

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 1 1/2 see inside of back cover.
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1717

CITY ENGINEER'S OFFICE

INDEXED

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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.

Chica

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E
to be
of road
examp
30.6 =

Additional Notes Old Town Storm Drain

La Jolla - Congress + Arroyo	44
Arista - Congress to La Jolla	45-
Conde + San Diego	49
" + Jefferson	52
" & Santa Fe Ref W.	54
Earl St. - Birch to Cottonwood	2-6
Alley - (41st St.)	7-8
Cottonwood - 41 to 42	9-13
Yama - Main to Cottonwood	14-21
Drainage channel	22

Walker
Hendricks
Hendrick
Clirey
6-10-46

CROSS SECTION - EARL ST.
60' wide
10' cbs 10' 1/4s
from Cottonwood St.
To - Birch St.

6.06 17.99

11.93

BM. Earl
N.E. 7' thick
Cottonwood

W 6.0 12.0

+2.5 on Walk 5.57 12.02

cb. 6.05 11.94

cut. 6.9 11.1

1/4 INDEXED 6.8 11.2

E 6.5 11.5

1/4 6.2 11.8

cut. 6.1 11.9

cb. 5.69 12.30

+7.5 on Walk 5.51 12.48

E 5.3 12.7

0750

E-5 5.4 12.6

E 5.6 12.4

1/4 5.9 12.1

E 6.0 12.0

1/4 6.2 11.8

+2 5.7 12.3

cb. 5.7 12.3

W 5.8 12.2

+5 6.0 12.0

WALKER
C. S. K.

Birch

ST.

2

BM. 3768
FB 1716
61

470966

BM. El. 37.68
= 4' thick FB 1716
61

Earl ST

BM. 1193

0700

FB 1716-61

Cottonwood

ST.

17.99 ✓ Earl St.

1700

-5	5.3	12.7
W	5.4	12.6
cb.	5.3	12.7
+8	5.3	12.7
'14	5.9	12.1
2	5.6	12.4
'14	5.7	12.3
+3	5.0	13.0
cb.	5.5	12.5
E.	5.3	12.7
+5	5.2	12.8

1750

-5	4.6	13.4
E.	4.7	13.3
cb.	4.9	13.1
'14	5.1	12.9
2	5.0	13.0
'14	5.1	12.9
cb.	5.1	12.9
W	5.0	13.0
+5	4.7	13.3

1751.5 - 2' 3' Conc. Walk on E 0.7' Back

1755 - 2' " Walk on W 4.25 13.02 3' in St.

176 - 2' 6.5' Conc. Drive on E.

E-4.3 on Top " 4.64 13.35

E-5' " " 4.55 13.22

2700 17.99 ✓ Earl St.

-5	4.3	13.7
W	4.0	14.0
cb.	3.7	14.3
'14	3.8	14.4
2	3.6	14.2
'14	3.7	14.3
cb.	3.6	14.2
E.	3.6	14.2
+5	4.2	13.8

2705 - 2' 3' Conc. Walk on W, 30' in St. 13.53

2728 - 2' 3' Conc. Walk on W 0.3' Back 15.13

2725

E. of Wall	2.4	15.6
cb.	2.4	"
'14	2.2	15.8
2	2.3	15.7
'14	2.7	15.3
cb.	2.7	15.3
W	2.9	15.1
+5	2.8	15.2

T.P. 1245 30.04 0.40 17.59

2700 to 2725 - Conc. Walk on E 0.9' Back 2' High

2736 to 2749 " " " " on Line " "

2750

-5 on top	12.1	17.9
W	12.0	18.0
cb.	12.8	17.2

	2+50	30041	Earl of	
1/4			127	17.3
E			127	17.3
cb.			13.0	17.0
E			127	17.3
1' South on Wall			11.58	18.96
50' " " "			13.42	16.62
E75			123	17.7
			11.57	18.97
2+56.4 = 2' Garage on E			14.5	Back
			11.31	18.73
2+64.4 " " "			" "	" "
			11.29	18.75
2+56.4 = 2' Conc. Walk on W			0.3	Back
2+70				
-5			9.1	20.9
W			8.9	21.1
cb.			9.4	20.6
1/4			10.1	19.9
2/8			10.3	19.7
1/4			10.8	19.2
cb.			10.7	19.3
E			10.8	19.2
+5			10.9	19.1
2+71				
2+92 = 2' 35' Conc. Walk			6.48	23.56
				on East 0.4' Back
3+00				
-5			5.3	24.7
E			4.9	25.1
cb.			4.9	"
+4			4.7	25.3

		3004V		
79			59	29.1
1/4			59	"
2/8			53	29.7
+8			51	29.9
1/4			40	26.0
cb.			3.4	26.6
+9.7 of Wall			3.2	26.8
W on "			0.85	29.19
+5			0.6	29.8
T.P.	12.48	42.22	0.30	29.74
			3+25	
-5			9.3	32.9
W			9.6	32.6
cb.			9.3	32.9
+9			10.1	32.1
1/4			10.7	31.5
+3			12.6	29.6
2/8			12.5	29.7
1/4			18.0	29.2
+1			13.0	"
+4			12.0	30.2
cb.			12.1	30.1
E			12.0	30.2
+5			12.2	30.0
			8.27	33.95
			3+30	on W 2.170
-5			8.3	33.9
E			8.2	34.0

3150

4222

East St.

Fcb	8.5	33.7
+8	8.4	33.8
1/4	9.3	32.9
2	8.7	33.5
1/2	8.2	34.0
cb	6.7	35.5
1/4	6.4	35.8
+5	6.1	36.1
3+75		
1/4-5	3.3	38.9
1/4	3.3	"
+2	4.1	38.1
cb	4.4	37.8
+4	4.4	"
+9	6.0	36.2
1/4	6.0	"
2	6.3	35.9
+9	6.7	35.5
1/4	6.2	36.0
+1	5.9	36.3
cb	6.1	36.1
E	6.8	35.8
+5	7.8	34.9
4+00		
-5	6.1	36.1
E	5.4	36.8

4100

4222

Fcb	5.2	37.0
1/4	4.9	37.3
+2	5.5	36.7
2	5.2	37.0
1/4	5.1	37.1
+3	5.1	"
+7	2.6	39.6
cb	2.6	"
+6	2.4	39.8
1/4	1.5	40.7
+5	1.3	40.9
4+08		
-5	0.9	41.3
1/4	1.0	41.2
cb	1.4	40.8
+3	1.8	40.9
+6	5.0	37.2
1/4	5.1	37.1
2	5.1	"
1/4	5.2	37.0
cb	5.3	36.9
E	5.6	36.6
+5	5.8	36.4
4+09, 66 = SL Birch St.		
E	5.7	36.5
+25' on edge walk	6.35	35.87

15

42.22 ✓ Earl St.

cb. 6.51 35.71

Gut. (Higher) 6.2 36.0

1/4 5.2 37.0

1/2 5.1 37.1

1/4 5.1 "

Gut. (Higher) 4.4 37.8

cb 4.72 37.5

+17.5 on walk 4.59 37.63

W 4.0 38.4

4119.66 = South cb. Birch

W on cb 4.34 37.88

Gut. 5.2 37.0

cb. 5.0 37.2

1/4 5.0 "

1/2 5.1 37.1

1/4 5.5 36.7

cb. 6.1 36.1

Gut. on ~~cut~~ 6.8 35.9

E 6.06 36.16

+2.5 on Genes. Gut 6.92 35.30

cbk. SW 7' fack 4.55 37.67 ✓

Birch + Earl P2 37.68

0.01

Walker Cross Section 20' Alley - Nordico Hts
 Hendricks from Marine View Ave
 Hurley to Cottonwood St.
 Carey
 6-11-46

BM. post
 in Pole at
 Alley on
 1246 64.08 51.62

TR 4.93 68.41 0.60 63.48 ✓
 0+00 = N. Side Marine View Ave.

E-5 4.5 63.9

E 4.8 63.6

2 INDEXED 4.9 63.5

+3 4.1 69.3

W 4.0 69.4

+5 4.1 69.3

0+25

-5 4.1 69.3

W 3.9 69.5

2 4.1 69.3

E 4.6 63.8

+5 4.1 69.3

Elec.
 0+20.5 Pole on E 1' in Alley
 0+35.4 10" Pop Tree on W 4' in Alley
 0+40

5 5.1 63.3

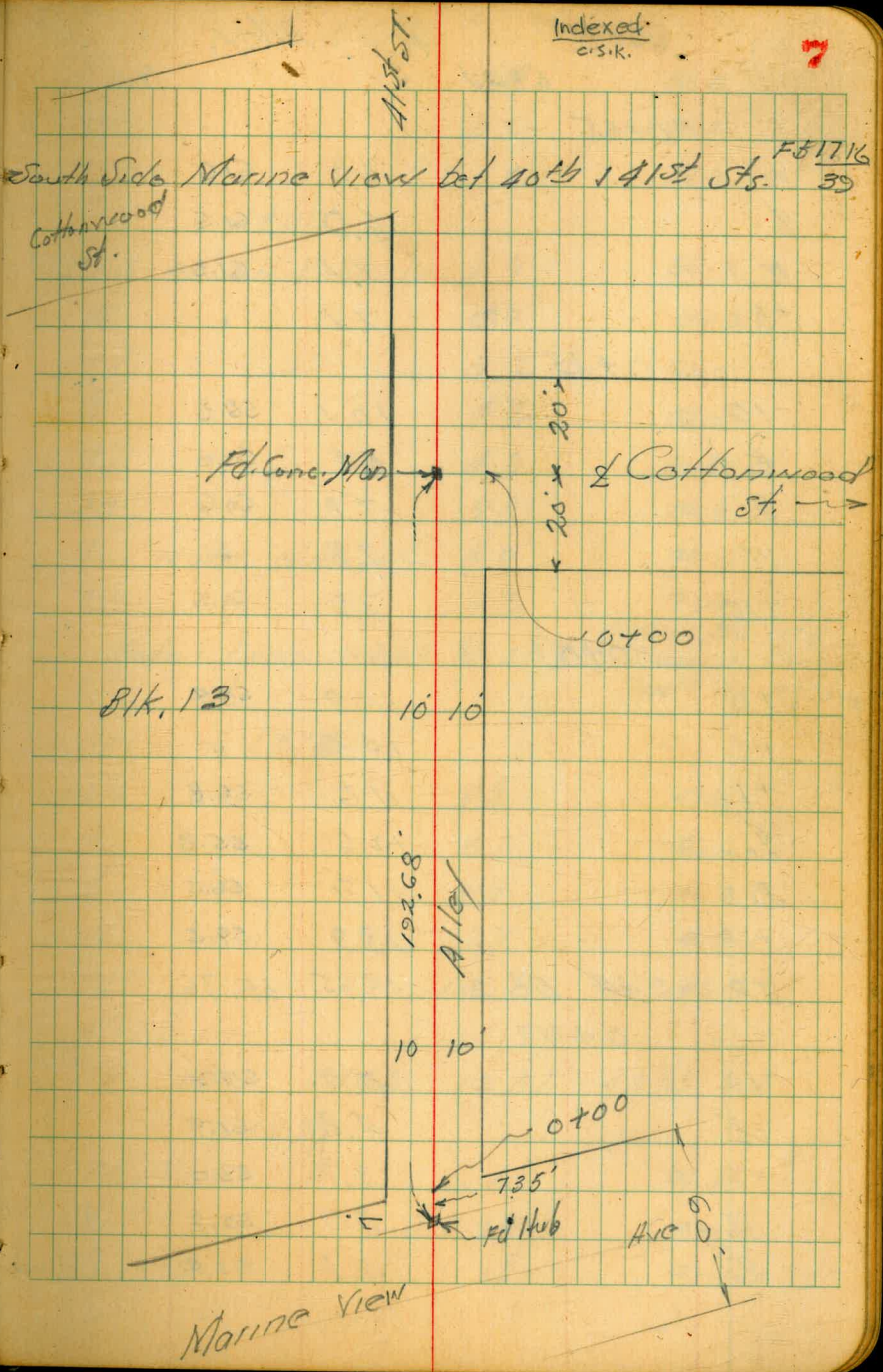
E 4.9 63.5

2 5.4 63.0

W 5.4 63.0

0+35 to 0+65 old House on W. No Good
 0.3' in Alley

Indexed
 o.s.k. 7



6841 ✓

Alley.

0+65

W	6.8	61.6
L	6.9	61.5
E	7.1	61.3
+3	7.1	"

0+73

-10	10.1	58.3
E	8.4	60.0
L	7.8	60.6
W	7.8	"
+10	7.9	60.5

0+87

-10	10.0	58.9
W	10.0	"
+1	11.6	56.8
L	12.6	55.8
E	11.9	56.5
+10	13.9	59.5
TP	0.44 56.20	12.65 55.76

0+97

-10	5.0	51.2
-5	4.8	51.9
-2	3.2	53.0
E	3.3	52.9
L	2.8	53.9

5620 ✓

8

L+18	2.4	53.8
W	0.0	56.2
+10	11.0	57.2
1+09		
-10 on Fill Rubbish	1.0	55.2
W. " " "	0.0	56.2
+1 " " "	3.2	53.0
L " " "	4.2	52.0
+7 " " "	4.9	51.3
+9 " " "	5.8	50.9
E Natrl. Ground	8.0	48.2
+10	8.3	47.9

Note: from 0+97 to 1+15
Approx 20 yds
Rubbish, Cans etc.
Should be removed

1+15

-20	8.9	47.3
E	9.6	46.6
L	9.9	46.3
W	9.7	46.5
+10	10.3	45.9
+20	10.3	"
TP	0.29 43.62	12.87 43.33

1+30

-20	1.5	42.1
W	1.9	42.2
L	1.5	42.1

4362

Alley

E	15	42.1
+20	1.0	42.6

1+64.6 = Shina Cottonwood

E	7.9	35.7
S	8.4	35.2
W	8.3	35.3
+10	8.2	35.9

1+70

-10	8.9	39.7
W	9.1	39.5
S	9.0	39.6
E	9.2	39.9

1+84.6 = S Cottonwood on E

E	10.3	33.3
S	10.8	32.8
S on Conc. Mon	11.17	32.45 ✓
W	10.8	32.8
+10	11.0	32.6

2+04.6

-10	13.4	30.2
W.L.	12.6	31.0
S	12.5	31.1
E	13.1	30.5

Mulker,
Hendrick
Hinsley
Cura
6-11-46

CROSS SECTION - Cottonwood St.

40' Wide

9

from E. line 41st to 42nd St.

* from opp. Page

4362 ✓

Indexed
C.S.K.

0+00 = E. line 41st of Alley

S.L.	8.3	35.3
+2	8.9	34.7
S	10.3	33.3
+3	10.6	33.0
N	13.0	30.6

INDEXED

0+50

-10	14.0	29.6
-04 at SW. Cur Shed	12.9	30.7
N+15	10.1	33.5
S	9.8	33.8
+18	9.1	34.5
S.L.	8.0	35.6
+2	6.6	37.0
+10	4.8	38.8

1+00

-10	4.4	39.7
S-2	6.3	37.3
S	8.2	35.9
+3	9.4	34.7
S	10.3	33.3
N	12.6	31.0
+1	14.0	29.6
+15	16.6	27.0

Cottonwood

1+17	E 18"	Fin. Tree	on N	1' Back
+28	" 16"	"	"	"
+36	" 16"	"	"	"
+57	" 16"	"	"	"
+73	" 6"	"	"	"
+91	" 6"	"	"	"
2+00	" 12"	"	"	"
+11	" 16"	"	"	"
2+33	" 3" Pop Tree	"	on N	05 Back

4362

TP 10.50 44, 18 10.04 3358

1+50

-15		18.3	25.8
-2		16.1	28.0
N		15.2	28.9
+5		12.9	31.2
E		11.0	33.1
+17		10.1	39.0
S.L.		8.8	35.3
+4		6.1	38.0
+10		4.5	39.6
	2+00		
-10		3.6	40.5
-4		5.5	38.6
S.L.		8.1	36.0
+4		9.8	39.3

44, 08

d	10.8	33.3
+16	12.3	31.8
N	14.5	29.6
+2	15.2	28.9
+15	17.3	26.8
	2+50	
-15	14.4	29.7
N-2	12.1	32.0
N	11.5	32.6
+5	10.7	33.9
E	9.6	39.5
+15	9.8	37.3
S.L.	7.0	37.1
+2	5.5	38.6
+10	3.8	40.3
	2+75	
-10	4.5	39.6
-2	5.9	38.2
S.L.	7.3	36.8
+5	10.2	33.9
E	9.8	39.3
+18	10.0	39.1
N	14.4	33.7
+10	12.4	31.7
+15	13.1	31.0

44.08 ✓ Cottonwood

3+00			
-15		14.3	29.8
-7		13.2	30.9
H		11.8	32.3
♀		10.7	33.2
+16		11.3	32.8
+17		10.0	34.1
SL		7.7	36.9
+2		6.3	37.8
+10		5.8	38.3
3+12.7 = 2 Juncos MH			
on Rim		11.38	32.70
3+25			
-10		8.8	35.3
-2		9.0	35.1
SL		10.4	33.7
+2		12.1	32.0
+10		12.8	31.3
♀		12.3	31.8
+17		13.0	31.1
H		13.4	30.7
+6		15.4	28.7
+15		17.1	27.0
T.P.	2.55	35.25	11.38 32.70
3+50			
-15		10.9	29.9

Rim MH.

