1378

Loma Alta and Western Add. Sewers (Prelim.)

Does not include # 1P to 6 - 6/21/20 AK

ENGINEERING DEPARTMENT,
CITY OF SAN DIEGO,
CALIFORNIA.

Our Leather Bound Engineers Note Books are carried in the following rulings:

No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.

No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.

No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.

No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter *"F"* to catalog number.

THE FREDERICK POST CO.
ENGINEERING and DRAFTING SUPPLIES
IRVING PARK STATION
CHICAGO, ILL.

to page # 6 v
except page #5,

62' Extension of Bacon St
Take over Lots 52, 53, 54, 55, 56, Ocean Beach

Groveland St. Euclid-54th 40-51

Walker
Lockey
McMicon
1-13-30

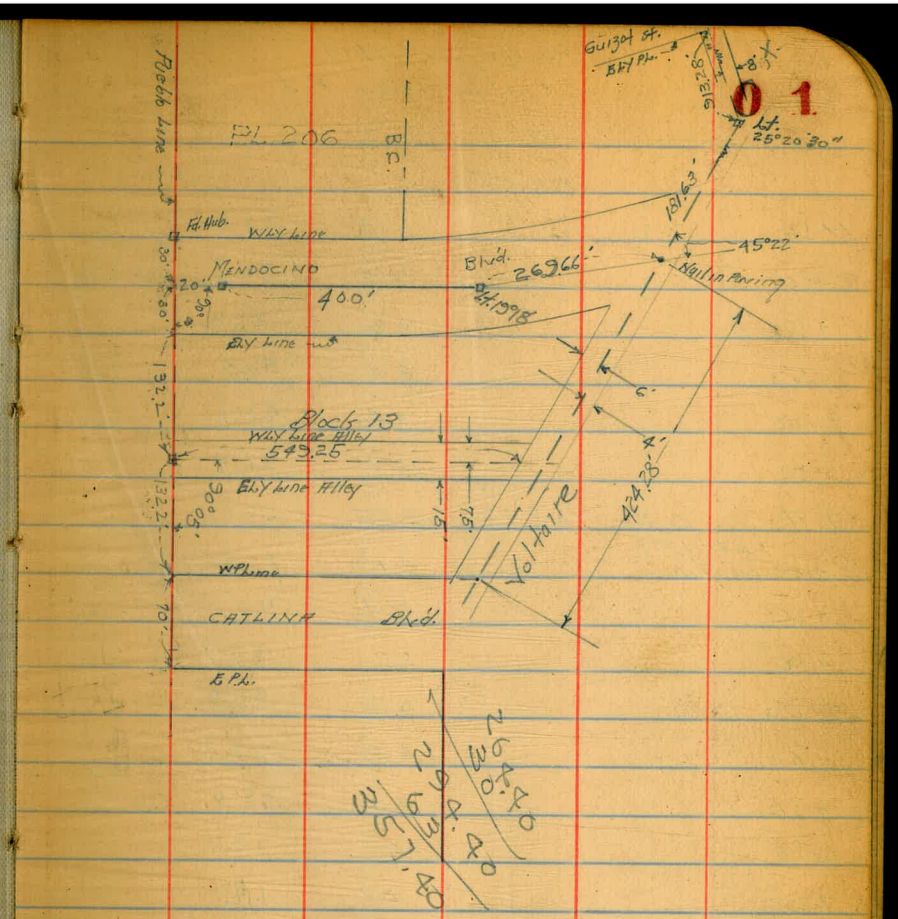
PRELIMINARY LEVELS IN MENDOCINO Blvd. And Block 13

05 Per Location on opp. Page

LEVELS & Alley, Blk. 13

S.E. B.P. Catalina, Blvd & U061 St. SLY Line Pueblo 206		9.84	84.53	74.69	Book 1317 Page 27
=0+00 on Redwood Hub.			1.80	82.73	
+13			3.0	81.5	
+19			5.1	79.4	
+32			2.8	81.7	
+50			3.2	81.3	60' East =78.5 Elev.
+75			4.1	80.4	
1+00			5.5	79.0	
+35			7.4	77.1	
+50			8.8	75.7	75' East =73.7 Elev.
2+00			12.1	72.4	
T.P.		0.12	73.22	11.43	73.10
+50				3.3	69.9
+60				4.1	69.1
3+00				5.1	68.1
+40				5.6	67.6
+50				4.9	68.3
+75				5.0	68.2
4+00				6.5	66.7
+20				7.1	66.1
+50				9.0	64.2
+75				10.0	63.2
5+00				10.1	63.1
+25				9.7	63.5

INDEXED



5+49.25 =SLY Line Voltaire St.		9.71	63.51
+55.5 =NLY edge Sidewalk		9.70	63.52

LEVELS IN MENDOCINO Blvd.

B.M. on Hub 0+00 & Alley 13

	11.95	24.68	82.73	
T.P.	6.22	100.05	0.85	93.83
20' North of Sly Pueblo 206 =0+00 on Hub.			0.25	99.80
+50			2.7	97.3
1+00			4.6	95.4

100' East =86.6 Elev.

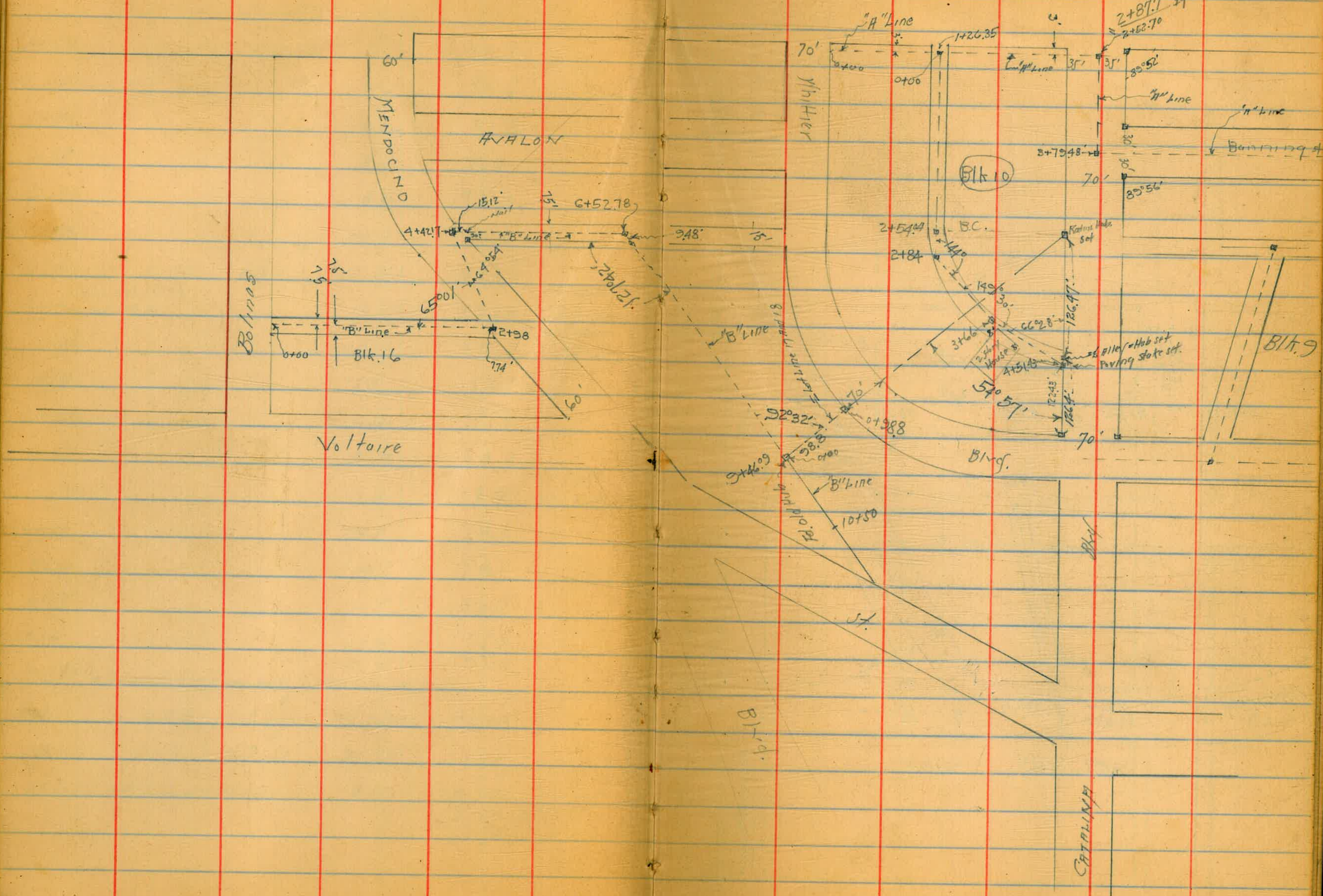
Cont. on P- 2

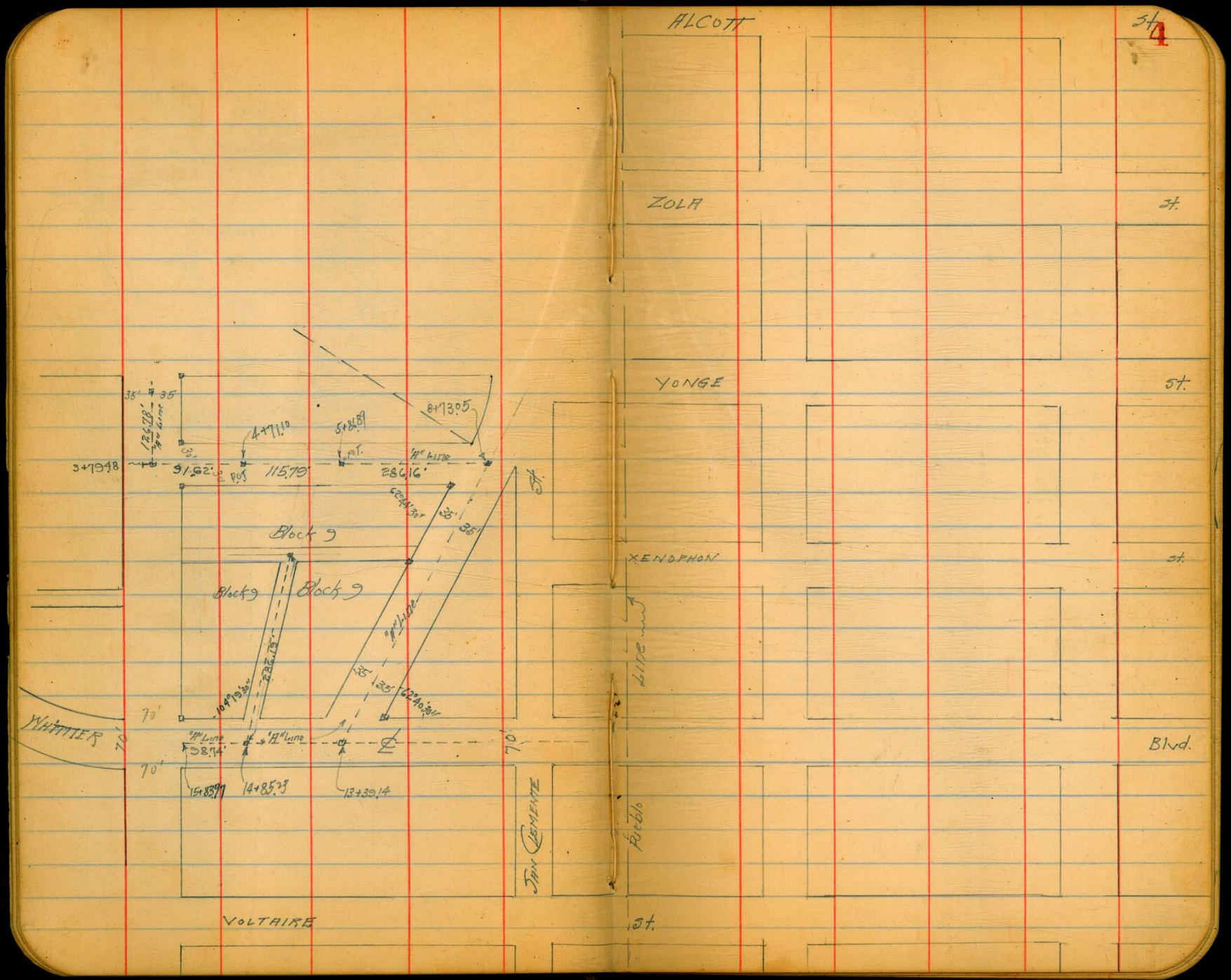
MENDOCINO Blvd.
Cont. from P 1

		100.05			
1+50			6.3	93.7	
2+00			7.5	92.5	100' East. =75.3 Elev.
+50			8.2	91.8	
+75			8.0	92.0	
3+00			8.4	91.6	
+50			13.1	86.9	
T.P	0.36	88.18	12.29	87.82	
4+00	= Δ Mt. 1918 on Stub.		4.19	83.99	100' East. =78.2 Elev.
+25			5.1	83.1	100' East. =68.4 Elev.
+50			5.5	82.7	
5+00			6.4	81.8	
+40			8.3	79.9	
+50			9.4	78.8	60' East. 69.0 Elev.
6+00			14.1	74.1	
+22			14.1	74.1	
+25			11.5	76.7	
+50			13.2	75.0	
			16.2	72.0	

6+69.66 = Intersection Hwy 1 Pipe Walk on Hwy 1 Side Volhaire

T.P	0.04	75.23	12.99	75.19	
T.P	2.67	67.11	10.79	64.44	
Chk. on Sta. 8 P Volhaire & Catalina			4.79	62.32	
				62.37 = B.M.	
				0.05 = Error.	


60'
MENDOCINO
AVALON
Whitter
70'
"A" Line
1+26.35
0+00
2+87.7 Equation
2+52.70
35'
"A" Line
Banning St
3+79.48
Blk 10
70'
6+52.78
4+42.7
"B" Line
75'
2+54.44
B.C.
2+84
Bolinas
7.5'
"B" Line
Blk. 16
0+00
2+98
60'
Voltaire
Blk. 9
54°57'
92°32'
70'
Blvd.
"B" Line
10+50
St.
Blvd.
CATALINA


ALCOTT
St.
4
ZOLA
St.
YONGE
St.
XENOPHON
St.
Line
Blvd.
Pueblo
JAN CLEMENTE
VOLTHAIRE
St.
WHITTIER
70'
35'
Block 9
Block 9
Block 9
"A" Line
3+79.78
4+71.10
5+88.89
8+73.05
115.79
286.16
231.29
38.74
15+85.97
14+85.23
13+30.14

Walker
Lyker
McHenry
1-15-30

"B" LINE Page 3
Prelim. Levels

6

					NYT&T.P. Book 1517-41
E.L.Y. Line Bellows St.	112	87.62		86.50	Voltaire St. Bellows
=0+00			4.5	83.1	
+50			9.2	78.4	
+60			9.9	77.7	
1+00			10.5	77.1	
+32.5-8" tiller on left			10.5	77.1	
(90' Lt. 14325)			13.8	73.8	
1+50			11.4	76.2	
2+00			12.4	75.2	
T.P.	0.31	74.95	12.98	74.64	
+50			2.8	72.2	
+85			4.2	70.8	
+98 on Hub	=Δ Lt 114°59'		9.34	65.61	
3+25			12.1	62.9	
+50			12.8	62.2	
T.P.	0.16	62.30	12.81	62.14	
4+00			1.1	61.2	
+42'17	=Δ Rt 115°06'		1.30	61.0	
+50			1.0	61.3	
+75			1.6	60.7	
5+00			3.9	58.4	
+15			5.9	56.4	
(40' Lt 5+15)			8.5	53.8	
(70' " 5+15)			15.0	47.3	
5+50			12.3	50.0	

		62.30			
T.P.	0.18	50.43	12.05	50.25	
5+58			2.5	47.9	60' Lt.
6+00			13.1	37.3	=33.5=Elev.
+13			18.0	32.4	
+23			16.3	34.1	
T.P.	4.70	43.09	12.04	38.39	
6+52.78	=Δ Rt 52°18' on Hub.		8.90	34.19	
+90			1.9	41.2	
7+00			1.9	41.2	
+50			6.1	37.0	
+75			8.2	34.9	50' Lt. =Elev. 27.1
8+00			5.7	37.4	
+13			4.5	38.6	
+50			6.7	36.4	
+75			8.7	34.4	
9+00			8.7	34.4	
+25			8.3	34.8	
+46.09	on Line Hub. Lots 18+19		8.58	34.51	
10+00			6.9	36.2	
+10			5.7	37.9	
-25			+2.0	45.1	
10+50	=End "B" Line		+9.4	52.5	

See Sketch P-3

LEVELS on Lot Line 17 And 18 Blk. 12.

Above Sta. 9+46.09 on "B" Line				
=0+00		43.09	8.58	34.51
+50			10.6	32.5
+97			9.8	33.3

Cont. on P-7

LEVELS on Lot Line 18 And 17 Block 12

Cont from P-6

		x 43.09		
0+98.8 on Hub. = W.S. Whittier Blvd.			8.97	34.12
1+18.8 on top Cb.			8.89	34.20
+19.8 "Gut. on Paving			10.37	32.72
+34.8 = ℄ Whittier Blvd. on Pav.			10.68	32.41
T.P.	0.32	30.50	12.91	30.18

Walker Lockery Matheson 1-15-30

"A" LINE

PRELIMINARY LEVELS

Sketch on Page 3-4

		30.50 = Above H.I.		
E.L.Y. Whittier Blvd. =0+00			10.0	20.5
+50			10.6	19.9
+88			12.0	18.5
1+00			9.2	21.3
T.P.	11.33	41.01	0.87	29.68
1+26.35 = ℄ on Hub. Alley Block 10			12.06	28.95
+30			8.6	32.4
+50			5.9	35.1
+70			4.3	36.7
2+00			5.0	36.0
+40			6.0	35.0
+50			7.9	33.1

"A" LINE

4101

2+65			10.8	30.2
2+87.7 = 2+52.7 equation on Hub. = ℄ Catalina Blvd.			13.30	27.71
3+00			7.6	33.4
T.P.	13.02	53.77	0.26	40.75
+50			11.4	42.4
+79.48 = ℄ Banning on Hub. 2nd Catalina			8.14	45.63
4+00			9.8	44.0
T.P.	6.33	60.03	0.07	53.70
+50			1.8	58.2
+71.10 = P.O.T. on Hub			0.89	59.14
5+00			0.9	59.1
+50			0.6	59.4
+86.89 on P.O.T. Hub.			1.32	58.71
6+00			3.6	56.4
+25			11.2	48.8
T.P.	0.59	47.84	12.78	47.25
6+50			3.8	44.0
+75			7.1	40.7
7+00			9.0	38.8
+37			8.5	39.3
+50			9.7	38.1
T.P.	0.10	34.96	12.98	34.86
+75			1.1	33.9
8+00			7.9	27.1
+25			13.8	21.2
+50			12.8	22.2

100' St. 45.0 Elev.

