + 00.00	2 R.R.	5.9	13.7	✓ on Tie
	Top E. Rail	5.35	14.28	✓
+ 11		7.7	11.9	✓
T.P. City B.P.	2.61	(15.34)	6.90	(2.73)
S. 96.7 R.R.				
Bridge & Dyke				
			12.70	



15.34

40+27	12.2	3.1 ✓
+35	12.9	2.4 ✓
40+55.13 A	MH 12.07	<u>3.27</u> ✓ xx2 Hub

Levels on Senior Line Change  
across S.D. River Sketch p.34

BM. P.34	11.40	<u>16.15</u>	4.75 ✓	State Mant
Calculated Non to Pt here at Sta 0+56.72				
0+45.60 = Junc. with	Mission Valley Line	12.8	3.3	{ 35+52 Mission 35+45.28 at Valley Line str.
0+90		13.0	3.2 ✓	
1+15		10.8	5.3 ✓	
+37		9.2	7.0 ✓	
+49	Top River Dike	2.2	14.0 ✓	
+62		2.2	14.0 ✓	
+85		13.1	3.0 ✓	
I.P.	3.30	<u>7.38</u>	12.07	<u>4.08</u> ✓
1+98		7.6	-0.2 ✓	
2+05		7.5	-0.1 ✓	

*Handwritten notes:*  
- "road" written over +37  
- "Line changed" written over +49 and +62  
- "See Paper" written below +62

7.38

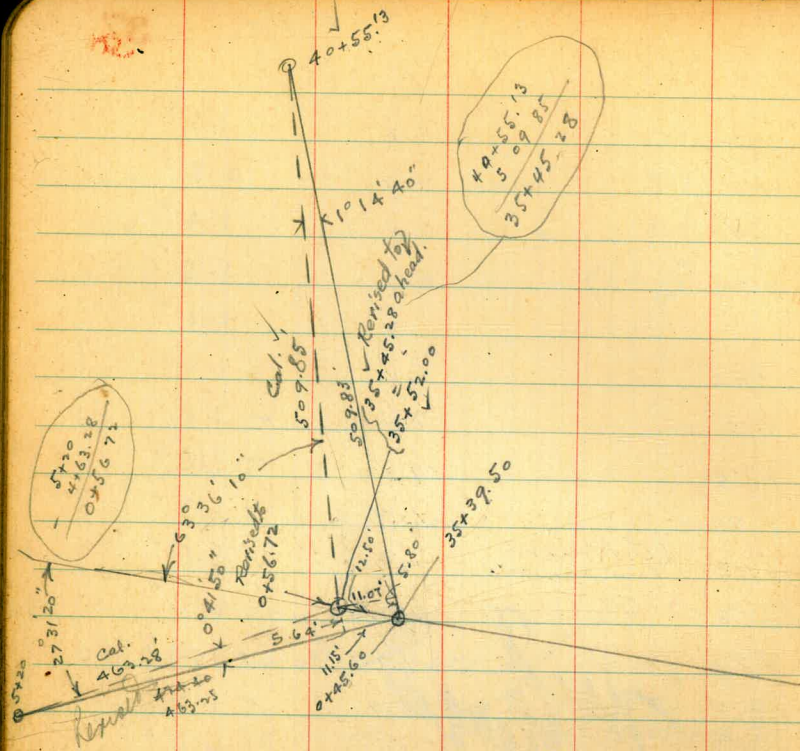
Level  
Station

37

2+12	5.8	1.6 ✓	
+35	4.9	2.5 ✓	
+40	6.0	1.4 ✓	
+50	5.9	1.5 ✓	
3	6.3	1.1 ✓	
+06	6.4	1.0 ✓	
+16	8.4	-1.0 ✓	
+48	9.0	-1.6 ✓	
+50	13.7	-6.3 ✓	
+65	S.D. River Low Point	12.9	-5.5 ✓
+68		6.2	-2.8 ✓
+87		6.0	-1.2 ✓
4+15		8.9	-1.5 ✓
+30		8.0	-0.6 ✓
+50		8.0	-0.6 ✓
+69		8.7	-1.3 ✓
+75		5.6	+1.8 ✓
+95		6.3	1.1 ✓
5+02		4.3	3.1 ✓
5+20 A	10°45'30" 17	4.0	3.4 ✓
	10°03'40" 4 + as Cal on Remission		
Groundcheck at 5+50	3.1	<u>4.2</u> ✓	x3 0.0
FB. 1633-48			

*Large handwritten note:*  
"road changed" written over +65 to +87  
"Line changed" written over +30 to +50  
"See Paper" written below +50



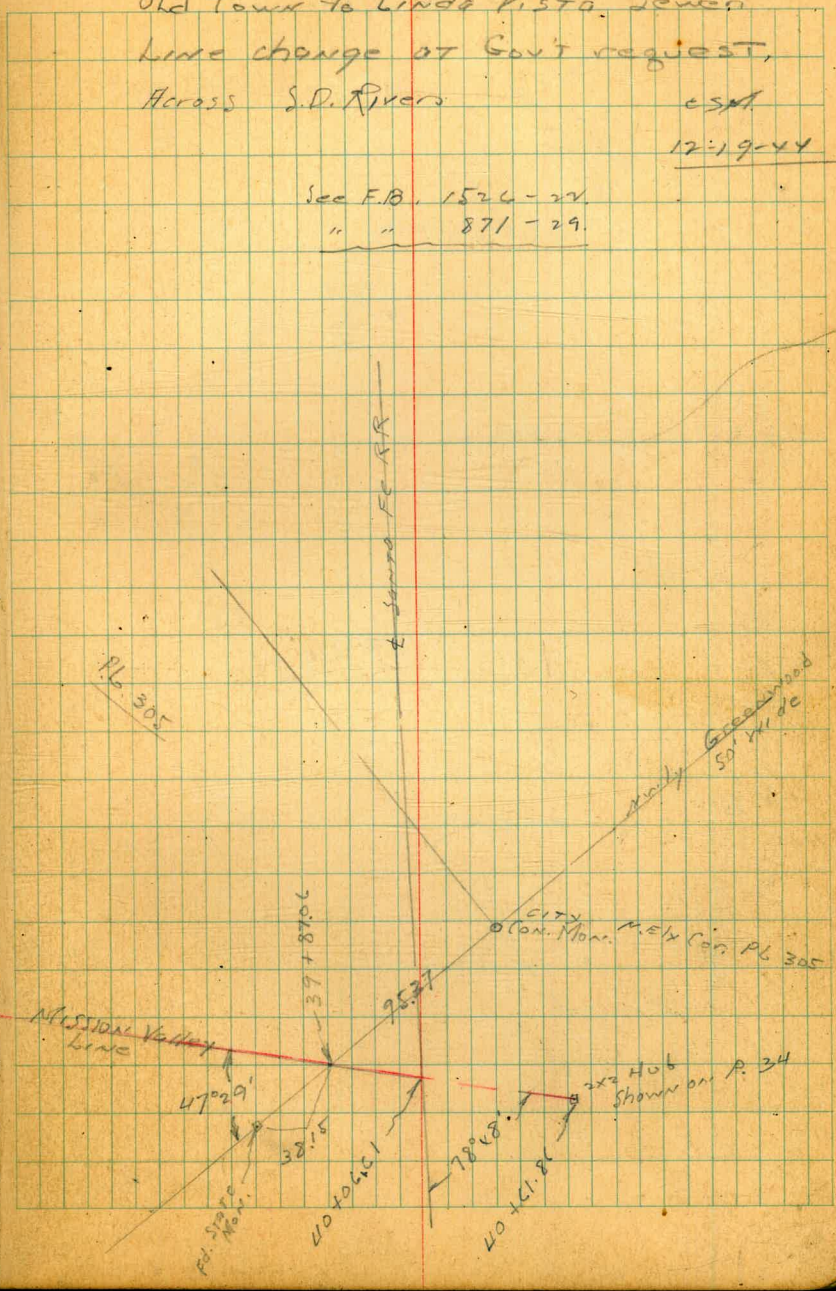
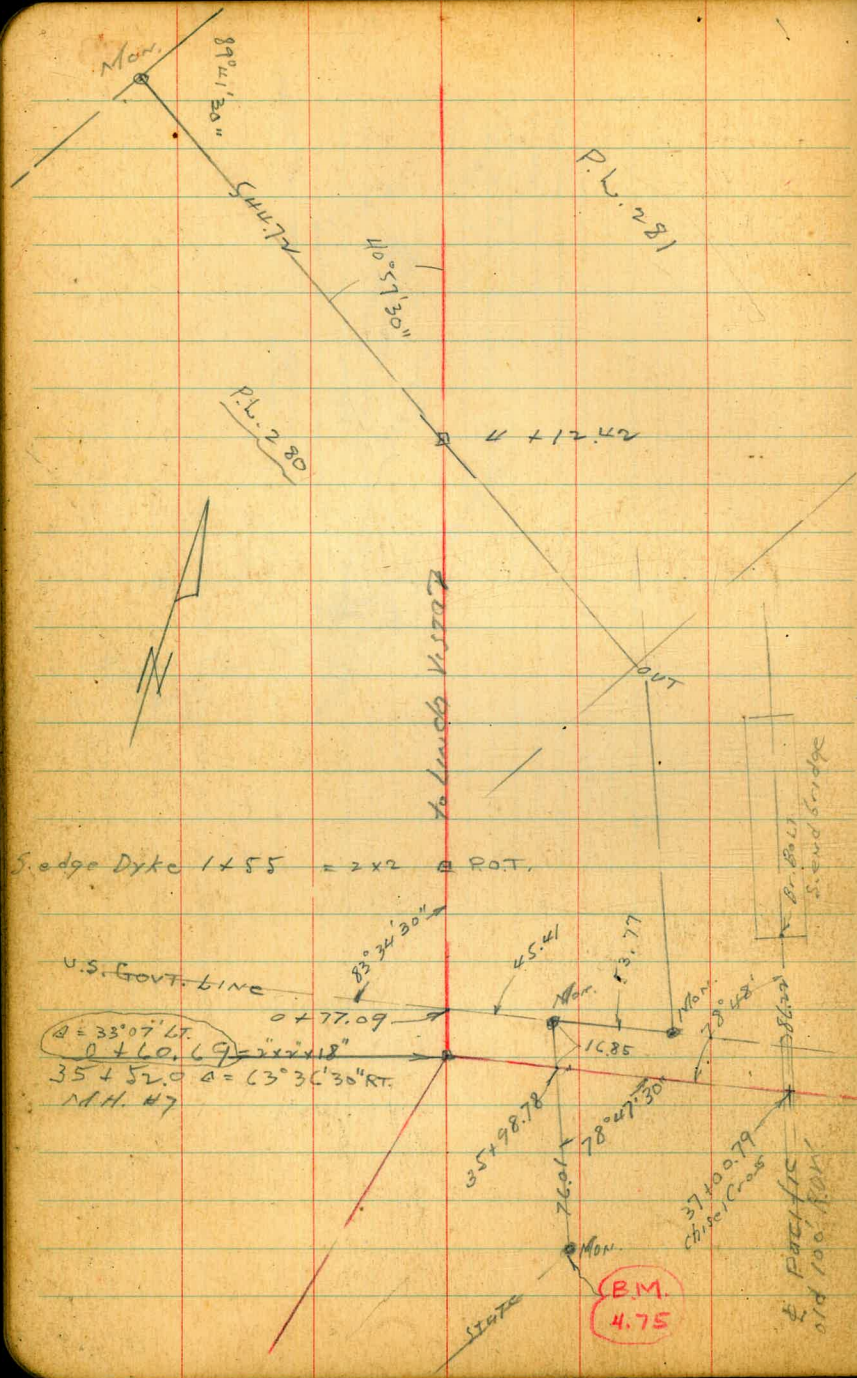




Old Town to Linda Vista. Sewer  
line change at Gov't request,  
Across S.P. Rivers

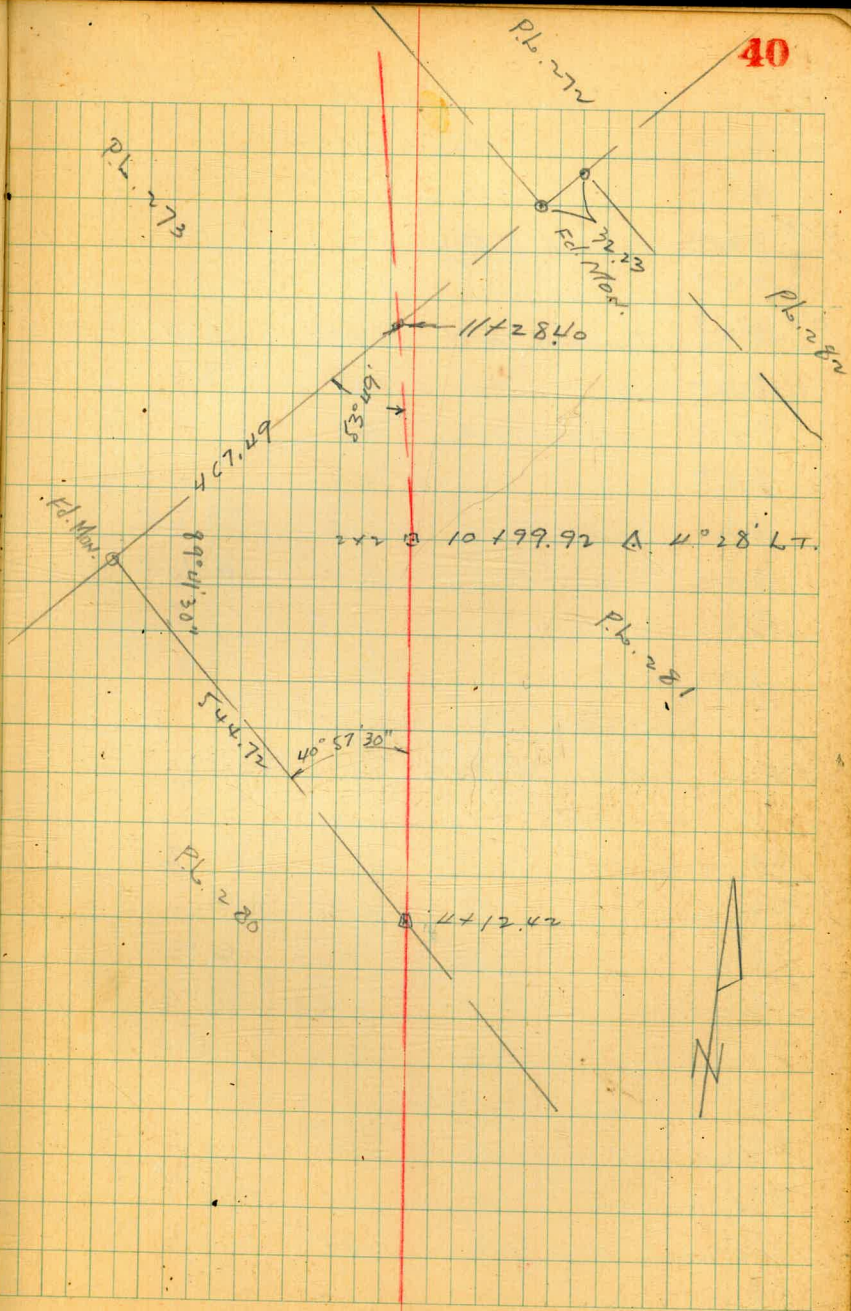
CSM  
12-19-44

See F.B. 1524-27  
" " 871-29





line change across S.D. River





N. toward Linda Lake Con  
 E. Sewer Levels on Change  
 Sketch p. 39

B.M. State Mon 11.78  $\langle 16.53 \rangle$   $\langle 4.75 \rangle$  p. 36

0 + 60.69 35 + 52	JUNCTION M.H.	13.5	3.0 ✓
1400		13.1	3.4 ✓
+30		9.3	7.2 ✓
+40		9.7	6.8 ✓
+52	Dyke	2.8	13.7 ✓
+69	"	2.4	14.1 ✓
+77		7.0	9.5 ✓
+91		12.8	3.7 ✓