35.25 ✓

3+50			
N		8.6	26.6
+4		7.2	28.0
♀		5.8	29.9
+19		5.9	29.9
SL		4.6	30.6
+1		4.2	31.0
+15		2.7	32.6
3+75			
-15		7.7	27.6
S		8.8	26.9
♀		8.8	"
+16		9.2	26.0
N		11.1	24.2
+4		12.4	22.8
+15		13.2	22.0
4+00			
-15		13.6	21.6
N		13.2	22.0
+4		10.9	29.9
♀		11.2	29.0
SL		11.7	23.6
+15		12.2	23.0
T.P.	6.31	28.57	12.99 22.26
4+30.59 = W.L. on South Cottonwood			
-15		6.5	22.1

on Rim MH.

2857 Cottonwood

4+30.59

S.L.	6.5	22.1
L	6.5	"
N	6.2	21.7
+15	7.3	21.3

4+50.59 - Cottonwood

-15	6.2	21.7
N	6.2	"
L Ground	6.8	21.8
L on Rim MH	6.31	22.26
S.L.	6.7	21.9
+15	6.3	22.3

4+61 to 4+79.2 = shed on N 1' back

4+70.59 = E.L. Cottonwood

Alley 20' wide Here to 41st St.

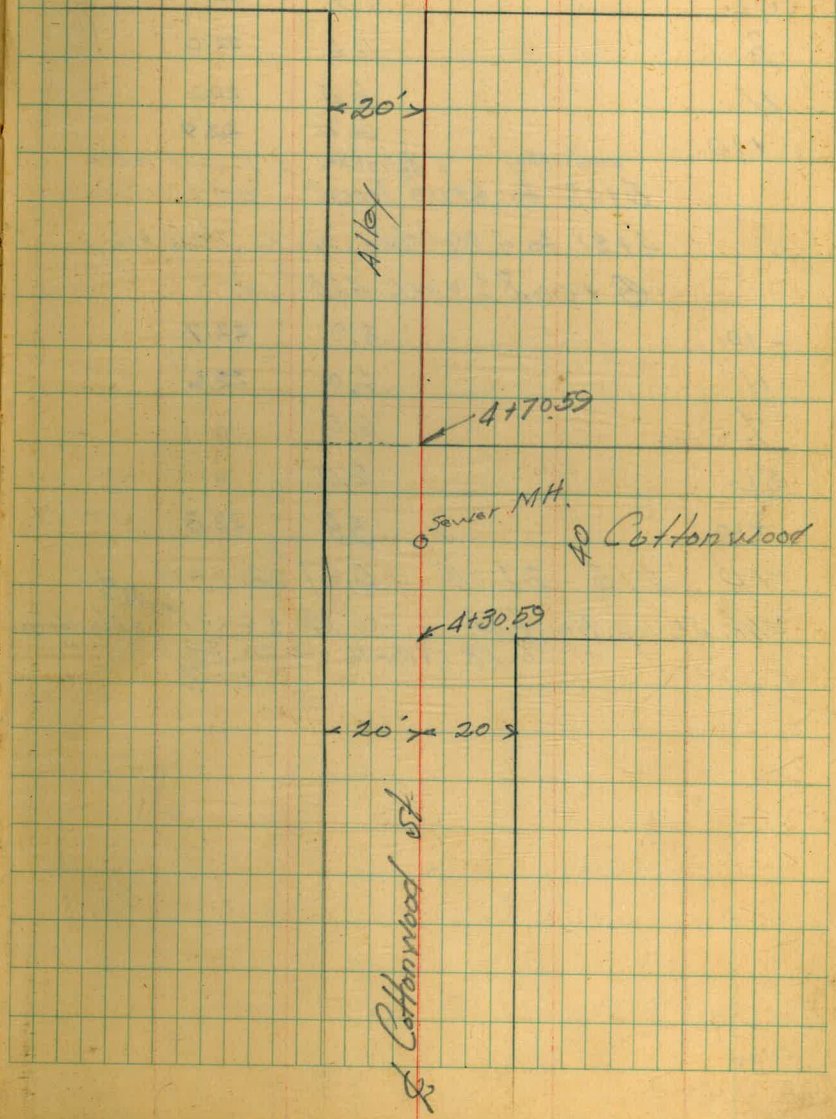
-10	6.6	22.0
S.L.	6.2	21.7
+10 = L	6.7	21.9
N	6.7	"
+10	6.2	21.7

5+00

-10	7.2	21.4
N	6.6	22.0
L	6.6	"
S.L.	6.3	22.3
+10	6.3	"

42+00

27 12



28.57

Alley

5+50

-10		6.1	22.5
SL		6.5	22.1
$\frac{1}{2}$		6.6	22.0
N		6.4	22.2
+10		6.2	22.4

^{26' in Alley} 5+03 to ^{46' in Alley} 6+00 Fence on North. 4' Picket fence

4+81 to 4.89 = shed on N 1' in Alley

6+00.8 \pm = W.L. 42nd St.

-10		5.9	22.7
N		6.0	22.6
$\frac{1}{2}$		6.0	"
SL		6.0	"
+10		5.8	22.8

TR 4.15 27.05 5.67 22.90

chk. SE Top Fire Hydr. 0.74 26.31 ⁴²³⁴ Hord's ca.
 FB. 1716-16 \rightarrow 26.34
 0.03

13

Walker
Hendricks
A. H. H. H.
Carey
4/12/46

CROSS SECTION - YAMA ST.
60' Wide
10' cbs. 10' HWS
from Main St. to Cottonwood St.

INDEXED

6.35 13.63

7.28

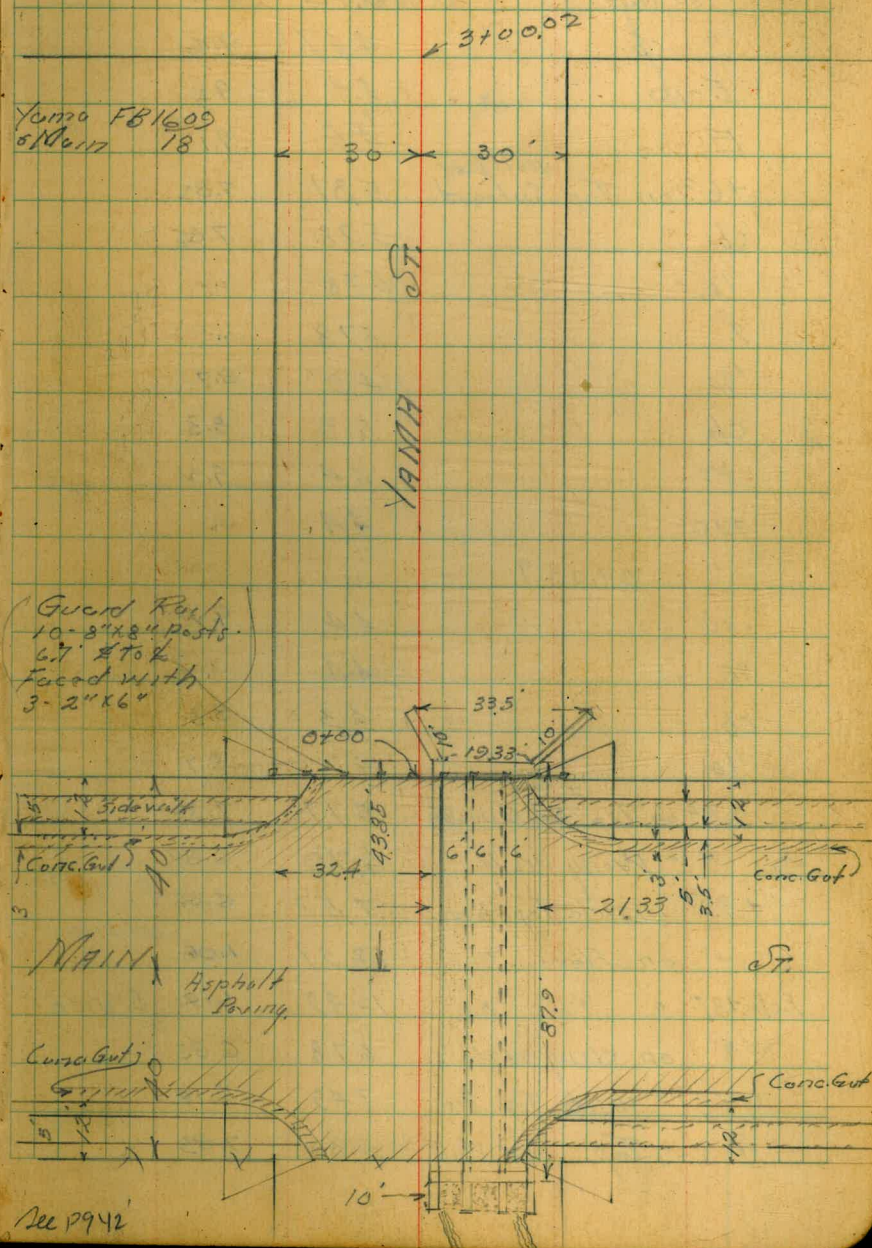
P.M. Brass Plg.
547 H. H. H. H.
Box Culvert

E-10	0-12		
- E. cb. RC.		4.66	8.97
Gut " Par. 1/2"		5.35	8.28
E.L. on Par.		5.18	8.45
cb. on Grading		5.16	8.47
1/4 " Par.		5.07	8.56
1/2 " "		5.02	8.61
1/4 " "		4.92	8.71
cb. " "		4.95	8.68
W.L. " "		5.04	8.59
W.L. + 10' " "		5.13	8.50
" " on cb.		4.44	9.19
0100 = N.H. / Line Main St.			
- 10		4.2	9.9
W.		4.2	"
+ 8.35 on cb.		4.56	9.07
" " Gut.		5.16	8.47
+ 11.35		5.13	8.50
1/4 on Par. (Patch)		5.07	8.56
1/2 " " "		4.99	8.62
1/4 " " "		5.01	8.62
1/4 + 8.6 on Conc. Gut.		5.11	8.54

Indexed
C.S.K.

DALBERGIA

ST. 14

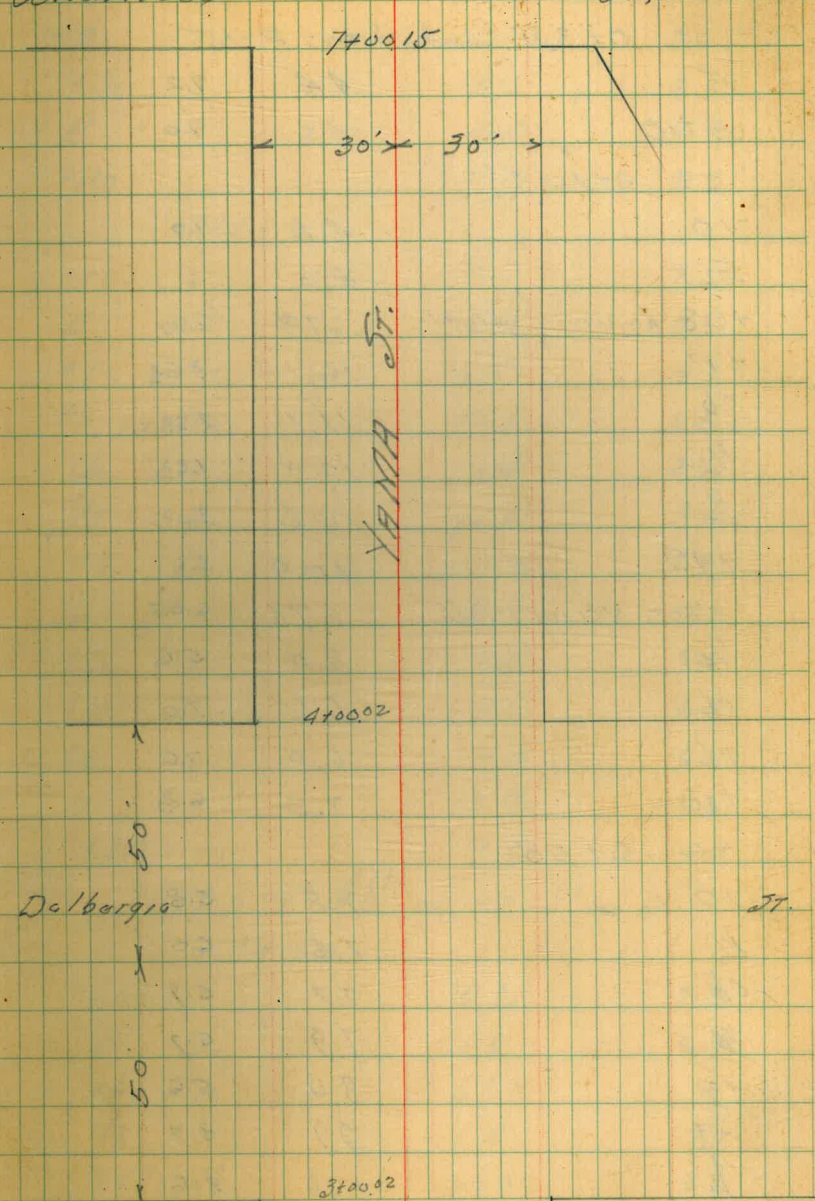


YAMA ST.

12.63

cb + 165 Cent.	5.12	8.51
" cb.	4.47	9.16
E-10	4.9	9.2
E	4.5	9.1
+6.3 on Top Wall Box Culvert	5.81	7.82
cb.	5.78	7.85
'12	5.78	"
E	5.78	"
'14	4.9	8.7
cb.	5.3	8.3
W	4.4	9.2
110	4.4	"
0+03.9		
-10	4.4	9.2
W	4.4	"
cb.	5.3	8.3
'14	4.9	8.7
+2.4 on Top Wall Box Culvert	5.77	7.86
" " Wing Wall	6.79	6.89
+3.07 inside Top Box	7.57	6.06
" on Floor "	12.57	1.06 W side
Ecb 13' " " "	12.49	1.14 E side
" " on Wing Wall	6.78	6.85
" " inside Top Box	7.49	6.19
" " Top Box Wall	5.80	7.83

Cottonwood ST.