3496 "A" LINE Levels

8+73.0 = Δ 117°15'30" on Hub. Rt.			12.03	22.93
9+00			13.1	21.9
+50			12.3	22.7
10+00			10.8	24.2
+50			7.5	27.5
T.P.	12.66	47.62	0.00	34.96
+80			11.6	36.0
11+00			9.6	38.0
+20			8.5	39.1
+50			7.9	39.7
12+00			4.7	42.9
+25			1.6	46.0
T.P.	12.75	59.63	0.74	46.88
12+50			8.2	51.4
+80			1.0	58.6
T.P.	6.17	65.04	0.76	58.87
13+00			5.3	59.7
+39.14 = Δ on Hub. Rt. 62°40'30"			5.62	59.42
+50			6.2	58.8
14+00			6.3	58.7
+30			5.3	59.7
+50			3.5	61.5
+75			1.7	63.3
14+85.23 = Hub on ℄ Alley on Rt.		Blk 9	2.32	62.72
15+00			3.4	61.6
TP	0.70	53.99	11.75	53.29

100' Rt. = 57.4 Elev.

5399

+44			5.3	48.7
+50			4.5	49.5
+83.97 = ℄ L.V. Line Catalina			7.09	46.90
16+19 on Rim East MH			9.36	44.63
T.P.	12.22	65.91	0.30	53.69
Sta. Sht. on S.M. Vol Line + Catalina			3.55	62.36
				62.37 = BP
				0.01 = Error

1-16-30 Alley Blk 9 See sketch P4

14+85.23 "A" Line = 0+00	1.78	64.50		62.72
			1.78	62.72
+15			3.7	60.8
+30			3.3	61.2
+50			2.6	61.9
+90			2.8	61.7
1+00			3.4	61.1
+50			6.6	57.9
2+00			9.2	55.3
+25			8.7	55.8
+50			6.9	57.6
+75			3.3	61.2
2+86.19 on Hub = ℄ East + West Alley			2.24	62.26
30' Rt. of Above Sta. 2+86.19			3.3	61.2
75' Rt. of 2+86.19			16.1	48.4
125' Rt. of 2+86.19			29.2	35.3

Blk on Hub. 14+85.23 on opp Page

75' Rt. Elev. = 56.7

75' Rt. Elev. = 56.2

100' Rt. Elev. = 53.1

in ℄ East + W. Alley

" " " "

" " " "

Walter Leeke of Mathews 1-16-50

PRELIMINARY LEVELS
Alley Block 10 Loma Alta #1

1499 ✓ 43.94

-1+26.35 "A" Line P.I.=Location				28.95	Elev Hub 1+26.35 - Page 7
= 0+00			14.99	28.95	
+30			17.5	26.4	
+50			17.3	26.6	100' Rt. =El. 20.9
+70			14.7	29.2	
+75			10.5	33.4	40' Rt El. 29.0
+85			8.7	35.2	
+90			6.1	37.8	
1+00			5.6	38.3	19' Rt = Back of House El. 38.0
+23		✓	3.1	40.8	
T.P	12.55	55.60	0.89	43.05	✓
1+50'			6.0	49.6	
25' Rt 1+50			7.5	48.1	
65' R. 1+10			22.3	33.3	
2+00		✓	0.3	55.3	
T.P	11.39	66.33	0.66	54.94	✓
2+54.4 = BC. of Alley			7.46	58.87	
50' Rt Above Sta 2+54.4			10.8	55.5	
100' Rt Sta 2+54.4 on Hub.			20.3	46.0	
2+84 = Δ 36° Lt.			5.63	60.70	
3+00			5.4	60.9	
+50 on Hub.			7.3	59.0	60' Rt. =Elev. 45.1
3+66 = Δ Lt. 50°30'			8.21	58.12	
3+76 = W.L.Y. edge House			7.9	58.4	1' Rt. =Back of House
3+95 = E.L.Y. " "			7.5	58.8	57' Rt. Back of House
4+00			7.3	59.0	

66.33

4+51.43 = W.L.Y. Line Catalina Blvd.	7.55	58.78	✓
Ch. on Hub Sta. 2+81.19 = E. Alleys Blk 9 - Page 8	4.05	62.28	
		62.26 = Hub	
		0.02 = Error	

9+54 = Hub. Lt. 22°45'

8+66.97 = P.O.T. Hub.

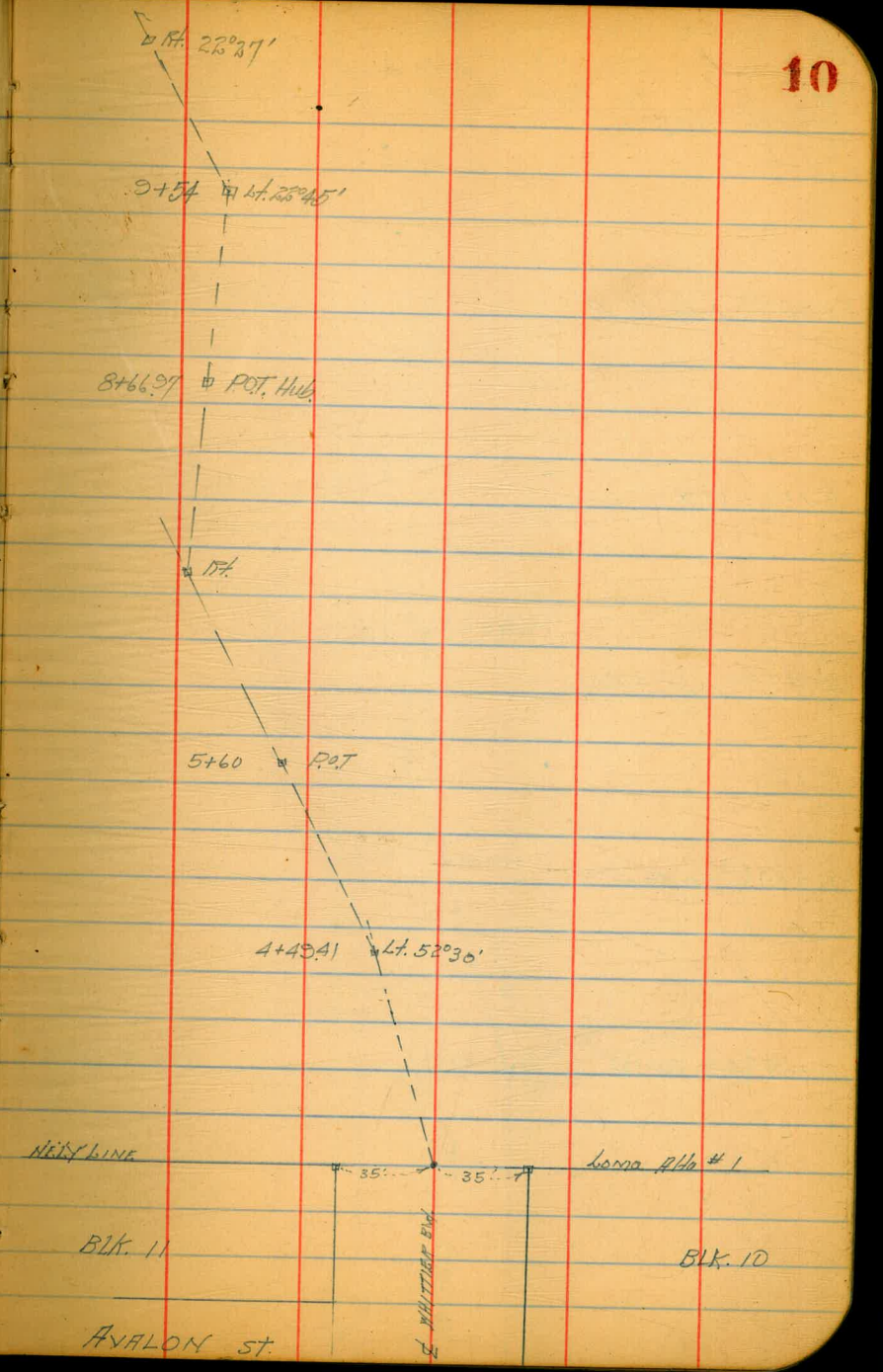
6+84 = on Hub. Rt 9°38'

Abandoned See P. 11

5+60 = P.O.T. Hub.

4+49.41 = Hub. Lt. 52°30'

0+00 = Lt. 18°39'



Walker. Levelled Notes Transcribed

PRELIM. LOCATION TRUNK LINE SEWER "C" LINE
from NELY Line Loma Alta #1
to Exist. Pumping Plant West of Mission Beach Bridge

11

8+77.86 = P.O.T.

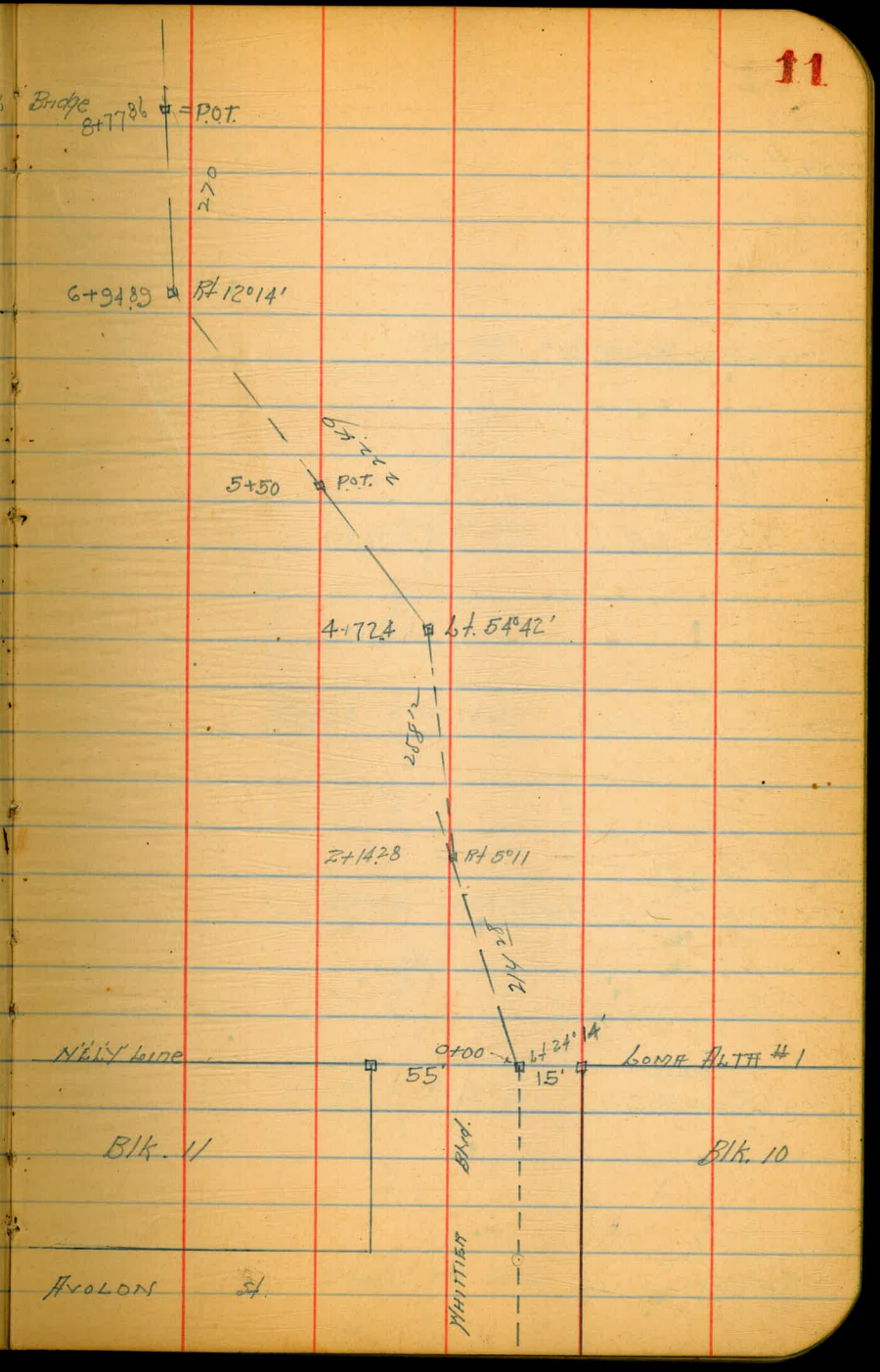
6+94.89 = Δ Rt 12°14'

5+50 = P.O.T.

4+72.40 = Δ Lt 54°42

2+14.28 = Δ Rt 5°11'

0+00 on Hub = Lt. 24°14'



20+39.16 = △ Lt. 33°03'

19+19.85 = △ Rt. 26°14'

17+23.18 = Hub Rt. 28°13'

14+82.13 = Hub △ Rt. 18°47'

12+94.5 = Hub △ Lt. 39°58'

11+67.89 = on Hub △ Rt. 21°

9+64.89 = on Hub △ Lt. 22°45'

20+39.16 ⌖ Lt. 33°-03'

119.31

19+19.85 ⌖ Rt. 26°14'

196.7

17+23.18 ⌖ Rt. 28°13'

240.05

14+82.13 ⌖ Rt. 18°47'

189.53

12+94.5 ⌖ Lt. 39°58'

176.61

11+67.89 ⌖ Rt. 21°00'

203°

9+64.89 ⌖ Lt. 22°45'

31+69.84 = P.O.T

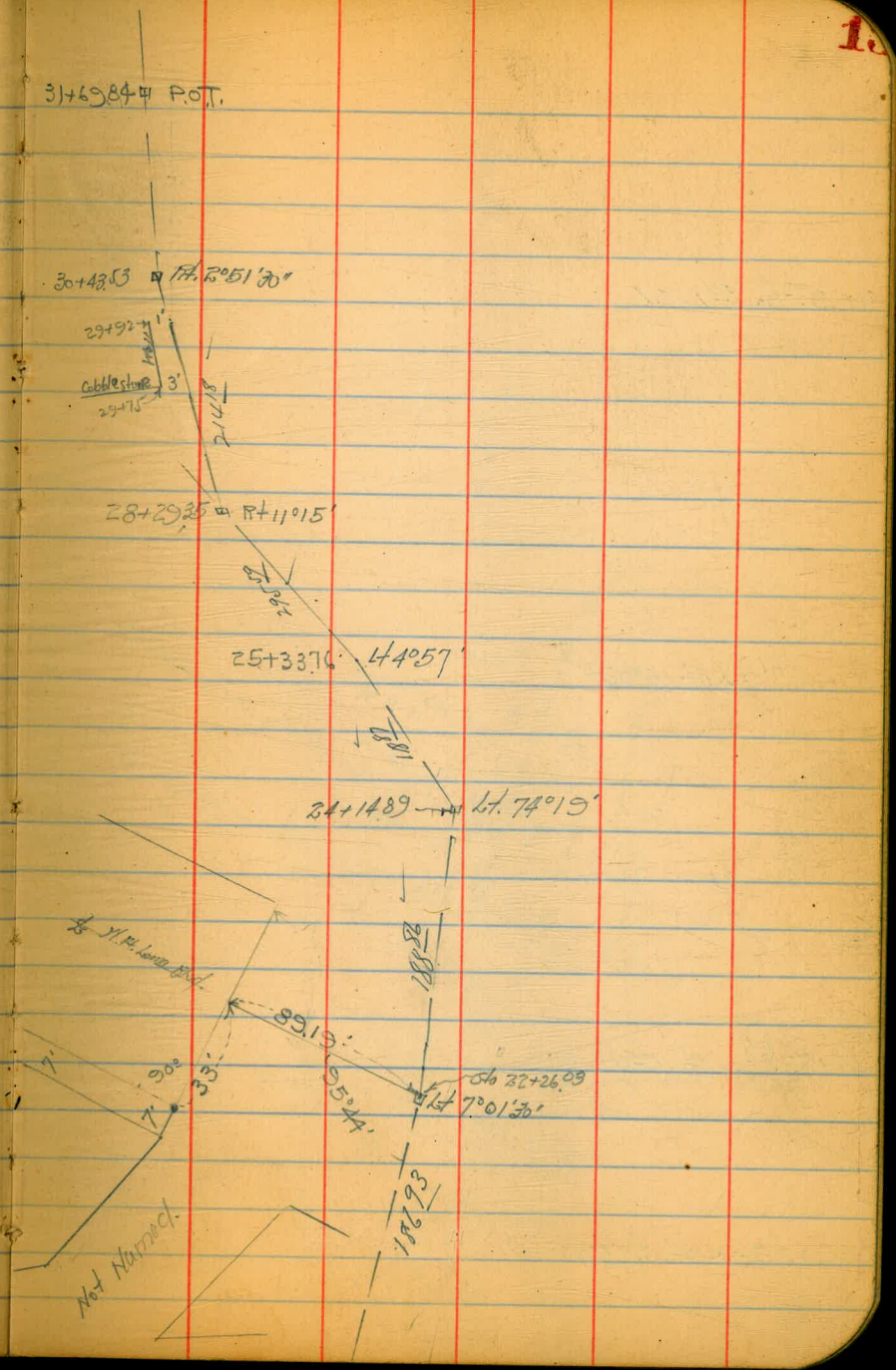
30+43.53 = Δ Rt 2°51'30"

28+29.35 = Δ Rt 11°15'

25+33.76 = Δ Lt 4°57'

24+14.89 = Δ Lt 74°19'

22+26.83 = Δ Lt 7°01'30"



37+37½

41+29.92 = △ Rt 10°21'

209.86

39+20.06 = △ Rt 15°05'

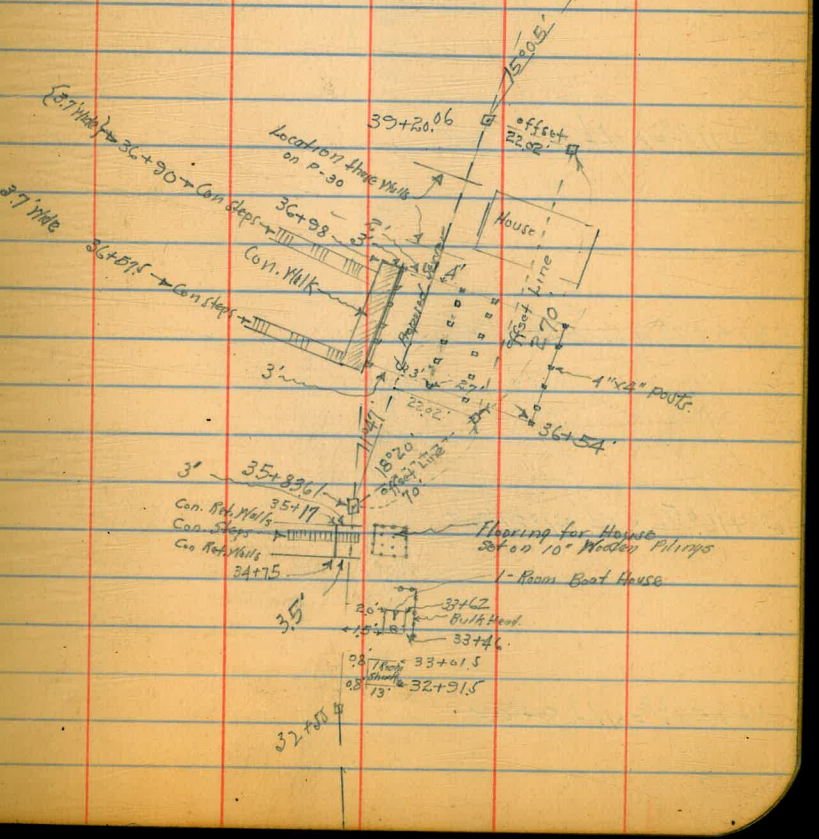
336.41

35+83.61 = △ Rt 11°47'