T.P. 2.70  $\langle 6.56 \rangle$  12.73  $\langle 3.80 \rangle$

2 + 02		6.8	- 0.2 ✓
+08		6.3	+ 0.3 ✓
+30		4.3	2.3 ✓
+40		5.2	1.4 ✓
+50		5.2	1.4 ✓
3		5.2	1.2 ✓
+25		6.1	0.5 ✓
+30		7.5	- 0.9 ✓
+50		8.1	- 1.5 ✓
+55		11.6	- 5.0 ✓

$\langle 6.56 \rangle$

3 + 60	S.D. River	12.9	- 6.3 ✓
+68		11.6	- 5.0 ✓
+70		8.9	- 2.3 ✓
+90		7.5	- 0.9 ✓
"		7.4	- 0.8 ✓
+50		6.9	- 0.3 ✓
+79		8.0	- 1.4 ✓
+84		5.5	+ 1.1 ✓
+95		5.7	0.9 ✓
5 + 12		3.3	3.3 ✓
+42		3.9	2.7 ✓

T.P. 9.31  $\langle 17.33 \rangle$  3.54  $\langle 3.02 \rangle$   
 Ground check old A 5 + 20 8.9 3.4 3.4 ✓

5 + 75		7.4	4.9 ✓
6		7.9	4.4 ✓
+50		8.8	3.5 ✓
+75		10.4	1.9 ✓
7		10.5	1.8 ✓
+15		10.9	1.4 ✓
+35		9.4	2.9 ✓
+48		10.5	1.8 ✓
+75		8.5	3.8 ✓
8		7.6	4.7 ✓



12.33

8 + 50		6.7	5.6	✓
+ 80		6.3	6.0	✓
+ 90		2.9	9.4	✓
9	Hwy RAMP	3.5	8.8	✓
+ 05		2.3	10.0	✓
+ 15		6.1	6.2	✓
+ 50		6.4	5.9	✓
10		6.8	5.5	✓
+ 50		6.9	5.4	✓
10 + 99.99	4° 28' LT	7.0	5.3	✓

60.69

29.73

1039.23



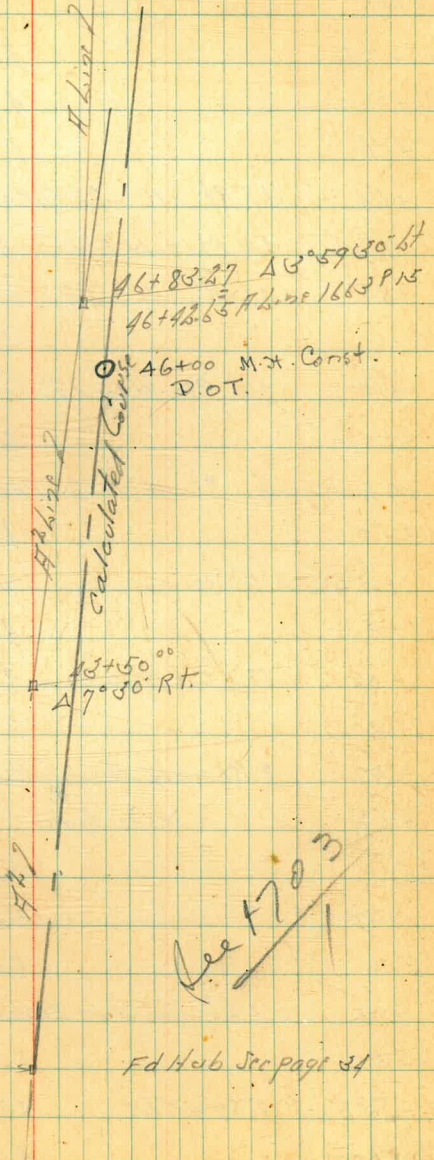
Mission Valley Survey Locatum  
From Hub E. of B.T. & S.F. R.R. 77 34  
19145  
Sisson  
Bliss  
Colburn

H 26 100

46+83.27  $\Delta 3^{\circ} 59' 30''$  Lt =  
46+42.65 H Line

43+50  $\Delta 7^{\circ} 30''$  Rt.

40+55.13  $\Delta 0^{\circ} 50''$  Lt



40+55.13  
 $\Delta 0^{\circ} 50''$  Lt  
 $\Delta 30^{\circ} 47' 35''$  Rt  
 $\Delta 5^{\circ} 49' 30''$  Rt  
D.S. Rd m

Fd Hub Sec page 34



Levels #2 Line Mission Valley Trunk Sewer

These Levels used on slightly changed design.

BM	6.65	(9.92)	3.27	Hub 104 55.13 Page 137
40+75		4.5	5.4	6/16/45 Recheck w.
41+0		4.7	5.2	
+50		4.7	5.2	
+64	6.5 Rt = N/4 24" Cotton Wood Tree			
+78.5	3.4 Rt = N/4 Cor Bldg			
+85	4.6 Rt = N/4 18" Cotton Wood Tree			
42+0		5.0	4.9	
711	2.5 Rt = N/4 18" C.W.T.			
+50		4.7	5.2	
+72	4 Rt = N/4 12" Pepper Tree			
43+0		4.9	5.0	
+50	A 7° 30'	4.62	(5.30)	07 Hub
44+0		4.2	5.7	
+01	= Top C.I. Water Main	4.78	5.14	
+50		2.2	7.1	?
+57	2 Rt = N/4 Anchor Pole			
+62	3 Lt = Wire Guy			
45+0		5.2	4.7	
+50		5.2	4.7	
46+0		5.3	4.6	
+15	0.4 Lt. Cor. Gun Emplacement			
+50		5.1	4.5	
+82.27	63° 59' 30" Lt	6.23	(3.69)	07 Hub
For Check 1663.19		4.63	(5.29)	07 5/10/45 11/09/19 5.25



Mission Valley Trunk Sewer No 3  
"H" Line

94+42<sup>10</sup>

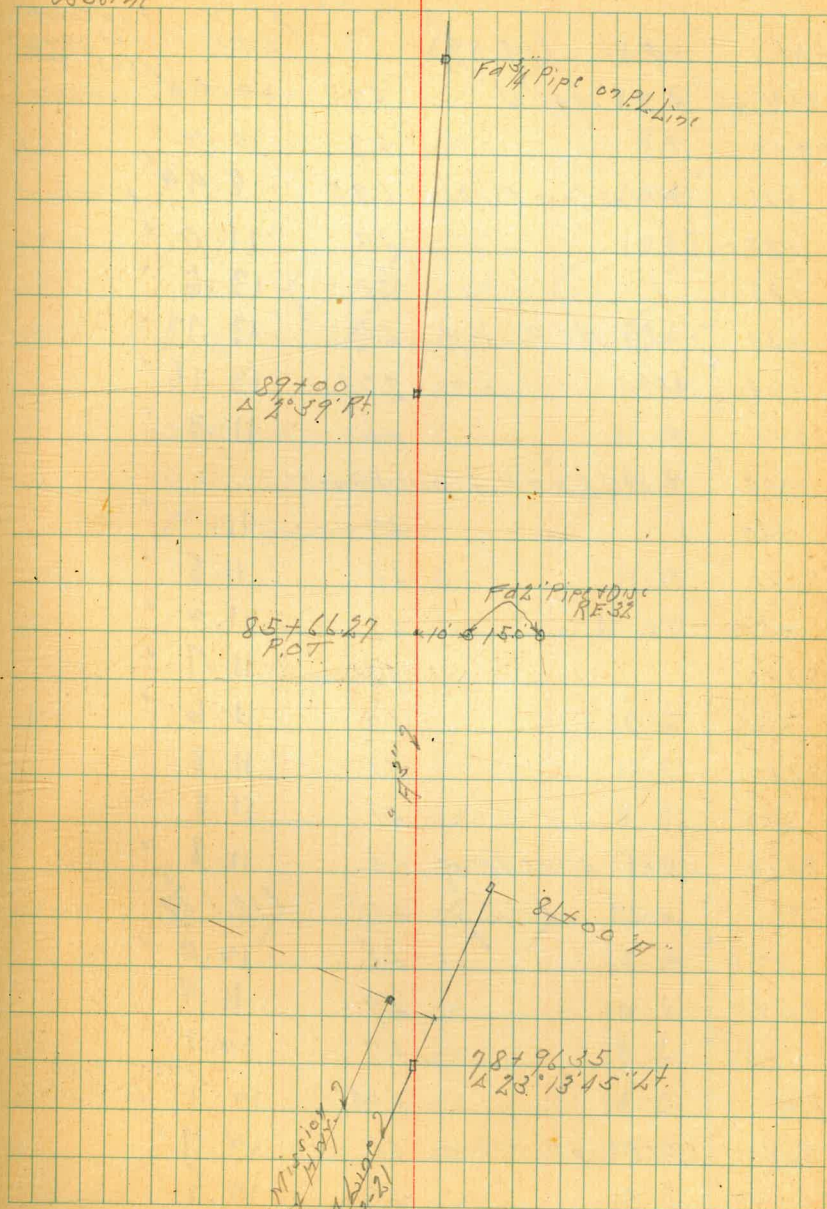
89+00  $\Delta 2^{\circ} 39' R$

85+66.27 P.O.T.

78+96.35  $\Delta 23^{\circ} 13' 45" L$

Jan. 10. 45  
S. Osborn  
81.15  
Osborne

45



Mission Valley  
Hobbs  
Hobbs  
#1665-21



BM	4.36	(15.89)	11.53	Top Connection 15' Lt 79+311 1863-27
78+96.35	Δ 23° 13' 45" W	4.95	10.94	or Hub
79+0		5.7	10.2	✓
+13	1/4" 1 1/2" Conc Pipe	6.95	8.94	Flophole
+22		4.9	11.0	✓
+38		2.3	13.6	✓
+47	1/4" F.C. Pav to North	2.12	13.77	✓
+94	1/4" " " " "	2.73	13.16	✓
80+0		4.6	11.3	✓
+30	18' Rt of 2 = 1/4" A Wire Fence			
+50		4.7	11.2	✓
81+0		4.4	11.5	✓
+50		4.7	11.2	✓
82+0		4.2	11.7	✓
+50		4.3	11.6	✓
83+0		4.1	11.8	✓
+50		4.1	11.8	✓
84+0	155 Rt = 4 Wire Fence	4.1	11.8	✓
TP	4.27	(16.81)	3.35	(12.54)
+50		4.8	12.0	✓
85+0		4.9	11.9	✓
+50		4.7	12.1	✓
BM		4.04	12.77	Top 3" Pipe 25 Rt 85+66.27
86+0	9.5 Rt = 4 Wire Fence	4.1	12.7	✓
+50		4.3	12.5	✓

		(16.81)		
87+0			4.8	12.0
+50			6.3	10.5
88+0			6.9	9.9
+50			6.4	10.4
89+0	Δ 2° 39' RT		5.94	10.87
TP	8.39	(19.26)	5.94	(15.87)
89+0	15' Rt of 2 = Top F. Med. Fence		5.7	13.6
+55			7.9	11.4
90+0	9.5 Rt = 4 Wire Fence		8.1	11.2
"	10' Rt = Top F. Med. Fence		5.7	13.6
+44	3' Rt = Fly Air Wire Fence			
+50			8.3	11.0
BM			8.06	11.20
+76	25 Lt = Fly 15" Exc. Trace			20 Rt 90+53 Top 2" Pipe
91+0			8.7	10.6
+25			8.5	10.8
+50			7.4	9.9
+60			11.5	7.8
92+0			8.2	11.1
+50			7.9	11.4
+65			6.5	12.8
93+0			5.7	13.6
+50			5.3	14.0
94+0			5.5	13.8
+4210	Ground		5.4	13.9
"			4.98	14.28
				Top 3/4" Pipe 94+4210



Mission Valley Trunk Sewer A' Line  
From Benards to City Line

22+70.48  $\Delta$  11° 12' Lt.

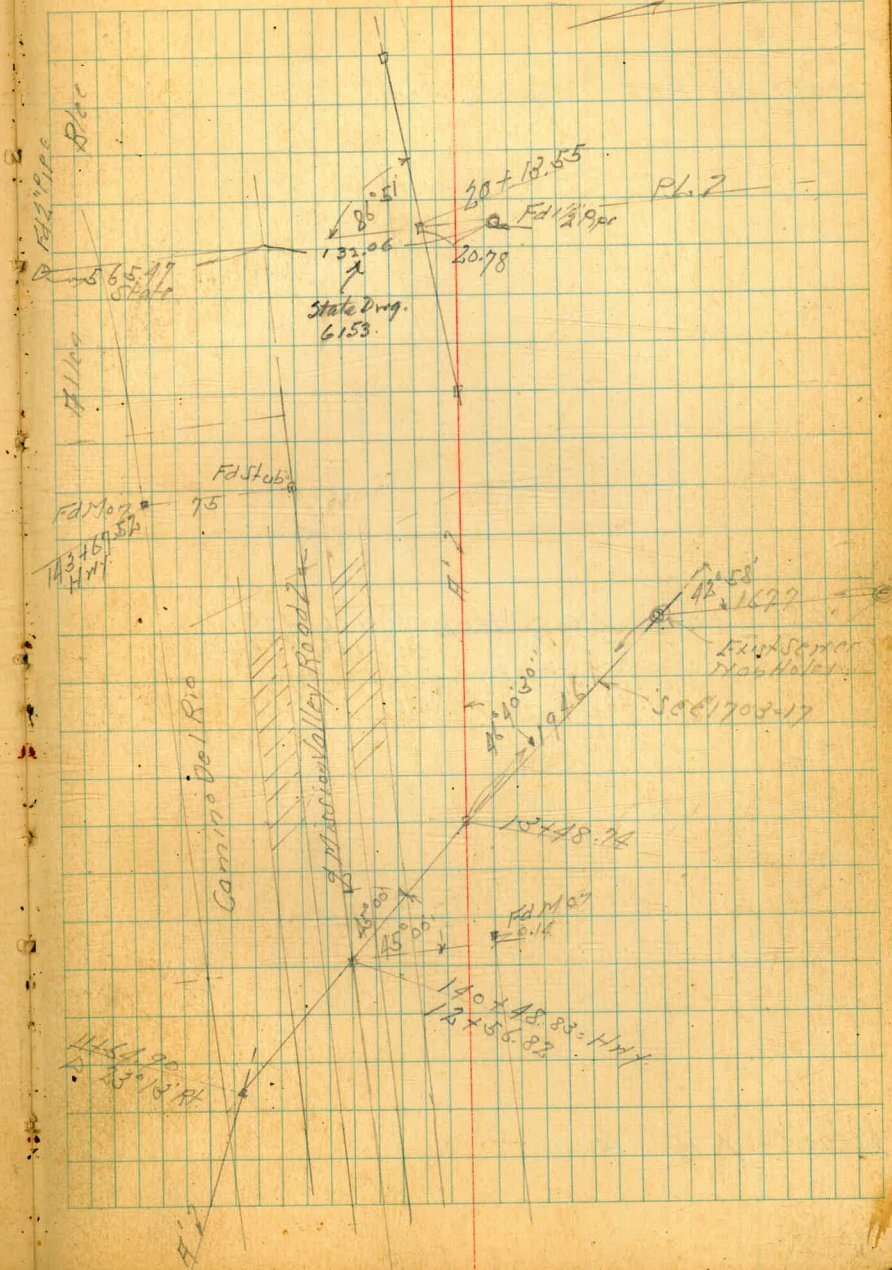
18+65.00  $\Delta$  11° 25' Lt.

13+48.74  $\Delta$  39° 35' Lt.

11+64.90  $\Delta$  23° 13' Rt.