0+3.9 Cont. from P-15

E 4.4 9.2

E+10 4.6 9.0

0+10.8

-10 4.6 9.0

E 4.6 "

10.8 on wing well 6.73 6.90

+11' 10.1 3.53

cb. 11.1 2.53

1/4 12.0 1.63

2/4 10.6 3.03

+4.3 10.0 3.6

" on wing well 6.78 6.85

1/4 8.0 5.6

cb. 6.6 7.0

W 6.0 7.6

+10 7.3 6.3

0+50

-10 7.8 5.8

W 7.6 6.0

cb. 7.7 5.9

1/4 7.9 5.7

+5 8.0 5.6

+7 9.9 3.7

2 10.0 3.6

E 1/4 11.6 2.0

cb. 11.0 2.6

+2 10.5 3.1

E 5.4 8.4

+10 5.3 8.3

1+00

-10 6.1 7.5

E 6.3 7.3

+1 6.5 7.1

+9 in ch. 10.1 3.5

cb. " " 10.4 3.2

1/4 " " 11.0 2.6

+6 " " 10.3 3.3

2/4 8.9 4.7

+2 7.4 6.4

1/4 7.1 6.5

cb. 7.0 6.6

W 7.3 6.3

+10 7.9 5.7

1+38.6 = 2 Elec. Poles on W 8' in st.

1+50

-10 6.2 7.4

W 6.8 6.8

cb. 6.8 "

1/4 6.5 7.1

+5 in ch. 10.0 3.6

2 " " 10.0 "

1363

YAMA-5A

1/2 on Rim old MH.	6.86	6.77
1/4	10.3	3.3
cb.	9.6	9.0
+9.4 = Back end Garage	6.6	7.0
T.P. 5.54 12.35	6.82	6.81

1+55 E. New Trunk Saver MH 5' W of L Yama
 " MH 5.51 6.84 on RITA

2+100

-5	4.9	7.9
E	5.0	7.9
+4	5.3	7.1
cb.	8.7	3.6
1/4	8.5	3.8
+4 = W edge chr	8.3	9.0
+8	5.8	6.6
1/2	5.7	6.6
1/4	6.0	6.9
cb.	5.7	6.6
W	5.8	6.6
+10	5.8	"

2+30

-10	5.8	6.6
W	5.9	6.9
cb.	5.8	6.6
1/4	5.6	6.8
+6	5.6	"
1/2	6.4	6.0

1235

2+5	6.6	5.8	17
1/4 in ch	9.1	3.2	
+6 " "	9.1	"	
8cb.	8.1	9.2	
+6	5.5	6.8	
E	5.3	7.0	
+10	5.3	"	

2+39

-10	5.1	7.2
E	6.2	6.4
+1 in ch	8.3	9.0
cb.	9.3	3.0
+7 " "	8.6	3.8
1/4	4.8	7.6
+6	6.5	5.8
1/2	5.8	6.6
1/4	5.5	6.8
cb.	5.7	6.6
W	5.9	6.9
+10	5.7	6.6

2+50

-10	5.8	6.6
W	5.7	6.6
1/2	5.7	"
1/4	5.5	6.8
1/2	5.5	"
+5	6.6	5.8

12.35 ✓

YAMA ST.

1/4	5.4	7.0
cb. W Bank	5.6	6.8
+1 in ch	8.5	3.8
E " & ch	9.5	2.8
+10 in ch	7.5	4.8
+15 E Bank	5.2	7.2
2.159		
-20 E Bank ch.	5.9	6.45
-10 & "	9.7	2.6
E -W " "	5.3	7.0
cb	5.5	6.8
1/4	6.1	6.2
+3	6.6	5.8
&	5.5	6.8
1/4	5.7	6.6
cb.	5.7	"
W	5.7	"
+10	5.7	"
3+0002 = O.K.		
-10	5.8	6.6
W	5.8	"
cb.	5.6	6.8
1/4	5.4	7.0
&	5.4	"
+5	5.3	7.0
1/4	6.3	6.0

12.35 ✓

cb	5.5	6.8	18
E	5.5	"	
+10	5.5	"	
3+16.02 = cb = O.K.			
-10	5.8	6.6	
E	5.7	6.6	
cb.	5.4	7.0	
+8	6.2	7.2	
1/4	5.7	6.6	
+5	5.2	7.2	
&	5.3	7.0	
1/4	5.4	7.0	
cb.	5.6	6.8	
W	5.8	6.6	
+10	6.2	6.2	
3+83.02 = 1/4 = O.K.			
-10	5.4	7.0	
W	5.4	"	
cb.	5.1	7.2	
1/4	5.3	7.0	
&	5.1	7.2	
1/4	5.7	6.6	
+3	6.0	6.4	
cb.	4.9	7.9	
E	5.3	7.0	
+10	5.3	7.0	

12

12.35 ✓

YAMA ST.

3+50.02 = L Dalbergia - o.k.

-10	4.5	7.8
E	4.6	7.8
cb.	4.6	"
+7	6.0	6.9
1/4	5.6	6.8
L	5.4	7.0
1/4	5.4	"
cb.	5.2	7.2
W	5.2	"
+10	4.9	7.9

3+67.02 = N 1/4 - o.k.

W	4.6	7.8
cb.	4.6	"
1/4	4.7	7.6
L	4.9	7.9
1/4	5.1	7.2
+3	5.8	6.6
cb.	4.3	8.0
E	4.5	7.8
+10	4.5	7.8

3+84.02 - o.k.

-10	4.8	7.6
E	4.7	7.6
cb.	4.6	7.8
+7	5.4	7.0
1/4	5.1	7.2

12.35 ✓

19

L	4.6	7.8
1/4	4.6	"
cb.	4.6	"
W	4.7	7.6

4+00.02 = L Dalbergia - o.k.

-5	4.7	7.6
W	4.4	8.0
cb.	4.5	7.8
1/4	4.6	7.8
L	4.7	7.6
1/4	5.2	7.2
cb.	5.0	7.8
E	5.0	"
+10	5.2	7.2

4+50.00 - See 1828- P.

-10	4.9	7.8
E	4.8	7.6
cb.	5.0	7.8
1/4	4.9	7.4
L	4.6	7.8
1/4	4.7	7.6
cb.	4.8	7.6
W	4.7	7.6
+10	4.5	7.8

+10 Garage floor. 3.98 8.37

1235 ✓

YAMAHA ST.

7P 431 1286 380 855

5+00 - o.k.

-5 52 7.7

E 52 "

cb. 50 7.9

'14 53 7.6

L 50 7.9

'14 50 "

cb. 47 8.2

W 50 7.9

+5 50 7.9

490 7.96

5+12 = 2' Conc. Walk on E 2' x 1/2 in

5+50 - o.k.

-5 50 7.9

W 50 "

cb. 51 7.8

'14 49 8.0

L 49 "

'14 51 7.8

cb. 49 8.0

E 51 7.8

+5 51 7.8

5+40 - Elec Pole on W 8.5' in st.

5+60.5 = 24" Elec Tree on E 10' in st.

5+75 4' Conc. Walk on W 470 8.16 on line

+92 4' Ribbon DINE 469 8.23 on W Line

+96 - 4' Conc. Walk on W 448 8.38 " "

1286 ✓

20

6+13

5+81.5 = 2.7' Conc. Walk 462 8.29 on E

5+85 = 24" Elec Tree on E 10' in st.

6+09 "36" " " " " 10' " "

6+00 - o.k.

-5 44 8.5

E 46 8.3

cb. 47 8.2

'14 51 7.8

L 49 8.0

'14 50 7.9

cb. 48 8.1

W 46 8.3

+5 47 8.2

6+50 - o.k.

-5 43 8.6

W 45 8.9

cb. 45 "

+5 45 "

+8 50 7.9

'14 49 8.0

L 47 8.2

'14 49 8.0

+3 50 7.9

+6 45 8.9

cb. 43 8.6

E 43 8.6

+5 44 8.5

1286

YAMA ST.

(+135-4 30" Euc. Tree on E 10' 117 st

21

= O.K. 7+00.15 = S.L. Cottonwood on W

-10 3.9 9.0

-7 3.7 9.2

-6 4.3 8.6

E 4.5 8.9

Cb. 4.6 8.3

1/4 4.5 8.9

2 4.5 "

1/4 4.4 8.5

gut. 4.4 "

W^{cb} on cb. 4.09 8.77

1/4 L 3.8 9.1

(Wcb) +75 on Walk 3.99 8.87

chk SW 7' Tack 4.00 8.86 ✓

Cottonwood + Yama
FB 16.09 = 8.88
18 0.02

6+98-8 Elec. Pole on W. 10.5' 117 st.

Checked Sections - as shown by O.K.
Marks - Add. Sections shown in Book

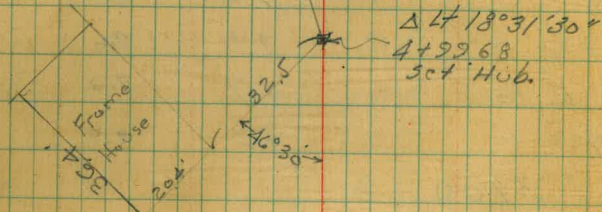
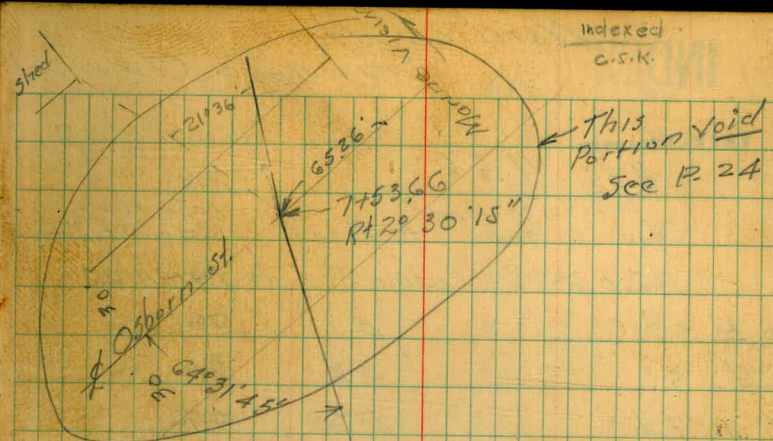
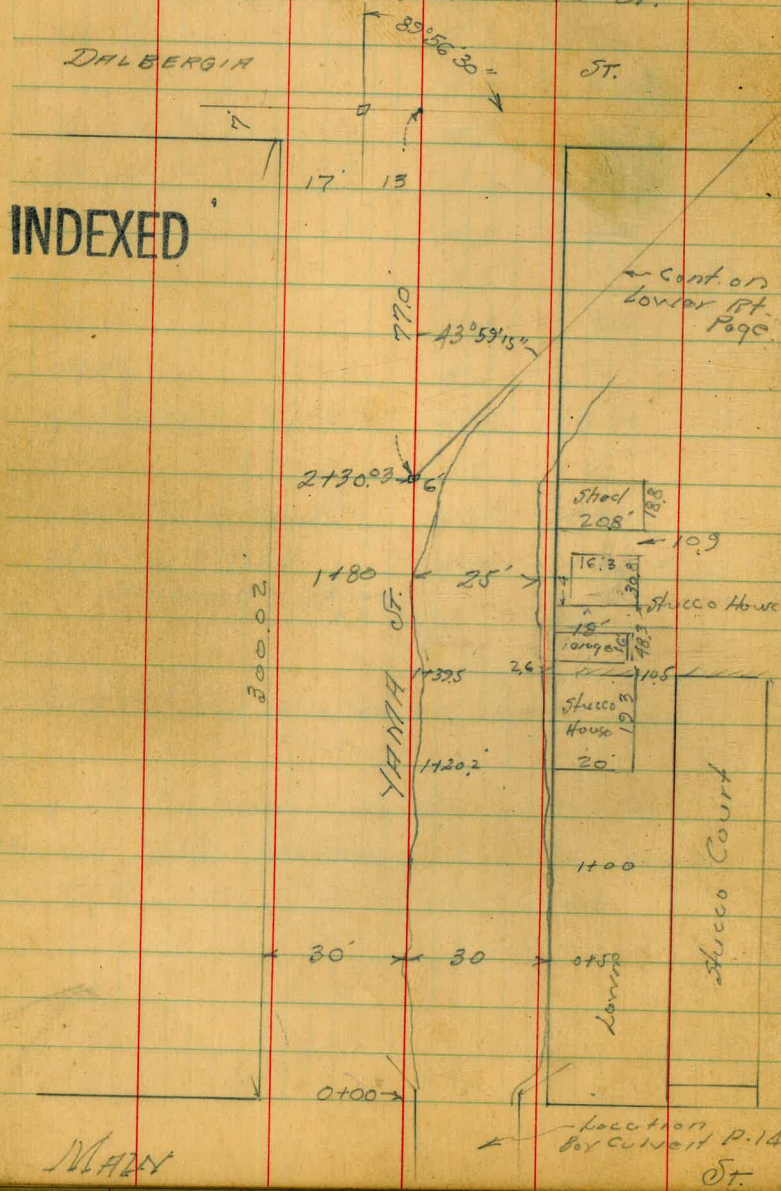
1828 - Page 11 - 10-26-48

F. Osborne

Wulker Location - Portion Existing Drainage
 Handricks Ditch And Proposed New Ditch
 Hunter in Nordica Hts.
 Core from Yanna & Main St.
 6-13-46 to 43rd + Nordica St.

Indexed
 C.S.K.

22



2+30.03
 Set Hub.

MAIN

INDEX

Nordica Hts.
Drainage Channel

INDEX

4.38 11.66
Levels of Channel
from 0+00 to 2+30
2+30.03 Section Pt Δ to YAMA SE

B.M.B.P.
P-14

7.28
See X-Section
Yuma St. P. 14

20 ft.	5.1	6.6
4 ft.	4.8	6.9
E on Hub	5.70	5.96
2 ft.	6.1	5.6
6 ft. Bank	4.7	7.0
9 " in ch.	8.0	3.7
13 " " "	9.2	2.5
23 " " "	7.1	4.6
27 " E Bank	4.7	7.0
50 ft.	4.3	7.2
3+00		
50 ft.	4.2	7.5
24 " Bank ch.	4.1	7.6
16 " ch.	8.2	3.5
9 " "	8.0	3.7
8 " Bank ch.	4.8	6.9
E	4.3	7.4
25 ft.	4.7	7.0
3+50		
25 ft.	4.1	7.6
1 ft.	4.2	7.5
E	4.5	7.2

1166'

23

5 ft. Bank	6.0	6.7
6 " in ch.	7.4	4.3
9 " " "	8.4	3.3
13 " " "	8.6	3.1
15 ft. Bank	6.0	5.7
20 ft. " "	3.5	8.2
50 ft.	3.9	7.8
T.D. 5.24	13.73	2.17
8.49		
4+00		
50 ft.	6.9	6.8
35 ft.	6.0	7.7
18 ft. Bank	6.5	7.2
12 ft. in ch.	10.1	3.6
5 ft.	10.1	"
E	8.7	5.0
1 ft.	6.6	7.1
35 ft.	6.3	7.9