336.61

32+55 = △ Rt 20°50'

211.39



60+29.20 = end = Exist. Pump House

153.31

58+75.89 = Δ Rt. 13°45'

204.55

56+71.24 = Δ Lt. 50°36'30"

273.49

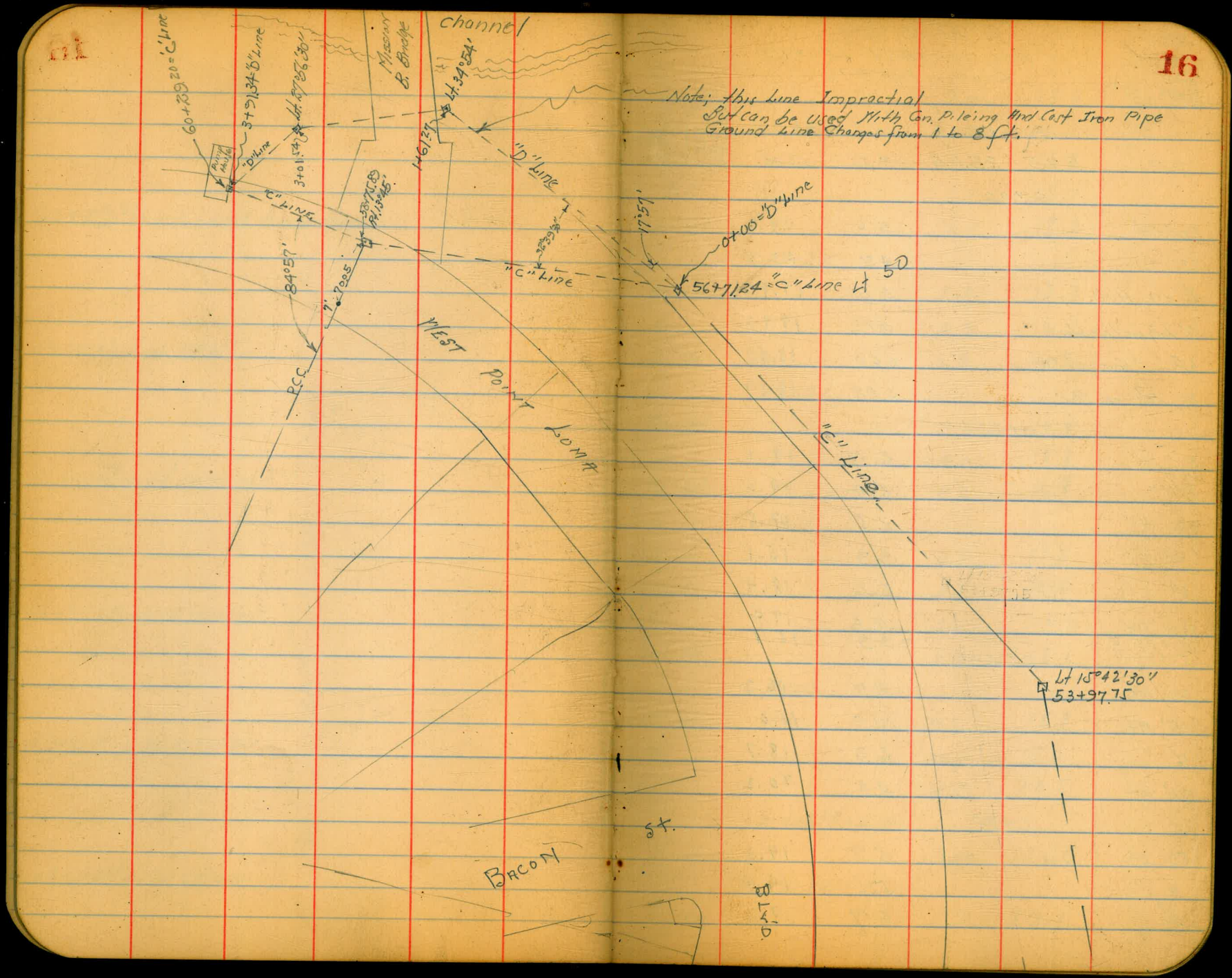
53+97.75 = Δ Lt. 15°42'30"

501.70

48+16.05 = Δ Rt. 51°21'30"

364.37

44+53.68 = Δ Lt. 24°03


Channel
Mission
& Bridge
Note; this Line Impractical
But can be used With Con. Pileing And Cast Iron Pipe
Ground Line Changes from 1 to 8 ft.
60+39.20 = "C" Line
3+91.34 "D" Line
3+01.54
"D" Line
"C" Line
84.57'
PCC
"D" Line
"C" Line
0+00 = "D" Line
56+71.24 = "C" Line
WEST POINT LOMA
"C" Line
Lt 15°42'30"
53+97.75
BACON
ST.
BLVD

Walker
Zeeley
Hoffoon
Hennig 1-22-30

"C" LINE
PRELIMINARY LEVELS
Location Page 11-16

	0.15	29.10 ✓		28.95	BM on Hub #685 P-7 =0+00 P-9 on Hub NELY Cor Whittier & Lucas Hills #1
TR	5.75	25.05 ✓	9.80	19.30 ✓	
	0+00				
20' Rt.			5.8	19.2	
15' "			4.7	20.3	
℄ on Hub.			5.13	19.92	
5' Lt on top Ch.			5.12	19.93	
6.5' " Gut. on Pav.			6.60	18.45	
20' Lt. on Pav.			6.88	18.17	
	0+26				
20' Lt.			6.1	19.0	
17' "			6.0	19.0	
16' "			7.5	17.5	
9' "			9.9	15.1	
℄			6.6	18.4	
20' Rt.			5.6	19.4	
0+35 ℄			9.9	15.1	
	0+45				
20' Rt.			8.7	16.3	
5' Rt.			10.0	15.0	
℄			6.3	18.7	
20' Lt			4.8	20.2	
	0+75				
20' Lt.			5.7	19.3	
6' "			5.6	19.4	
℄			6.7	18.3	

25.05

20' Rt.	7.4	17.6
1+00		
20' Rt.	8.2	16.8
℄	7.3	17.7
20' Lt.	7.1	18.0
1+25		
20' Lt.	7.3	17.7
℄	8.3	16.7
20' Rt.	8.3	16.7
1+50		
20' Rt.	8.6	16.4
℄	8.2	16.8
20' Lt.	8.2	16.8
1+75		
20' Lt.	7.7	17.3
15' Lt.	8.6	16.4
℄	8.8	16.2
20' Rt.	8.9	16.1
2+00		
20' Rt.	9.2	15.8
℄	10.0	15.0
20' Lt.	4.5	20.5
2+14.28 = Δ 5°11'		
℄ on Hub.	9.50	15.55
2+50		
20' Lt.	1.9	23.1

℄		7.1	17.9
15' Rt.		11.3	13.7
20' Rt.		11.6	13.4
	2+70		
20' Rt.		12.1	13.0
15' Rt.		12.4	12.6
℄		7.6	17.8
20' Lt.		1.7	23.3
	3+00		
20' Lt.		6.9	18.1
℄		12.2	12.8
20' Rt.		13.1	12.0
	3+25		
20' Rt.		13.3	11.7
℄		12.6	12.4
20' Lt.		11.1	14.0
	3+50		
20' Lt.		11.1	14.0
℄		12.0	13.0
20' Rt.		13.5	11.5
	3+70		
20' Rt.		13.3	11.7
℄		12.5	12.5
20' Lt.		9.0	16.0
	4+00		

20' Lt.		5.3	19.7
℄		7.3	17.7
20' Rt.		9.6	15.4
	4+20		
20' Rt.		11.3	13.7
℄		8.7	16.3
20' Lt.		6.1	19.0
	4+50		
20' Lt.		5.0	20.0
℄		7.0	18.0
20' Rt.		10.7	14.3
	4+72.40 = △ Lt. 59°42' Section on Bisector △		
20' Rt.		15.6	9.4
℄ on Hub		10.79	14.26
20' Lt.		6.1	19.0
T.P. on Hub	11.70 25.96	10.79	14.26
	5+00		
20' Lt.		6.4	19.6
℄		11.8	14.2
20' Rt.		17.6	8.4
	5+50 = P.O.T.		
20' Rt.		15.2	10.8
℄ on P.O.T. Hub		6.78	19.18
20' Lt.		2.8	23.2
	5+75		
20' Lt.		4.1	21.9

℄	7.8	18.2
20' Rt.	14.5	11.5
6+00		
20' Rt.	16.7	9.3
℄	11.0	15.0
20' Lt.	6.0	20.0
6+50		
20' Lt.	7.4	18.6
℄	12.3	13.7
20' Rt.	17.8	8.2
6+94.89 = △ Rt. 12°19' Section on Bisector		
20' Rt	16.7	9.3
℄ on Hub	13.04	13.92
20' Lt.	7.2	18.8
7+50		
20' Lt.	7.6	18.4
℄	12.5	13.5
20' Rt.	17.5	8.5
8+00		
20' Rt.	17.1	8.9
℄	12.0	14.0
20' Lt.	6.1	19.9
8+50		
20' Lt.	3.9	22.1
℄	8.7	17.3
20' Rt.	16.4	9.6

8+77.86 = POT & Hub	9.08	16.88
9+00		
20' Rt.	16.9	9.1
℄	10.0	16.0
20' Lt.	3.1	V2.9
9+50		
20' Lt.	3.6	V2.4
℄	13.1	12.9
20' Rt.	22.0	4.0
9+64.89 = △ Lt. 22°45' Section on Bisector		
20' Rt.	22.4	3.6
℄ on Hub	13.68	12.28
20' Lt.	4.4	V1.6
10.03 ✓		
TP on Above Hub 22.31	13.68	12.28
10+00		
20' Lt.	+ 2.4	24.7
℄	6.8	15.5
4' Rt.	7.5	14.8
20' Rt.	16.2	6.1
10+50		
20' Rt.	17.7	4.6
℄	7.3	15.0
20' Lt.	+ 5.0	27.3
11+00		
20' Lt.	+4.7	27.0
℄	7.9	14.4

20' Rt		19.5	2.8
	11+50		
20' Rt.		18.8	3.5
℄		8.4	13.9
20' Lt.		+3.0	25.3
11+67.89 = Δ Rt 21°00' = ℄ on Hub.		6.94	15.37
	12+00		
20' Lt.		1.3	21.0
℄		11.2	11.1
20' Rt.		22.4	−0.1
	12+50		
20' Rt.		20.5	1.8
℄		10.0	12.3
20' Lt.		+0.2	22.5
	12+94.5 = Δ Lt 39°58'		Section on Bisector.
20' Lt.		+1.4	23.7
8' Lt.		4.6	17.7
℄ on Hub.		11.12	11.19
20' Rt.		24.8	−2.5
	13+35		
20' Rt.		20.8	1.5
7' Rt.		13.0	9.3
℄		6.1	16.2
20' Lt.		+3.2	25.5
	13+65		
20' Lt.		+2.5	24.8

℄		7.7	14.6
20' Rt.		21.2	1.1
	14+00		
20' Rt.		21.6	0.7
℄		7.9	14.4
8' Lt.		3.6	18.7
20' Lt.		+7.4	29.7
	14+50		
20' Lt.		+6.8	29.1
℄		9.1	13.2
7' Rt.		15.2	7.1
20' Rt.		23.0	−0.7
	14+58 = ℄ Main Ditch		
20' Rt		21.6	0.7
11' Rt.		15.7	6.6
10' Rt.		16.6	5.7
2' Rt.		13.6	8.7
℄		11.0	11.3
5' Lt.		9.0	13.3
15' Lt.		2.4	19.9
20' Lt.		+4.0	26.3
	14+65		
20' Lt.		+7.7	30.0
8' Lt.		0.7	21.6
℄		7.7	14.6
6' Lt.		12.4	9.9

20' Rt.		21.2	1.1
	14+82.13 = Δ Rt. 18°47' Section Bisector		
20' Rt.		16.8	5.5
℄ on Hub.		3.22	19.09
14' Lt.		+8.2	30.5
20' Lt.		+8.2	30.5
	15+08		
20' Lt.		+7.9	30.2
10' Lt.		0.1	22.2
℄		5.3	17.0
20' Rt.		18.3	4.0
	15+11		
20' Rt.		19.2	3.1
10' Rt.		12.4	9.9
℄		10.7	11.6
10' Lt.		6.0	16.3
20' Lt.		+5.9	28.2
	15+25		
20' Lt.		+6.7	29.0
10' Lt.		2.0	20.3
℄		9.3	13.0
7' Rt.		15.6	6.7
20' Rt.		22.5	-0.2
	15+50		
20' Rt.		24.0	-1.7
10' Rt.		30.1	2.2

℄		13.2	9.1
20' Lt.		0.8	21.5
	16+00		
20' Lt.		+1.0	23.3
℄		12.4	9.9
20' Rt.		24.5	-2.2
	16+50		
20' Rt.		25.1	-2.8
℄		7.9	14.4
20' Lt.		+5.9	28.2
	16+74 = ℄ "A" Corrugated Iron Culvert - ℄ Evanston St.		
20' Lt		+6.4	24.7
℄ on top Pipe		12.4	9.9
18.5' Rt. on top Pipe		20.6	1.7
	17+00		
20' Rt.		23.6	-1.3
℄		11.7	10.6
20' Lt.		+1.7	24.0
	17+23.18 = Δ Rt. 28°13' Section Bisector		
20' Lt.		+8.0	30.3
℄ on Hub.		8.15	14.16
20' Rt.		21.8	0.5
	17+50		
20' Rt.		25.9	-3.6
℄		12.8	9.5
20' Lt.		+1.6	23.9

ZZ.31

	17+75			
20' Lt.			1.4	20.9
℄			15.0	7.3
8' Rt.			19.0	3.3
14' "			24.8	-2.5
20' "			26.3	-4.0
T.P	8.17	18.07	12.41	9.90
	18+00			
20' Rt.			20.7	-2.6
℄			8.2	9.9
10' Lt.			3.3	14.8
20' Lt.			+4.0	22.1
	18+50			
20' Lt.			+6.1	24.2
8' Lt.			3.0	15.1
℄			8.0	10.1
20' Rt.			19.3	-1.2
	19+19.85=Δ Rt		26'14	
20' Rt.			17.0	1.1
℄ on Hub.			8.21	9.86
20' Lt.			+4.9	23.0
	19+50			
20' Lt.			+0.5	18.6
℄			10.7	7.4
20' Rt.			18.6	-0.5
	20+00			

18.07 "C" LINE

20' Rt.		19.0	-0.9
℄		9.0	9.1
20' Lt.		+1.9	∀0.0
20+39.16=Δ Lt. 33°03'			
20' Lt.		+2.6	20.7
℄		6.5	11.6
20' Rt.		15.6	∀.5
20+70			
20' Rt.		16.7	1.4
℄		0.8	17.3
20' Lt.		+11.0	29.1
21+00			
20' Lt.		+10.6	28.7
℄		1.9	16.2
6' Rt.		9.9	8.2
20' Rt.		19.7	-1.6
21+25			
20' Rt.		17.0	1.1
℄		2.8	15.3
17' Lt.		+9.2	∀7.3
20' Lt.		+9.0	27.1
			∀ Poorly Const.
21+40 = Beginning Ref. Wall: Home Made Not cemented. ∀			
20' Lt.		+5.5	∀3.6
14' "		+4.8	∀2.9
5' " on top Wall		0.0	18.1
4' " Base of Wall		2.8	15.3

℄		4.4	13.7
9' Rt. = top of border Wall		8.3	9.8
10' " = Base " " "		12.7	5.4
20' "		17.2	0.9
	21+50		
20' Rt.		18.6	-0.5
9' Rt. of Base Wall		15.0	3.1
8' " on top Wall		8.9	9.2
℄		6.3	11.8
2' Lt. Base upper Wall		5.8	12.3
3' " top " "		+0.2	18.3
10' Lt.		+3.8	21.9
20' "		+4.4	22.5
	21+88 = End Rt. Wall S		
20' Lt.		+3.4	21.5
16' "		+3.0	21.1
9' "		-2.0	16.1
1' Lt. on top Wall		2.5	15.6
0.8' " " Base Wall		7.4	10.7
℄		7.4	10.7
2' Rt. on top border Wall		8.5	9.6
6' " of Base " "		14.0	4.1
16' Rt.		18.4	-0.3
20' Rt.		21.3	-3.2
	22+00		
20' Rt.		15.7	2.4

4' Batter

15' Rt.			15.0	3.1
8' "			7.9	10.2
℄			6.9	11.2
5' Lt.			6.4	11.7
20' Lt.			+0.5	18.6
	22+07			
20' Lt.			+0.6	18.7
℄			6.2	11.9
9' Rt.			8.7	9.4
16' "			14.6	3.5
20' "			14.9	3.2
T.P.	7.94	21.40 ✓	4.61	13.46 ✓
	22+82			
20' Rt.			8.5	12.9
2' "			2.0	19.4
℄			+2.6	24.0
20' Lt.			+4.0	25.4
	22+26.03 = Δ Lt 7°01'30" Lt.			
20' Lt.			+4.0	25.4
℄			+2.6	24.0
8' Rt.			+1.6	23.0
20' Rt.			6.5	14.9
	24+33			
20' Rt.			6.5	14.9
13' "			4.7	18.7
℄			+1.8	13.2 ✓

21.40

20' Lt.		+4.4	25.8
	22+39		
20' Lt.		+4.0	25.4
℄		1.2	20.2
7 Rt.		2.9	18.5
15 Rt.		10.7	10.7
20' Rt.		7.8	13.6
	22+57		
20' Rt.		19.5	1.9
℄		15.0	6.4
20' Lt.		4.5	16.9
	22+70		
20' Lt.		4.5	16.9
℄		16.0	5.4
15' Rt.		21.6	-0.2
20' Rt.		22.2	-0.8
	23+00		
20' Rt.		22.2	-0.8
15' Rt.		21.0	0.4
℄		12.1	9.3
20' Lt.		+0.8	22.2
	23+15		
20' Lt.		+1.1	22.5
15' Lt.		+1.4	22.8
℄		10.7	10.7
15' Rt		20.0	1.4

21.40 "C" LINE

20' Rt.	20.9	0.5
23+50		
20' Rt.	18.0	3.4
℄	6.0	15.4
10' Lt. = top Bank	0.4	21.0
15" = Gauge	0.4	21.0
23+90		
20' Lt.	14	20.0
4' "	3.2	18.2
℄	4.4	17.0
20' Rt.	13.9	7.5
24+00		
20' Rt.	19.6	1.8
14' "	13.0	8.4
5' Rt.	6.4	15.0
℄	4.8	16.6
20' Lt.	2.2	19.2
24+14.89 = Δ Lt 74°19 Section on Bisector.		
20' Lt.	2.7	18.7
5' "	5.6	15.8
℄ on Hub	10.40	11.0
15' Rt	22.9	-1.5
18' Rt.	23.8	-2.4
20' Rt. = edge Slough.	25.2	-3.8
24+36		
20' Rt.	21.8	-0.4