Bt. Ford 1663-25

Jan 12-45  
Sisson  
Bliss  
Osborn 47

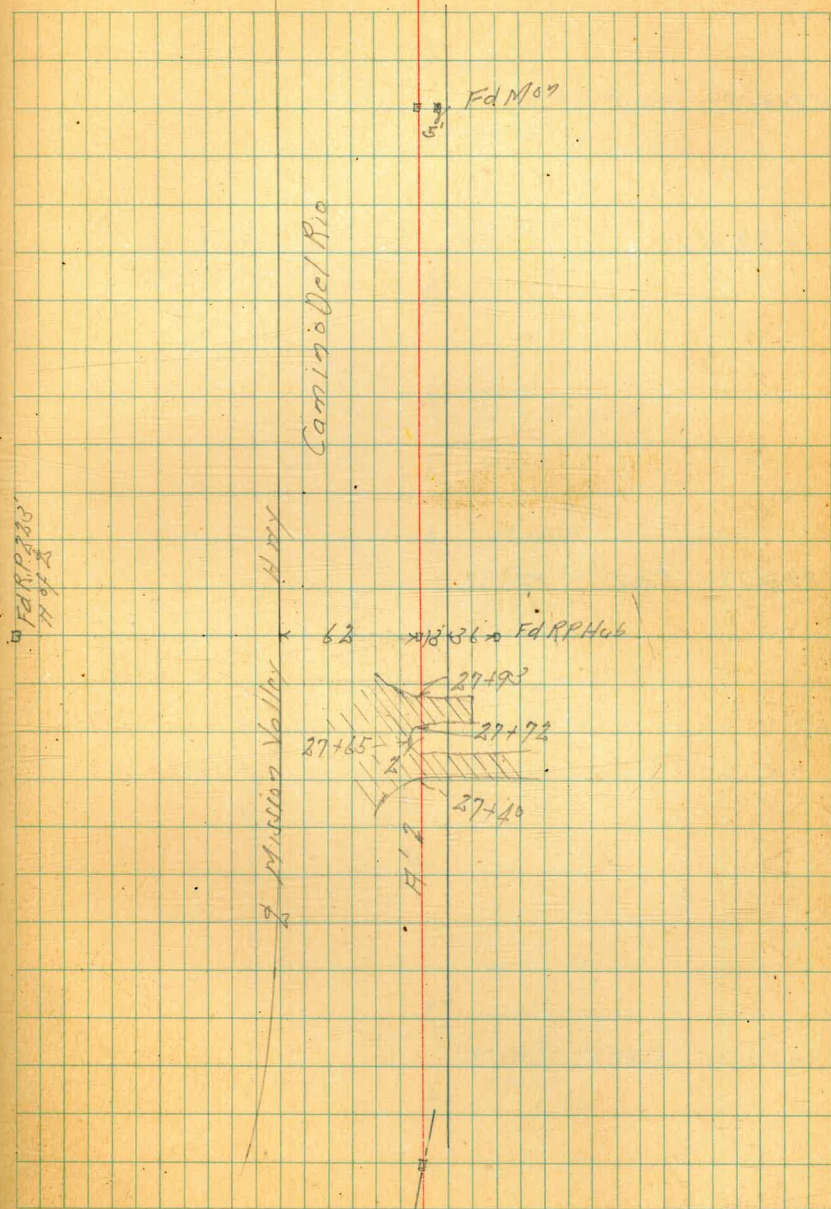




35+62.48 P.O.T. Opp RL Mo7

29+16.80 P.O.T. - E.C. of H.V.V. 156+47.99  
156+47.82

22+70.48  $\Delta$  1°12' 44"





52+41.87 P.O.T. Hail

51+89.96

48+20.78 P.O.T. Hail

38+70.95 P.O.T. Hail

37 53+62  
 178' Conc Culv.  
 37 53+135

51+89.96  
 179+20.20/4xy.

Fd. Man  
 178'

30 49+135  
 24' x 11' Culv.  
 31 49+143  
 32 49+136

48+142  
 18' Conc Culv.  
 48+14

Camino Del Rio

H' 7

95 38+91  
 18' Conc Culv.  
 95 38+62

13'



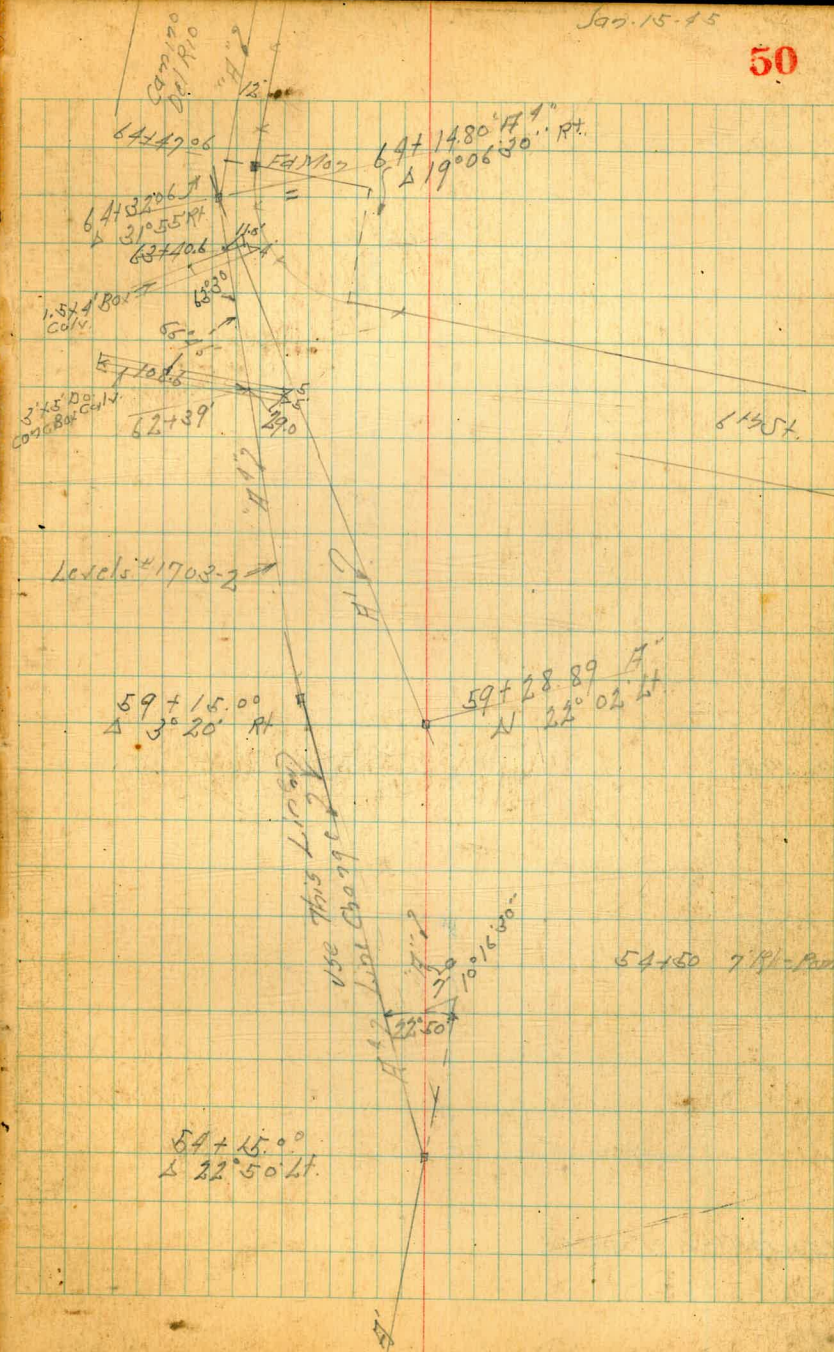
64+32.06  $\Delta$  31° 55' Rt.

59+28.89  $\Delta$  22° 02' Lt.

54+15.00  $\Delta$  10° 16' 30" Lt.  
Angle Revised to 22° 50' Lt.

Jan. 15-15

50





Mission Valley Transverse H-Line

77+19.08  $\Delta 1^{\circ}04'46''$

69+49.88

64+32.06  $\Delta 31^{\circ}55'46''$

50 38 76+05.54 Pot.  
Split of Angle

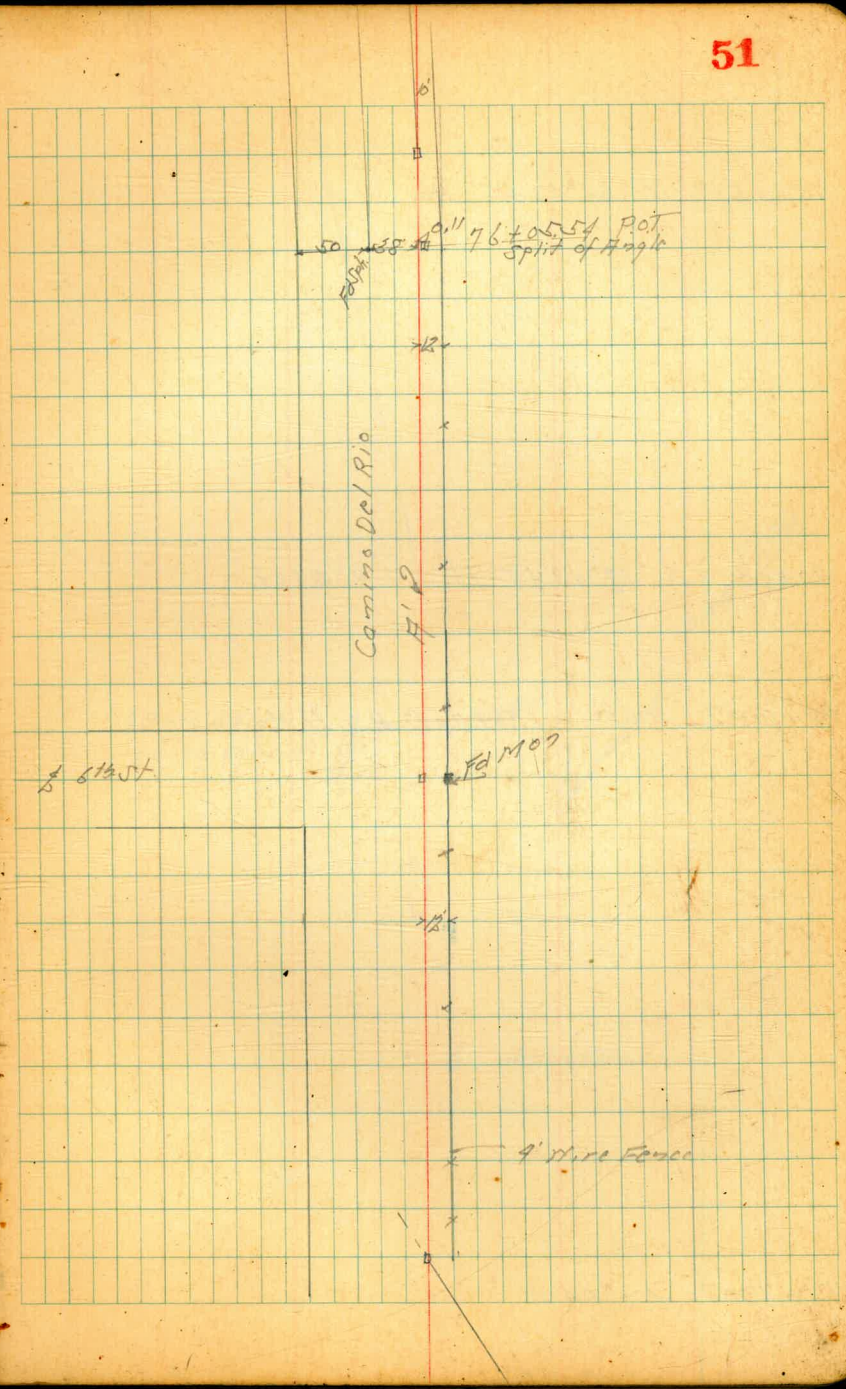
Camino Del Rio

H.P.

Start

Edmond

9 Mile Fence





94+15.1°  $\Delta$  13° 47' 45" RA

90+00 =  $\Delta$  12° 43' 45" Lt. = 90+8409

89+10.57 P.O.T. = 126+70.40 B.C. Lt. Hwy

77+19.08  $\Delta$  1° 04' Lt

89+10.57  
126+70.40 B.C. Lt

Camino Del Rio

Fd. Mt.

40

7.9

10

5 Wire Fence

Revised see 1706/10



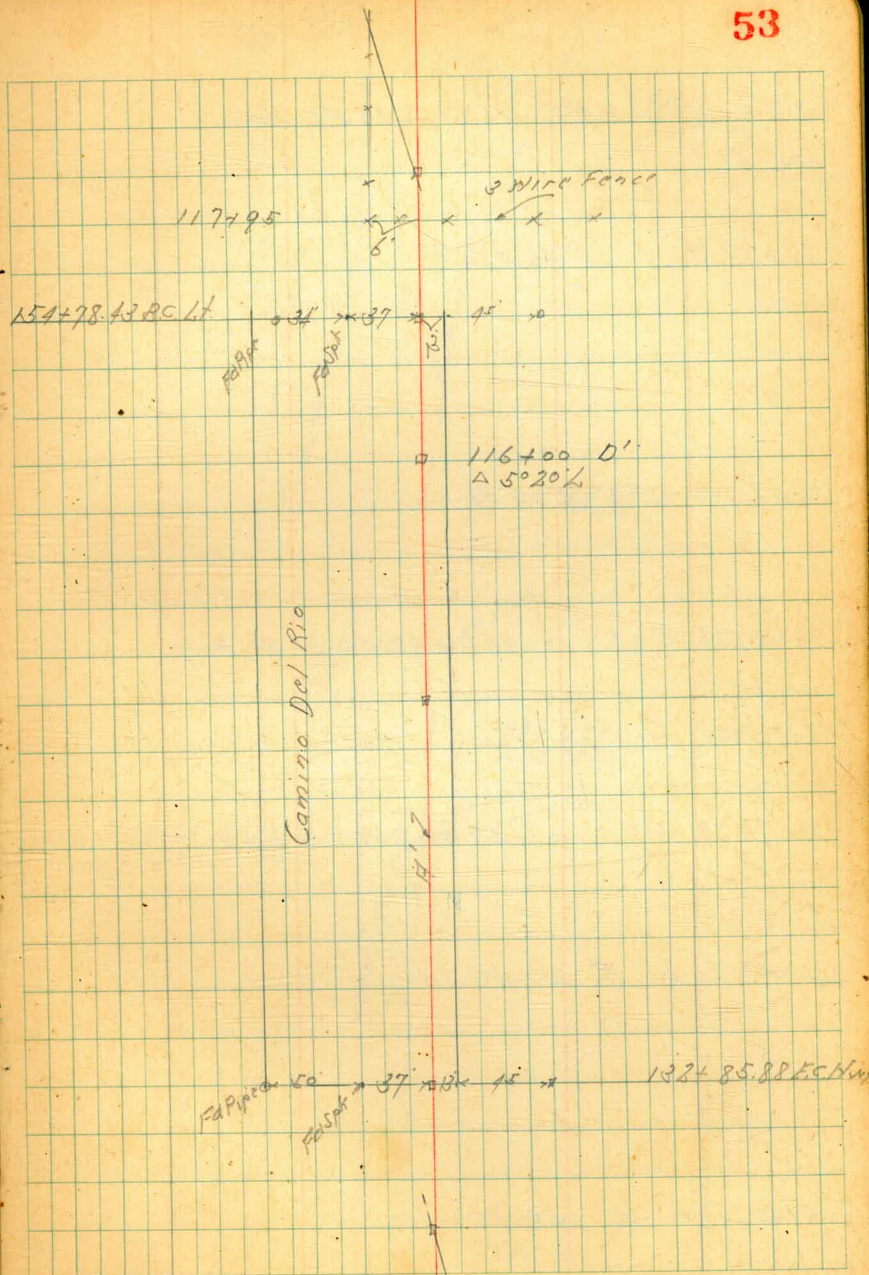
118+60.00 A 15° 50' 15" Lt

117+19.78 P.O.T. = 154+78.13 BC Lt Hwy.

105+00 P.O.T.

95+27.43 P.O.T. = 132+85.88 E.C. Hwy

94+15.10 A 13° 49' 45" Rt.





128+13.50 P.O.T. = 165+68.35 F.C. Hwy.

126+72.64  $\Delta$  15° 46' 45" Rt.

124+60.00  $\Delta$  9° 24' 15" Rt.