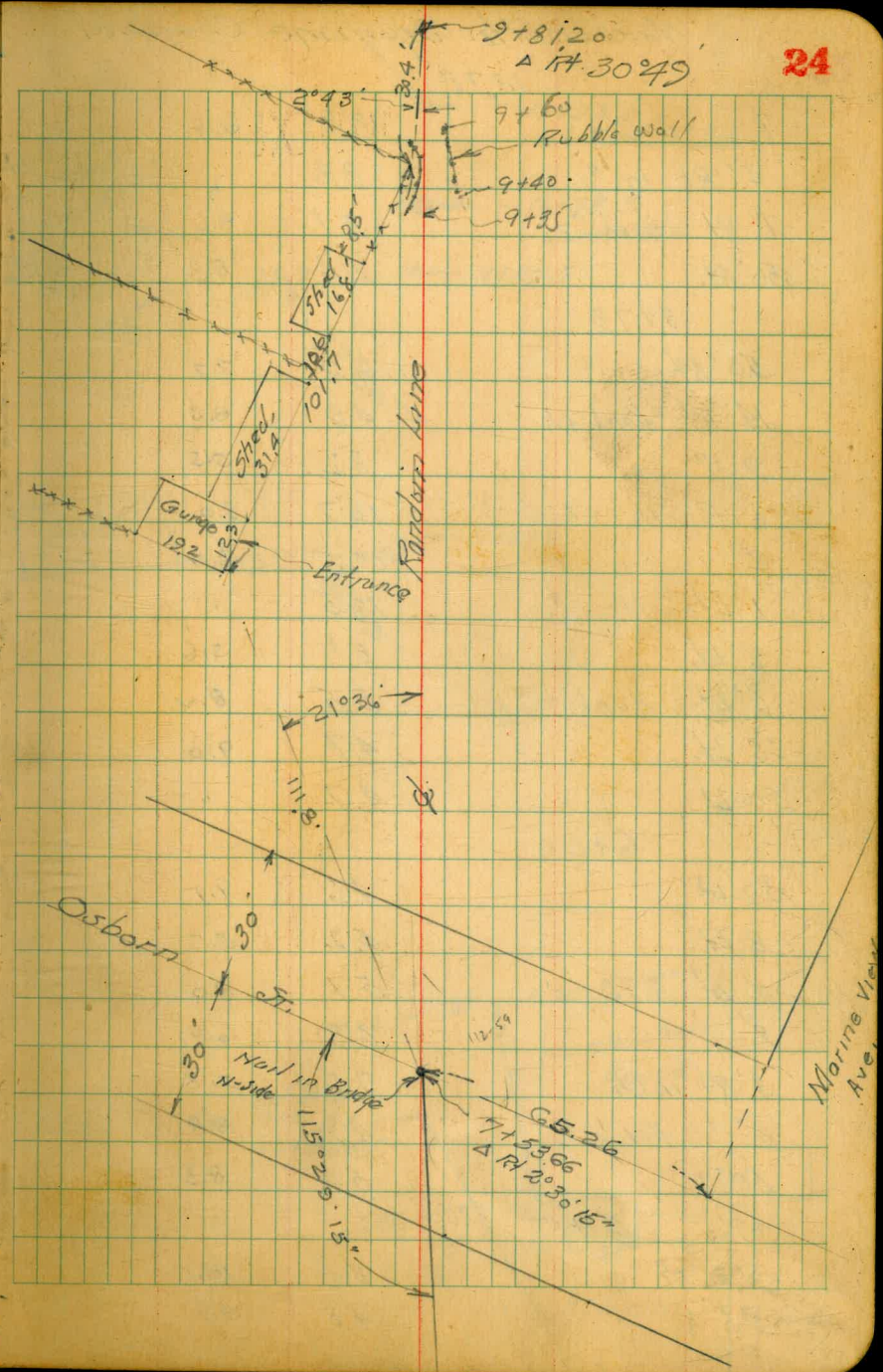
Sketch
Valid

Nardico Hts. Drainage Channel
13.73

4150

INDEXED

- 40 ft.	5.8	7.9
26' Lt = 18" Pop. Tree		
2 H. Bank	6.1	7.6
5' Lt in ch	8.9	4.8
2 " "	9.4	4.3
3' Rt " "	9.2	4.5
6' Rt	5.6	8.1
35' Rt.	6.2	7.5
45' "	5.5	8.2
55' "	6.2	7.5
Section on Bisector		
419968 Δ N 18° 31' 30"		
50' Rt.	6.1	7.0
2	5.24	8.99
3' Lt	5.3	8.9
6' Lt	8.9	4.8
13'	8.9	"
14' Lt	5.5	8.2
35' Lt	5.3	8.9
38' Lt at House	5.8	7.9
" " Floor	3.2	10.5
5150		
33' Lt. 4" Fig.	5.0	8.7
21' Lt. (5157) 3" Fig.		
8' Lt. Bank ch	5.0	8.7
5' Lt ch	7.1	6.6

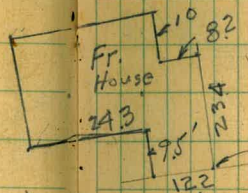


Nordica Hts. Drainage Channel

13.78

2' ch.	8.8	4.9
4' Rt in "	8.8	"
7' Rt. Bank "	5.1	8.6
50' Rt.	5.4	8.3
5+73		
50' Rt.	6.0	7.7
14' Rt. Bank ch	4.9	8.8
9 "	8.2	5.5
6' R in "	10.7	3.0
2 " "	10.5	3.7
1' Lt. " "	10.5	"
2' Lt.	8.1	5.6
6' Lt. Bank.	5.5	8.2
25' Lt.	4.7	9.0
50' Lt.	4.7	"
6+00		
50' Lt.	4.6	9.1
8' Lt.	5.2	8.5
2' Lt. Bank	5.7	8.0
2	6.8	6.9
3' Rt. in ch	7.2	5.8
9' " Bank	4.9	8.8
50' "	5.4	8.3
6+50		
50' Rt	3.6	10.1
35' R	4.8	8.9

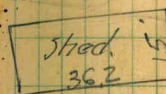
25



11+92.57
ALT 45° 34'

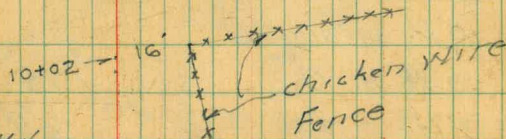
11+73.3
Sevier Mt

11+53.5



11+01.8

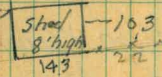
82° 40'



Set Hub
9+81.20
Δ Rt 30° 49'

2+69

2+46



Fr Shed.
15' High.

Nordica Htg. Drainage Channel

6+50 13.73

14' Rt Bank	47	9.0
13" ch.	72	6.5
5 "	63	7.9
2 Lt Bank	54	8.3
50' Lt	49	8.8

7+00

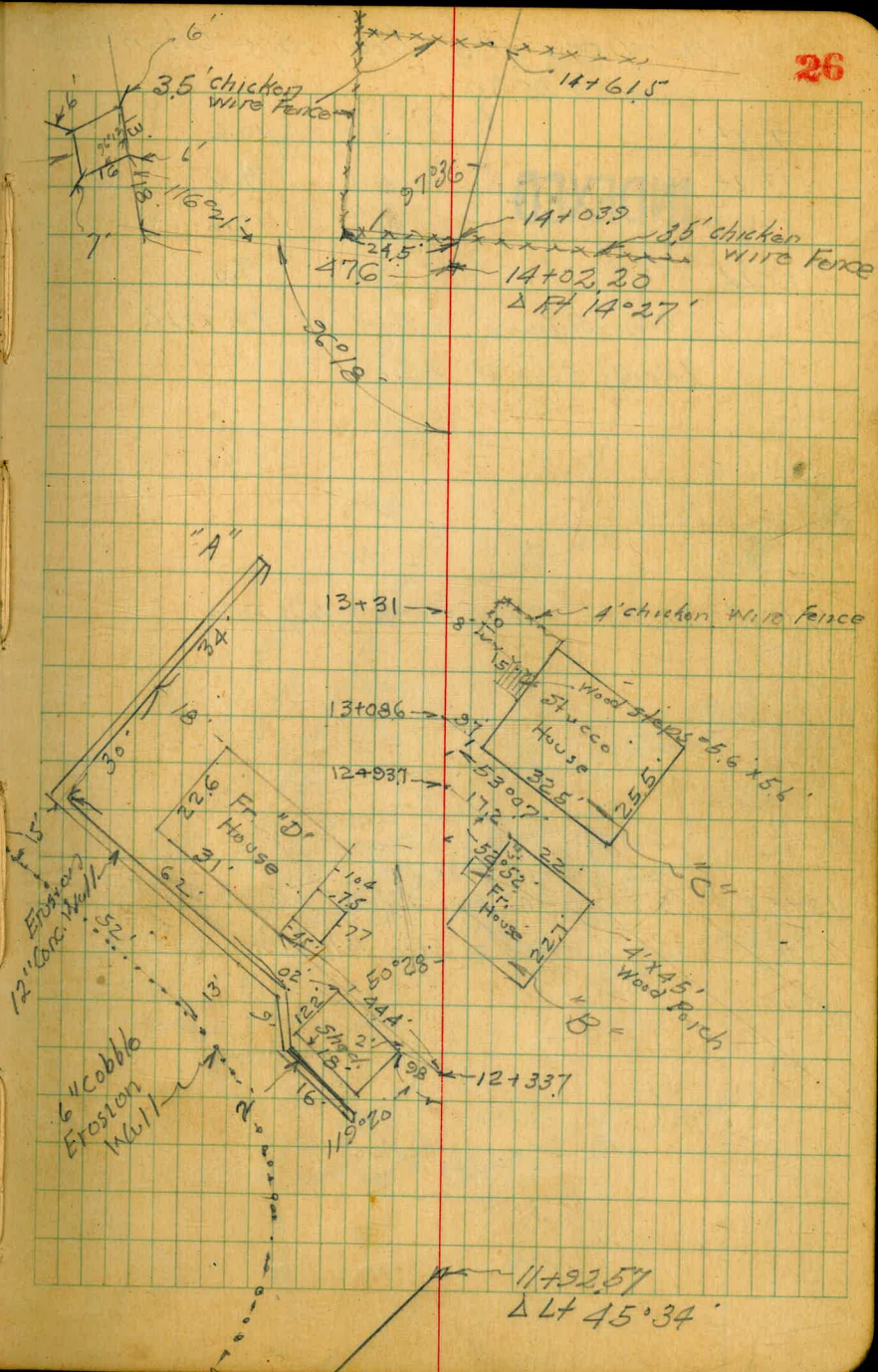
50' Lt	46	9.1
2' Lt Bank	41	9.6
2 in ch.	59	7.8
6' Rt. " "	65	7.7
8' Rt Bank	56	8.1
15' Rt	45	9.7
30' Rt	40	9.7
45' Rt	1.9	11.8
T.P. 3.22 15.80	1.15	12.58

7+34

20 Rt.	27	13.1
18 Rt.	20	13.8
10' Rt on Wing Wall	36	12.7
10' Rt in ch.	7.9	7.9
3' Rt " ch.	8.5	7.3
2 " "	7.6	8.7
1.7 Lt	7.6	"
1.7 Lt on Wing Wall	4.3	11.5
2' Lt.	6.6	9.7

INDEXED

Wood Bridge



Nardieu Hts. Drainage Channel

1580

7' Lt.	5.2	10.6
12' Lt.	6.6	9.2
17' Lt.	5.2	10.6
35' Lt.	6.0	9.8

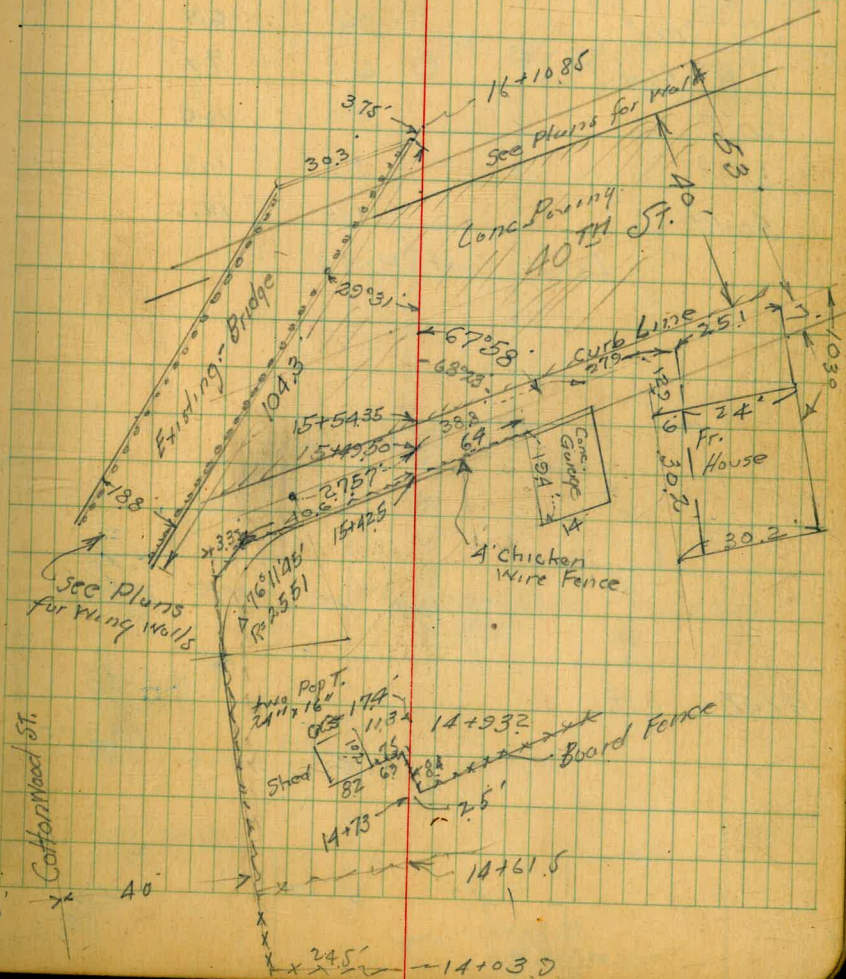
Cross Sections in East St FB 1716

Levels Cont P. 28

15+99.4 12.9' Rt. Parallel to cb = Guy Pole

15+53 diag. Parallel to 40th
9' Lt. = 30" Euc Tree (inside cb)

15+53 32.8' Lt. diag = Elec Pole (inside cb)



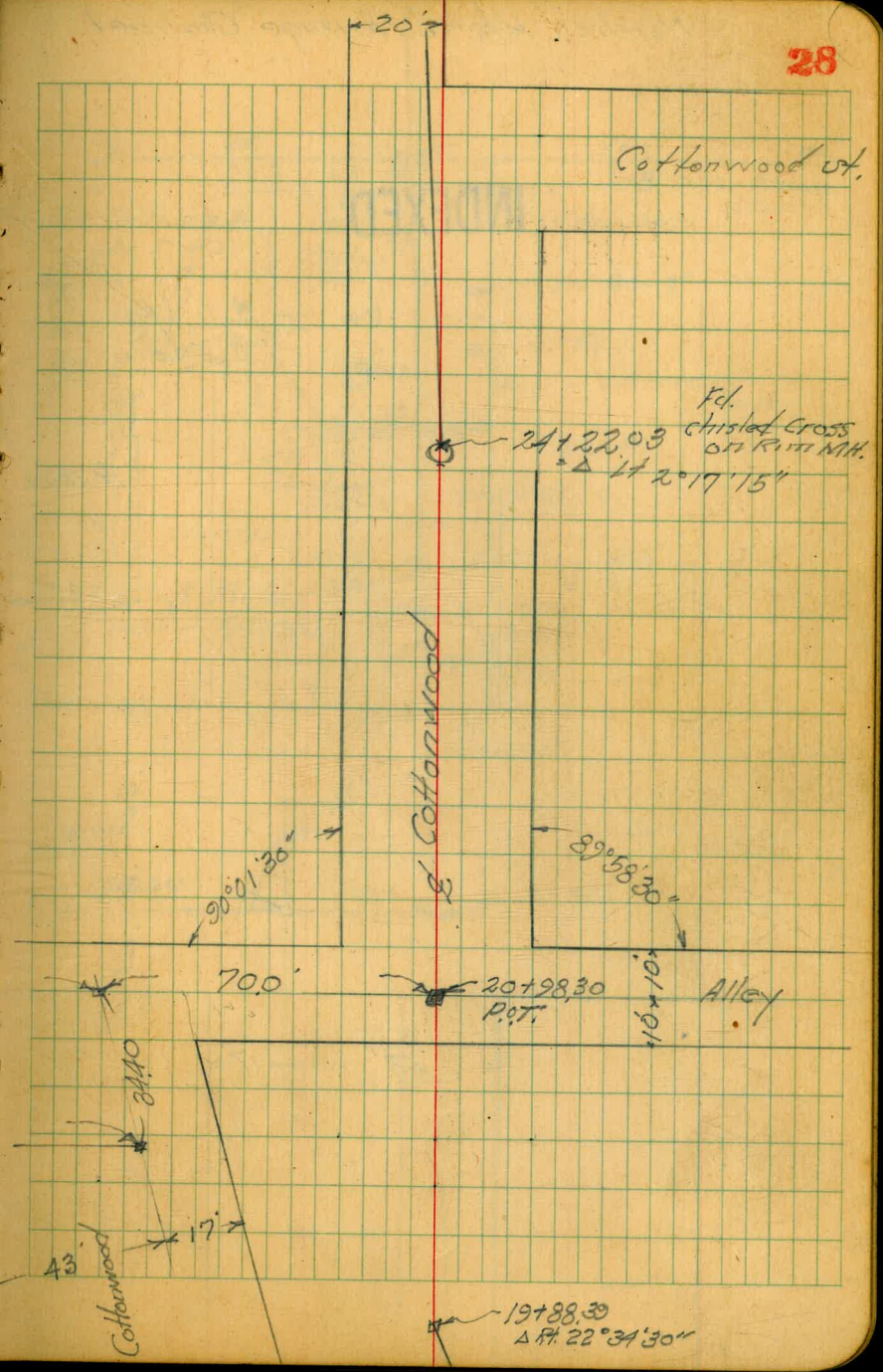
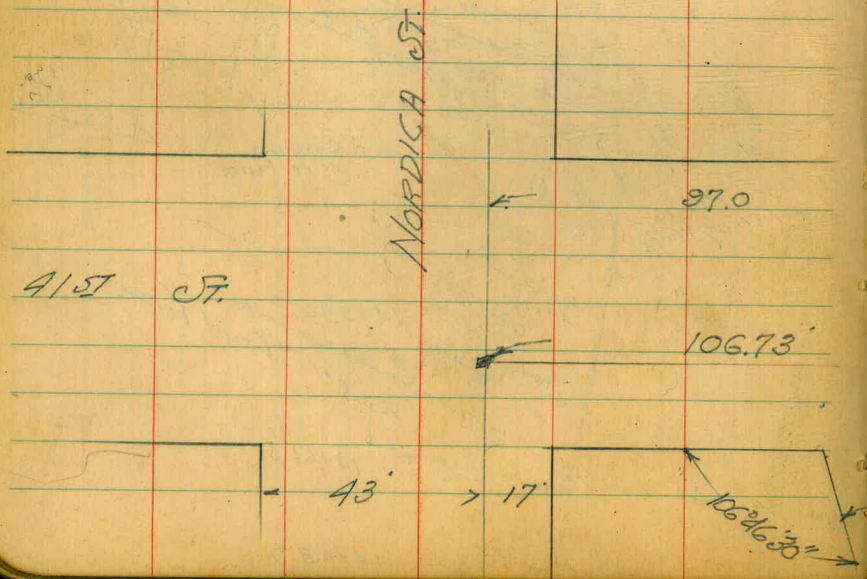
Nordica Hts. Drainage Channel