21.40

15' Rt.			21.8	-0.4
℄			6.4	15.0
5' Lt.			5.1	16.3
20' "			2.1	19.3
	25+00			
20' Lt.			2.1	19.3
5' Lt.			5.9	15.5
℄			8.0	13.4
20' Rt.			23.2	-1.8
T.P.	8.75	18.32	11.83	9.57
	25+33.76 = ℄ Lt 4.57'			
20' Rt.			21.8	-3.5
12' "			19.8	-1.5
℄ on Hub			9.90	8.4
8' Lt.			2.9	15.4
20' Lt.			0.2	18.1
	25+50			
20' Lt.			0.1	18.2
8' Lt			3.1	15.2
℄			10.0	8.3
10' Rt.			19.7	-1.4
20' Rt.			21.8	-3.5
	26+00			
20' Rt.			21.8	-3.5
8' Rt.			18.7	-0.4
℄			11.8	6.5

18.32 "C" LINE

12' Lt.		1.0	17.3
20' Lt.		+1.7	20.0
	26+50		
20' Lt.		+3.0	21.3
15' "		+2.0	20.3
℄		9.7	8.6
12' Rt.		19.4	-1.1
20' Rt.		21.4	-3.1
	27+00		
20' Rt.		22.5	-4.2
9' "		19.6	-1.3
℄		10.2	8.1
15' Lt.		+1.6	19.9
20' "		+3.4	21.7
	27+20		
20' Lt.		+3.5	21.8
15' "		+2.5	20.8
10' Lt.		3.7	14.6
℄		13.9	4.4
7' Rt.		19.5	-1.2
20' Rt.		22.5	-4.2
	27+50		
20' Rt.		22.0	-3.7
6' Rt.		19.2	-0.9
℄		13.4	4.9
20' Lt.		+2.2	20.5

	28+00		
20' Lt.		-0.2	18.1
13' "		1.0	17.3
℄		13.1	5.2
10' Rt.		19.8	-1.5
20' "		21.0	-2.7
	28+29.35=Δ Rt 11°15'		
20' Rt.		21.0	-2.7
15' Rt.		19.5	-1.2
℄ on Hub.		9.79	8.53
10' Lt.		2.7	15.6
20' "		+4.1	22.4
	28+59		
20' Lt.		-1.4	16.9
10' "		4.5	13.8
℄		10.3	8.0
13' Rt.		18.3	0.0
20' Rt.		19.5	-1.2
	28+62		
20' Rt.		19.5	-1.2
℄		16.0	2.3
12' Lt.		13.3	5.0
20' "		2.0	16.3
	28+72		
20' Lt.		11.2	7.1
℄		14.5	3.8

13' Rt.		17.7	0.6
20' Rt.		18.4	-0.1
	28+77		
20' Rt.		19.0	-0.7
13' Rt.		18.2	0.1
℄		10.3	8.0
11' Lt.		5.1	13.2
20' "		4.6	13.7
	29+00		
20' Lt.		3.5	14.8
8' "		4.9	13.4
℄		7.8	10.5
15' Rt.		19.0	-0.7
20' Rt.		19.3	-1.0
	29+28		
20' Rt.		20.4	-2.1
13' Rt.		19.4	-1.1
℄		10.4	7.9
9' Lt.		4.3	14.0
20' Lt.		2.4	15.9
	29+50		
20' Lt.		+0.4	18.7
15' "		0.2	18.1
℄		7.9	10.4
12' Rt.		19.4	-1.1
20' "		21.3	-3.0

29+75 = Beg. Cobble stone Ret. Wall

20' Rt.		21.0	-2.7
12' Rt		19.4	-1.1
℄		9.2	9.1
3' Lt = Base of Wall		8.9	9.4
4' " = top " "		2.8	15.5
20' Lt. on top " "		+2.6	20.9
20' " at Base of "		+0.2	18.5

29+92 = End of Above Wall

20' Lt. on Ground		+1.8	20.1
8' " " "		2.6	15.7
2' " " Wall		3.7	14.6
1' " Base "		9.3	9.0
℄		9.3	9.0
12' Rt		19.3	-1.0
20' Rt		21.0	-2.7

30+43.53 = Δ Rt 2°51'30"

20' Rt.		21.3	-3.0
12' Rt.		19.3	-1.0
℄ on Hub.		11.65	6.67
15' Lt.		+2.4	20.7
20' "		+3.0	21.3

31+00

20' Lt.		+5.4	23.7
12' "		+2.0	20.3
℄		9.2	9.1

12' Rt.		19.6	-1.3
20' Rt.		21.7	-3.4

31+50

20' Rt.		20.7	-2.4
15' Rt.		19.3	-1.0
℄		4.8	13.5
8' Lt.		+1.2	19.5
20' "		+5.7	24.0

31+80

20' Lt.		+5.2	23.5
13' "		+2.5	20.8
7' "		+0.6	18.9
℄		4.9	13.4
16' Rt.		19.4	-1.1
20' "		20.7	-2.4
T.P.	5.04	14.65 ✓	8.71 9.61 ✓

32+00

20' Rt.		16.6	-1.9
15' "		14.8	-0.1
℄		5.0	9.7
16' Lt.		+4.4	19.1
20' "		+7.7	✓2.4

32+55 = Δ Rt 2°50'

20' Lt.		+6.8	21.5
17' "		+6.2	20.9
℄ on Hub.		12.24	2.41

5' Rt.		15.7	-1.0
20' "		19.1	-4.4
	33+00		
20' Rt.		18.8	-4.1
10' "		17.0	-2.3
℄		11.2	3.5
20' Lt.		+7.0	21.7
	33+50		
20' Lt.		+4.8	19.5
℄		14.1	0.6
2 Rt. Floor Boat House		15.7	-0.5
15' Rt.		18.6	-3.9
20' "		20.0	-5.3
	Rod =	15.3	-0.6

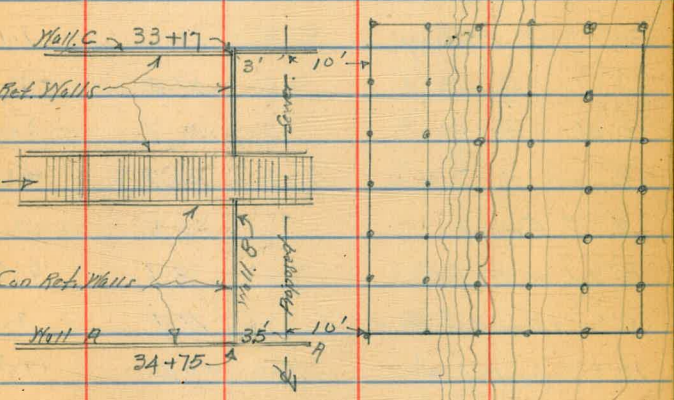
33+86 = End Bulkhead 15.5' Rt. of ℄

	34+00		
20' Rt.		19.4	-4.7
13' "		17.4	-2.7
12' "		16.1	-1.4
8' "		15.8	-1.1
℄		9.9	4.8
20' Lt.		+7.0	21.7
	34+50		
20' Lt.		+7.0	21.7
℄		9.2	5.5
6' Rt.		15.4	-0.7
12' Rt.		17.5	-2.8
13' "		18.8	-4.1

20' Rt.	20.0	-5.3

34+75 = Beginning Con. Walls and Floor for House on Rt.

20' Rt. on Ground	19.5	-4.8
35' Rt. = 4½' edge Flooring	13.6	1.1
14' Rt. on Ground	17.9	-3.2
10' Rt. = 5½' edge Above Flooring	13.6	1.1
3' Rt. on Ground at ℄	13.5	1.2
3' " " top 4½' ext Wall	11.7	3.5



℄ on Wall	10.0	4.7
4' Lt. on Wall B	7.6	7.1
16' Lt " " "	2.1	12.6
34+76 on Ground = ℄	12.6	2.1
34+93 " " = ℄	13.2	1.5

34+97 = ℄ Con. steps 7' Wide

17' Lt. on Con. steps	+1.5	16.2
℄ " "	10.8	3.9
3' Rt. = End steps	13.6	1.1
20' Rt. on Flooring House	13.6	1.1
35+01 on Ground = ℄	12.8	1.9
35+16 " " = ℄	13.6	1.1

35+17 = ℄ Wall C

20' Rt. on Ground	20.2	-5.5
20' " " Flooring	13.6	1.1
7' " " Ground	17.4	-2.7
3' Rt. on Wall C	11.7	3.0
℄ on " "	10.7	4.0
℄ " Ground	13.6	1.1
3' Lt. on Wall B	8.1	6.6
3' " " Ground at Wall B	11.1	3.6
17' " " top Wall B.	+0.2	14.9
35+18 on ℄ on Ground	13.6	1.1

35+50

20' Lt.	0.3	14.4
℄	15.9	-1.2
20' Rt.	21.0	-6.3

35+83.6' = Δ Rt 11°47'

20' Rt.	20.0	-5.3
10' Rt.	17.7	-3.0
℄ on Hub.	13.36	1.29

17' Lt.	+2.3	17.0
20' "	+3.5	18.2

36+50

20' Lt.	+1.6	16.3
5' "	7.3	7.4
℄	13.4	2.3
20' Rt.	18.1	-3.4

36+54 = Elv edge House Mr. Carter. Engineer.

20' Rt.	17.3	-2.6
℄	12.9	1.8
6' Lt. on Con. Walk = Floor Elev. House	12.3	2.4
6' " " top Ret. Wall	10.7	4.0
T.P 640	12.87 ✓	8.18 6.47 ✓

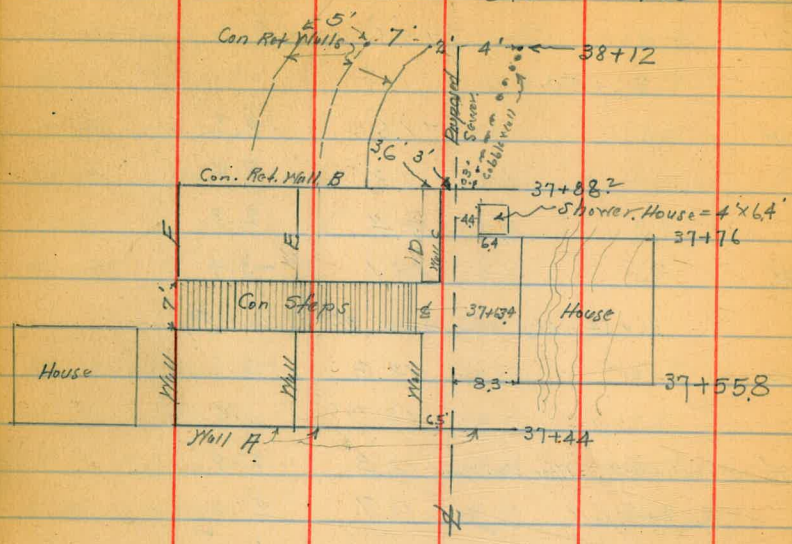
37+00

20' Lt	+2.7	15.6
15' Lt.	+1.1	14.0
℄	11.4	1.5
20' Rt.	18.4	-5.5

37+44.9 = Con. Wall A

20' Rt.	18.5	-5.6
8' Rt. at Wall A	17.4	-4.5
8' " top " A	12.0	0.9
4.1' " " " A	12.0	0.9
4.1 on Ground at Wall A	12.8	0.1
4.2' on Wall A	8.6	4.3
℄ on " A	8.6	4.3

12.87



2' Lt. on Wall A	8.6	4.3
7'Lt on Wall A	4.3	8.6
7 " " Ground	5.3	7.6
7.1' " Wall A	0.4	12.5
13' Lt. on " A	0.4	12.5
13' " " Ground	1.0	11.9
19' " "	+1.4	14.3
19' " top Wall	+4.3	17.2
37+63.4 = ℄ Con steps		
20' Lt.	+4.0	16.9
℄ on steps	10.3	2.6
8.3 Rt. on Floor House	12.3	0.6
Top Wall C	9.2	3.7
Ground at Wall C		?

12.87

30

Top Wall D	4.3	8.6
Ground at Wall D	9.0	3.9
37+88.2 = Con. Wall B		
20' Rt.	19.0	-6.1
8' Rt. at Wall B. on Ground	16.8	-3.9
8' " on " B	12.0	0.9
4.5 Rt " " "	12.0	0.9
4.4' " " " "	8.6	4.3
℄ on Ground.	10.9	7.0
2' Lt. on "	9.6	3.3
2' " " Wall B	8.6	4.3
7.5" " " "	4.5	8.4
top Wall D	4.3	8.6
38+12 = End Con. and Cobble Stone Ret. Walls.		
20' Rt.	18.5	-5.6
4' " = Bottom Cobble Wall	15.7	-7.8
3' " = top " "	10.9	7.0
℄	10.5	7.4
2' Lt. at Base Con. Wall	10.0	2.9
2' " on top " "	5.3	7.6
9' " at Bottom Con. Wall	4.6	8.3
9' " on top " "	0.6	12.3
14" " at Base " "	0.1	12.8
14' " on top " "	+3.2	16.1
20' Lt.	+3.2	16.1
38+50		

12.87

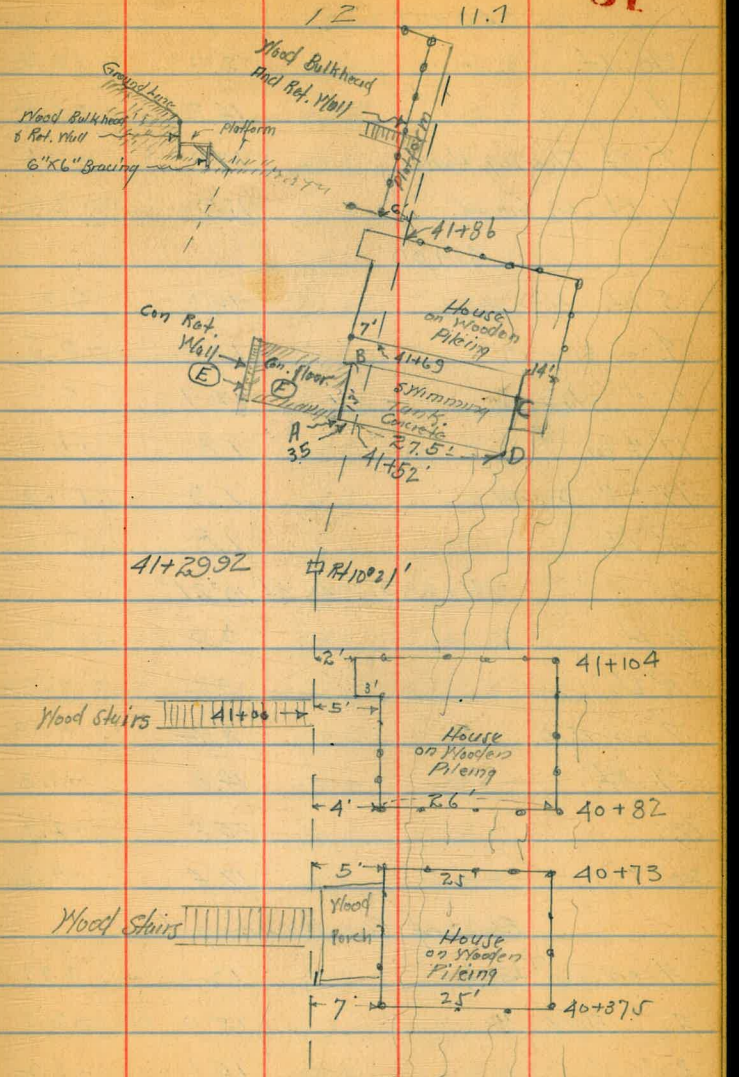
20' Lt.		+1.9	14.8
8' "		0.8	12.1
4' "		2.8	10.1
℄		4.8	8.1
6' Rt.		14.0	-1.1
13' "		15.3	-2.4
15' "		16.9	-4.0
20' "		18.3	-5.4
	39+20.06 = △ Rt.	15°05'	
20' Rt.		17.5	-4.6
14' "		16.7	-3.8
10' "		14.4	-1.5
℄ on Hub		7.05	5.82
8' Lt.		0.8	12.1
20' "		+1.8	14.7
	39+50		
20' Lt.		+1.3	14.2
7' "		2.3	10.6
℄		8.0	4.9
7' Rt.		14.2	-1.3
20' "		18.3	-5.4
	40+00		
20' Rt		18.4	-5.5
7' "		14.8	-1.9
℄		10.1	2.8
8' Lt.		3.6	9.3

12.87

"C" LINE

31

20' Lt.