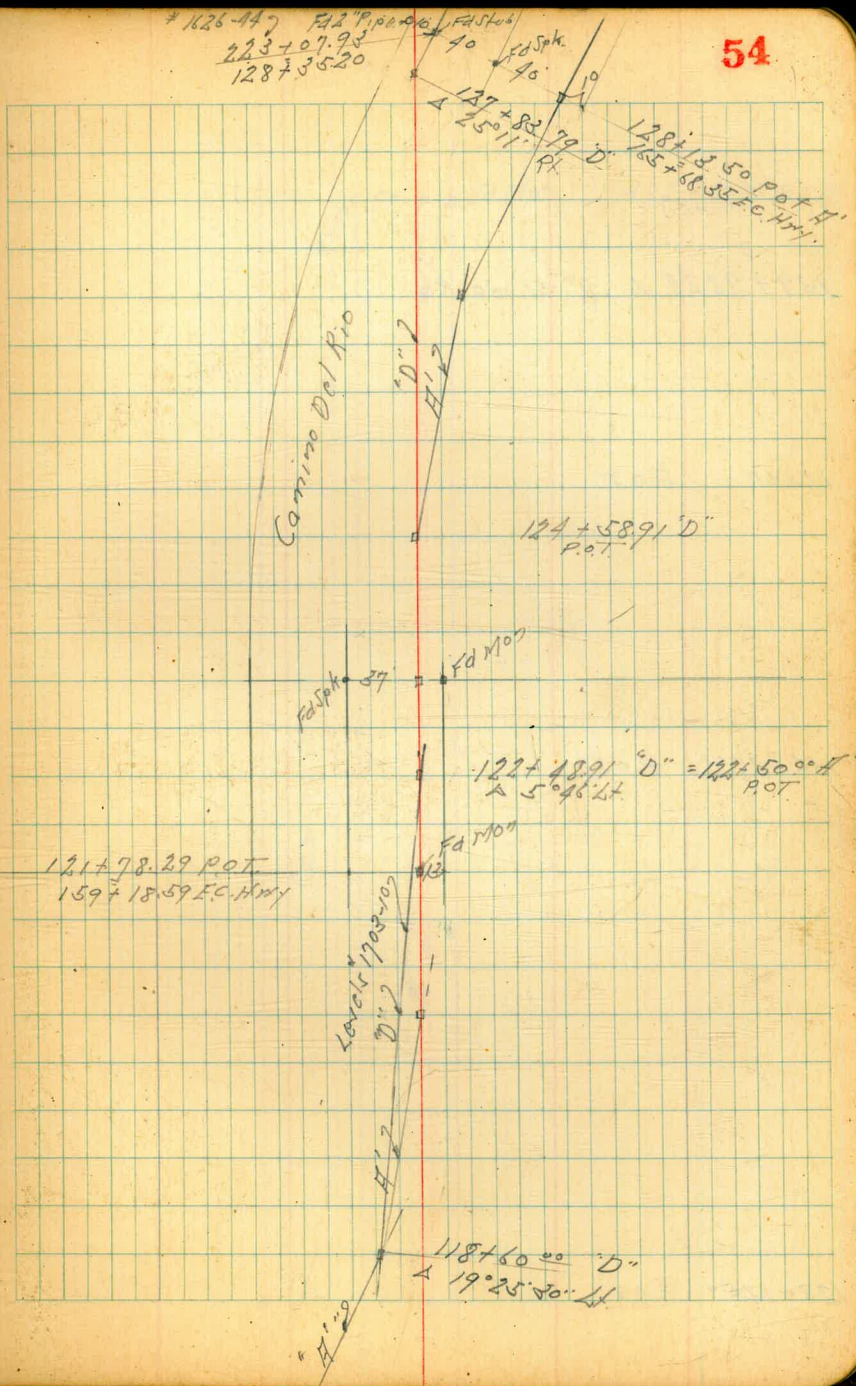
123+87.25 P.O.T. = 161+28.53 B.C. Rt. Hwy.

121+78.29 P.O.T. = 159+18.59 F.C. Hwy.

121+00.00  $\Delta$  9° 21' 30" Lt.

118+60.00  $\Delta$  15° 50' 15" Lt.

54





139+98.28  $\Delta$   $8^{\circ} 51' 30''$  RT

138+0 P.O.T.

134+37.71 P.O.T.

128+135° P.O.T.

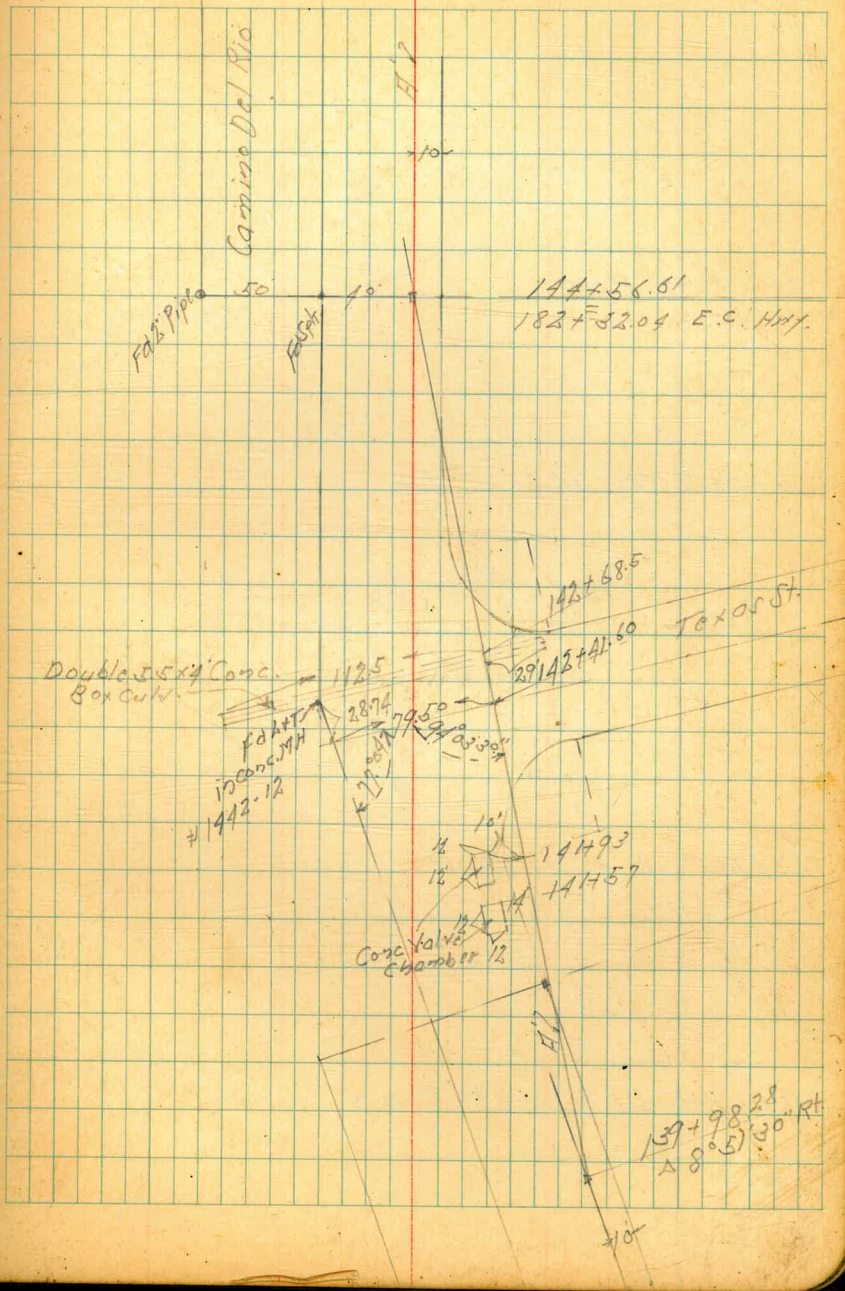
Camino Del Rio

Hwy

0 50 40 40



144+56.51  $\Delta$  13° 14' 30" RT.



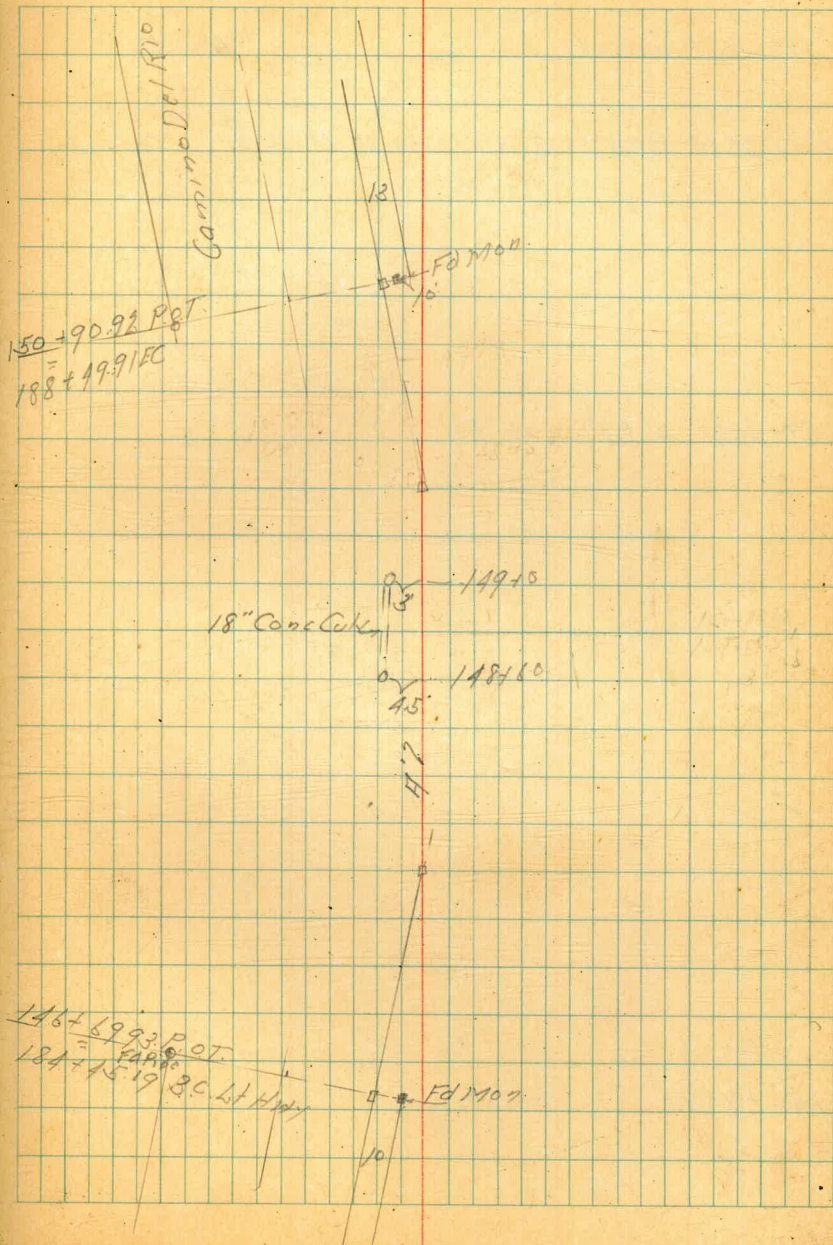


150+90.92 P.O.T.

150+01.32  $\Delta$   $11^{\circ}21'15''$  Lt.

147+50.00  $\Delta$   $11^{\circ}49'30''$  Lt.

146+69.93 P.O.T. =

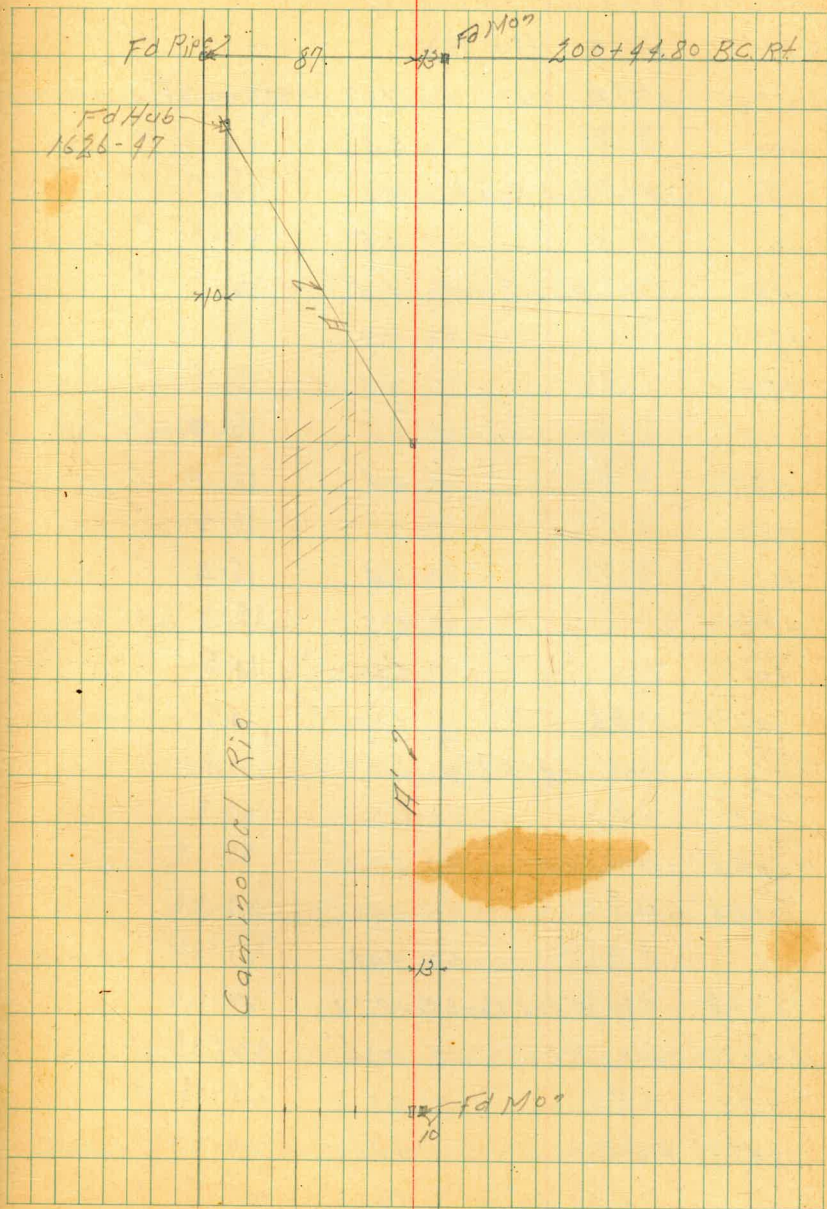




161+26.18 P.O.T = 256710.30 A Lt. Bl. St

159+61.20 A 27° 50' 40" Lt.

150+90.92





Levels A Line  
Mission Valley Trunk Sewer  
From Bernard's to City Line

Crossing Camino Del Rio to S. Side  
Thence E.