1580

8100

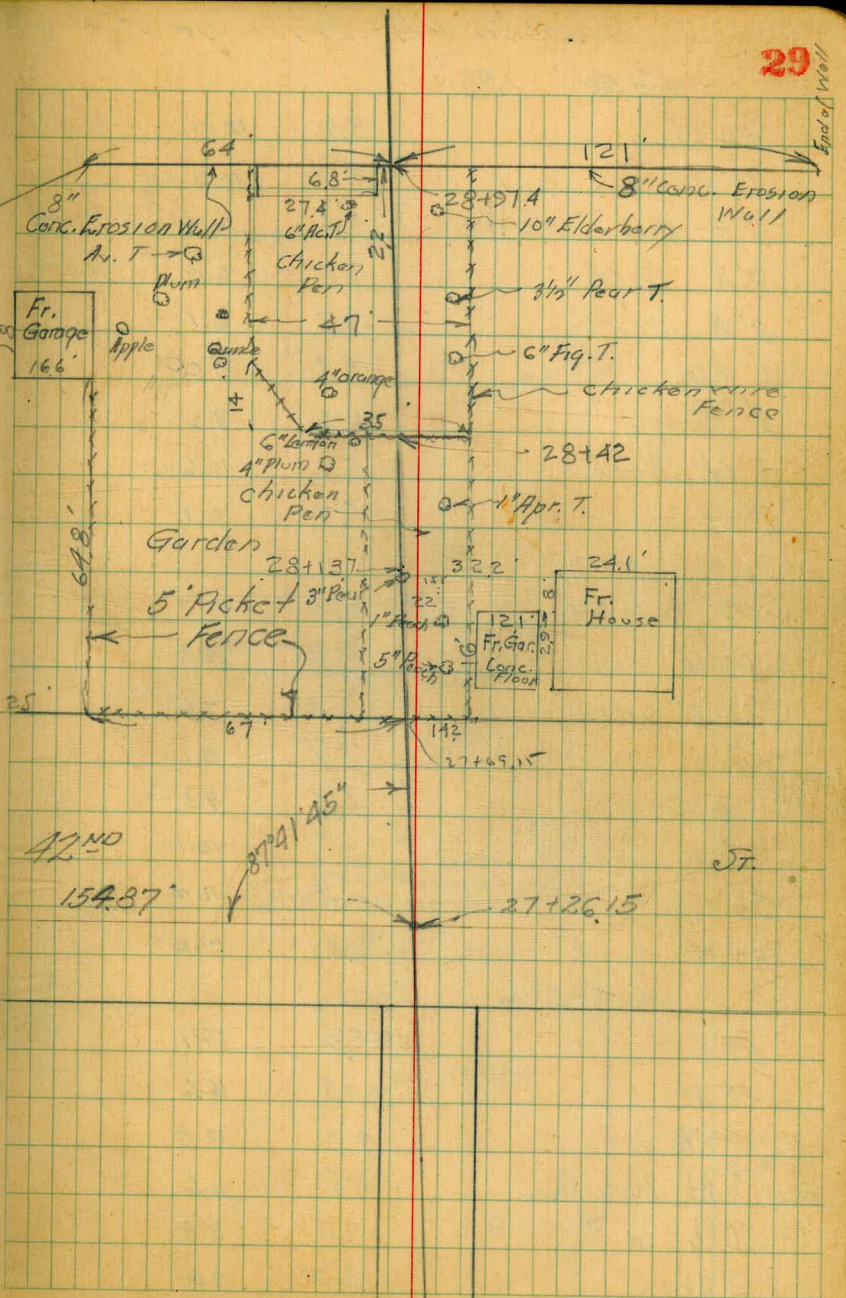
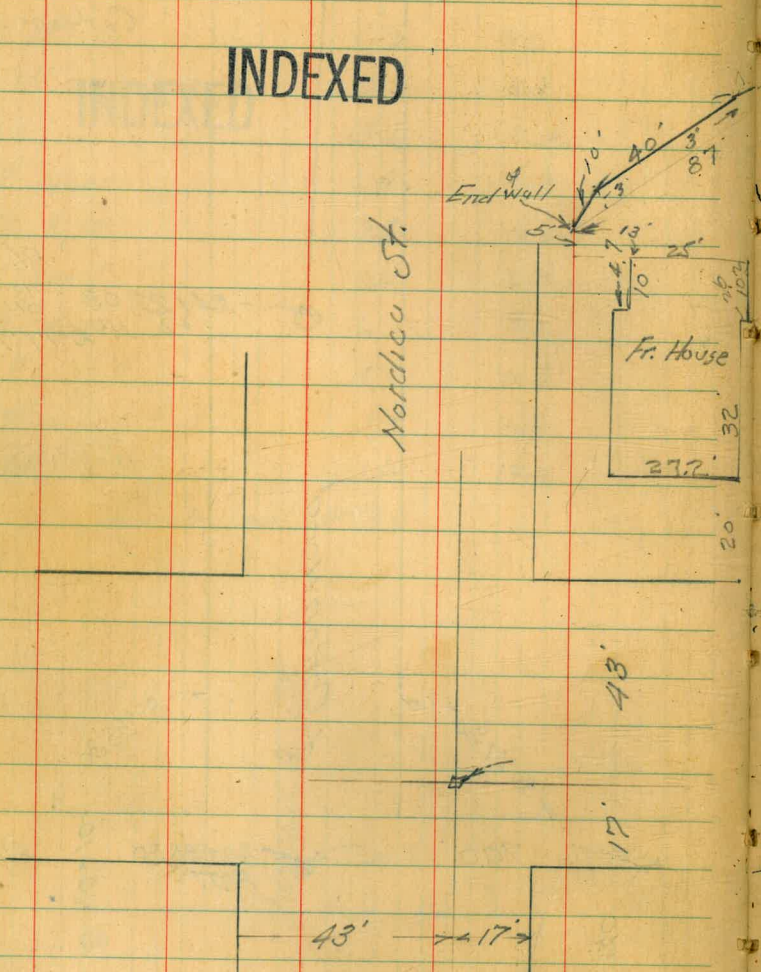
50' Lt.	6.2	9.6
3' Lt.	5.0	10.8
2' INDEXED	5.6	10.4
3' R Bank	6.4	9.9
5' R L. Ch.	2.3	6.5
9' in "	2.4	6.9
11' R Bank	6.1	9.7
20' R	5.0	10.8
35' R	3.9	11.9
56' R	1.6	14.4

Levels Cont P-30



INDEXED

Nordica St.



Nordica Hts - Drainage Channel

8+50 1580

50' R	3.8	12.0
10' R	4.8	11.0
9' R Bank	5.4	10.4
8' R in ch.	9.8	6.0
3' R " "	9.7	6.1
2' R	7.8	8.0
1' R	6.6	9.2
3' Lt. Bank.	5.2	10.6
50' Lt.	5.7	10.1

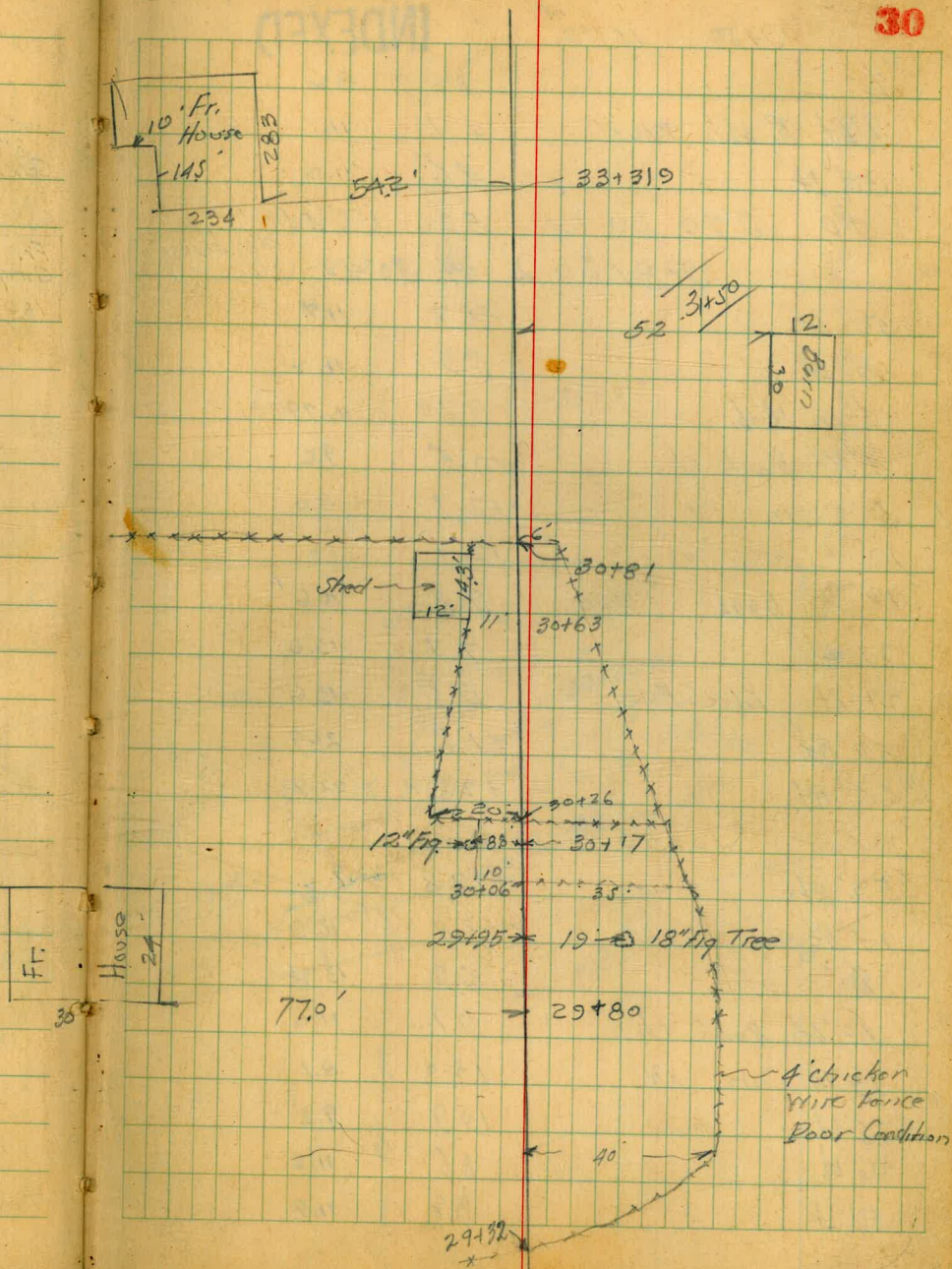
9+00

22' Lt. of Fence	5.1	10.7
10' Lt. Bank	5.0	10.8
2' Lt. in ch.	8.2	7.6
2' " "	7.7	8.1
2' R	6.5	9.3
5' R Bank	5.7	10.1
35' R Lt.	4.4	11.4
50' R	1.8	14.0

9+50

50' R	+3.3	19.1
48' R Lt.	+0.8	16.6
20' R Lt.	3.0	12.8
9' R Lt. Bank ch.	4.5	11.3
7' R Lt. in "	7.0	8.8
3' R Lt.	8.0	7.8