40+50		
20' Lt.	2.0	10.9
℄	14.3	-1.4
7' Rt. Flooring House	13.0	-0.1
7' Rt. on Ground.	15.9	-3.0
41+00		
5' Rt. = Floor House	12.7	0.2
℄ on Ground.	13.4	-0.5
℄ " Stairway	12.7	0.2
17' Lt. on "	1.8	11.1
17' " " Ground	1.9	11.0
20' Lt.	1.8	11.1
41+29.92 = △ Rt 10°21'		
20' Lt.	2.0	10.9
8' Lt.	3.2	9.7
℄ on Hub.	8.74	4.13
7' Rt.	14.2	-1.3
12' "	15.8	-2.9
20' "	17.6	-4.7
Elev. of Con. Swimming tank		
A on top of tank.	12.0	0.87
A " Floor "	15.0	-2.1
B " "	15.1	-2.2
B " top "	12.1	0.8
C " " "	12.5	0.4
C " Floor "	19.0	-6.1

D on top of tank		12.1	0.8
D " Floor " "		12.7	-6.8
41+32 on Floor tank.		15.4	-2.5
41+65 " " "		15.6	-2.7
Base Con. Wall Ⓔ = Con Floor Ⓕ		12.3	0.6
top " "		4.6	8.3
T.P.	2.66 3.07	12.46	10.41
41+88 = Beg. Wood Bulkhead & Platform			
20' Rt.		9.3	-6.3
℄		5.6	-2.5
6' Lt at Base Bulkhead		4.0	-0.9
6' " " top "		0.0	3.1
16' "		+8.1	11.2
20' "		+8.1	11.2
42+37 = End Above Bulkhead & Rel Wall & Platforms.			
20' Lt.		+7.0	10.1
16' "		+7.0	10.1
6' " on top Bulkhead		0.0	3.1
6' " at Base "		4.0	-0.9
℄		5.7	-2.6
20' Rt.		9.3	-6.2
42+50			
20' Rt.		9.0	-5.9
℄		5.7	-2.6
7' Lt.		2.3	0.8
20' Lt.		+6.8	9.9

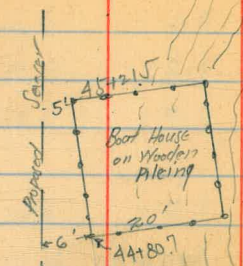
3.07

	43+00		
20' Lt.		+8.5	11.6
17' Lt.		+8.0	11.1
16' "		+5.0	8.1
10' "		+4.1	7.2
℄		4.8	-1.7
20' Rt.		8.6	-5.5
	43+50		
20' Rt.		8.5	-5.4
℄		5.0	-1.9
16' Lt. at Base Ref. Well		+5.2	8.3
17' " " Top "		+8.3	11.4
20' "		+8.3	11.4
	44+00		
20' Lt.		+6.6	9.7
17' "		+6.6	9.7
6' "		4.9	-1.3
℄		5.7	-2.6
20' Rt.		8.1	-5.0
	44+53.68 = △ Lt. 24°03'		
20' Rt.		8.2	-5.1
℄ on Hub		6.37	-3.30
11' Lt.		4.5	-1.4
20' "		+4.2	7.3
T.P.	9.26 9.55	2.78	0.29
	45+00		

9.55 "C" LINE

33

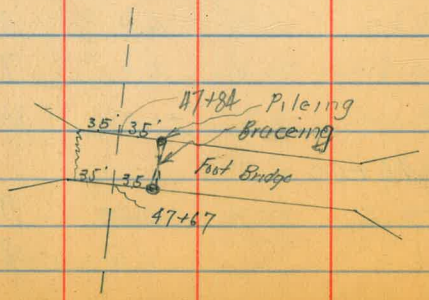
20' Lt.	+1.6	11.2
10' "	+0.2	9.8
℄	9.0	0.6



44+53.68 △ Lt 24°03

5.5' Rt. = F.F. Bot. Boat house	9.3	0.3
6' Lt. on Ground	11.3	-1.7
45+34.85 = P.O.T. on Hub.	4.25	5.30
45+50		
20' Rt.	13.3	-3.7
6' "	11.2	-1.6
℄	6.0	3.6
6' Lt.	2.0	7.6
20' "	+1.0	10.6
46+00		
20' Lt.	0.0	9.6
10' "	1.6	8.0

℄		10.7	-1.1
20' Rt.		12.9	-3.3
	46+50		
20' Rt		13.0	-3.4
℄		11.8	-2.2
3' Lt.		11.4	-1.8
12' "		3.2	6.4
20' "		1.1	8.5
	47+00		
20' Lt.		2.2	7.4
17' "		3.2	6.4
6' "		10.5	-0.9
℄		11.9	-2.3
20' Rt.		13.3	-3.7
	47+50		
20' "		13.3	-3.7
℄		11.9	-2.3
7' Lt.		11.9	-2.3
20' "		4.2	5.4



47+67		
20' Lt.	3.7	5.9
4' "	5.3	4.3
3' "	10.6	-1.0
℄	11.7	-2.1
20' Rt.	13.6	-4.0
47+84		
20' "	13.6	-4.0
℄	11.4	-1.8
3.5' Lt.	11.0	-1.4
4' "	5.0	4.6
20' "	3.3	6.3
48+16.05 = Δ Rt 51°21'30" on Bisector		
20' Lt.	2.2	7.4
10' "	3.7	5.9
2' "	8.0	1.6
℄ on Hub.	11.00	-1.4
20' Rt	13.6	-4.0
48+50	13.6	-4.0
49+00	14.3	-4.7
49+50	14.8	-5.2
+60	13.9	-4.3
+72	8.6	1.0
50+00	9.2	0.4
+50	9.2	0.4
51+00	9.9	-0.3

	9.55			
51+17		10.1	-0.5	
+20		11.6	-2.0	
+50		12.0	-2.4	
+60		12.6	-3.0	
+67		11.6	-2.0	
+75		8.8	0.8	
52+00		9.8	-0.2	
+19		9.7	-0.1	
+25		12.1	-2.5	
+36		11.9	-2.3	
+50		4.3	5.3	
+58 = E/Y Rail SDERRG.	Ocean Beach Line	4.09	5.46	
+63 = WLY " " " " "		4.08	5.47	
53+00		4.0	5.6	
T.P.	0.55 5.82	4.28	5.27	
53+48.8 = E/Y Rail Turnout SDERR.	Lafolla Line	1.00	4.82	
53+50		1.4	4.4	
+74.4 = E/Y Rail SDERR.	Main Line to Lafolla	1.23	4.59	
+97.75 = ▷ Lt. on Hub.		2.59	3.23	
54+50		2.2	3.6	
55+00		2.2	3.6	
+50		2.8	3.0	
56+00		3.7	2.6	
+50		4.0	1.8	
+71.24 = ▷ Lt on Hub.	= 0+00 'D' Line	4.67	1.15	
57+00		4.9	0.9	

	5.82		"C" LINE	
+17			4.8	1.0
+20			6.2	-0.4
+50			5.3	0.5
+56			2.6	3.2
58+00			3.4	2.4
+03.75 = top ch.			3.44	2.38
+03.75 = Paving at ch. Line			4.19	1.63
+27.3 = NLY Rail Lafolla Line			3.64	2.18
+63.5 = SLY edge Paving			4.04	1.78
+75.89 = ▷ Rt. on Hub			4.45	1.37
59+00			4.3	1.5
T.P.	1.84 5.96		1.70	4.12
+50			6.6	-0.6
60+00			7.0	-1.0
+29.70			6.8	-0.8
T.P.	7.51 12.82		0.65	5.31
Chk. N.E. BP V. Haines + Bacon.			3.19	9.63
				9.52 = B.M.
				0.11 = difference

Walker
Leakey
McHoan
Kanagy

LEVELS on "D" Line
IMPRACTICAL Line

5.82 = T P-35

56+71.74 "C" Line				
=0+00 "D" Line on Hub			4.67	1.15
+21			5.2	0.6
+22			6.8	-1.0
+50			11.0	-5.2
1+00			11.6	-5.8
+06			9.8	-4.0
+50			8.7	-2.9
+61.27 = Δ Lt. on Hub			8.76	-2.94
2+00			8.2	-2.4
+50			7.5	-1.7
TP	1.84	5.96 ✓	1.70	4.12 ✓
3+01.54 = Δ Lt. on Hub			6.97	-1.01
+50			7.7	-1.7
+91.34 = E 1/4' edge Pump House			6.8	-0.8

Note for cbf. out see Continuation Levels on P-35

(Extensions checked by Davies 3-17-30)

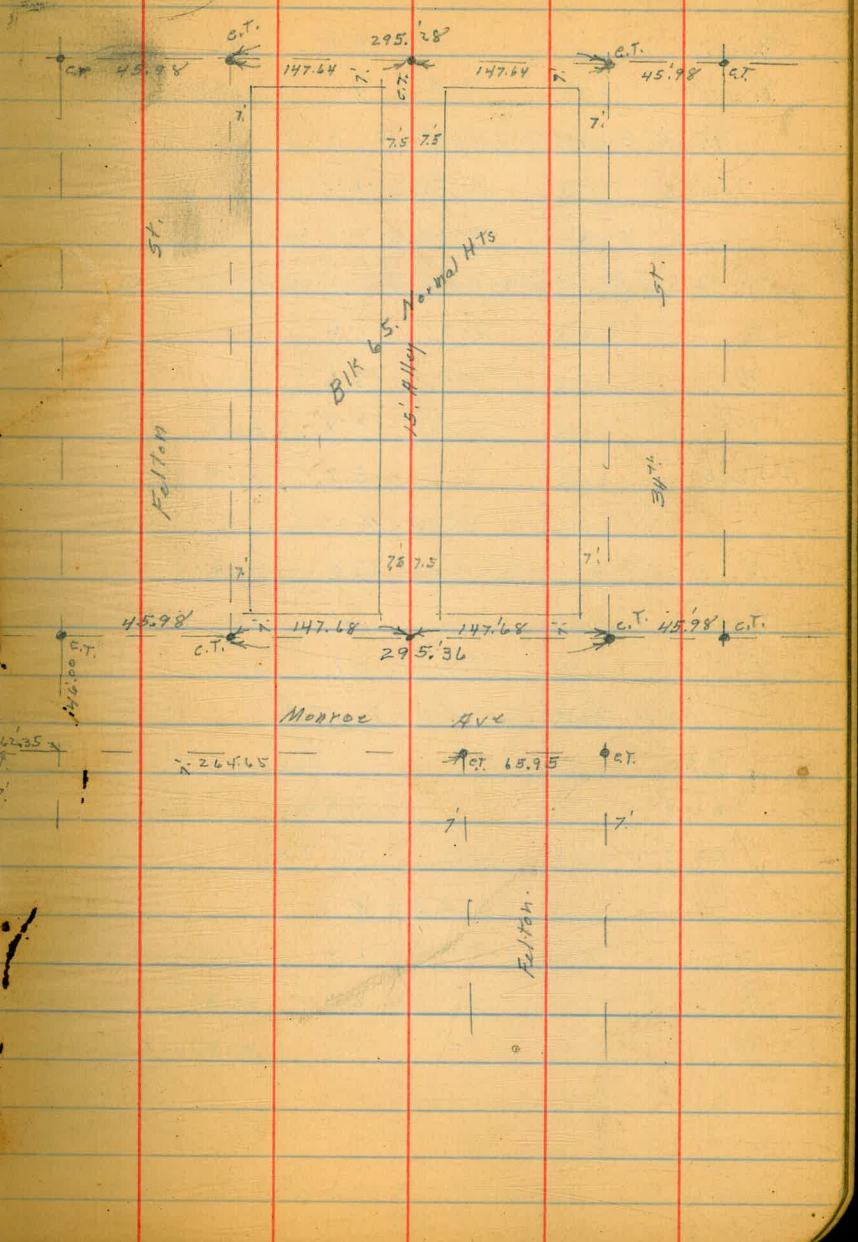
X See Alley Blk 65 Normal Hts, Monroe to Madison Bet Felton & 34th St

4-13-33 Miller Walker Bliss

Indexed C.S.K.

S.E. 34th & Monroe

BM. BP	0.33	388.69		388.36
	12' S. of N. Line		= N. of Line Monroe	
E. of			4.90	3838
E. gutter			5.40	83.3
℄ "			5.51	83.18
W "			5.63	83.06
W. of			5.24	83.45
		00 = N. Line Monroe.		
W. on cmt. of N. End			4.97	83.72
W + 0.40	gutter N. End parmt.		5.28	83.41
℄	" " "		5.42	83.27
E. on parmt.	" " "		5.06	83.63
+ 0.2	gutter " " "		5.06	83.63
+ 0.2	cmt. of N. End.		4.81	83.88
		10' N		
E			4.1	84.6
℄			4.6	84.1
W			4.3	84.4
		35' N		
W			3.9	84.8
℄			4.2	84.5
E.			4.2	84.5
		60' N		
E			4.2	84.5
℄			4.3	84.4
W			4.3	84.4



388.69

100' N

W		4.0	84.7
℄		4.1	84.6
E		4.1	84.6

95' N. Board Fence O.K on E.

100' N " " 0.3 in Alley

125' N " " O.K

150' N. Garage on W. used for dwelling 2.5 Back

E		3.6	85.1
℄		3.6	85.1
W		3.8	84.9
W+2.5		3.8	84.9

200' N

W.		3.0	85.7
℄		3.1	85.6
E.		3.1	85.6

190' N Board Fence on E. O.K

200' " " " " " 0.2 in Alley

225' " " " " " 0.4 " "

235' N " " " " O.K.

250' N

E		2.8	85.9
℄		2.9	85.8
W		2.9	85.8

388.69 Alley Blk 65 Normal Hts

292' N

W+0.6 S. End Board Fence

300' N

W+0.6	Fence		2.3	86.4
℄			2.2	86.5
E.			2.2	86.5
T.P.	6.68	393.33	2.04	386.65

326' N. N. End Fence 0.6 in Alley on W.

333' N. Garage on W. dirt floor 0.6 Back

E		6.6	86.7
℄		6.8	86.5
W.		7.0	86.3
+0.6	floor	7.0	86.3

342' N. S. End Fence on W. 0.6 in Alley

365' N Garage on E dirt floor 0.5 Back

W+0.6	Fence	6.3	87.0
℄		6.4	86.9
E.	floor	6.7	86.6

400' N

E		6.2	87.1
℄		6.0	87.3
+7.0	fence	5.7	87.6

430' N

W.+0.5	Fence	6.0	87.3
℄		6.1	87.2
E.		6.3	87.0

441' N. N. End Fence on W. 0.9 in Alley.

Alley Blk 65 Normal Hts.

		393.33			
		445' N			
E			5.8	82.5	
℄			5.7	82.6	
W.			5.6	82.7	
		467' N			
W.			6.4	86.9	
℄			6.4	86.9	
E.			6.4	86.9	
		500' N			
E			6.1	82.2	
℄			6.2	82.1	
W			6.2	82.1	
		540' N			
W			5.6	82.7	
℄			5.7	82.6	
E			5.5	82.8	
552' N. garage on W. cmt. floor 6' Back					
W - 6.0			5.0	88.3	
W			5.2	88.1	
℄			5.5	87.8	
E			5.6	82.7	
		585' N			
E			5.2	88.1	
℄			5.2	88.1	
W.			5.0	88.3	

		393.33			
600' N. Garage on E. cmt. floor 21.5 Back					
W			4.9	88.4	
℄			4.9	88.4	
E			4.8	88.5	
E + 21.5 floor.			4.97	88.36	
		620' N			
E.			5.1	88.2	
℄			4.9	88.4	
W.			5.1	88.2	
		637' N			
W.			5.4	87.9	
℄			5.5	87.8	
E			5.7	87.6	
64 42.3 = S. line Madison					
E + 0.25 Top ch.			5.88	87.45	
E + 0.25 gutter pavmt.			6.03	87.30	
℄		"	6.14	87.19	
47.20	"	"	6.12	87.21	
47.20 Top ch			6.06	87.27	
12.5 N of S. line = S. ch. line Madison.					
W. Top ch.			6.50	86.83	
W. pavmt.			6.77	86.56	
℄ "			6.68	86.65	
E "			6.63	86.70	
E. Top ch.			6.15	87.18	
T.P.	6.17	394.92	4.54	388.75	
T.P.	4.12	394.05	4.99	389.93	
chk BM			579.	388.26 = 388.32	N.W. Felton & Adams.

Walker
Osborne
Huzard
9-14-43

Cross Section Groveland St from Euclid to 54th 50' wide 10' cbs. 7.5' 1/45

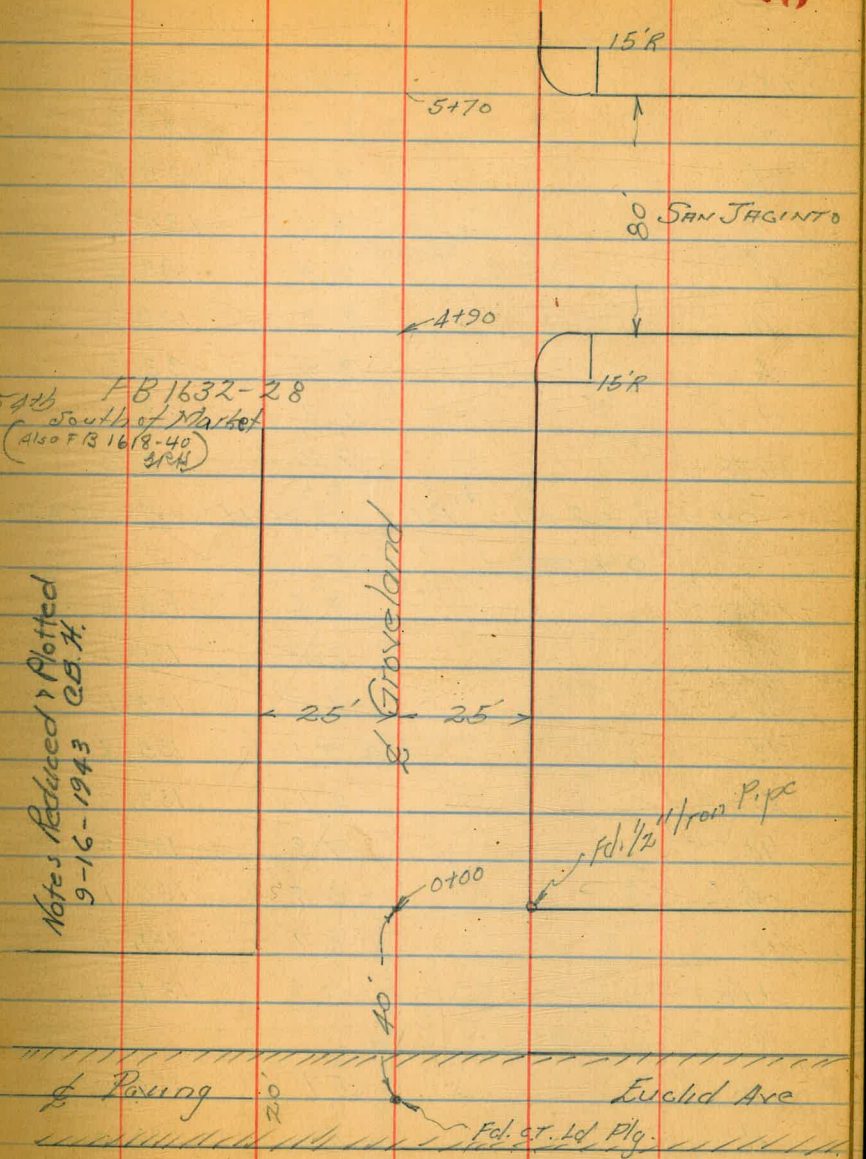
Indexed
C.S.K.