B.M	10.17	(20.82)	10.65	on Hub 5-12.5.76 1863-21.22
8+38.10	A 6°32'30" Lt	7.67	(13.15)	on Hub Non
+80		8.5	12.3	✓
+90	= Fly Dirt Road	5.1	15.1	✓
9+0		4.5	16.3	✓
+18	= Fly Dirt Road	4.2	16.5	✓
+28		7.7	13.1	✓
+50		7.3	13.5	✓
10+0		5.8	15.0	✓
+23		5.4	15.4	✓
+28		7.6	13.2	✓
+36		5.4	15.4	✓
+50		5.5	15.3	✓
11+0		6.3	14.5	✓
+64.90	A 23°13' Rt	6.00	14.84	on Hub
TP	11.06	(25.88)	14.82	✓
+92		3.0	22.9	✓
12+05.6	= Fly F40 Conc Box	2.73	23.15	✓
+36.6	Sly " " "	2.80	23.08	✓
	" " "	4.04	21.84	on Hub
+76.8	= Fly Fly to E Conc Box 3.23		22.65	✓
13+07.7	= Sly " " "	3.73	22.15	✓
+23		4.2	21.7	✓
+48.74	A 39°35' Lt	3.36	22.52	on Hub
"	4' Rt. Bot. Cut	3.2	22.7	✓
"	10' Rt	4.3	33.2	✓

Bench Levels 1629-1 to

Jan. 19-45  
S. 5500 X  
Osborne 59

	(25.88)		
14+0		4.6	21.3
	11' Rt. Bot. Cut	4.5	21.4
+50		6.1	19.8
15+0		6.8	19.1
+50		7.5	18.4
16+0		8.1	17.8
+50		8.0	17.9
+68	= Fly Gold Lay Box	7.2	18.7
+84	= Fly " " "	7.2	18.7
17+0		7.5	18.4
+50		8.1	17.8
18+0		8.6	17.3
+65.00	A 11°20' Lt	8.93	16.95
TP	7.60	(24.55)	8.93
19+0		7.2	17.3
+22	= Fly Gold Lay Box	6.0	18.5
+47	= Fly " " "	5.9	18.6
+65		7.7	16.8
+89	Sly 5' Lt = 8' 8" x 9' Conc Valve Box	4.88	19.67
20+0		5.2	19.3
+10		8.0	16.5
+20	1/2 Cable Anchor	12.5 Pt.	Tel Pole 150 x 10 H
+60		7.3	17.2
+65	5' Lt = Sly 120' Conc Pipe 8' Head Wall	9.55	15.00
+85		9.2	15.3



2455			
20+75		4.8	19.7 ✓
+85	1/4 Oil x Rock Pav	4.6	19.9 ✓ Note: Levels Adjusted
21+0		4.4	20.1 ✓ 21+19 to 819 Borculo 81952 Cassino Del Rio
+07	1/4 Oil x Rock Pav	4.1	20.1 ✓
B.M.	#17 State	3.09	(21.46) ✓ 3" Pipe 36" RT 21+19 State 21+19 Marked on State
+50		5.4	19.1 ✓
+76	8' Lt - 2 Fire Hyd		
22+0		5.7	18.8 ✓
+39	98 RT - Power Pole #79046		
+70.48	11' 12" Lt	5.53	19.0 ✓ on Hub
23+0		5.8	18.7 ✓
+50		5.8	18.7 ✓
24+0		5.8	18.7 ✓
+50		5.8	18.7 ✓
25+0		5.7	18.8 ✓
TP	6.92 (25.78)	5.69	(18.86) ✓
+11	6.8 RT - 1/4 Power Pole #79047		
+50		7.4	18.4 ✓
26+0		7.4	18.4 ✓
+50		7.3	18.5 ✓
27+0		8.1	17.1 ✓
+25		7.9	17.9 ✓
+35		4.7	21.1 ✓
+40	1/4 Oil x Rock Pav	4.3	21.6 ✓
+57	" " "	4.4	21.4 ✓
+70	7.8 RT - 1/4 Power Pole #79049		

2578			
27+72		4.6	21.2 ✓
+92	1/4 Oil x Rock Pav	4.6	21.2 ✓
28+0		6.0	19.8 ✓
+25		8.9	16.9 ✓
+50		10.2	15.6 ✓
+54	10.2 Lt 5 1/2" 42" Cone Storage Drain 14" Wood 20"	10.92	14.86 ✓ Flood Line
29+0		9.5	16.3 ✓
+16.80		9.54	16.24 ✓ on Hub
+50		9.8	16.0 ✓
30+0	12' RT - Wire Fence	9.4	16.4 ✓
"	13' RT	9.9	15.9 ✓
"	15' Lt	3.5	22.3 ✓
+50	7' RT - 1/4 Power Pole	9.3	16.5 ✓
31+0		8.6	17.2 ✓
"	12' RT	9.1	16.7 ✓
"	15' Lt	3.5	22.3 ✓
TP	7.72 (25.60)	7.90	(17.88) ✓
+50		8.5	17.1 ✓
32+0		8.7	16.9 ✓
"	13' RT	8.9	16.7 ✓
"	15' Lt	3.2	22.4 ✓
+50		9.1	16.5 ✓
33+0		8.8	16.8 ✓
"	13' RT	9.2	16.4 ✓
"	15' Lt	3.3	22.3 ✓



A-Line Mission Valley Trunk Sewer

		<u>25.60</u>	
33+50	7.3 Rt. N.Y. Pow. Pole #79051	8.7	16.9 ✓
34+0		8.5	17.1 ✓
"	13' Rt.	9.3	16.3 ✓
"	15' Lt.	2.9	22.7 ✓
+50		9.1	16.5 ✓
35+0		8.5	17.1 ✓
"	13' Rt.	9.3	16.3 ✓
"	15' Lt.	2.7	22.9 ✓
+50		8.3	17.3 ✓
36+0		8.4	17.2 ✓
"	13' Rt.	9.0	16.6 ✓
"	15' Lt.	2.7	22.9 ✓
+50	7.3 Rt. Pow. Pole #79052	8.0	17.6 ✓
BM		9.50	<u>16.10</u> ✓ as Mon 8 Rt 3516243
37+0		8.3	17.3 ✓
"	13' Rt.	8.8	16.8 ✓
"	15' Lt.	2.7	22.9 ✓
TP	4.77	<u>25.7</u>	<u>22.03</u> ✓
+50		10.4	17.4 ✓
38+0		10.0	17.8 ✓
"	13' Rt.	10.4	17.4 ✓
"	15' Lt.	4.6	23.2 ✓
+57		9.1	18.7 ✓
+69	N.Y. Oil & Rect. Poles	5.7	21.9 ✓
+81	Ely " " "	5.6	22.2 ✓

36+50  
5+62.5  
87.5

61

		<u>27.80</u>	
38+91	9.5 Rt. Ely 18' Culi	10.90	16.9 ✓ Flow line
39+0		8.5	19.3 ✓
"	13' Rt.	10.1	17.7 ✓
"	15' Rt.	4.5	23.3 ✓
+45	7.4 Rt. N.Y. Pow. Pole #79054		
+50		10.1	17.7 ✓
40+0		9.4	18.4 ✓
"	13' Rt.	10.4	17.4 ✓
"	15' Lt.	4.2	23.6 ✓
+50		9.1	18.7 ✓
41+0		8.9	18.9 ✓
"	13' Rt.	9.5	18.3 ✓
"	15' Lt.	4.1	23.7 ✓
+47		9.9	17.9 ✓
"	5.5' Lt. = 5.4' Rt. Conc. Culi	10.55	<u>17.25</u> ✓ Flow line
42+0		9.2	18.6 ✓
"	13' Rt.	10.0	17.8 ✓
"	15' Lt.	4.1	23.7 ✓
+48	8.3 Rt. N.Y. Pow. Pole #79055		
+50		9.2	18.6 ✓
43+0		9.7	18.1 ✓
"	13' Rt.	10.5	17.3 ✓
"	15' Lt.	4.0	23.8 ✓
TP	5.13	<u>29.01</u>	<u>22.88</u> ✓
+50		11.3	17.8 ✓



<29.01>

44+0		11.3	17.7	✓
"	13' RT	11.8	17.2	✓
"	15' LT	5.0	24.0	✓
+38.5	3.5 LT - 5/4 24" Cond Cyl 12.25		16.76	Flashed
+50		11.3	17.7	✓
+60	5.5 RT - 1/4 Poly Pole #99056			
45+0		11.4	17.6	✓
"	13' RT	11.7	17.3	✓
"	15' LT	4.7	24.3	✓
+50		11.0	18.0	✓
46+0		11.3	17.7	✓
"	13' RT	11.8	17.2	✓
"	15' LT	4.9	24.1	✓
+50		11.1	17.9	✓
+93	7.6 RT - 1/4 Poly Pole #279005			
47+0		11.0	18.0	✓
"	13' RT	11.9	17.1	✓
"	15' LT	4.6	24.4	✓
+50		11.2	17.8	✓
48+0		10.3	18.7	✓
"	13' RT	11.7	17.3	✓
"	15' LT	4.4	24.6	✓
+14		9.0	20.0	✓
"	4' RT - 1/4 18" Cyl	12.05	(16.96)	Flashed
+20	- 1/4 10" Rock Pole	5.9	23.1	✓

<29.01>

48+34	Fly 0.1 x Rock	5.7	23.3	✓
+35	6.8 RT - 1/4 Poly Pole #99060			
+40		7.6	21.4	✓
+47	9.5 RT - 2 Fire Hyd.		17.01	on line Top 8" C.P. Pipe
+60	5' LT - Sky 20' Poplar Tree			
+63		9.2	19.8	✓
TP	4.2 <28.87>	4.61	<24.40>	✓
49+0		9.1	19.7	✓
"	13' RT	9.2	19.6	✓
"	15' LT	4.0	24.8	✓
+10	5.2 RT - 1/4 18" Poplar Tree			
+30	8.5 RT - 1/4 14" Palm			
+32		8.4	20.4	✓
+36	2.2 RT - 1/4 24" W/C Cyl 11.78		17.04	Flashed
+43	- 1/4 10" Poly	5.0	23.8	✓
+47	- Fly " " "	4.9	23.9	✓
+80		7.9	20.9	✓
50+0		8.8	20.0	✓
"	13' RT	9.5	19.5	✓
"	7' LT	7.8	21.0	✓
"	15' LT	5.7	25.1	✓
+11	5 RT - 1/4 24" Poplar Tree			
+50		8.7	20.1	✓
+60	3' LT - 5/4 22" Poplar Tree			
51+0		8.6	20.2	✓



H Line Mission Valley Trunk Sensor

(2882)

51+0	13' Rt	9.7	19.1	✓
"	7 Lt	8.1	20.7	✓
"	15 Lt	3.6	25.2	✓
+09	57 Rt - Nly 18" Poplar Tree			
+15		8.0	20.8	✓
+22	48 Lt - Sly 24" Conc Culy 10.42		18.40	Flap Line
+25		10.6	18.2	✓
+27	74 Rt - Nly Pop Pole #79052			
+34		7.7	21.1	✓
+60	3' Lt - Sly 24" Poplar Tree			
+65		9.4	19.4	✓
52+0		9.2	19.6	✓
"	13' Rt	10.1	18.7	✓
"	15 Lt	3.3	25.5	✓
+11	53 Rt - Nly 18" Poplar Tree			
+35		7.7	21.1	✓
+41	Nly Oil & Rock Pav	5.1	23.7	✓
+54	Fly " " "	4.9	23.9	✓
+62	37 Rt - Fly 18" Culy 10.00		18.8	Flap Line
+64	7 Lt - Sly 14" Poplar Tree			
+65		9.7	19.1	✓
53+0		9.8	19.0	✓
"	13' Rt	10.5	18.6	✓
"	6 Lt	9.7	19.1	✓
"	20 Lt	2.3	26.5	✓
BM		10.35	(18.47)	Top Mon 12' Rt 5148998

Jan. 20-45  
S. Ross  
8/1/55  
Osborn

63

(2882)

53+50		9.7	19.1	✓
54+0		9.7	19.1	✓
"	13 Lt	9.7	19.1	✓
"	13 Rt	8.9	19.9	✓
"	23 Rt	7.0	21.8	✓
+15.00	10' 16" 20 Lt	9.39	19.43	on Hub
TP	5.62	(25.05)	9.39	(19.43) ✓ on Hub 54+15.00
+50		5.4	19.6	✓
55+0		4.5	20.5	✓
+50		4.7	20.3	✓
56+0		4.8	20.2	✓
+50		4.7	20.3	✓
57+0		4.9	20.1	✓
+50		4.4	20.6	✓
58+0		4.9	20.1	✓
+50		4.7	20.3	✓
59+0		4.7	20.3	✓
+28.89	22' 02" Lt	4.81	20.24	on Hub
TP	10.68	(30.92)	4.81	(20.24) ✓ on Hub 59+28.89
+50		10.2	20.6	✓
60+0		10.2	20.1	✓
+50		9.8	21.1	✓
61+0		10.3	20.6	✓
+50		9.7	21.2	✓
62+0		9.1	21.8	✓



	$\langle 30.92 \rangle$			
62+15	9.1	21.8	✓	
+24	4.0	26.9	✓	
+25	10.6	20.3	✓	
+42	11.2	19.7	✓	
+50	5.5	25.4	✓	
+53 = Nly Paving	5.7	25.5	✓	
+82	5.88	25.54	✓	
63+21 = Fly Paving	5.80	25.12	✓	
+62	9.3	21.6	✓	
" 5' Lt = 5' x 15' x 4' Culv.	9.7	21.2	✓	
64+0	9.1	21.8	✓	
+15	8.5	22.4	✓	
+32.06 Δ 31° 55' Rt	5.29	25.63	✓	on Hub
+44 72 Rt = Nly Power Pole #79547				
B.M.	6.24	$\langle 24.68 \rangle$	✓	

4+7 East Side  
 + North End  
 Do. Box Culv.  
 Camino del Rio  
 + 6128  
 + 2468 # 16678

Cont Page 66

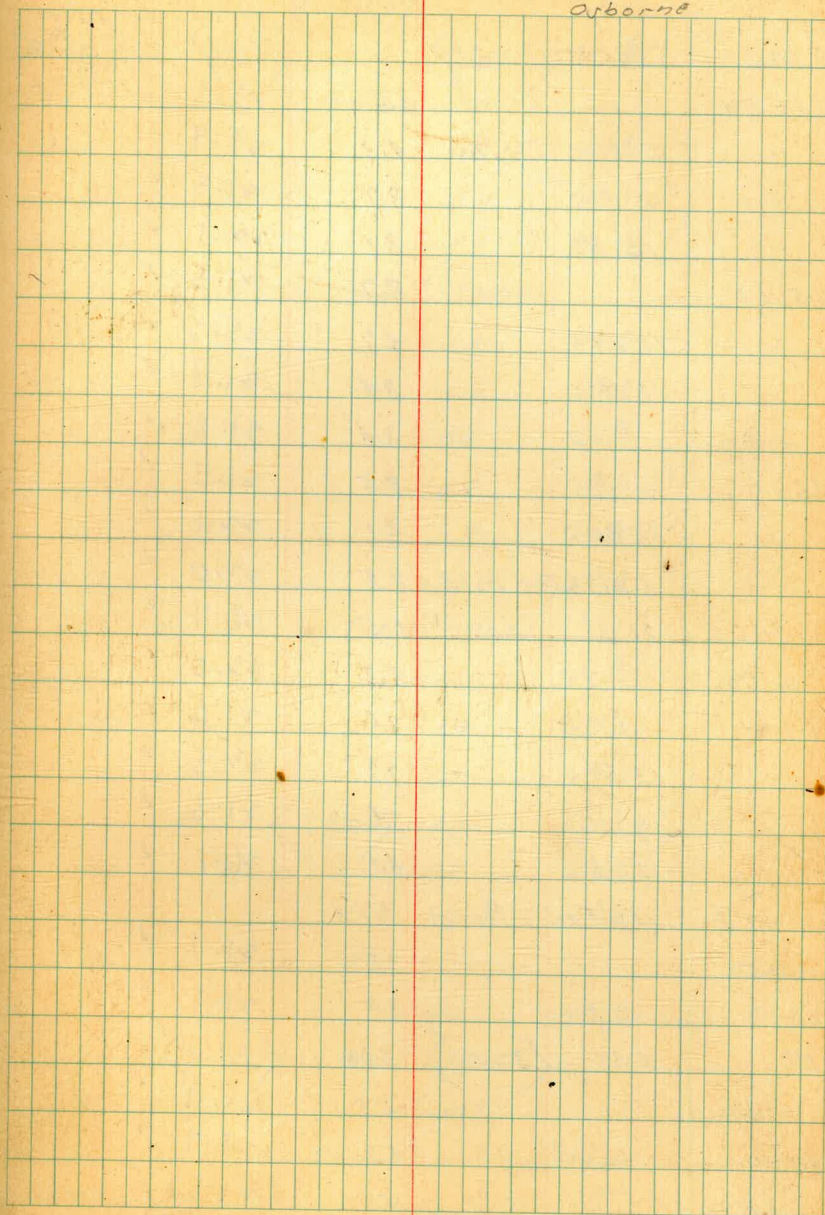


Check Levels Bridge Moreno Blvd. Camino Del Rio  
to Camino Del Rio 46th St.