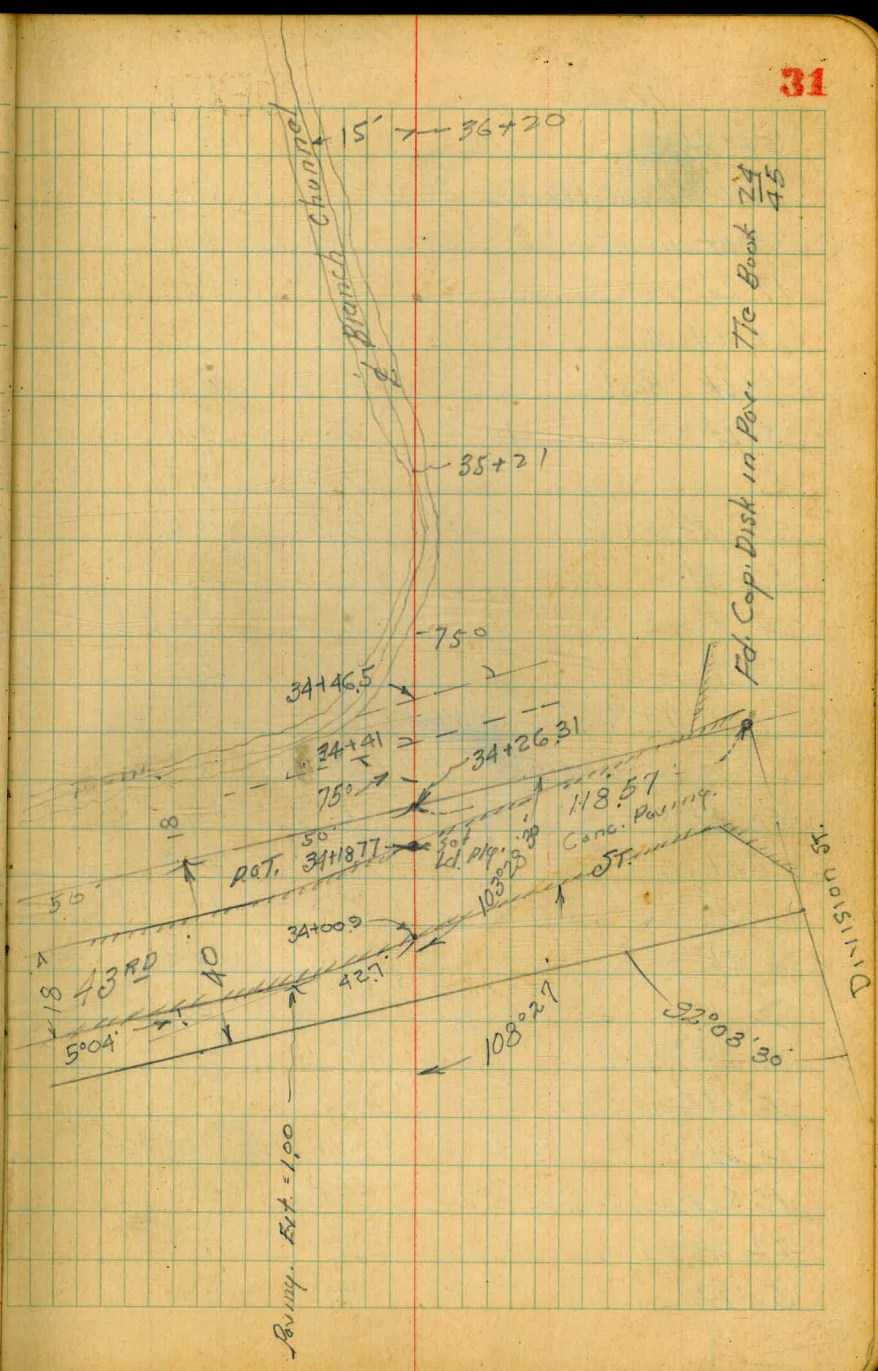
30



2+50 158°

INDEXED

2		7.6	8.2
1' Lt Rubble Wall		4.7	11.1
50' Lt		4.6	11.2
TP.	2.70 20.14	5.36	10.44
	2+81.20	RT. 30°49' on bisector	
50' Lt		8.7	11.9
10' Lt		8.9	11.2
2 on Hub		2.70	10.99
4' Rt, Bank ch.		10.5	9.0
5' " " "		12.1	8.0
10' " " "		12.1	"
12' " Bank		9.5	10.6
21' Rt		7.1	13.0
27' Rt Elec. Pole		6.5	13.6
50' Rt		+1.8	21.9
65' Rt.		+2.8	22.9
	10+50		
50' Rt.		+12.8	32.9
17' Rt		3.8	16.3
2		6.9	13.2
12' Lt. Bank ch.		2.1	11.0
19' Lt. " ch		12.0	8.1
25' Lt.		10.9	9.2
26' Lt.		8.5	11.6
50' Lt.		8.2	11.9



20, 14 1 Nordic Hts.
Drainage Channel

11400

50' Lt	7.8	12.3
24' Lt. ^{6"} brq. Cobble Erosion Wall	6.7	13.9 on Wall
23' Lt in ch.	9.9	10.2
17' Lt " "	12.1	8.0
12' Lt " "	11.9	8.2
9' Lt Bank	8.1	12.0
5' Lt	6.0	14.1
2	5.4	14.7
10' Rt.	2.5	17.6
16' Rt.	+0.1	20.2
24' R	+3.4	22.5
50' R	+15.7	35.8

11432 14.5' Rt = Elec. Pole

11450 Ditch & Wall. A to Lt.

50' Rt.	+10.8	30.9
14' Rt	+0.2	20.3
13' Rt.	2.4	17.7
8' Rt	6.2	13.9
2	8.1	12.0
4' Lt Bank	8.9	11.2
6' Lt in ch.	12.6	7.5
14' Lt " "	10.8	9.3
16.5' Lt on Cobble Wall	6.2	13.9
22' Lt in yard on Lwrth	7.9	12.3
50' Lt " " " "	7.5	12.6

20 14 ✓

32

11445 = 14" Pepper Tree 21' Lt.

11473.3 on Rim NH	3.94	16.20
11468 27.6' Lt. = Wall	30' Lt	18" Pine T.
11492.57 Δ Lt 45° 34'	Section on Bisector.	
T.P. 6.65	23.79	3.00 17.14
50' Lt	11.6	12.2
40' Lt (12' Ahead = 20" Pine		
36.6' Lt. on Cobble Wall	23.5	14.04
36' Lt Bank ch.	11.5	12.3
34' Lt = Bank "	11.7	12.1
32' Lt in ch.	15.4	8.4
28' Lt " "	15.2	8.6
22' Lt Bank ch.	10.7	13.1
7' Lt	9.1	14.7
4' Lt	7.1	16.7
2 on Hub	6.65	17.14
6' R	5.7	18.1
20' Rt	1.2	22.6
50' Rt	+13.6	37.4
	12+25	
50' Rt	14.3	28.1
38' R	0.6	23.7
32' Rt	2.2	20.6
13' "	4.9	18.9
9' R	6.4	17.4
8' R	8.8	15.0

12+25

2879

Nordica Hts.
Drainage (channel)

ℓ			10.0	13.8
17' Lt. - South end Conc.	12"	995	13.87	
17' Lt on Ground		10.8	13.0	
21' Lt on Bank		11.2	12.6	
26" in ch.		14.3	9.5	
33' Lt " "		15.2	8.6	
35' Lt.		12.5	11.3	
37' Lt. on Cobble Wall		2.51	14.28	
50" in yard		11.6	12.2	
	12+50			
50' Lt in ch.		15.5	8.3	
89' Lt. on 12" Conc. Wall		10.17	13.62	
38' Lt		10.9	12.9	
25' Lt		11.1	12.7	
ℓ		10.0	13.8	
17' R		7.1	16.7	
27' R		4.2	19.6	
28' R 1/2 W - Tek Pole				
30' R		1.5	22.3	
42' R		7.47	28.5	
TR	11.80	27.85	7.74	16.05
on 12" Wall of "A"		13.38	14.47	
	13+00			
10' R 1/2 Basement of House	"C"	9.2	18.6	
" " Main Floor " "		2.10	25.75	
" " " " "B"				

2785

33

ℓ		10.3	17.6	
5' Lt		11.9	16.0	
22' Lt.		14.0	13.8	
55' Lt		14.7	13.2	
Floor House "D"		13.3	19.6	
	13+50			
35' Lt. in st.		12.9	15.0	
20' Lt		11.6	16.2	
5' Lt.		9.7	18.2	
ℓ		7.0	20.8	
10' R		2.5	25.4	
40' R		+5.2	33.0	
		-2.4		
S.E. Cor House "C" on Ground			25.4	
	13+92			
50' R 1/2		+12.2	40.0	
13' R 1/2		0.2	27.6	
ℓ		7.2	20.6	
3' Lt		8.7	19.2	
30' Lt in st		12.4	15.4	
	14+02.20	Δ R 14+27	on Bisector,	
30' Lt.		12.3	15.6	
ℓ on Hub		3.18	24.67	
25' R 1/2		+4.4	32.2	
40' R		+8.7	36.6	
50' R 1/2		+12.8	40.6	
TR	4.44	31.11	3.18	24.67

31.1 + 1 Nordica Hts.
Drainage Channel

14+30

50'R	+10.0	91.1
45'R	+8.3	39.9
33'R	+4.4	35.5
20'R	+1.4	32.5
ℓ	4.8	26.3
28' Lt	13.7	17.9

14+70

33' Lt	15.4	15.7
22' Lt	14.1	17.0
10' Lt	13.2	17.9
ℓ	10.8	20.3
10'R	11.4	19.7
18'R	6.4	29.7
50'R	1.4	29.7
T.P.	2.58 21.09	12.60 18.51

14+85

50'R	3.0	18.1
40'	4.4	16.7
30''	5.1	16.0
ℓ	5.2	15.9
35' Lt	5.4	15.7

15+54.35 = 11 cb 40' on cb ^{Diag.}

30' Lt on cb	5.60	15.5
" " " Gut	8.01	15.08
ℓ on cb	4.95	16.14
" " Gut	5.42	15.67

21.09

34

23' Rhon cb	4.47	16.62
" " Gut	5.02	16.07
40' R on cb	3.82	17.27
" " " Gut	4.38	16.71
15+75.86 = ℓ 40' ^{sec Diag.}		
40'R	3.57	17.52
15'R	4.48	16.61
ℓ on Patch	4.80	16.29
30' Lt " "	5.28	15.81
15+97.37		
30' Lt on Patch	5.0	16.1
10' Lt. on cb. at Bridge	4.63	16.46
" " " Gut	5.30	15.79
ℓ on cb	4.75	16.34
" " Gut Conc.	5.98	15.61
25'R. on cb	3.98	17.11
" " Gut	4.58	16.51
40'R " cb	3.35	17.74
" " Gut	3.93	17.16
16+07		
ℓ on East end Bridge	5.09	16.00 on Deck
" in channel	10.3	10.8
16+10		
20' Lt on walk	3.96	17.13
ℓ	5.4	15.7
11' Lt. in ℓ ch	10.0	11.1

16+10 2109 Nordico Hts. Drainage Channel

23' Lt. INDEXED	71	19.0
27' Lt. Bank ch.	52	15.9
50' Lt.	50	16.1
16+50		
50' Lt.	48	16.3
30' Lt. N Bank ch.	52	15.9
19' Lt.	74	13.7
16' Lt. in ch in Pocket	11.5	9.6
10' Lt. Bank	75	13.6
♀	55	15.6
13' Rt.	58	15.3
19' Rt.	69	14.2
25' Rt. in Hole 5' wide 20' long	23	18.8
N.W. Cottonwood		
T.P. ch. Disk & 40th	6.27	14.82
		14.88
		0.06
	✓ T. Corrected	14.88 = Above BM

13.01 27.89		
17+00		
50' Rt.	12.3	15.6
30' Rt.	12.3	"
♀	12.3	"
18' Lt. Bank ch.	13.3	14.6
22' Lt. in "	14.2	13.0
25' " " "	17.2	10.0
31' Lt. Bank'	13.5	14.9
45' "	11.2	16.7

27.89 ✓

17+50		
45' Lt. ♀ ch.	15.6	12.3
37' " South Bank	12.2	15.7
30' Lt.	12.7	15.2
20' Lt.	14.0	13.9
10' Lt.	14.4	13.5
♀	12.8	15.1
25' Rt.	12.3	15.6
50' Rt.	10.5	17.4

18+00		
50' Rt.	7.3	20.6
30' Rt.	10.2	17.7
♀	11.5	16.9
5' Lt.	13.4	14.5
25' Lt.	12.9	15.0
32' Lt.	11.9	16.0
45' Lt. South Bank ch.	11.6	16.3

18+20		
40' Lt.	13.3	14.6
15' Lt.	12.5	15.9
♀	11.7	16.2
15' Rt.	10.1	17.8
30' Rt.	8.9	19.0
50' Rt.	5.2	22.7
18+45		
50' Rt.	7.06	28.5

Nordica Hts. - Drainage Channel

18+45 27.89 ✓

23' Rt	0.5	27.9
16' Rt.	2.2	25.7
ℓ	10.2	17.7
6' Lt.	11.2	16.7
16' Lt	12.1	15.8
40' Lt	12.7	15.7

INDEXED

18+75

40' Lt.	11.9	16.0
20' Lt	12.1	15.8
18' Lt.	11.3	16.6
ℓ	8.7	19.2
20' Rt.	0.9	27.0
50' Rt.	+2.6	37.5

19+00

50' Rt.	+1.29	40.8
25' Rt.	+3.6	31.5
ℓ	7.0	20.9
15' Lt.	11.2	16.7
40' Lt.	11.6	16.3

19+25

40' Lt	10.9	17.0
30' Lt.	10.7	17.2
ℓ	4.7	23.2
25' Rt.	+4.2	32.1
50' Rt.	+13.0	40.9

27.89 ✓

19+65

36

50' Rt	+11.6	39.5
25' Rt	+2.5	31.9
ℓ	4.0	23.9
15' Lt.	7.0	20.9
T.P.	1238 36.99 3.28	24.61

19+88.39 = Δ 22° 34' 30" Rt Sec. on Bisector

15' Lt	14.6	22.4
ℓ on Hub.	1238	22.61
25' Rt.	6.3	30.7
50' Rt.	+1.9	38.9

20+25

50' Rt.	+2.5	39.5
25' Rt.	3.4	33.6
ℓ	8.5	28.3
30' Lt.	13.0	29.0

20+45

30' Lt.	11.0	26.0
ℓ	6.6	30.4
20' Rt.	3.0	34.0
30' Rt.	1.1	35.9
50' Rt.	+2.7	39.7

20+81

50' Rt.	+3.4	40.4
25' Rt.	1.1	35.9
ℓ	4.2	32.8

Nordica Hts. Drainage Channel

36.99 ✓

INDENTED

30' H	8.1	28.9
40' Lt.	9.4	27.6
Chk. Mon 20+98.39	4.52	32.47 ✓
		32.45 P-9
		0.02

X-Sections
From 41st to 42nd see p. 9-13

P-13

1.87 28.21 ✓

26.34

B.M. SE Top Hgt
42nd
+ Nordica

2.7+39.15 = Eline 42nd section on Eline

50' Lt.	5.5	22.7
ℓ	5.3	22.9
50' Rt.	5.4	22.8
50' Rt.	5.1	23.1
ℓ	4.7	23.5
50' Lt.	5.2	23.0

28+15

50' Lt.	5.0	23.2
ℓ	4.7	23.5
50' Rt.	4.5	23.7

28+50

50' R	4.5	23.7
ℓ	4.6	23.6
50' Lt.	4.7	23.5

28.21 ✓

37

29+00

50' Lt.	4.9	23.3
ℓ	4.6	23.6
50' Rt.	4.8	23.8
(28+74)		

ℓ on Wall	2.47	25.74
50' R	2.40	25.81
T.R 335	29.09	24.7
	29+07	25.74

50' R	5.0	24.1
ℓ	4.7	24.4
50' Lt.	5.0	24.1

29+20 = E Channel

50' H in Ch.	10.2	18.9
ℓ " "	10.2	"
46' Rt ℓ ch = Δ	10.2	"

29+34

46' Rt ℓ ch	9.0	20.1
30' R N Bank Ch.	4.8	24.3
ℓ	4.8	"
50' Lt.	4.9	24.2

30+00

50' Lt.	4.6	24.5
ℓ	4.5	24.6
45' Rt N Bank	4.7	24.7
56' R ℓ ch.	8.2	20.9

37

Nordica Hts. Drainage Channel

29.09 ✓

INC

T.P. 456 30.52 ✓ 313 25.96

30+50

50' 6.3 29.9

45' Rt South Bank ch 6.3 "

40' " 10 ch 10.3 20.2

35' Rt. 8.6 21.9

25' " N Bank 8.0 22.5

18' " 5.9 29.6

L 5.4 25.1

50' Lt. 5.1 25.9

30+88 = Int. W Bank ch

50' Lt. 4.3 26.2

L Bank ch 5.2 25.3

12' Rt L ch 10.2 20.3

20' Rt S Bank ch 6.3 29.2

50' R 5.6 29.9

31+00

50' Rt 5.7 29.8

12' R S Bank 5.3 25.2

L ch 6' Wide-bottom 9.3 21.2

15' Lt N Bank 4.0 26.5

50' Lt 4.4 26.1

31+12

50' Lt 4.3 26.2

28' Lt N Bank ch 4.0 26.5

11' Lt L ch 6' 9.2 21.3

30.52 ✓

38

L = S Bank ch 5.9 29.6

50' Rt 5.7 29.8

31+50

52' Rt at shed 5.5 25.0

L 4.7 29.8

32' Lt S Bank 4.9 29.6

39' Lt L ch 8.9 21.6

50' Lt N Bank 3.9 26.6

32+00

50' Lt 4.6 25.9

L 4.6 "

50' Rt 5.1 25.9

32+50

50' R 4.8 25.7

L 5.0 25.5

50' Lt 4.4 26.1

95' Lt Bank ch 4.2 26.3

105' Lt L ch 9.6 21.9

33+00

50' Lt 4.1 26.9

L 4.4 26.1

50' Rt 3.8 26.7

33+50

50' Rt 2.8 27.7

L 3.2 27.3

50' Lt 3.3 27.4

3052

746	35.67	231	28.21
chk Cap Disk		4.50	31.17
1' East of West edge Pav.		31.16	FB/216
13' South of E Nordico		0.01	20

Section
33+88 Parallel to Pav. Rd of E

50'		8.3	27.9
ℓ		7.6	28.1
50' Rt.		6.3	29.9

33+95 Parallel to Above

50' R		5.0	30.7
ℓ		5.3	30.9
50' Lt.		5.5	30.2

34+00.9 on West edge Pav.