B.M. NE Nail in Ld Plg. Meridian Imp. Ave	1.52	163.23		161.71
T.P.	5.27	158.04	10.46	152.77
T.P.	1.39	148.08	11.35	146.69
T.P.	0.17	137.75	10.50	137.58
T.P.	0.86	127.72	10.89	126.86
T.P.	12.01	133.99	5.74	121.98
chk. B.M. B.P.			12.85	121.14 S.W. Cor Bridge on 54th
				121.05 = FB 1632-28
T.P.	11.56	145.32	0.23	133.76
T.P.	6.60	151.12	0.80	144.52
T.P.	2.58	146.55	7.15	143.97
T.P.	3.84	142.62	7.77	138.78
	0-30 = East edge Exist. Pav.			
-25' on Pav.			9.47	133.15
S	" "		9.68	132.94
Cb.	" "		9.78	132.84
1/4	" "		9.87	132.75
C	" "		9.97	132.65
N 1/4	" "		10.07	132.55
N Cb	" "		10.24	132.38
N	" "		10.50	132.12
+25	" "		11.32	131.30

Cont. P. 41

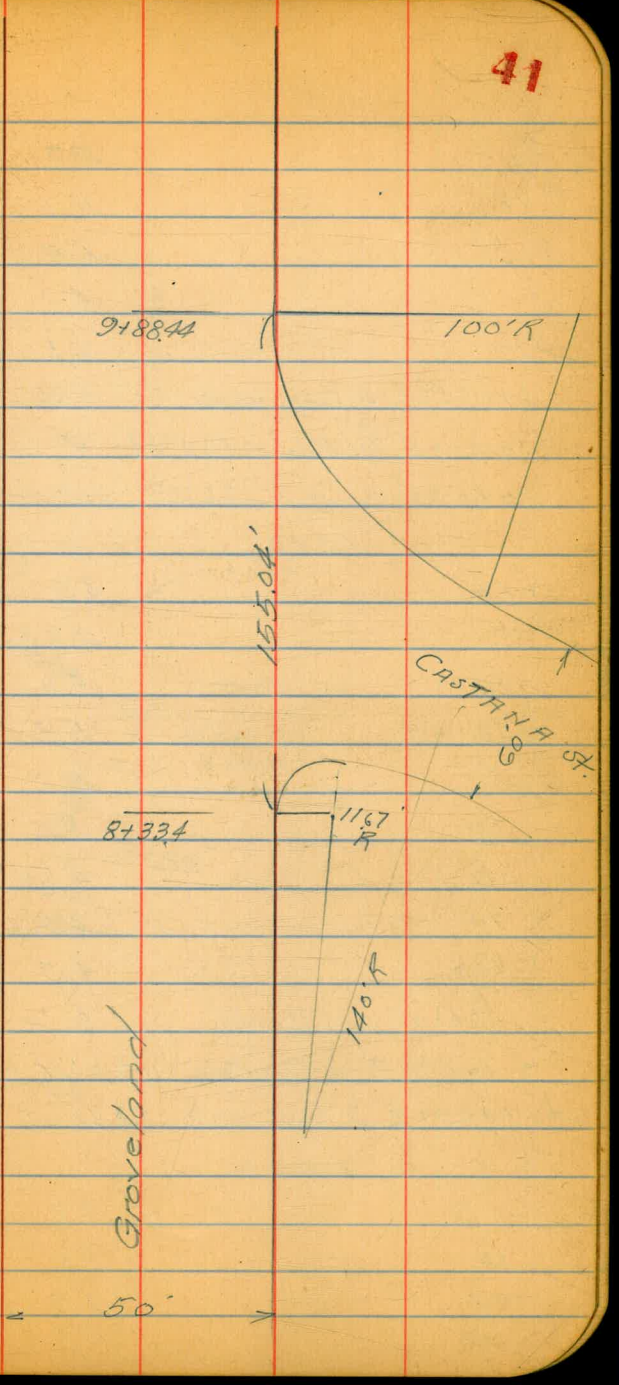
FB 1632-28
54th South of Market
(Also FB 1618-40 SRH)

Notes Reduced & Plotted 9-16-1943 C.S.K.

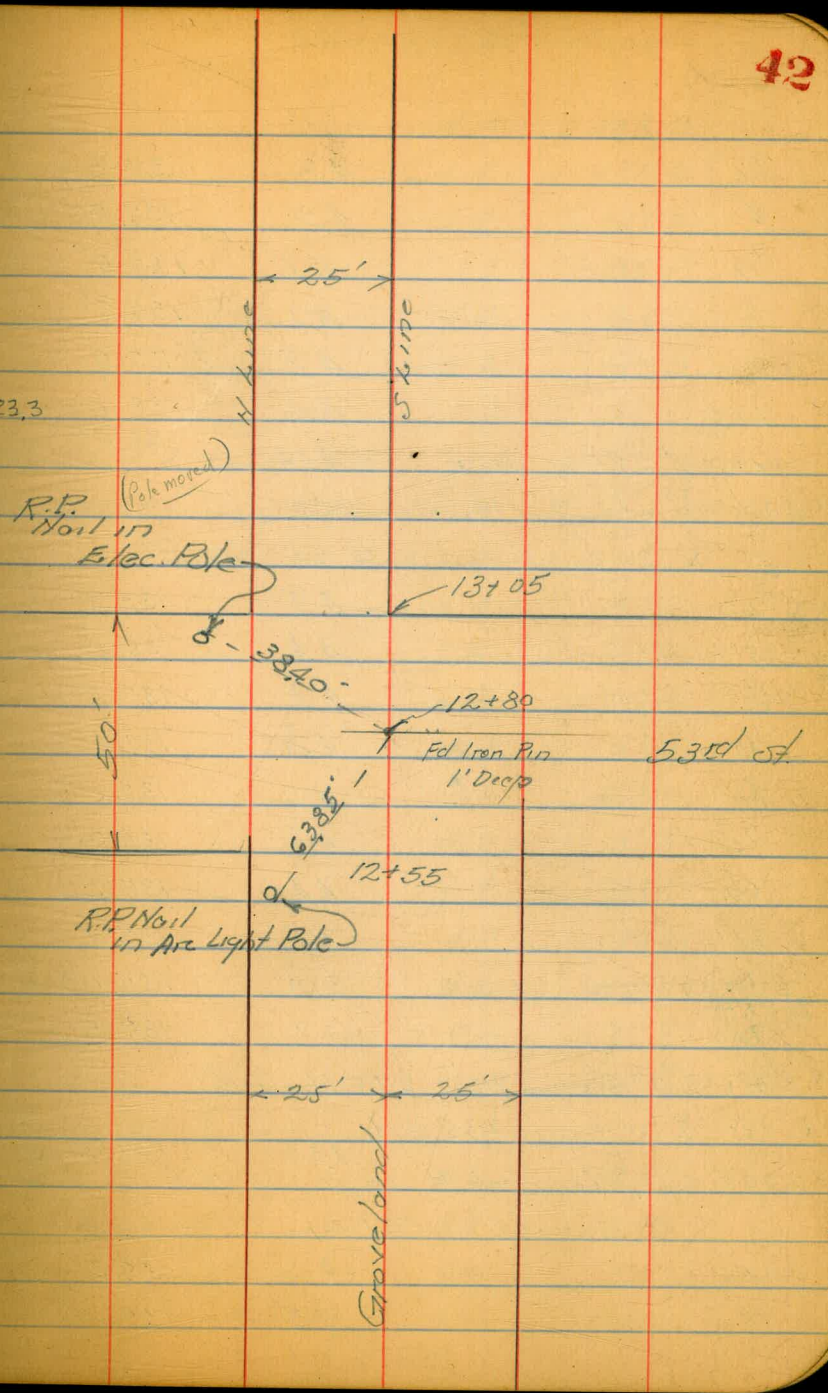


1426Z X-Section Groveland St.

	0+00		
-10		7.3	135.3
N		7.3	135.3
cb		7.2	135.4
1/4		8.5	134.1
℄		9.3	133.3
1/4		9.3	133.3
cb		9.3	133.3
S		9.3	133.3
+10		9.3	133.3
	0+41.3 = ℄ Elec Pole	6.6 17.5' Lt. of ℄	136.0
	0+50		
-10		7.6	135.0
S		7.5	135.1
cb		7.5	135.1
1/4		7.1	135.5
℄		6.9	135.7
1/4		7.3	135.3
cb		6.5	136.1
N		6.7	135.9
+10		7.7	134.9
	1+00		
-10		5.7	136.9
N		5.6	137.0
cb		5.6	137.0
1/4		5.9	136.7



℄	5.7	136.9	
5'℄	5.7	136.9	
5 cb.	5.3	137.3	
5	5.7	136.9	
+10	6.1	136.5	
1+08.5 = ℄ 4' Conc. Walk	5.86	136.76 ✓	Lt of ℄ 23.3
1+21 = ℄ 12" Tel Pole 16.5' Rt	✓		
1+41 = ℄ " " 26' Lt.	10" dia. ✓		
1+50			
-10	4.9	137.7	
5	4.8	137.8	
cb.	5.0	137.6	
'10	5.3	137.3	
℄	5.1	137.5	
'14	5.0	137.6	
cb	4.8	137.8	
N	4.6	138.0	
+10	4.9	137.7	
(1+10) 75' Lt of ℄	6.2	136.4	
1+67 = ℄ 12" Tel Pole 17.5' Lt. of ℄			
1+84 = ℄ 3' Conc Walk 24' Lt. of ℄	3.56	139.06 ✓	
2+00			
-10	3.7	13.8.9	
N	3.8	138.8	
+1	4.5	138.1	
cb.	4.7	137.9	



⅛	4.8	137.8	
℄	4.9	137.7	
⅛	5.1	137.5	
cb.	5.1	137.5	
S	4.7	137.9	
+10	4.6	138.0 ✓	
✓ 2+44.5 = ℄ 2.5 Conc Walk	4.14	138.48	24.4' Rt ℄
✓ 2+35 = ℄ 10" Acacia Tree			25' Lt of ℄
✓ 2+50 = ℄ Conc Walk 2.7' on N			
-10	3.9	139.7	
S	4.4	138.2	
cb.	4.7	137.9	
⅛	4.8	137.8	
℄	4.6	138.0	
⅛	4.6	138.0	
cb.	4.4	138.2	
N	4.1	138.5	
" on Walk	3.19	139.43 ✓	
+10	3.1	139.5	
✓ 2+69 = ℄ 12" Acacia Tree	2.45' Lt. of ℄		
✓ +88 = ℄ 12" Pepper	23.5' Lt ℄		
✓ 2+96 ℄ 2.7' Conc Walk on N	3.20	139.42 ✓	25' Lt ℄
✓ 3+00 = ℄ 12" Tel Pole			17' Lt. of ℄
N-	3.0	139.6	
N	3.3	139.3	

cb.	4.3	138.3	
⅛	4.4	138.2	
℄	4.4	138.2	
⅛	4.5	138.1	
cb.	4.4	138.2	
S	3.6	139.0	
+10	3.3	139.3	
✓ 3+17 = ℄ 2' Conc Walk	2.83 3.52	139.79 ✓	29.4' Rt ℄
✓ 3+20.5 = ℄ Conc Ribbon Drive		✓ 139.10	27.7' Lt ℄
3+50			
-10	3.0	139.6	
S	3.6	139.0	
+4	4.2	138.4	
cb.	4.0	138.6	
⅛	4.2	138.4	
℄	4.3	138.3	
⅛	4.3	138.3	
cb.	4.1	138.5	
N	4.4	138.2	
7+10	4.8	137.8	
3+75 75' Lt. of ℄	8.4	134.2	Vacant Lot
4+00			
-60	8.0	134.6	
-10	5.4	137.2	
N	4.9	137.7	
cb.	4.1	138.5	

		19262				14650	Groveland	
	4+00							
℄			4.2	138.4	℄		6.2	140.3
&			4.1	138.5	+3		6.6	139.9
℄			4.1	138.5	cb.		6.1	140.4
scb.			3.8	138.8	S		5.3	141.0
S			3.8	138.8	+10		5.5	141.0
+10			3.0	139.6	✓ 5+05 = ℄ Tel Pole on N 17.5' Lt ℄		5.63	140.87 ✓
T.P	7.77	146.50 ✓	3.89	138.73	↓ 5+16 = Beginning Conc. Wall			28' Lt ℄
	4+50				↓ 5+63 = End " "		" 5.26	141.24 ✓
					5+50			
-10			6.4	140.1	-10		5.0	141.5
S			7.3	139.2	S		5.1	141.4
cb.			6.9	139.6	cb.		5.4	141.1
+3			7.4	139.1	℄		5.7	140.8
℄			7.2	139.3	&		5.4	141.1
&			7.1	139.4	℄		5.5	141.0
℄			7.3	139.2	cb.		5.6	140.9
cb.			7.5	139.0	N		5.7	140.8
N			7.5	139.0	N on 6" Wall		5.48	141.02 ✓
+10			7.5	139.0	+10		5.4	141.1
↓ 4+58 = ℄ 4' Cone Walk			7.24	✓ 139.26 of ℄			5+40 = ℄ ~~Tel~~ Tel on ~~℄~~	
↓ 4+93 = ℄ 7' " Drive			6.30	✓ 140.20				232' Lt ℄
	5+00				S-100		2.8	143.7
-10			6.3	140.2	S-50		3.9	142.6
N			6.3	140.2	S		5.5	141.0
cb.			6.2	140.3	cb.		5.8	140.7
℄			6.3	140.2	℄		5.8	140.7
&			6.2	140.3		6+00		
					N-10		4.3	142.2

6+00

N	4.2	142.3
cb.	4.4	142.1
1/4	4.8	141.7
℄	5.1	141.4
1/4	5.2	141.3
+2	5.4	141.1
cb.	4.7	141.8
S	3.9	142.6
+10	3.4	143.1
↓ 6+20 = ℄ 16" Tel Pole	17' Lt. ℄	
✓ 6+24 = Beginning Conc. Wall on Lt.		24.8' Lt ℄
on	3.27	143.23 ✓

6+50

-10	3.1	143.4
S	3.4	143.1
cb.	4.0	142.5
+5	5.0	141.5
1/4	4.8	141.7
℄	4.5	142.0
1/4	4.2	142.3
cb.	3.9	142.6
N	3.4	143.1
on Wall	3.04	143.46
+10	2.9	143.6
↓ 6+55 = ℄ 7' Conc. Drive	3.50	✓ 143.00 24.8' Lt ℄

7+00

-10	2.4	144.1
N on Wall	2.67	143.83 ✓
" " Ground	3.0	143.5
cb.	3.6	142.9
1/4	3.6	142.9
℄	3.8	142.7
1/4	4.1	142.4
+2	4.2	142.3
cb.	3.4	143.1
S	2.6	143.9
+10	2.4	144.1
↓ 7+19 = ℄ 2' Conc. Walk	2.28	✓ 144.22 25.6' Rt. of ℄
↓ 7+35 = End Conc. Wall	2.32	✓ 144.18 24.8' Lt ℄
↓ 7+46 = ℄ Tel Pole 16"	17' Lt. ℄	

7+50

-10	2.1	144.4
S	2.3	144.2
cb.	2.1	144.4
+5	4.0	142.5
1/4	3.9	142.6
℄	3.6	142.9
1/4	3.3	143.2
cb.	2.8	143.7
N	2.7	143.8
+10	2.5	144.0

	146.50			
7+98 = ℄ 2.5' Conc Walk		1.64	144.86 ✓	22.3 Rt ℄
8+00				
-10		2.0	144.5	
N		2.4	144.1	
cb.		2.9	143.6	
1/4		3.0	143.5	
℄		3.2	143.3	
1/4		3.5	143.0	
+2		3.8	142.7	
cb.		2.6	143.9	
S		1.7	144.8	
+10		1.6	144.9	
T.P.	5.80	142.82	2.48	144.02 on Cor. Meter Box
8+50				
Roughed out -7.5 in Costume St.			4.7	145.1
-10			4.9	144.9
S			4.9	144.9
cb.			5.7	144.1
+5			6.5	143.3
1/4			6.4	143.4
℄			6.1	143.7
1/4			6.2	143.6
cb.			6.0	143.8
N			5.4	144.4
+10			5.4	144.4

	149.82	Groveland	
9+00			
-7.5'		6.8	143.0
-10		5.1	144.7
N		5.4	144.4
cb.		5.8	144.0
1/4		5.9	143.9
℄		5.8	144.0
1/4		6.1	143.7
+2		6.2	143.6
cb.		5.4	144.4
S		5.3	144.5
+4.0 in Roughed Grade Costume		4.9	144.9
9+50			
-10		4.6	145.2
S		5.4	144.4
cb.		5.5	144.3
+5		5.8	144.0
1/4		5.7	144.1
℄		5.6	144.2
1/4		5.6	144.2
cb.		5.4	144.4
N		4.9	144.9
+10		4.9	144.9
9+72 = ℄ 3' Conc. Walk		4.61	✓ 145.21 25.8 Lt ℄
9+90 = ℄ 2.5' " "		4.75	✓ 145.07 23.7 Rt ℄
9+99 = ℄ Tel Pole 16 Lt. ℄			

	10+00		
-10		4.4	145.3
N		4.4	145.3
cb.		4.8	145.0
⅛		5.0	144.8
℄		5.0	144.8
¼		5.4	144.4
cb.		5.1	144.7
S		4.6	145.2
+10		4.2	145.6
	10+50		
-10		3.6	146.2
S		4.0	145.8
cb.		4.4	145.4
⅛		5.1	144.7
℄		4.7	145.1
⅛		4.5	145.3
cb.		4.3	145.5
N		4.0	145.8
+10		3.8	146.0
	11+00		
-100' Vacant Lot		6.9	142.9
-10		4.0	145.8
N		4.3	145.5
cb.		4.3	145.5
⅛		4.4	145.4

℄	4.4	145.4
⅛	4.6	145.2
cb.	4.0	145.8
S	3.6	146.2
+10	2.6	147.2
11+34 = ℄ 65' Conc. Drive	26' Lt. ℄	
N-65 = at Garage	6.2	✓ 143.6
N-1' on Conc.	3.94	✓ 145.88 ✓
11+50		11+51=8.25' Conc. Walk on N Line
-10	2.1	147.7
S	3.7	146.1
cb.	3.7	146.1
+2	4.0	145.8
⅛	4.0	145.8
℄	3.9	145.9
¼	3.8	146.0
cb.	4.1	145.7
N on Conc. Walk	3.82	146.00 ✓
12+00		
-100' in Vacant Lot	7.0	142.8
-10	3.4	146.4
N	3.5	146.3
cb.	3.6	146.2
¼	3.5	146.3
℄	3.5	146.3
¼	3.5	146.3

	12+00	149.82						
cb.			3.2	146.6	S			
S			2.5	147.3	+50			
+10			1.5	148.3	+100			
↓12+19=℄ Tel Pole 17' Lt. ℄					+150			
T.P.	5.04	151.80 ✓	3.06	146.76	+200			
	12+55=W.L. 53rd St.							
-10			4.2	147.6	35 Rt of ℄			
S			4.8	147.0	25' " "			
cb.			5.3	146.5	15 " "			
1/4			5.3	146.5	7.5 " "			
℄			5.3	146.5	3' Rt.			
1/4			5.5	146.3	℄			
cb.			5.4	146.4	7.5 N			
N			6.1	145.7	cb.			
+10			5.9	145.9	N			
	12+80=℄ 53rd St.			Roughed out	+10			
N-200			16.1	135.7				
-150			13.6	138.2	-10			
-100			11.2	140.6	N			
-50			8.3	143.5	+10			
N			6.0	145.8	+17.5			
cb.			5.7	146.1	+22			
1/4			5.5	146.3	S			
℄			5.2	146.6	+7.5			
1/4			4.9	146.9	+17.5			
cb.			4.6	147.2	+25			
					+35			

	151.80	Groveland		
		E. Line of 53rd St.	4.2	147.6
			2.6	149.2
			1.1	150.7
			0.0	151.8
			+0.7	152.5
		" " ~~E. Line~~ Groveland 53rd St		
	13+05	Groveland 25' Wide from here		
			3.6	148.2
			4.2	147.6
			4.6	147.2
			5.1	146.7
			5.1	146.7
			5.9	145.9
			5.9	145.9
			6.1	145.7
			6.7	145.1
			6.4	145.4
	13+50			
			5.5	146.3
			5.4	146.4
			5.5	146.3
			5.5	146.3 ✓
			5.7	146.1
			5.0	146.8
			4.5	147.3
			4.3	147.5
			4.4	147.4
			4.4	147.4