BM	5.94	25.94	20.00	P.P. S. 17 Cor. 8-1096 Moreno Camino Del Rio 1996 State
	1.77	20.90	6.81	19.13
	4.60	20.16	5.34	15.56
	4.67	20.44	4.39	15.77
BM	9.20	20.73	8.91	11.53 Top Conc. Man 10' Lt 79+21.11 1668 27
	8.61	24.81	4.53	16.20
	11.00	35.41	0.40	24.41
	9.80	44.83	0.38	35.03
	0.69	40.55	4.97	39.86
#165 State	1.61	32.40	9.76	30.79
BM			3.97	28.43 RR Mt in Fwd 77-60 76' Lt 136+41 28.41
BM	2.12	27.41	7.11	25.29 Check D N 48 11' legs H. 4.6 Curb cut 25.83 H. 163-38
	4.87	25.06	7.22	20.19
BM	6.16	27.62	3.60	21.46 4" Pipe 36' Lt 219.7' 21.43 Paper 30
	4.56	27.48	4.70	22.92
	5.03	28.01	4.50	22.98
BM			11.91	16.10 Top Mon 29' Lt 351.62+3 16.02 P 61
	5.07	29.03	4.05	23.96
	3.16	27.06	4.13	24.90
BM	11.24	29.71	8.59	18.47 Top Mon 13' Lt 51+39.96 18.36 P 63
	1.31	31.62	4.40	25.31
BM			6.98	24.64 4+T E Side N End Do. 8' Curb Camino Del Rio 46th St. 24.68 4/629

Bench Levels 1629-170

Jan 22-45  
S. J. Som  
Blinn X  
Osborne 65





Levels of Line Mission Valley Trunk Section  
5 of 7 May

B.M.	5.54	(30.22)	(24.68)	By 2 Side of Cab Box Cult. Camerobd x 5 1954 1629-P4
64+50		6.4	23.8	✓
"	5' Lt. - Sky Pole	4.3	25.9	✓
"	5' Pt	8.7	21.5	✓
"	10' Pt	8.1	22.1	✓
65+0		8.7	21.5	✓
"	10' Lt	4.7	25.5	✓
"	12' Pt	8.4	21.8	✓
+50		8.4	21.8	✓
66+0		8.5	21.7	✓
"	12' Pt	8.1	22.1	✓
"	6' Lt = Tac Fill	8.2	22.0	✓
"	20' Lt	3.5	26.7	✓
+50		8.2	22.0	✓
67+0		8.6	21.6	✓
"	12' Pt	7.7	22.5	✓
"	8' Lt	8.6	21.6	✓
"	18' Lt	4.1	26.1	✓
+62	14.2 Lt = Sky Power Pole			✓
+50		8.5	21.7	✓
68+0		8.5	21.7	✓
TP	5.39	(27.55)	(22.12)	✓
+50		5.8	21.7	✓
69+0		5.8	21.7	✓
+1988	2.6 + 1/2 St. North	5.91	(21.62)	at Hub

Jan 22-45  
Sisson  
811 St T  
Asberne

66

(27.55)

B.M.	5.04	22.51	Nov 12 '91 69+49.88
69+70	13' Lt - Sky Power Pole	79078	
70+0		6.0	21.5 ✓ w
+50		5.4	22.1 ✓
71+0		4.8	22.7 ✓
+28	13.2 Lt - Sky Power Pole	79074	
+50		5.5	22.0 ✓
72+0		5.4	22.1 ✓
"	12' Pt	4.6	22.9 ✓
"	8' Lt	4.4	23.1 ✓
"	18' Lt	0.8	26.7 ✓
+50		5.1	22.4 ✓
+86	13.4 Lt - Sky Power Pole	79075	
73+0		4.6	22.9 ✓
+50		4.9	22.6 ✓
74+0		5.6	21.9 ✓
TP	6.31	(29.00)	(22.69) ✓
+50		6.5	22.5 ✓
75+0		6.2	22.8 ✓
+89	13' Lt - Sky Power Pole	79505	
+50		5.5	22.5 ✓
+80	14' Lt - Sky T21 Pole	4687-1	
+92	14' Lt - " " "	4687	
79+0	14.8 Pt - Sky Anchor Pole	43679.4	
78+0	8' Lt - 2 Cable Dead Man		



29.00

BM		3.02	25.98	4x D Corral 15' Lt 7640 2596 41689
7670		4.8	24.2	
+50	12.3 Lt - Sly P. Pole	4.8	24.2	
7740		4.8	24.2	
+19.08	Δ 1'04' Lt	4.71	24.29	02 Hub
+50		4.8	24.2	
7810		4.5	24.5	
+50		4.5	24.5	
+89	9.5 Lt - Sly P. Pole #70977			
7940		4.3	24.7	
+50		4.2	24.8	
8040		4.2	24.8	
TP	3.47	2.98	26.02	
+20		4.5	25.0	
+30		3.2	26.3	
+50		5.7	25.8	
+64	3.0 Lt - Sly 36" Cyp. Pole			
+71	6.5 Lt - Sly P. Pole #79078			
8140		4.7	24.8	
+50		5.3	24.2	
+87	27 Lt - Sly P. Pole #79099			
8240		4.9	24.6	
+50		5.3	24.2	
8340		5.3	24.2	
+50		4.9	24.6	

29.49

8440		4.1	25.4	
+10		3.1	26.4	
+40		3.1	26.4	
+83	36 Pt - Sly Trans. Pole #79080			
BM		3.13	26.36	Sly 17 Pole 36 Pt 8440 25.43
8540	42 Pt - Sly Trans. Pole #79979	4.1	25.4	
+50		4.4	25.1	
8640		4.0	25.5	
+50		3.5	26.0	
TP	6.02	3.24	26.25	
8740		6.5	25.8	
+50		6.5	25.8	
+85	44 Pt - Sly P. Pole #79081			
8840		6.3	26.0	
+50		5.9	26.4	
+90	44 Pt - Sly P. Pole #79082			
BM		4.54	27.73	Sly 17 Pole 44 Pt 8840 27.30
+97		4.5	27.8	
8940		3.4	28.9	
+10		2.8	29.5	
+20		5.3	27.0	
+50		5.2	27.1	
9040	Δ 12° 43' 45" Lt	5.25	26.9	02 H
+50		5.6	26.7	
9140		5.6	26.7	



(32.27)			
91+03	128 Rt. - N/4 Post Pole # 79088		
+05		5.1	27.2 ✓
+17		3.5	28.8 ✓
+32		3.4	28.9 ✓
+50		5.2	27.1 ✓
92+0		5.8	26.5 ✓
TP	4.30 31.33	5.24	(27.05) ✓
+50		5.0	26.3 ✓
93+0		5.0	26.3 ✓
+50		5.1	26.2 ✓
94+0		5.3	26.0 ✓
+15.10	Δ 13° 47' 45" Rl	4.86	26.47 ✓ <small>on Hub</small>
+32	1/2 Rt. - N/4 Post Pole # 79090	1.0 Rt. - Cable Guy Dead Man	
+50		4.5	26.8 ✓
95+0		5.5	25.8 ✓
+50		5.5	25.8 ✓
96+0		5.0	26.3 ✓
+31	78 Rt. - N/4 Post Pole # 79091		
+50		5.1	26.2 ✓
97+0		5.0	26.3 ✓
+50		4.8	26.5 ✓
98+0		4.8	26.5 ✓
+29	76 Rt. - N/4 Post Pole # 79092		
+50		4.5	26.8 ✓
99+0		4.0	27.3 ✓

(31.33)			
TP	396	(32.14)	2.15 (28.18) ✓
99+50			4.8 27.3 ✓
100+0			5.1 27.0 ✓
+45			4.6 27.5 ✓
+55			2.3 29.8 ✓
+70			5.6 28.5 ✓
+73	78 Rt. - N/4 Post Pole # 79093		
101+0			5.3 26.8 ✓
+50			5.2 26.9 ✓
102+0			5.3 26.8 ✓
+50			5.1 27.0 ✓
+68	75 Rt. - N/4 Post Pole # 79097		
8M		1.75	(30.47) ✓
103+0		4.8	27.3 ✓ <small>BP in HWCALV 15' at 102+72 30.46</small>
+50		4.2	27.9 ✓
+77	32 Rt. - N/4 36" Feed Trac		2.3 29.8 ✓
104+0		1.8	30.3 ✓
+50		1.5	30.6 ✓
+65	38 Rt. - N/4 Post Pole # 79118		
105+0			2.7 29.4 ✓
TP	466	(34.87)	1.93 (30.21) ✓
+50			5.2 29.7 ✓
106+0			5.0 29.9 ✓
+50			5.0 29.9 ✓
107+0			5.0 29.9 ✓
+50			4.8 30.1 ✓
+66 83 Rt. - N/4 Post Pole # 79119 ✓			



Levels A Line Mission Valley Trunk & Service

(34.87)

108+0		4.8	30.1	✓
+50		4.2	30.7	✓
109+0		4.2	30.7	✓
+50		4.1	30.8	✓
110+0		4.3	30.6	✓
+50		4.3	30.6	✓
+65	75 RT = Nly. Post Pole # 79120			✓
111+0		4.3	30.6	✓
TP	4.29 (35.65)	3.51	(31.36)	✓
+50		5.0	30.6	✓
112+0		4.8	30.8	✓
+50		5.0	30.6	✓
113+0		5.0	30.6	✓
+50		4.8	30.8	✓
+95	7.2 RT = Nly Post Pole # 79121			✓
114+0		4.7	30.9	✓
+50		4.6	31.0	✓
115+0		4.6	31.0	✓
+50		4.8	30.8	✓
+116+0	* 79126 75 RT = Nly Post Pole	4.6	31.0	✓
B.M. Set		2.31	(33.34)	✓ <small>Ch 150/2.17 Hood Wall C.M. 14' at 115+85</small>
+50		4.4	31.2	✓
117+0		4.3	31.3	✓
+119.78	P.O.T.	4.03	31.6	✓ on Hub
+50		4.8	31.8	✓

Jan 24-45

Sisson

Bliss

Orbanet

69

(35.65)

117+70	6.2 RT = Nly Post Pole # 79127	3.2		✓
TP	7.22 (40.93)	1.94	(33.7)	✓ <small>3' Nail Pole 62.8' 117+70 33.75</small>
+88		7.2	33.7	✓
118+0		8.8	32.1	✓
+60	Δ 15° 50' 15"	9.0	31.9	✓
119+0		8.7	32.2	✓
+50		8.2	32.7	✓
120+0	6 RT = 3 Wire Fence	8.2	32.7	✓
+26	10 RT = Nly Post Pole # 79128			✓
+50		8.1	32.8	✓
121+0	11 Δ 2 RT = Fence	8.14	32.79	✓ on Hub
+50		8.0	32.9	✓
122+0		8.0	32.9	✓
+50		8.0	32.9	✓
+85	80 RT = Nly Post Pole # 79130			✓
123+0		7.8	33.1	✓
+50		7.9	33.0	✓
B.M.	9.47 (42.95)	7.45	(32.48)	✓ <small>Top Mon 13' RT 123+85</small>
+80	115 RT = 3 Wire Fence			✓
124+0		9.9	33.0	✓
+60.00	Δ	8.80	34.15	✓ on Hub
125+0		8.3	34.6	✓
+113	7 RT = Nly Post Pole # 79131			✓
+50		7.1	35.8	✓
126+0		7.2	35.7	✓



42.95

126+50		5.9	37.0	✓
+58	6 Rt = 1 1/4 Power Pole # 79132			✓
+92.64	Δ 15° 46' 45" Rt	5.18	37.77	on Hub.
127+0		2.5	39.4	✓
+50		3.6	39.3	✓
128+0		4.0	38.9	✓
+13	10' Lt = 5/4 Power Pole # 79133			✓
+50		4.4	38.5	✓
129+0		5.0	37.9	✓
+50		4.6	38.3	✓
+61	12.5 Lt = 5/4 Power Pole # 79134 3.5 Rt = Cable Dead Man			✓
130+0		5.0	37.9	✓
+20		6.0	36.9	✓
+25		7.4	35.5	✓
+33	9 Rt = 12" Cypress Tree			✓
+35	9' Lt = 5/4 36" " "			✓
+50		7.5	35.4	✓
+55	92 Rt = 1/4 Fence			✓
+56	10' Lt = 5/4 24" Pepper Tree			✓
+76	10' Lt = 5/4 38" Cypress			✓
131+0		9.5	33.4	✓
TP	5.67	42.97	5.65	37.30
+18	14' Lt = 5/4 Power Pole # 79134			✓
+50		10.6	32.2	✓
132+0		10.4	32.6	✓
+20	13' Lt = 5/4 15" Pepper Tree			✓

42.97

132+50		10.4	32.6	✓
133+0		9.9	33.1	✓
+50		9.7	33.3	✓
+90		9.8	33.2	✓
134+0		8.6	34.4	✓
+10		7.2	35.8	✓
+13	8' Lt = 5/4 27" Pepper Tree			✓
+16	15' Lt = 5/4 Power Pole # 79135			✓
+50		6.0	37.0	✓
+89	8' Lt = 5/4 30" Cypress Tree			✓
135+0		5.6	37.4	✓
+34	14' Lt = 5/4 Power Pole # 79136			✓
BM	9.47	48.4	4.03	38.94
+50		10.9	37.5	✓
+70	7.4 Lt = 5/4 12" Cypress Tree			✓
136+0		10.8	37.6	✓
+50		8.0	40.4	✓
137+0		5.2	43.2	✓
+18	15.0 = 5/4 Power Pole # 79137			✓
+50		2.7	45.7	✓
138+0	ROT	2.55	45.86	on Hub
+13		4.4	44.0	✓
+23	= 1 1/4 # 15 Power Pole	4.22	44.19	✓
+44	= 1 1/4 " "	4.02	44.39	✓
+50		4.1	44.3	✓



		<u>(48.4)</u>		
139+0		2.5	45.9	✓
+50		2.6	45.8	✓
+56	Wly N45 Pav	2.43	45.98	✓
+57	12.5 Rt = Fly Fence			
+84	Wly N45 Pav	2.47	45.94	✓
+76	15 Lt = Fly Post Pole #79138			✓
+98.28	Δ 8° 51' 30" Rt	2.52	45.89	o7 Hub
140+50		2.0	46.4	✓
141+0		1.2	47.2	✓
TP	6.13 <u>(51.55)</u>	2.99	<u>(45.42)</u>	✓
+50		4.5	47.0	✓
+57	14' Lt = Top Conc Valve Chamber	5.04	46.51	✓
+93	10' Lt = Top Conc Valve Chamber	5.20	46.35	✓
142+0		2.1	48.4	✓
+21	Wly Paving Texas St	2.28	49.27	✓
+59	Wly "	2.36	49.19	✓
+68.5	29' Rt. Fly Box Culv	2.77	48.78	Top Box Culv
"	" " " "	8.33	43.22	Floor Line
"	112.5 Lt = Wly Box Culv	8.51	43.04	Top Box
"	" " " "	14.11	37.44	Floor Line
+80	4' Lt. 2" Fire Hydr	2.5	49.0	✓
+83	6.8' Lt. Fly 24" Cypress Tree			
+90		5.5	46.0	✓
143+0		5.9	45.6	✓
+50		7.3	44.2	✓
RM		1.88	49.67	Point A Top Head Wall Culv 26' Lt 142+15 49.75

		<u>(51.55)</u>		
144+0		8.6	42.9	✓
+56.61	Δ 12° 14' 30" Rt	9.20	42.35	o7 Hub
TP	4.76 <u>(47.11)</u>	9.20	<u>(42.35)</u>	o7 Hub 144+56.612
145+0		5.3	41.8	✓
+55		4.7	42.4	✓
+60		5.5	41.6	✓
146+0		5.4	41.7	✓
+50		5.3	41.8	✓
147+0		5.3	41.8	✓
+50	17 Rt = Fence Δ 11° 49' 30" Lt	6.53	40.58	o7 Hub
148+0		7.0	40.1	✓
+50		6.6	40.5	✓
+66	Wly Paving	4.97	42.14	✓
+76	Wly "	4.92	42.19	✓
+86	10' Rt = Wly Post Pole #79144			
149+0		4.9	42.2	✓
"	3' Lt = Fly 18' Culv	6.56	40.55	Floor Line
+50		4.6	42.5	✓
150+0		6.2	40.9	✓
TP	8.08 <u>(49.98)</u>	5.21	<u>(41.90)</u>	o7 Hub 150+0182
+01.32	Δ 11° 49' 30" Lt	8.08	41.90	✓ POT on main design
+50		8.3	41.7	✓
+91	7' Rt = Wly Pole #79145			
151+0		7.7	42.3	✓
+50		7.6	42.4	✓