50' Lt on Paving		5.56	30.11
25' Lt " "		5.63	30.09
ℓ " "		5.66	30.01
25' Rt. " "		5.61	30.00
50' R " "		5.37	30.30

Elec. Pole 23' Lt of E 7' W W edge Paving

34+19.8 Section East edge Paving

50' R on Paving		5.21	30.96
25' " " "		5.55	30.12
ℓ " "		5.65	30.02
25' Lt " "		5.71	29.96
50' Lt " "		5.69	29.98

Nordico Hts. Drainage Channel
35.67
34+32 Section Parallel to East edge Pav.

39

50' Lt.		5.5	30.2
25' Lt		5.3	30.9
ℓ		4.9	30.8
25' Rt.		4.4	31.3
50' Rt.		4.5	31.2

50' Rt.		4.6	31.1
---------	--	-----	------

34+41 diag. section Δ 75° Rt of E

34' Rt 15' E = ℓ 48" Cypress			
18' R 14" " 42" "			
ℓ		6.3	29.9
50' Lt on W Bank ch.		6.8	28.9

34+46 Parallel to Above Section

100' Lt in ch.		11.7	29.0
50' Lt " " "		11.5	29.2
22' Lt " " "		11.2	29.5
15' Lt on Bank		6.9	28.8
ℓ		6.0	29.7
50' Rt.		4.8	30.9

34+56 Parallel to Above Section

50' Rt.		5.0	30.7
ℓ		6.7	29.0
4' Lt. South Bank		7.0	28.7
ℓ Channel		11.7	29.5
25' Lt. N Bank		6.9	28.8

35.67 ✓

50' Lt	6.5	29.2
34+84		
50' Lt.	8.4	27.3
14' Lt	8.2	27.5
7' Lt. N Bank ch	6.4	29.3
2' in ch	10.0	25.7
3' Rt - 2 ch.	11.1	29.6
7' Rt - South Bank ch	7.4	28.3
35' Rt.	5.2	30.5
35+21 = Int of Channel Branch		
2 ch	10.5	25.2
36+20		
2	8.2	27.5
15' Lt 2 channel	10.2	25.5
25' Lt	6.2	29.5

Pg. 1 to 20. Notes Reduced.

Location Portion East Channel 20

Not shown in X. Section Notes - North of Nordica St And East of 40th St.

E. Line North = 0+00 Dist. are from st. line

3+00 83' Rt - 2 channel

3+60

50' N 11' W - 2 ch

80' N 12' W " "

111' N 4' E " "

139' N 20' E " "

147' N 45' E " "

4+57 124' N - 2 ch.

5+49 62' N - 2 ch.

6+18 124' N " "

6+90 125' N " "

7+20

167' N 18' W 2 ch

237' N 34' W 2 "

258' N - 2 " "

7+42 264' N 2 ch = Extreme Apex North

7+65 248' N " "

8+15 156' N 2 "

9+22 44' N 2 "

Walker
HandricksYAMA ST. Storm Drains
Levels Location P. 42

INDEXED

B.M. B.P.
Hd. Wall

2.34 9.62

7.28 S.F. Main
+ Yuma
Culvert

0 - 3.82 = NLY end 5' x 6' Conc. Box

Lt Culvert Flow Line 8.50 1.12

L " " 8.55 1.07 1.09 Ave.

RT " " 8.54 1.08

0 + 84.07 = SLY end Main Box Culvert.

31' Lt. 1.3 8.3

10' Lt on Top Hd. Wall 2.38 7.29

L Lt Culvert Flow 2.09 0.53

L " " 2.07 0.55

RT " " 2.08 0.55 ✓

10' Rt. on Hd. Wall 2.25 7.27

31' R 0.9 8.7

0 + 94.15 = SLY Lip of Spillway

31' Rt 0.9 8.7

10' R 8.07 1.55

L Rt Culvert Flow 2.16 0.96

L " " 2.17 0.95 ✓

L Lt " " 2.16 0.96

10' Lt on Hd Wall 8.05 1.57

23' Lt. 6.2 3.9

33' Lt 1.4 8.2

9.62

41

1+15
40' Lt 1.6 8.0
31' Lt 1.8 7.8

27' Lt. 8.4 1.2

L 10.0 - 0.38

16' R 2.4 6.2

31' R 1.6 8.0

41' R 1.6 8.0

1+50

40' R 1.6 8.0

30' R 1.9 7.7

13' R 10.1 - 0.5

L 12.0 - 2.9

20' Lt. 2.6 6.0

31' Lt 2.4 7.2

40' Lt 2.1 7.5

2+00

40' Lt 2.7 6.9

33' Lt 2.9 6.7

18' Lt 10.4 - 0.8

L 12.5 - 2.9

13' Lt. 10.3 - 0.7

30' 2.3 7.3

40' Lt 2.2 7.9

3+00

40' Lt 3.2 6.9

29' " 2.6 6.0

YAMA ST. STORM DRAIN

9.62

INVERTED

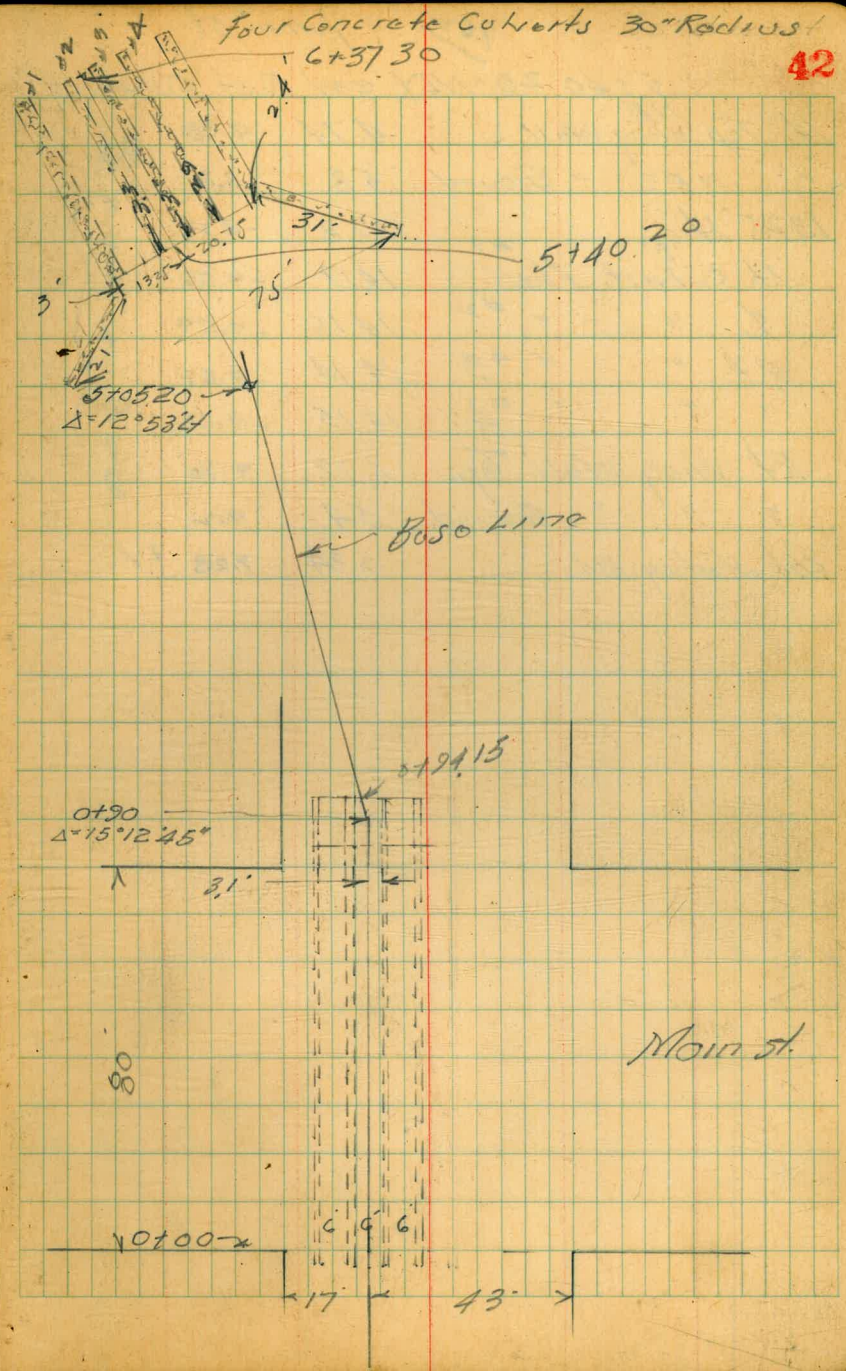
3+00 Cont.

12' Lt.	127	-3.1
ℓ	129	-3.3
17' Lt.	11.3	-1.7
31' Lt.	4.3	5.3
40' Lt.	4.1	5.3
4+00		
40' Lt.	5.5	4.1
31' Lt.	5.8	3.8
18' Lt.	12.3	-2.7
ℓ	129	-3.3
13' R	13.0	-3.9
29' R	4.8	4.8
40' R	4.5	5.1
5+05.20 Δ Lt.		
40' R	5.6	4.0
26' R	6.1	3.5
13' R	12.2	-2.6
ℓ on Hub	12.97	-3.35
14' Lt.	13.4	-3.8
30' Lt.	6.5	3.1
40' Lt.	6.1	3.5
6+37.30 = Sky end Culvert		
hd Wall	4.72	4.90
Flow # 2 Culvert	14.22	-4.00
Cont. P-43 for Station 5+40.20		

Four Concrete Culverts 30" Radius

6+37.30

42



9.62

Yama. St.

5+40.20 = NEY end Exist. C. Marks

H. Top	NE	Wing Wall	4.74	4.88
--------	----	-----------	------	------

"	NE	" Ground	5.8	3.8
---	----	----------	-----	-----

13.25' H	5'	" #1	12.8	-3.2
----------	----	------	------	------

Lt. Culvert		Flow	14.17	-9.55
-------------	--	------	-------	-------

L	"	" #2	14.16	-9.59
---	---	------	-------	-------

Rt	"	" #3	14.14	-9.57
----	---	------	-------	-------

"	"	" #4	14.15	-9.53
---	---	------	-------	-------

Rt. Wing Wall		Top	4.72	4.90
---------------	--	-----	------	------

"	"	" Ground	5.4	4.7
---	---	----------	-----	-----

chk starting BM			2.34	7.28	✓
-----------------	--	--	------	------	---

Notes Reduced. 12.18.22

43

Intersection of Congress - La Jolla + Ampudia

W.C. 90081
3/14/49

Ch. Levels

INDEX

WK
MAR 22 1949

Sommerston
MSOuy
AT124
Jones

41.53	41.05	41.44	41.51	41.88	41.26
6.81	7.39	7.03	6.93	7.56	7.18
P	P	P	Q	Q	Q
cc	G	"X"	cc	Q	"X"

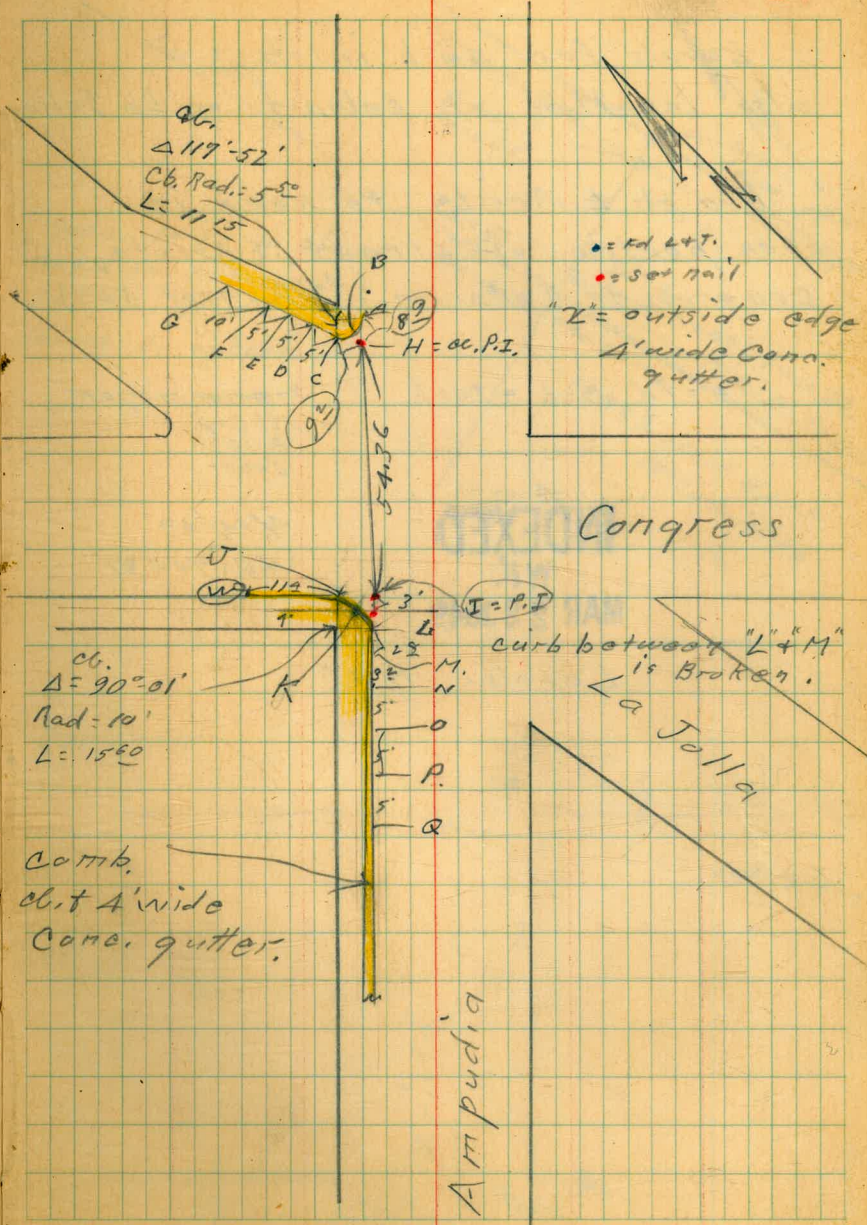
41.96	41.40	41.94	41.59	41.68	41.76	41.23	41.56
6.48	7.04	6.52	7.05	6.76	6.66	7.21	6.88
M	M	N	N	N	O	O	O
cc	G	cc	G	"X"	cc	G	"X"

41.93	41.58	41.02	41.44	41.53	41.16	41.63	41.88	41.51
6.51	6.86	7.42	6.30	6.91	6.31	6.81	6.36	6.93
I	W	W	J	J	K	K	L	L
cc, P.I	cc	G	cc	Q	cc	cc, Ret	G	cc
Pave	Curb End.		cc					

41.49	41.79	41.28	41.57	41.30
5.95	6.65	6.16	6.87	6.14
F	F	G	Q	H
cc	G	cc	G	cc, P.I
				Pave

41.99	41.57	41.88	41.24	41.94	41.09	41.68	41.01	41.51	41.91
5.45	5.87	5.56	6.20	5.82	6.36	5.76	6.43	5.87	6.53
A	A	B	B	C	C	D	D	E	E
cc, End	G	cc, Ret	Q	cc, Ret	Q	cc	G	cc	Q

S.E.B.P.
Ampudia + La Jolla Blvd. 4.69 48.44 — 43.75
(Really Sly, Cor.)