	151.80		
	14+00		
-35'	1.8	150.0	
-25'	1.9	149.9	
-15	2.0	149.8	
-7.5	2.6	149.2	
S.L.	3.1	148.7	
+4	4.1	147.7	
+7.5	4.0	147.8	
+15'	4.5	147.3	
N.L.	4.1	147.7	
+10	4.1	147.7 2'N.N.L.	
↓ 13+98 = ℄ 2' Conc. Walk	3.67	148.13 ✓	
↓ 14+25 = ℄ 12" Tel Pole 1' South of N. line			
	14+50		
-75	5.4	146.4	
-10	3.4	148.4	
N	3.2	148.6	
+10	3.4	148.4	
+17.5	3.2	148.6	
S.L.	2.7	149.1	
+7.5	2.4	149.4	
+17.5	1.9	149.9	
+25	1.8	150.0	
+35	1.6	150.2	
	15+00		
-35'	0.8	151.0	
-25	1.2	150.6	

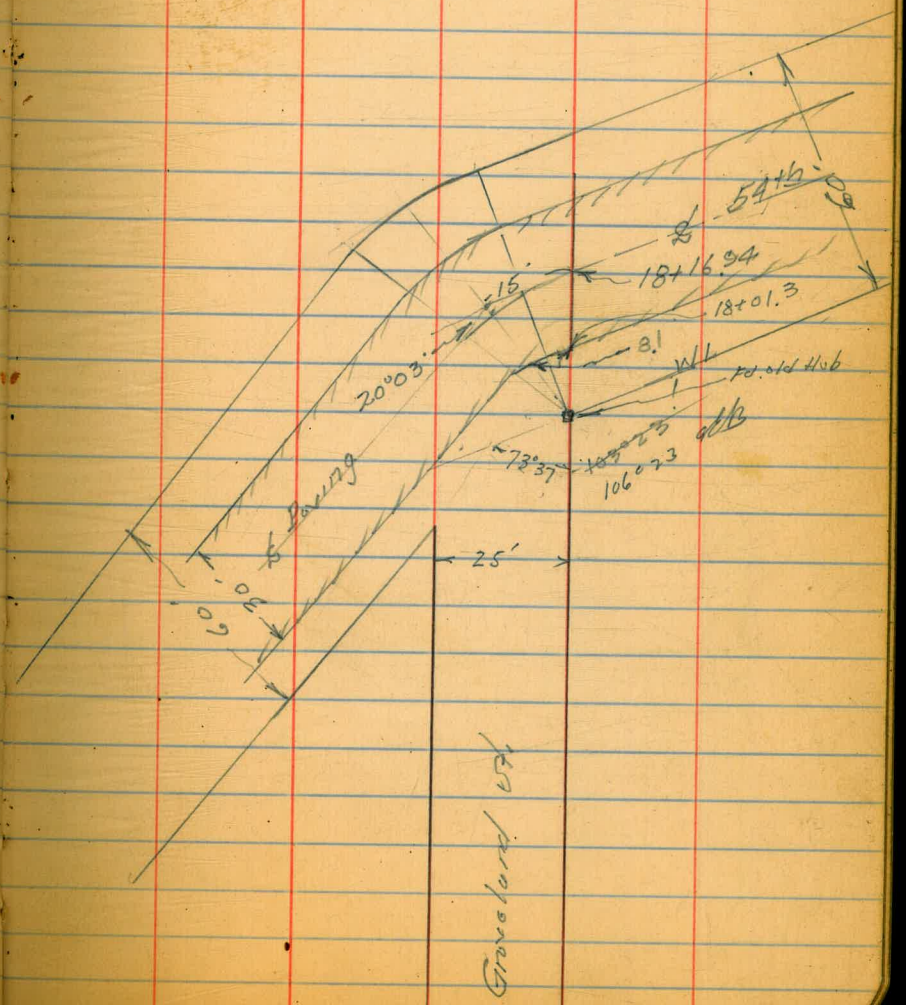
		151.80	Groveland St.		
-15			1.6	150.2	
+7.5			1.7	150.1	
S.L.			1.5	150.3	
+3'			2.3	149.5	
+7.5			2.2	149.6	
+15			2.3	149.5	
N.L.			2.6	149.2	
+10			2.6	149.2	
T.P.	7.76	157.54	2.02	149.78	
↓ 15+49 = ℄ 16" Tel Pole on N 1.5' South of N.L.					
	15+50				
-10			6.8	150.7	
N			7.1	150.4	
+10			7.2	150.3	
+17.5			7.2	150.3	
℄ +22			7.4	150.1	
S.L.			6.7	150.8	
+7.5			6.8	150.7	
+17.5			6.5	151.0	
+25			5.9	151.6	
+35			6.0	151.5	
	16+00				
-35'			5.0	152.5	
-25			5.0	152.5	
-15			5.2	152.3	
-7.5			5.5'	152.0	
S.L.			5.3	152.2	

SL+2'	6.0	151.5
+7.5	6.0	151.5
+15	6.0	151.5
NL	5.9	151.6
+10	5.4	152.1
↓ 16+24 = ℄ Conc Ribbon Drive on Rt. 16's SL. 6.5' wide	4.90	152.64 V
↓ 16+45 = ℄ 16" Tel Pole on N 1'10 St.		
16+50		
-10	4.1	153.4
N	4.9	152.6
+10	5.2	152.3
+17.5	5.1	152.4
+22	5.2	152.3
SL.	4.6	152.9
+7.5	4.9	152.6
+15'	4.9	152.6
+25	4.9	152.6
+35	4.9	152.6
17+00		
-35	4.4	153.1
-25	4.6	152.9
-15	4.5	153.0
-7.5'	4.4	153.1
SL.	4.3	153.2
+3	5.8	151.7
#7+7.5	5.6	151.9

157.54

SL: +15.	5.5	152.0
N	5.1	152.4
+10	4.1	153.4
17+50		
-10	3.6	153.9
N-3	3.8	153.7
N	6.4	151.1
+10	6.2	151.3
+17.5	6.3	151.2
+20	6.2	151.3
SL.	3.7	153.8
+7.5	3.4	154.1
+15	3.5	154.0
+25	3.5	154.0
+35	3.5	154.0
17+83		
-35	3.3	154.2
-25	3.3	154.2
-15	3.4	154.1
-7.5	3.6	153.9
SL.	3.6	153.9
+6	6.5	151.0
+7.5	6.5	151.0
+15	6.4	151.1
+25 - NL.	6.4	151.1
N+5. ℄ = N edge Pav	6.57	150.97

		157.54		
T.P.	9.28	156.86	9.96	147.58
18+01.3 = W edge 30' Strip Conc. Paving				
S-50 on Pav		2.87		153.99
-25 " "		3.81		153.05
-15 " "		4.24		152.62
SL " "		5.01		151.85
+81 = PI " edges		5.35		151.51
N on Pav.		5.67		151.19
+25 " "		6.29		150.57
T.P.	0.23	147.81	9.28	147.58
T.P.	0.23	135.28	12.76	135.05
T.P.	4.01	126.37	12.92	122.36
	P.40			
chk. BM. in Bridge 54th St.			5.25	121.12
				121.14
				0.02 diff.

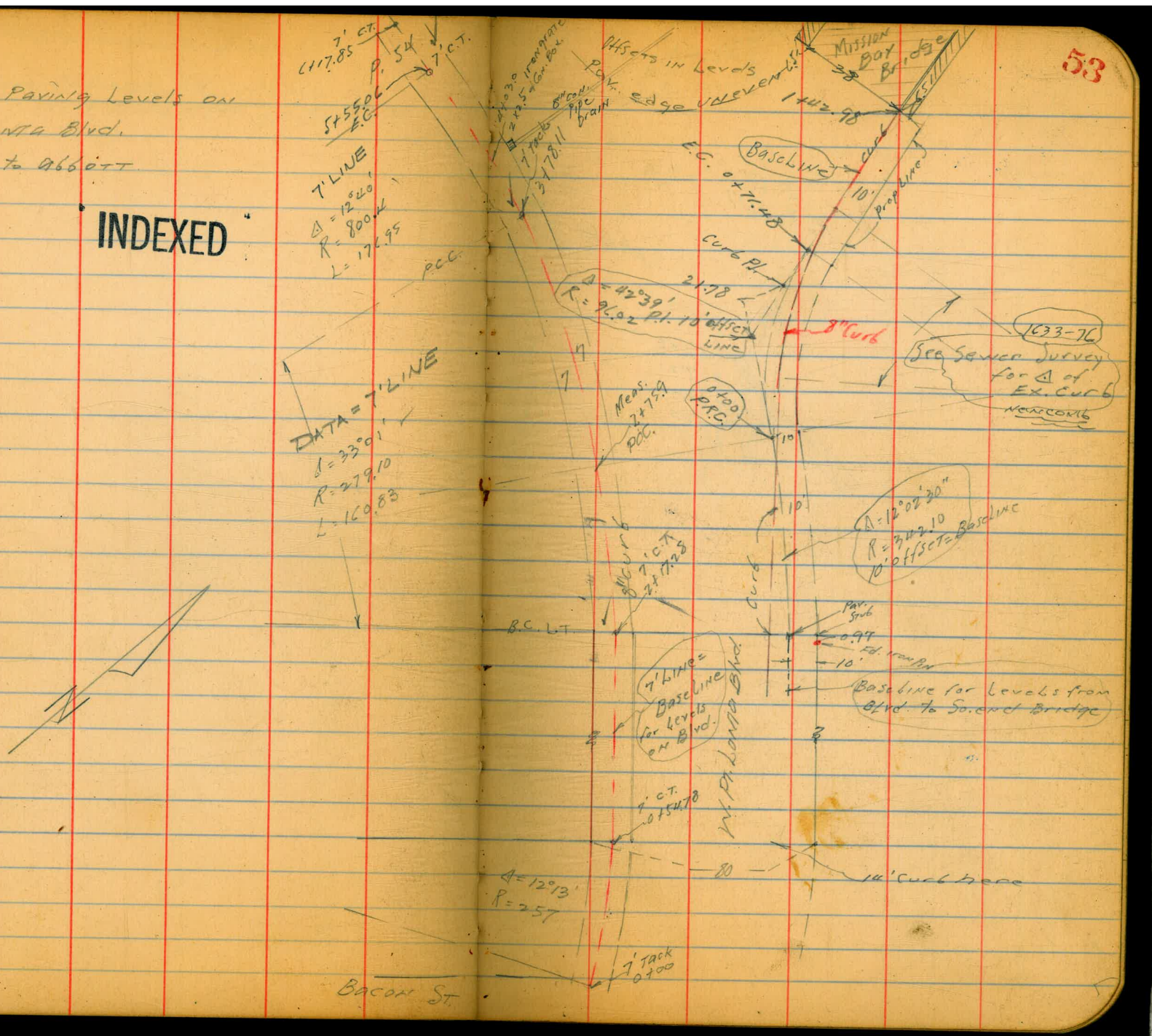


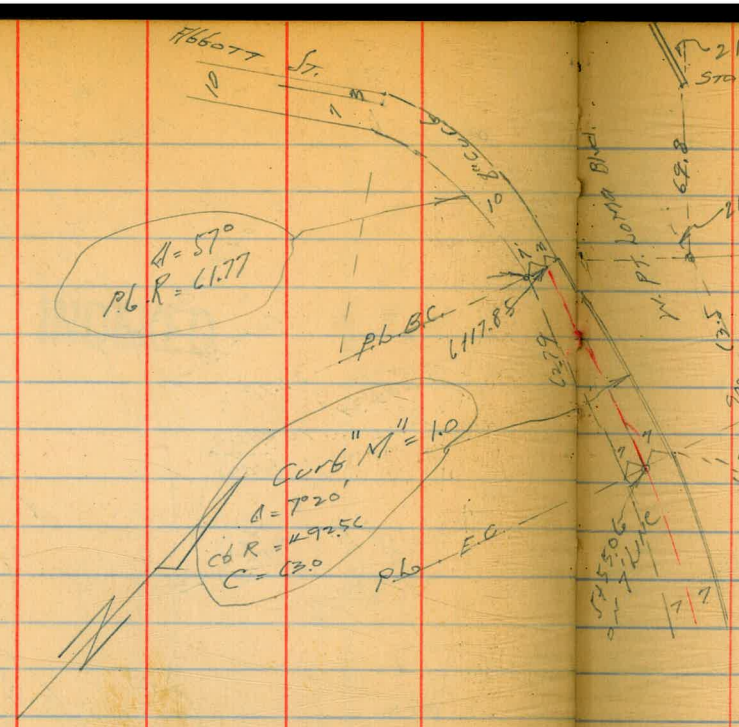
Walker Cross Section Long St.
Osborne
Hazard from Hbune Kenwood
09-15-43 To West Line 60th at Bach St.

Curb & Paving Levels on
W. Pt. Loma Blvd.
Bacon to Abbott

C.M.
C.S.
M.H.
E.B.
8-8-44.

INDEXED




Abbott St.
Curb "M"
Δ = 57°
P.C. R = 61.77
P.C.C.
61.77
Curb "M" = 1.0
Δ = 7°20'
C.C. R = 492.5
C = 63.0
P.C.
E.C.

21°40'
Start of 8" curb
69.8
21°28'
Sec. "A"
P.C.
S.C.
90°
Sta 5+06
Tie Line
Rough Pav. edge
offsets in levels

S/y 7' Line of Blvd = Baseline

Indexed c.s.k

Pav. Levels W. Pt. Loma Blvd. Bacon N/y

Rt. or NE/y.

E/e. Reduced 8-10-1944 C.B.K.

1+25			4.76	4.17	4.46	4.76	4.52	4.14	4.88
			6.20	6.87	6.48	6.18	6.42	6.80	6.06
			7	7	1/4	C	1/4	59	59
			C6	9T				9T	C6
1+00			5.07	4.46	4.81	5.08	4.87	4.47	5.20
			5.87	6.48	6.13	5.86	6.07	6.47	5.74
			7	7	1/4	C	1/4	59	59
			C6	9T.				9T	C6
0+80			5.42	4.76	5.11	5.35	5.11	4.76	5.42
			5.54	6.18	5.83	5.59	5.83	6.18	5.52
			7	7	1/4	C	1/4	59	59
			C6	9T				9T	C6
0+54.78			5.89	5.21	5.45	5.70	5.40	5.05	
			5.05	5.73	5.49	5.24	5.54	5.89	
			7	9T.	1/4	C	1/4	58.8	
			C6					9T. IN DRIVE	
0+27.39				5.53	5.90	6.08	6.88	5.47	6.17
				5.41	5.04	4.86	5.06	5.47	4.77
				7.44	1/4	C	1/4	58.6	58.6
				9T. IN DRIVE				9T	C6
0+00 Radial with S.L. Blvd.			6.57	5.83	6.23	6.40	6.29	5.82	
			4.37	5.11	6.71	4.54	4.65	5.17	
			6.4	6.4	1/4	C	1/4	58	
			C6	9T.				9T. IN DRIVE	
			ON RETURN						
NEBP W. Pt. Loma Blvd. & Bacon	6.40	10.94	6.54			10.94			

Sly 7' Line Blvd.
Base Line

Rt.

2+50		2.91	2.27	2.69	2.81	2.56	2.28	3.07
		4.26	4.90	4.48	4.36	4.61	4.89	4.10
		7	7	1/4	C	1/4	61.3	61.3
		C6	9T				9T	C6
2+25		3.22	2.65	3.06	3.24	2.97	2.65	3.42
		3.95	4.52	4.11	3.93	4.20	4.52	3.75
		C6 7	9T 7	1/4	C	1/4	59.1 9T	59.1 C6
N.L.&C. T.P. Pav. Stub	3.52	7.17	7.29	3.65		7.17		
2+17.28	B.C. Lt.							
		3.30	2.77	3.17	3.39	3.17	2.79	3.46
		7.64	8.17	7.77	7.55	7.77	8.15	7.48
		7	7	1/4	C	1/4	9T	59
		C6	9T					C6
2+00		3.63	3.03	3.45	3.63	3.42	3.03	3.67
		7.31	7.91	7.49	7.31	7.52	7.91	7.27
		7	7	1/4	C	1/4	59	59
		C6	9T				9T	C6
59		4.02	3.41	3.73	3.99	3.79	3.38	
-7		6.92	7.53	7.21	6.95	7.15	7.50	
52 Rdy		7	7	1/4	C	1/4	59	
1x' c&s		C6	9T				9T 1x D.I.V.	
80' wide								
1+75								
		4.60	3.82	4.15	4.40	4.22	3.92	4.63
		6.34	7.12	6.79	6.54	6.72	7.02	6.31
		7	7	1/4	C	1/4	59	59
		C6	9T				9T	C6
1+50								
	10.92				10.94			

5/4 7' Line of Blvd = Baseline

Rt.

4+03. Line of drain Covered Rip Rap 2x2.5 Con. Box & Iron grate	1.83	0.21	1.00	0.94	1.16	1.28	1.29	1.25
	C.14 / C6	C.96 / 7 Top grate	8.17 / 7 F.L. Bt drain	C.23 / 1/4	6.01 / C	5.89 / 1/4	5.88 / 59	5.97 / C2 ragged edge pav.
3+78.11 = P.C.C. 4+04.13	1.00	0.50	1.05	1.34	1.46	1.46	1.50	1.83
	C.17 / 7 C6	C.C7 / 7 9T	C.12 / 1/4	5.83 / C	5.71 / 1/4	5.71 / 59 C6 on Pav.	5.C7 / 73 Pav.	5.34 / 89 Ragged Edged Pav.
3+50	1.42	0.90	1.15	1.41	1.56	1.76	1.93	
	5.75 / 7 C6	C.27 / 7 9T	C.07 / 1/4	5.76 / C	5.61 / 1/4	5.41 / 59 C6 Pav.	5.24 / 73 N.L. on Pav	
3+25	1.80	1.21	1.35	1.40	1.53	1.98	2.14	2.00
	5.37 / 7 C6	5.96 / 7 9T	5.82 / 1/4	5.79 / C	5.64 / 1/4	5.19 / C659 Pav.	5.03 / C7 Hump	5.17 / 73 N.L. Pav.
3+00	2.17	1.58	1.83	1.90	2.30	2.41	1.95	1.79
	5.00 / 7 C6	5.59 / 7 9T	5.34 / 1/4	5.27 / C	4.87 / 1/4	4.76 / 1/4+4	5.12 / 59 C6 on Pav.	5.38 / 73 N.L. on Pav
2+75.9 P.O.C. on So. & P.R.C. on N = 0+00 for Levels on paving Blvd. to So. end Bridge Sketch P. 53 & 2+89.84	2.54	1.89	2.29	2.53	2.15	1.97	2.14	
	4.63 / 7 C6	5.30 / 7 9T	4.88 / 1/4	4.64 / C	5.07 / 1/4	5.20 / C6.C 9T.	5.03 / C.CC C6 IN drive	

7.17

7.17

S/y 7' Line of Blvd = B.L. →

Rt.

5+55.06 E.C.

1.75 1.27 1.72 1.69
5.32 / 7 / 66 — 5.80 / 7 / 97 — 5.35 / 20 — 5.38 / 33 edge Pav

5+25

1.59 1.10 1.57 1.54 1.58
5.48 / 7 / 66 — 5.97 / 7 / 97 — 5.50 / 20 — 5.53 / 33 — 5.49 / 34 edge pav

T.P. 5.59 7.07 5.69 1.48

7.07

5+00

1.53 1.01 1.45 1.43 1.39
5.04 / 7 / 66 — 5.46 / 7 — 5.72 / 20 — 5.74 / 33 — 5.78 / 37 edge pav

4+75

1.35 0.85 1.29 1.34 1.31
5.82 / 7 / 66 — 6.32 / 7 / 97 — 5.88 / 20 — 5.83 / 33 — 5.86 / 41 edge Pav

4+50

1.24 0.74 1.16 1.30 1.26
5.93 / 7 / 66 — 6.43 / 7 / 97 — 6.01 / 20 — 5.87 / 33 — 5.91 / 41 edge Pav.