Levels A Line Mission Valley Trunk Sinner

		<49.98>		
15210		7.6	42.4	✓
+50		6.8	43.2	✓
+80	8 Rt = NY Pow Pole #79146			
15310		5.2	44.8	✓
+50		4.5	45.5	✓
15410		4.6	45.4	✓
+50		3.8	46.2	✓
+60	10.5 Rt = NY Tel Pole			
15510		3.4	46.6	✓
+30	8.5 Rt = NY Pow Pole #79147			
JP BM	5.56 <54.25>	1.29	<48.69>	5 ft 10 Pole 8.5 Rt 155 130 48.70
+50		6.2	48.0	✓
15610		5.2	49.0	✓
+50		4.6	49.6	✓
15710		4.3	49.9	✓
+50		4.1	50.1	✓
+79	7.8 Rt = NY Pow Pole #79142			
15810		4.7	49.5	✓
+50		5.0	49.2	✓
15910		4.6	49.6	✓
+61.20	Δ 27°50' 40" Lt	4.48	49.77	07 Hub
+95		5.7	48.5	✓
16010		6.7	47.5	✓
+12	= NY Pow	6.79	47.46	✓
+50		6.40	47.85	10 Pow

72

		<54.25>		
160+65	= NY Pow	6.47	47.78	✓
+85	1.8 Lt = Tel Pole			
16110		7.1	47.1	✓
+10		7.6	46.6	✓
+2618	= 2.56 + 10.30 #1626-51	12.03	<48.22>	07 Hub 48.20

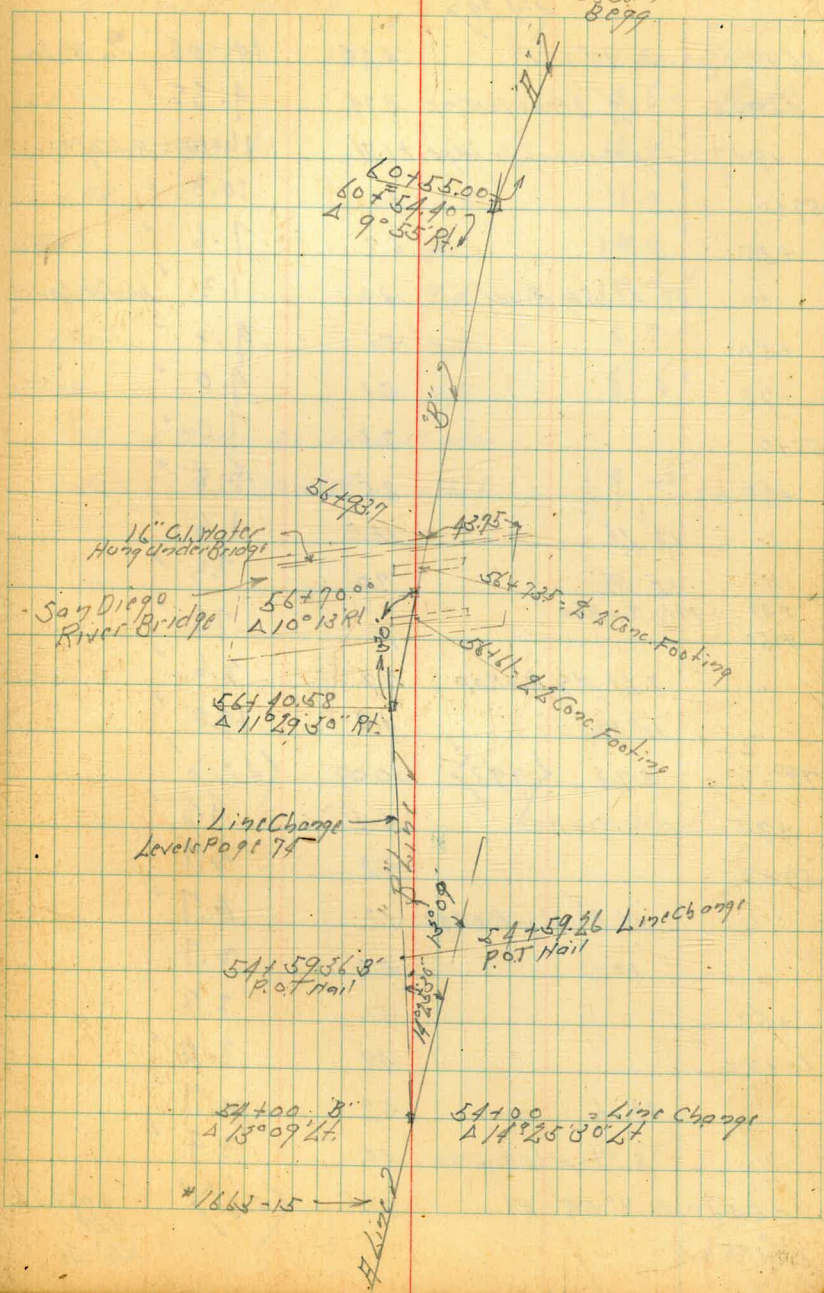


Mission Valley Trunk Sewer 8" Line  
Across San Diego River Dyke & Under Bridge

BM	1.39	(21.39)	20.00	BP 5 End Old Town Bridge
54+0	A 13° 09' Lt.	12.89	8.50	on Hub
"	15' Rt of 1/2	14.3	7.1	✓
"	18' Lt " " Top Dyke	3.4	18.0	✓
+50	Sly Top Dyke	3.3	18.1	✓
"	15' Lt - 1/4 Dyke	3.1	18.3	✓
"	20' Rt of 1/2	12.4	9.0	✓
"	30' R " "	12.4	9.0	✓
+95	1/4 Top Dyke	3.1	18.3	✓
"	15' Rt - Sly Top Dyke	3.4	18.0	✓
"	18' Lt	12.4	9.0	✓
55+40	1/4 Top Dyke	10.2	11.2	✓
"	10' Lt	12.9	8.5	✓
"	17' Rt - 1/4 Top Dyke	3.1	18.3	✓
+70		12.3	9.1	✓
"	10' Lt	12.8	8.6	✓
"	5' Rt	12.3	9.1	✓
"	23' Rt - 1/4 Top Dyke	3.1	18.3	✓
56+0		12.8	8.6	✓
+01	10' Rt - 2 30" Conc. Cylinder			
TP	2.34	(14.29)	9.44	(11.95) ✓ on Top Conc. Cylinder
+50		4.6	9.7	✓
"	10' Lt	4.8	9.5	✓
"	20' Rt	2.1	12.2	✓
+61	2' Conc Footing	4.70	9.59	✓

Feb 8, 45  
Sisson  
Bliss  
Osborne  
Begg

73





56+70.00	A 10° 13' Rt.	4.24	10.05	Hub	
+73.5	= 2' Conc Footing	4.74	9.55		
+93.7	= Fly Truss of Bridge	1.81	16.10	Bot. of Truss	
-57+0		4.0	10.3		
+35		6.7	7.6		
"	27' Lt. S/Sy River	12.0	1.3	Water Level	
+50		5.1	9.2		
+72		5.3	9.0		
58+0		7.3	7.0		
+25		8.5	5.8		
"	12' Lt.	12.5	1.8		
"	15' Rt.	7.0	7.3		
+39	= 1/4 Rip Rap	7.0	7.3		
+50		11.7	2.6		
"	7 Lt. 1/4 Rip Rap	4.3	10.0		
TP	3.73	10.09			
+75	= 1/4 Rip Rap	6.4	1.5		
59+0		5.2	2.1		
"	12 Rt. 1/4 Rip Rap	3.2	4.7		
"	10 Lt.	5.2	2.7		
+50		5.1	2.8		
60+0		4.9	3.0		
"	5.2 Lt.	5.2	2.7		
"	18 Rt. 1/4 Rip Rap	4.0	3.9		
+54.40	A 9° 55' Rt.	4.65			
604 550.7"					

Levels Line Change off B Line  
54+0 to 56+70.58  
Alignment Page 73

Dec. 20-45  
S. S. 1907  
Bill Osborne

BM	11.13	19.63		
54+0		11.1	8.50	0.75 to 6
+50 = Top of Ke		1.4	8.5	54+00
+95 = " "		1.4	16.2	11/11/45
56+0		5.6	18.2	
+40		9.4	16.0	
+75		10.9	10.2	
56+0		11.1	8.1	
+02	A Rt. 1/4 20' Conc Gy Under		8.5	
+40.58	A 11° 29' 30" Rt.	10.38	9.25	0.00 Hub

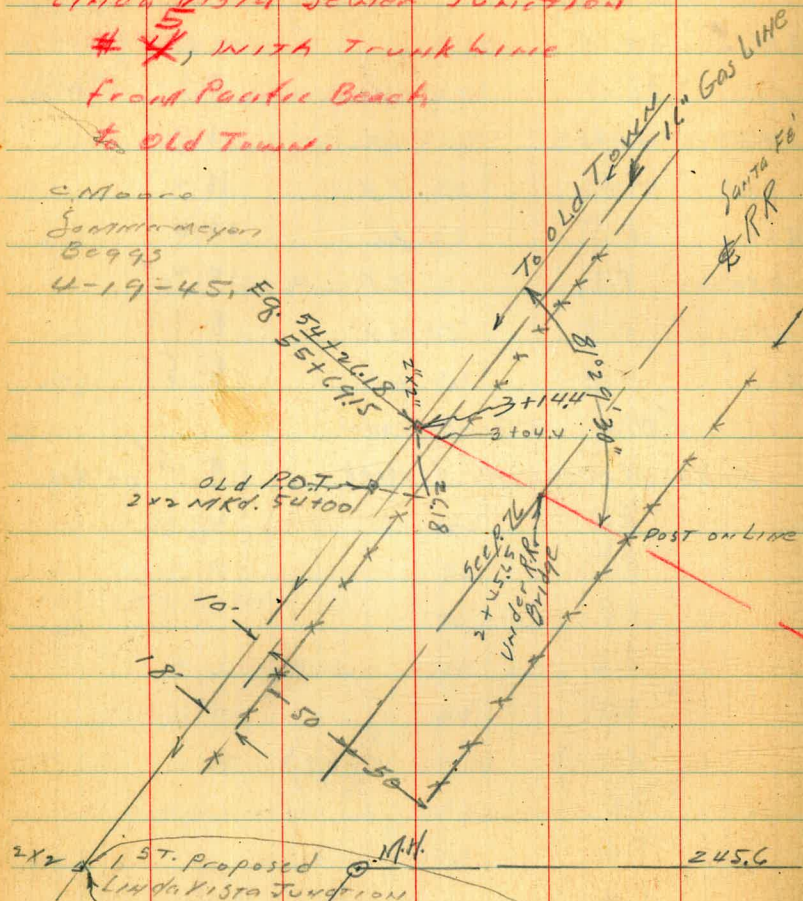
07 St us  
329  
1663-26



Linda Vista Sewer Junction  
 # 5, WITH Trunk line  
 from Pacific Beach  
 to Old Town.

C. Moore  
 Surveyor  
 B0995

U-19-45, EG. 54126.18  
 55+9.15



Old P.O.T.  
 2x2 MKD. 54100

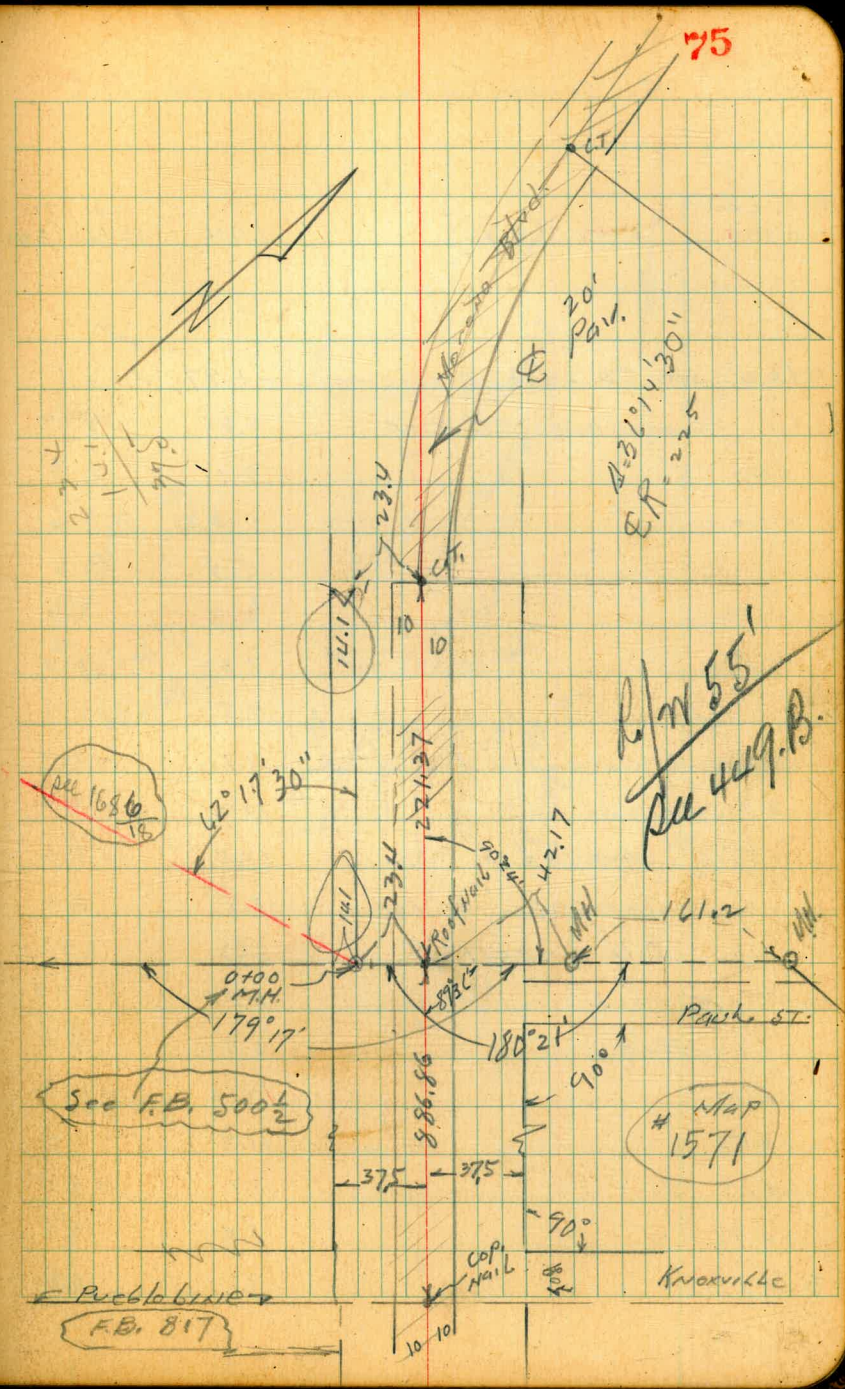
POST ON LINE  
 2x4 U.S. Under RR Bridge

10'  
 18'  
 50'  
 50'

2x2 15' Proposed Linda Vista Junction  
 Old E.B. 48445.23  
 49488.20

see p. 2 and p. 29  
 for past proposals

M.H.  
 EXISTING OUTFALL  
 Linda Vista Sewer



see 1686  
 16

see F.B. 500 1/2

Pueblo line  
 F.B. 817

20' Pav.  
 23.14  
 30"  
 E.R. 225

R/W 55'  
 see 449.B.

Map # 1571

0100 M.H. 179.17  
 886.86  
 37.5  
 37.5  
 90°

Knorrville  
 COP. MAIL  
 10-10



± Sewer Levels, change #5

76

B.M. 2'x2'  
Old P.O.T.

8.42 (9.86)

1.44

old STA.  
54100 P. 7.

THIS BK.

0+00 see F.B. 500 1/2 P. 45

-1.87

F.H.O.

" Ground and M.H. RIM

4.84

5.02

+40

5.1

4.8

+60

6.3

3.6

1

6.3

3.6

+50

6.3

3.6

+95

7.3

2.6

2

7.8

2.1

+22

9.7

0.2

+30

12.3

-2.4

(+46.5)

ground E.R.R.

13.5

-3.6

" Top cap bridge

5.5

4.4

" Pile cutoff

6.3

3.3

Top rail

2.87

6.99

" Tie

3.5

6.4

+60

12.3

-2.4

+57

11.3

-1.4

+85

11.1

-1.2

+95

8.4

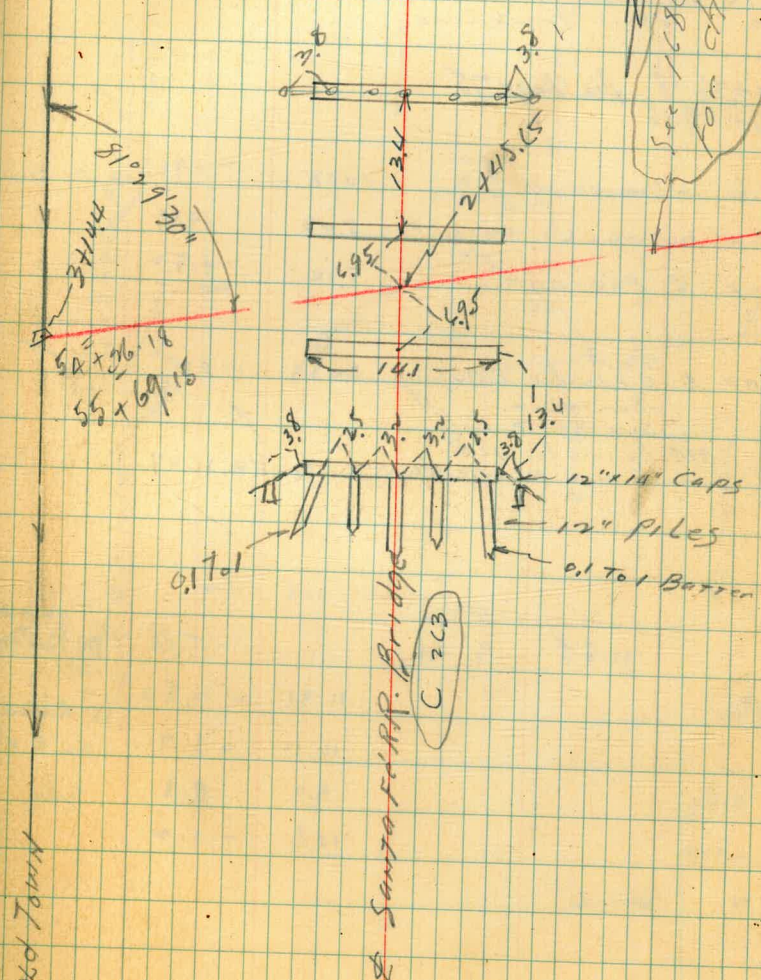
1.5

3

9.1

0.8

to old Town





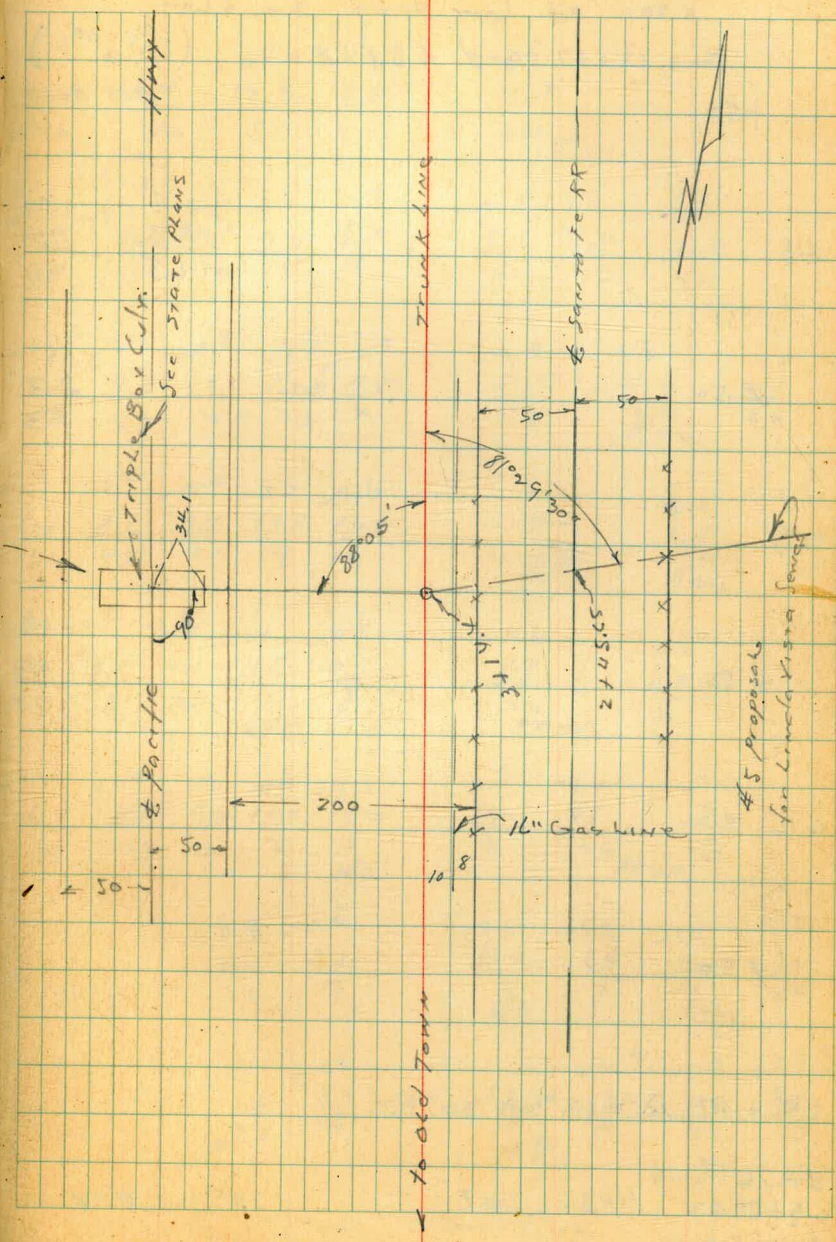
9.84

3 + 0.4	ground	over 9.5 LINE	9.4	0.5
"	Top 12" gas line		12.90	-2.14
3 + 14.4	JUNCTION WITH MAIN TRUNK LINE		8.22	1.64 2x2 Hub

5A + 26.18 See Page 75  
55 + 69.15

E.L. INLET TRIPLE	CONV. BOX CUTV.	10.78	-0.92	on Pacific
Top hd wall	colv.	5.03	4.83	" "
Top of PAVING		5.34	4.52	" "
B.M. B.P. E	TOP E. hd wall cutv. over inlet. See BK. 7 on B.M. Levels for 157. Survey via Pacific ROW	5.03	4.83	See F.B. 1647 ?

Top Bed	11.55	9.41	-2.14	above top Res Main
"			11.91	-2.50
"			11.10	-1.7
"			9.3	9.1
"			10.6	-1.2





17  
 X Sec of Low Area R.R. 647

Between 15+37 and 18+48.01 (FROM)  
 P. 3  
 + his Book

+50

L8

+1.8 -1.7  
 5.7 9.2  
 25 49

+50

+1.8  
 5.7  
 53

L7

+50

+1.3  
 6.2  
 45

L6

+50

15+37  $\Delta = 13^{\circ} 29' 30''$  RT.

STUB

69+89.53

403

7.48

345

P. 8

$\Delta 12^{\circ} 37'$  RT.

L7 = to West ←

RT. 78

5.9 5.6 -4.8 -1.3  
 13.4 13.1 12.3 8.8  
 100 70 50 22

Tidal  
 Slough  
 4.8 -5.0 -2.6 -2.0 -0.1  
 10.3 12.5 10.1 9.5 8.7  
 35 32 30 15 11

1.1 -2.1 -4.9 2.5 2.0  
 8.0 9.0 12.4 10.0 9.5  
 48 28 25 23 \*

1.5 -1.1 -2.2 -4.6 -2.6  
 6.0 8.0 9.7 12.1 10.1  
 50 45 21 17 14

0.8 -2.0 -1.9 -2.0 -2.6  
 8.3 9.5 9.4 11.5 10.1  
 4 28 14 11 8  
 M.D.

1.1 -1.2 -1.7 2.6 -3.1  
 6.4 8.7 9.2 10.0 11.2  
 35 29 10 5 3  
 M.D.

40.9 -1.2  
 6.0 8.7  
 24 19

40.9 -0.8  
 6.0 8.3  
 23 16

OLD RR Embankment

+4.7  
 2.8

20 Row

2.4 3.5 5.5  
 5.1 4.0 2.0  
 8 17 20  
 Row

2.0 3.5 1.4  
 5.5 4.0 0.1  
 18 20 30  
 Row

0.3 2.0 5.5  
 7.2 5.5 2.0  
 18 20 30  
 Row

-0.6 2.5  
 8.1 5.0  
 22 35  
 Row

-2.5 -1.6 -1.0  
 10.0 9.1 8.5  
 3 20 55  
 Row

-3.1 -1.9 -1.9 -1.7  
 10.0 9.4 9.2 9.2  
 5 7 31 50  
 M.D. Row

-2.9 -2.2 -1.9 -1.8  
 10.4 9.7 9.4 9.3  
 8 11 37 50  
 M.D.

Mosquito  
 Ditch

West End of  
 RR



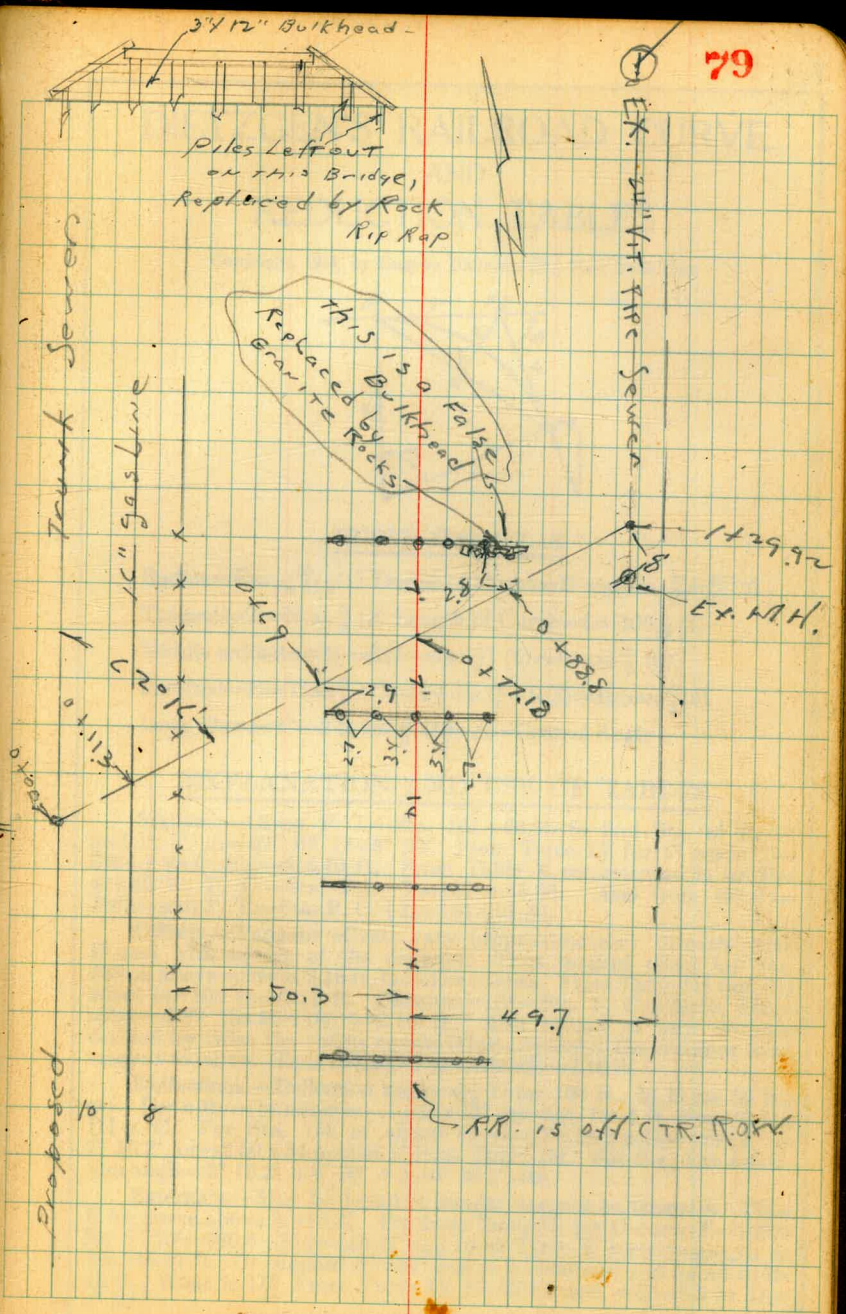
5-31-45.

Sewer location at Pacific Hwy.  
and Tecolote Creek

BM. Top 3.90 40.88 ✓ C.98 P.C

0+00 Hub	5.99	4.89	✓
+11.3 ground	6.2	4.7	✓
" Top 1" gasline	9.97	0.91	✓
+30	7.2	3.7	✓
+34 Bot. ditch	10.3	0.6	✓
+52 " "	10.5	0.4	✓
+55	8.2	2.5	✓
+69	8.0	2.9	✓
Top w rail	3.91	6.97	✓
0+77.18 ground	6.8	4.1	✓
Top E rail	3.90	6.98	✓
0+88.8	7.5	3.4	✓
+90	7.0	3.9	✓
0+98	3.8	1.1	✓
+115	5.5	5.4	✓
+29.92 = Build New M.H. ground	5.2	5.1	✓
" Top 2" pipe	5.91	4.97	✓

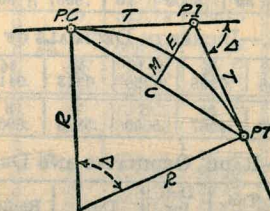
24" V.I. pipe has 2" shell





# DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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## CURVE FORMULAS

Radius— $R = \frac{50}{\sin \frac{D}{2}}$  (1) Degree of Curve— $D$  and  $\sin \frac{D}{2} = \frac{50}{R}$  (2)  
 Tangent— $T = R \tan \frac{\Delta}{2}$  (3) Length of Curve— $L = 100 \frac{\Delta}{D}$  (4)  
 Middle ordinate— $M = R(1 - \cos \frac{\Delta}{2})$  (5)  $= R \text{vers} \frac{\Delta}{2}$  (6)  
 External— $E = T \tan \frac{\Delta}{4} = R + \cos \frac{\Delta}{2} - R$  (8)  $= R \text{exsec} \frac{\Delta}{2}$  (9)  
 Long Chord— $C = 2 R \sin \frac{\Delta}{2}$  (10)  $\Delta$ —Central Angle

## EXPLANATION AND USE OF TABLES

**Stations.**—Given P. I.—Sta. 161+60.35 to find Sta. of P. C. and P. T.  $\Delta = 62^\circ 10'$   $D = 8^\circ 20'$ . From Table IV for  $1^\circ$  curve  $T = 3454.1$  and  $\div 8\frac{1}{3} = 414.49$  ft. From Table V correction = .36 or  $T = 414.85$  ft. P. C. = Sta. P. I. —  $T = 157 + 45.50$ . Also from (4)  $L = 746.00$  and P. T. = Sta. P. C. +  $L = 164 + 91.50$ .

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

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

**Externals.**—May be found in similar manner to tangents. Thus  $E$  for curve above is 115.37. For from Table IV for  $1^\circ$  curve  $E = 960.6$  for  $8^\circ 20' = 960.6 \div 8\frac{1}{3} = 115.27$  and from Table V correction = .10 or  $E = 115.37$  ft. Or suppose  $\Delta = 32^\circ$  and  $E$  is measured and found to be 42 ft. What is  $D$ ? From Table IV  $E = 230.9$  and  $\div 42 = 5.5$  or  $D = 5^\circ 30'$ .



P 5-



568 B.M. 1647-66

1C33-4C

1647  
1633  
1660  
1686

37+333 = M.H. 11 as Built

35+62.48 = P.L. line Mon.

170.82 - back of M.H.

43+23 = M.H.

897.00 = Mon to Pin

461.35 = POT Hub.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

10999~  
28.48  
112840

Roadway 16 feet wide. Side Slopes 1 on 1 1/2 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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