4+25

1.11 0.56 1.04 1.04 1.34 1.20
6.06 / 7 / 66 — 6.61 / 7 / 97 — 6.13 / 20 — 6.13 / 33 — 5.83 / 41 — 5.97 / 53 ragged edge Pav.

7.17

Sy 7' Line of
W Pr Lanes = Baseline

check to BM BP "N S. C6 Blvd. 5+4 1.83
1.84 NE Con Supper Club

L+17.85 B.C. Lt. = Scc "A" to angle pt. 21°28'
N. edge Pav.

5+84.46 See sketch p. 54

7.07

1.95	1.50	2.17	2.16
5.17	5.57	4.90	4.91
3	3	20	33 angle edge Pav.
C6	97.		

1.82	1.37	1.94	1.99
5.25	5.70	5.13	5.08
C	C	20	33 Pav edge
C6	97		

7.07

indexed
O.S.K.

Pav. Levels from W Pt. Loma Blvd.
to So. end Mission Bridge

1+47.98 = So. end Mission Bridge Sketch P. 53

1+19.08 edge pav.

0+95.78

0+71.48 E.C. 10' out from prop. Line E.C.

0+53.61

0+35.74

Curve in 4 eq. parts

0+17.87

P.R.C. on N = 0+00 on 10' offset Line (= 21.59 POC other side MP&L)

B.M. B.P. Curb NE Corn. Supp Co Club 5.49 7.37 1.83

over

10' offset Line
Baseline

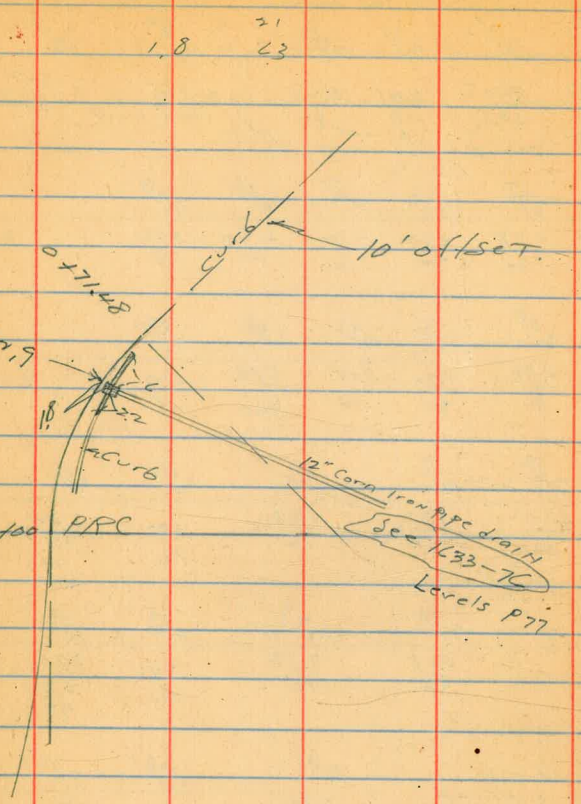
	LT.						RT
Top Guard Rail	4.07	3.03	3.07	3.11	3.09	3.03	3.46	4.10
	3.25 / 38	4.29 / 38	4.25 / 18.5	4.21 / 19	4.23 / 9.5	4.29 / 9.7	3.86 Curb end	3.72 / 0.10 Top Guard Rail
	Bridge Deck							
	2.29	2.47	2.74	2.78	2.62	2.40	3.00	
	5.03 / 45	4.85 / 40	4.58 / 30	4.54 / 20	4.70 / 10	4.92 / 9.7	4.32 / C6	
	1.90	2.25	2.44	2.40	2.21	1.84	2.53	
	5.42 / 50	5.07 / 40	4.88 / 30	4.92 / 20	5.11 / 10	5.48 / 9.7	4.79 / C6	
		2.08	2.12	1.79	1.52	1.50	2.27	
		5.24 / 30	5.20 / 20	5.53 / 10	5.80 Pav.	5.84 / 0.9 / 9.7	5.05 / 0.9 / C6	
		2.14	1.97	1.69	1.52	2.34		
		5.18 / 20	5.55 / 10	5.73 Pav	5.80 / 2.8 / 9.7	4.98 / 2.8 / C6		
Some of these Left Shots overlap The Levels taken The Blvd.		2.02	1.79	1.72	2.42			
		5.30 / 10	5.53 Pav.	5.60 / 4.5 / 9.7	4.90 / 4.5 / C6			
		1.99	1.87	1.83	2.55			
		5.33 / 10	5.45 Pav	5.49 / 5.5 / 9.7	4.77 / 5.5 / C6			
		2.09	1.99	1.97	2.14			
		5.23 / 10	5.33 Pav.	5.35 / 3.5 pav 9.7	5.18 / 3.5 / C6 in drive			

7.37

BL.

Lt.

10' offset Baselines



0+00 on deck Bridge

3.71	3.72	3.72	3.66	3.66
3.61	3.60	3.60	3.61	3.61
38	28.5	19	9.5	

3.26	3.29	3.29	3.28	3.27
4.06	4.03	4.03	4.04	4.05
38	28.5	19	9.5	

1+60 on deck Bridge

7.3%

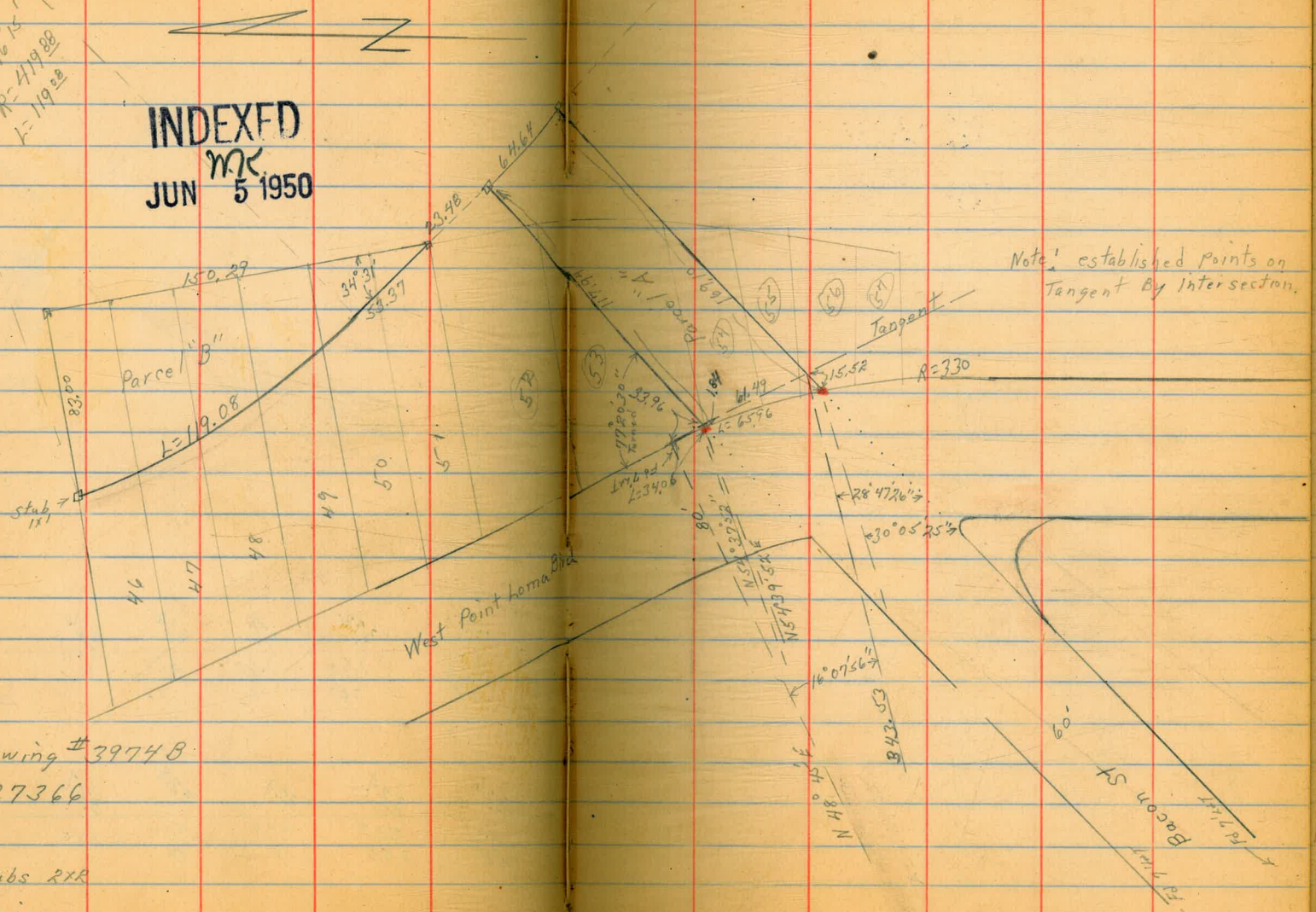
7.3%

D. Smith
E. Gregory
K. Sherman
G. Cota.

62

Lay out Parcels "A" & "B" and Flag 6/11/50
for Planning Dept. WO # 27366

INDEXED
JUN 5 1950



Ref: Drawing # 39748
WO # 27366

□ Set Hubs 2x2

• Set Shiners

IMPROVED TABLES

AND

INFORMATION

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope 1½ to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE No. 9.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections.

Degree of curve with a given I may be found by dividing tangent, (or external), opposite I by given tangent, (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

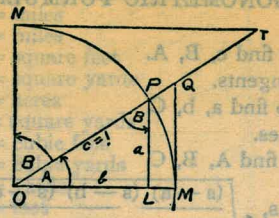


TABLE II

TRIGONOMETRIC FORMULÆ.

$\angle A = \angle MOP \qquad \angle B = \angle PON = \angle OPL$

$R = OB = c = 1$

$$\sin A = \frac{a}{c} = \frac{a}{1} = a = \cos B = LP$$

$$\cos A = \frac{b}{c} = \frac{b}{1} = b = \sin B = OL$$

$$\tan A = \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ$$

$$\cot A = \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT$$

$$\sec A = \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ$$

$$\csc A = \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT$$

$$\text{vers } A = \frac{LM}{OP} = LM = \text{covers } B$$

$$\text{covers } A = \frac{OP - LP}{OP} = OP - LP = \text{vers } B$$

$$\text{exsec } A = PQ = \text{coexsec } B$$

$$\text{coexsec } A = PT = \text{exsec } B$$

$$\sin \tfrac{1}{2} A = \sqrt{\frac{1 - \cos A}{2}} \qquad \cos \tfrac{1}{2} A = \sqrt{\frac{1 + \cos A}{2}}$$

$$\sin 2A = 2 \sin A \cos A \qquad \cos 2A = \cos^2 A - \sin^2 A$$

$$\text{Law of Sines} \quad \frac{\sin A}{a} = \frac{\sin B}{B} = \frac{\sin C}{C}$$

$$\text{Law of Cosines} \quad c^2 = a^2 + b^2 - 2ab \cos C$$

$$\text{Law of Tangents} \quad \frac{a+b}{a-b} = \frac{\tan \tfrac{1}{2}(A+B)}{\tan \tfrac{1}{2}(A-B)}$$

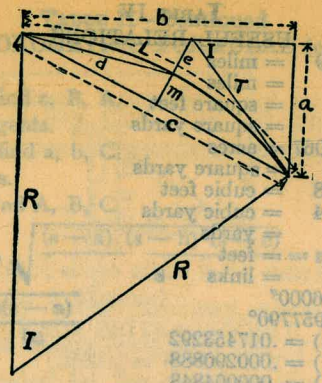


Table V

CURVE FORMULAE FOR SIMPLE CURVES

Compiled by J. Calvin Locke, C.E.

(1) $c = \sqrt{2Ra}$ (2) $c = \sqrt{a^2+b^2}$

(3) $c = \sqrt{2R\,(R-\sqrt{(R+b)\,(R-b)}} = \sqrt{2R(R-\sqrt{R^2-b^2})}$

(4) $c = 2\sqrt{m\,(2R-m)}$

(5) $c = 2R \sin \frac{1}{2} I$ (6) $c = 2T \cos \frac{1}{2} I$

(7) $e = R \operatorname{exsec} \frac{1}{2} I$

(8) $e = R \tan \frac{1}{2} I \tan \frac{1}{4} I$ (9) $e = T \tan \frac{1}{4} I$

(10) $b = \sqrt{a\,(2R-a)}$

(11) $b = \sqrt{\left(c+\frac{c^2}{2R}\right)\left(c-\frac{c^2}{2R}\right)} = \sqrt{c^2-\frac{c^4}{4R^2}}$

(12) $b = R \sin I$ (13) $b = a \cot \frac{1}{2} I$

(14) $R = \frac{a^2+b^2}{2a} = \frac{c^2}{2a}$ (15) $R = \frac{d^2}{2m} = \frac{c^2+4m^2}{8m}$

(16) $d = \sqrt{R\,(2R-\sqrt{(2R+c)\,(2R-c)}} = \sqrt{R(2R-\sqrt{4R^2-c^2})}$

(17) $d = \sqrt{2Rm}$ (18) $d = 2R \sin \frac{1}{4} I$ (19) $m = \frac{d^2}{2R}$

(20) $m = R \mp \sqrt{\left(R+\frac{c}{2}\right)\left(R-\frac{c}{2}\right)} = R \mp \sqrt{R^2-\frac{c^2}{4}}$

(21) $m = R \operatorname{vers} \frac{1}{2} I$ (22) $m = R \sin \frac{1}{2} I \tan \frac{1}{4} I$ (23) $m = \frac{1}{2} c \tan \frac{1}{4} I$

(24) $a = \frac{c^2}{2R}$ (25) $a = R - \sqrt{(R+b)\,(R-b)} = R - \sqrt{R^2-b^2}$

(26) $a = 2\,R\,(\sin^2 \frac{1}{2} I)^2$ (27) $a = R \operatorname{vers} I$ (28) $a = R \sin I \tan \frac{1}{2}$

(29) $a = b \tan \frac{1}{2} I$ (30) $a = T \sin I$ (31) $T = R \tan \frac{1}{2} I$

(32) $I = \frac{L}{R} \times 57.295780$ (33) $R = \frac{L}{I} \times 57.295780$

(34) $L = IR \times 0.01745329$ (35) $L = \frac{8d-c}{3}$

(36) Area Seg. $= \frac{LR - R^2 \operatorname{Sin} I}{2} = \frac{LR - Rb}{2}$

Table VI

SINES, COSINES, TANGENTS, COTANGENTS

deg.	sin 0′	tan 0′	sin 10′	tan 10′	sin 20′	tan 20′	sin 30′	tan 30′	sin 40′	tan 40′	sin 50′	tan 50′	deg.
0	0000	0000	0029	0029	0058	0058	0087	0087	0116	0116	0145	0145	89
1	175	0175	0204	0204	0233	0233	0262	262	291	291	320	320	88
2	349	349	378	378	407	407	436	437	465	466	494	495	87
3	523	524	552	553	581	582	610	612	640	641	669	706	86
4	698	699	727	729	756	758	785	787	814	816	843	864	85
5	872	875	901	904	929	934	958	963	987	992	1016	1022	84
6	1045	1051	1074	1080	1103	1110	1132	1139	1161	1169	190	198	83
7	219	228	248	257	279	287	305	317	334	346	363	376	82
8	392	405	421	435	449	465	478	495	507	524	536	554	81
9	564	584	593	614	622	644	650	673	679	703	708	733	80
10	736	763	765	793	794	823	822	853	851	883	880	914	79
11	908	944	937	974	965	2004	994	2035	2022	2065	2051	2095	78
12	2079	2126	2108	2156	2136	186	2164	217	193	247	221	278	77
13	250	309	278	339	306	370	334	401	363	432	391	462	76
14	419	493	447	524	476	555	504	586	532	617	560	648	75
15	588	679	616	711	644	742	672	773	700	805	728	836	74
16	756	867	784	899	812	931	840	962	868	994	896	3026	73
17	924	3057	952	3089	939	3121	3007	3153	3035	3185	3062	217	72
18	3090	249	3118	281	3145	314	173	346	201	378	228	411	71
19	256	443	283	476	311	508	338	541	365	574	393	607	70
20	420	640	448	673	475	706	502	739	529	772	557	805	69
21	584	839	611	872	638	906	665	939	692	973	719	4006	68
22	746	4040	773	4074	800	4108	827	4142	854	4176	881	210	67
23	907	245	934	279	961	314	987	348	4014	383	4041	417	66
24	4067	452	4094	487	4120	522	4147	557	173	592	200	628	65
25	226	663	253	699	279	734	305	770	331	806	358	841	64
26	384	877	410	913	436	950	4462	986	488	5022	514	5059	63
27	540	5095	566	5132	592	5169	617	5206	643	243	669	280	62
28	695	317	720	354	746	392	772	430	797	467	823	505	61
29	848	543	874	581	899	619	924	658	950	696	975	735	60
30	5000	774	5025	5812	5050	851	5075	890	5100	930	5125	969	59
31	150	6009	175	6048	200	6088	225	6128	250	6168	275	6208	58
32	299	249	324	289	348	330	5373	371	398	412	422	453	57
33	446	494	471	536	495	577	519	619	544	661	568	703	56
34	592	745	616	787	640	830	664	873	688	916	712	959	55
35	736	7002	760	7046	783	7089	807	7133	831	7177	854	7221	54
36	878	265	901	310	925	355	948	400	972	445	995	490	53
37	6018	536	6041	581	6065	627	6088	673	6111	720	6134	766	52
38	157	813	180	860	202	907	225	954	248	8002	271	8050	51
39	293	8098	316	8146	338	8195	361	8243	383	292	406	342	50
40	428	391	450	441	472	491	494	541	517	591	539	642	49
41	561	693	583	744	604	796	626	847	648	899	670	952	48
42	691	9004	713	9057	734	9110	756	9163	777	9217	799	9271	47
43	820	325	841	380	862	435	884	490	905	545	926	601	46
44	947	657	967	713	988	770	7009	827	7030	884	7050	942	45
45	7071	1.0000	7092	1.0058	7112	1.0117	133	1.0176	153	1.0235	173	1.0295	44
deg.	60′ cos	60′ cot	50′ cos	50′ cot	40′ cos	40′ cot	30′ cos	30′ cot	20′ cos	20′ cot	10′ cos	10′ cot	deg.

FB. 1389 - 64.

Iona × Pilot Top Hyd. 17013.

Brooklyn × 60th — Ld. o Tucks

L " W 10' Line 60th 23447

Hunderlin × 60th 27434 — C.T. Ld W 10' Line 60th

Beach . SEBP. 28213

ENGINEERING DEPARTMENT,
CITY OF SAN DIEGO,
CALIFORNIA.