Arista & Congress

Levels for curb inlets
also location of culvert on La Jolla

Run on & Arista to keep in
open portion of street, (Arista,
Congress to Jefferson.) (T.P. sheet 529)

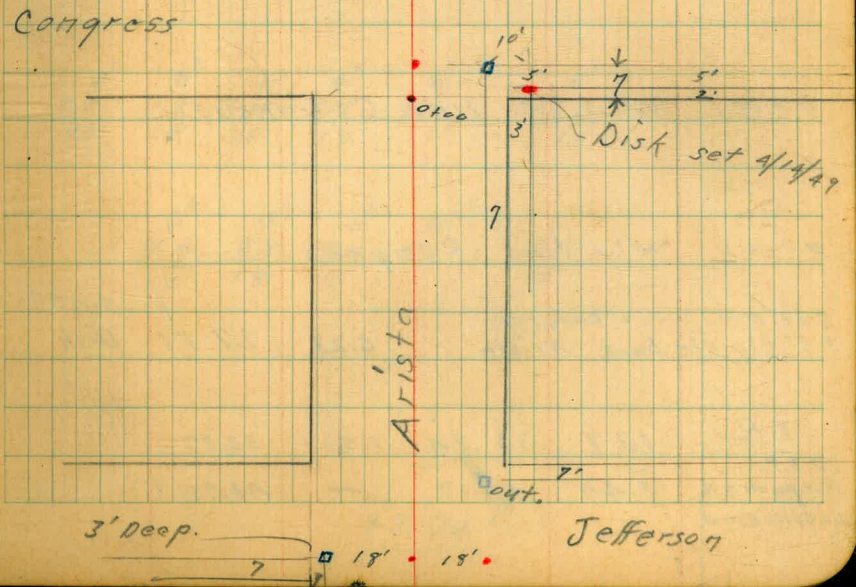
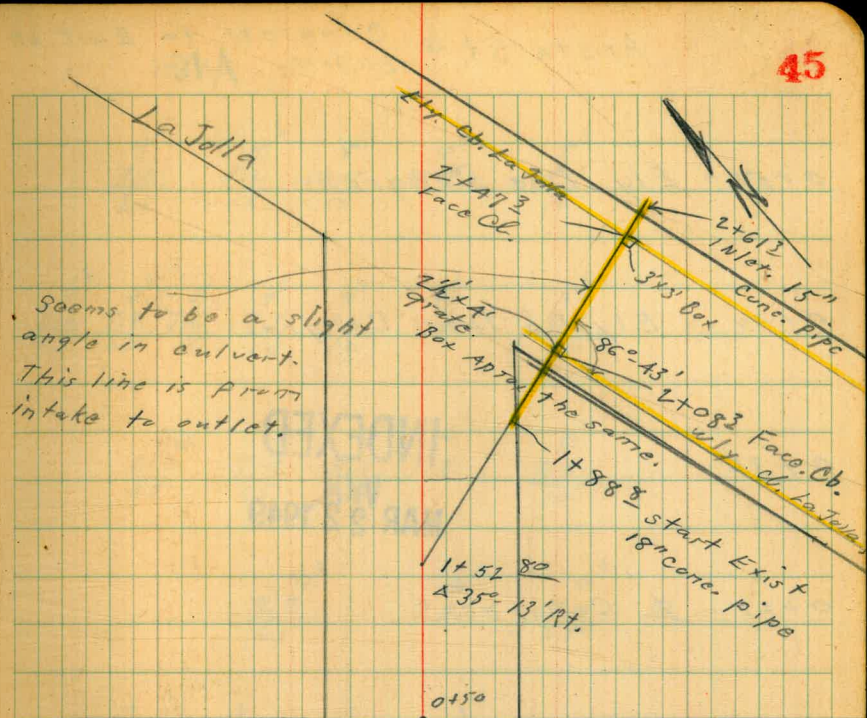
• = Fd. Hub & tack

Sammormeyer
McCoy
Allen
Jones

INDEXED
WK
MAR 22 1949

4/14/49
W.O. 90081

Levels - P. 45



Arista St.

Congress to East of
La Jolla AVE

46

0+50 = Ely line Congress

0+40 = Ely Cb. line Congress

0+36

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WK
MAR 22 1949

0+25 = Congress

0+12

0+10 Wly Cb. line Congress

0+00 = Wly line Congress

Set. B.M. Wly & Congress
+ 3' sly tie back Arista 6.23 27.51 B.M.#1 Disk

T.P.	137	33.74	11.82	32.37
SE.B.P.				
Ampudia &	0.44	44.19	—	43.75
La Jolla Blvd.				

^{26.1} 7.6 25	^{26.5} 7.2 14	^{26.0} 7.7 12	^{26.0} 7.7	^{26.0} 7.7 10
------------------------------	------------------------------	------------------------------	------------------------	------------------------------

^{26.5} 8.2 45	^{26.9} 7.8 25	^{26.1} 7.6 15	^{26.0} 7.7 14	^{25.6} 8.1 12	^{25.1} 8.0	^{26.1} 7.6 10
------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------	------------------------------

^{25.1} 10.0 45	^{24.2} 9.4 25	^{24.5} 8.8 15	^{25.9} 7.8	^{26.1} 7.6 10
-------------------------------	------------------------------	------------------------------	------------------------	------------------------------

^{25.0} 8.7 25	^{26.1} 7.5	^{26.1} 7.0 25
------------------------------	------------------------	------------------------------

^{23.1} 10.0 45	^{24.5} 9.2 25	^{25.0} 8.7 15	^{25.1} 8.0	^{24.4} 7.5 15
-------------------------------	------------------------------	------------------------------	------------------------	------------------------------

^{26.0} 7.7 45	^{25.9} 7.8 35	^{25.3} 8.4 25	^{25.8} 8.9 18	^{25.5} 8.2	^{26.1} 7.6 15
------------------------------	------------------------------	------------------------------	------------------------------	------------------------	------------------------------

^{25.8} 7.9 25	^{25.9} 7.8 18	^{25.3} 8.4 15	^{25.6} 8.1	^{26.2} 7.5 15
------------------------------	------------------------------	------------------------------	------------------------	------------------------------

33.74

Arista St.

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WK
MAR 22 1949

2+08²⁵ Gutter line

3⁵ Lt = End exist al.

2+08³ Top. wly. ch. La Jolla Blvd.

1+90⁸ 5' Rt. = N.Wly Cor. Conc. block wall

1+88⁸ = start 18" Diam Conc. Pipe.

1+75 6' Rt. = Ctr. Pipe # 3975

T.P. 11.76 39.41 6.09 27.65

1+52⁸² Δ 35° 13' Rt. Section at 90° to
back Tang.

1+00

33.74 ✓

4

47

Approx. 55' ob. face. 4.32 35.09 Approx. 55' ob. face

35.36
4.05
3.5
End Ob.
35.40
4.01
35.70
3.71
10
8

30.3
9.1
29.1
8.7
5
Base wall
30.1
3.7
5
Top wall
35.7

8.3
5
31.1
10.2
1
Ord
29.7
11.50
Invert
29.1
10.2
1
Ord
29.1
10.3
5
29.1

29.1
7.3
10
28.8
10.6
29.4
10.0
10

39.41 ✓

5.7
25
28.0
6.2
27.5
6.0
15
27.7

6.9
25
26.8
6.8
25.9
6.9
7
26.8
5.2
9
26.5
5.0
15
28.1

33.74 ✓

S.E.B.P. Ampudia

+ La Jolla. (Orig B.M. P. 4C) 1.86 43.76 43.75

19.01

T.P. 8.28 45.62 2.07 37.34

S.W.B.P.

Arista + La Jolla Blvd. 4.06 35.35 35.48

2+61² intake 15" Conc. pipe

2+47³ - Ely Cl. line La Jolla.

2+47²⁵ Gutter

Box is 3'x3'

2+45² 0⁷ Rt. = Ctr. 1' down pipe

car over grate
can not get f. line pipe, locked

2+11 - = Ctr. 1' down pipe

48

34.3	33.0	31.75	33.0	35.1
$\frac{5.1}{5}$	$\frac{6.4}{5}$	7.66	$\frac{6.4}{5}$	$\frac{4.3}{5}$
	Grd.		Grd.	

35.64	35.81	36.08
$\frac{3.77}{10}$	3.60	$\frac{3.33}{10}$
06	06	06

35.08	35.34	35.53
$\frac{4.53}{10}$	4.07	$\frac{3.88}{10}$

35.31	33.14	30.14
4.10	$\frac{6.29}{2}$	$\frac{8.99}{2}$
Grate	Bottom of box	Invert Culvert

35.07
4.34 = Approx Red.
grate

39.41

Drain Levels Conde + San Diego

3-21-49
W.O. 90081

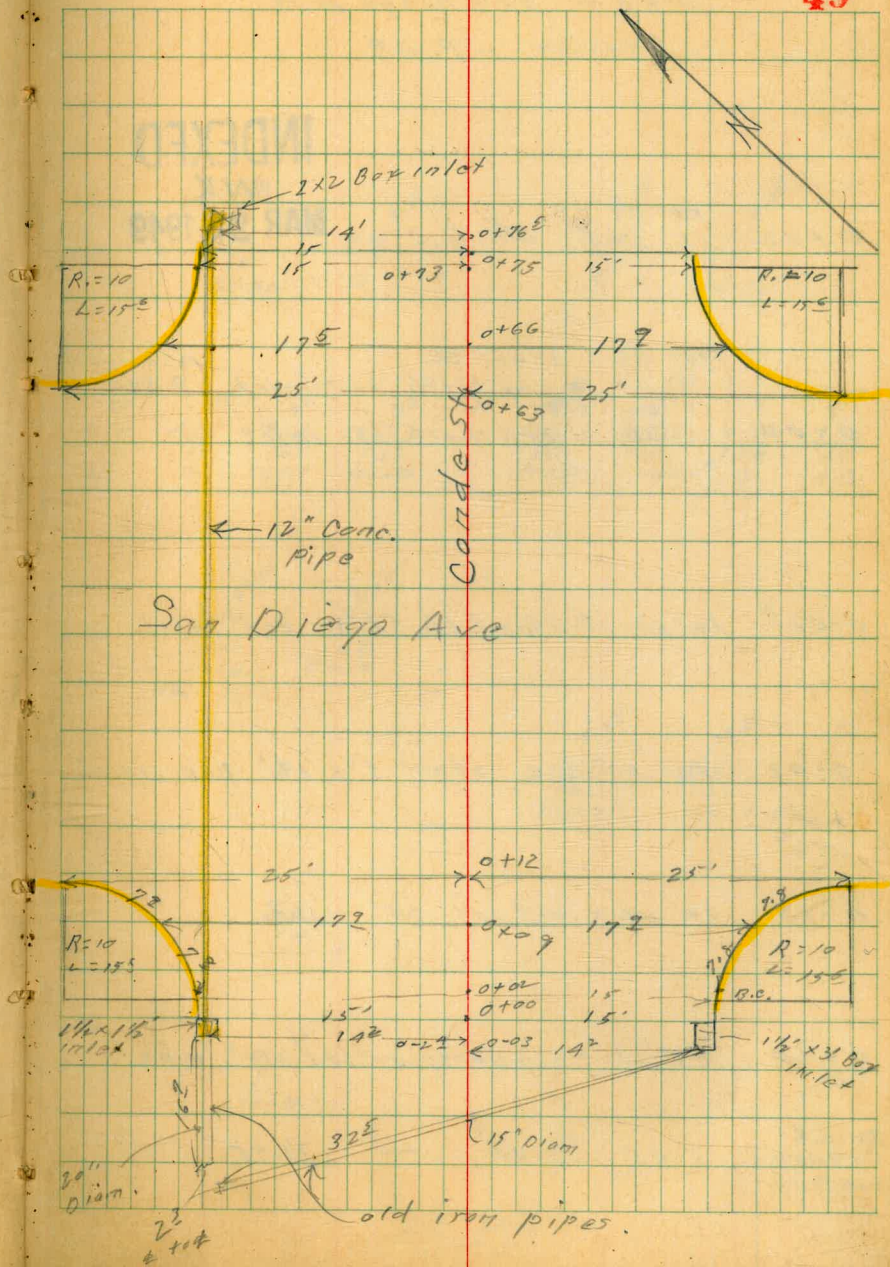
INDEXED
WIK
MAR 22 1949

Sommermeier
McCoy
Allen
Jones

Levels page 50

Conde St.

49



Conde + San Diego Ave
Sketch - P. 49

INDEXED

WK

MAR 22 1949

0+02 $\left. \begin{array}{l} 15' RT \\ 15' LT \end{array} \right\} = \text{cl. B.C.}$

0+00 $\left\{ \begin{array}{l} 15' RT. = \text{start cl.} \\ 14' RT. = \text{End } 3' \times 1\frac{1}{2}' \text{ box inlet} \\ 15' LT. = \text{start cl.} \\ 14' LT. = \text{End } 1\frac{1}{2}' \times 1\frac{1}{2}' \text{ box inlet} \end{array} \right.$ 12" culvert.

0-02^A 14' Lt. = start 1 $\frac{1}{2}$ ' x 1 $\frac{1}{2}$ ' box inlet.

0-03 14' Rt. = start 3' x 1 $\frac{1}{2}$ ' box inlet.

0-18 14' Lt. = outlet 20" pipe

0-20 13' Lt. = invert, outlet 15" pipe

S.W.G.R.
Coydon
San Diego

3.45 35.40 — 31.95

Conde

50

$\begin{array}{r} 31.99 \\ 3.91 \\ 15 \\ \hline \text{cl. B.C.} \end{array}$

$\begin{array}{r} 31.15 \\ 4.25 \\ 15 \\ \hline \text{Q} \end{array}$

$\begin{array}{r} 31.15 \\ 4.25 \\ 15 \\ \hline \text{Q} \end{array}$

$\begin{array}{r} 31.75 \\ 3.65 \\ 15 \\ \hline \text{cl. B.C.} \end{array}$

$\begin{array}{r} 31.60 \\ 4.00 \\ 15 \\ \hline \text{Q} \end{array}$

$\begin{array}{r} 31.05 \\ 4.35 \\ 15 \\ \hline \text{Q} \end{array}$

$\begin{array}{r} 28.20 \\ 7.20 \\ 14\frac{1}{2} \\ \hline \text{Invert box} \end{array}$

$\begin{array}{r} 31.02 \\ 4.38 \\ 14\frac{1}{2} \\ \hline \text{Grate} \end{array}$

$\begin{array}{r} 31.05 \\ 4.32 \\ 14\frac{1}{2} \\ \hline \text{Grate} \end{array}$

$\begin{array}{r} 29.43 \\ 5.97 \\ 14\frac{1}{2} \\ \hline \text{Invert} \end{array}$

$\begin{array}{r} 31.11 \\ 4.29 \\ 14\frac{1}{2} \\ \hline \text{Q} \end{array}$

$\begin{array}{r} 31.70 \\ 3.70 \\ 15 \\ \hline \text{cl. B.C.} \end{array}$

$\begin{array}{r} 28.10 \\ 7.30 \\ 14\frac{1}{2} \\ \hline \text{Invert box + pipe} \end{array}$

$\begin{array}{r} 31.02 \\ 4.38 \\ 14\frac{1}{2} \\ \hline \text{Grate} \end{array}$

$\begin{array}{r} 31.25 \\ 4.15 \\ 14\frac{1}{2} \\ \hline \text{Grate} \end{array}$

$\begin{array}{r} 29.35 \\ 6.05 \\ 14\frac{1}{2} \\ \hline \text{Invert} \end{array}$

box & pipe

$\begin{array}{r} 27.7 \\ 7.7 \\ 14 \\ \hline \text{Invert} \end{array}$

$\begin{array}{r} 28.2 \\ 7.2 \\ 13 \\ \hline \text{Invert} \end{array}$

35.40 ↓

Condo

0+78.5 14' Lt. = End 2x2' box inlet

33.72
4.68
14
Bottom
of box

31.76
3.64
14
Grate

0+76.5 1A' Lt. = 2" box inlet + 12" Culvert

33.72
4.68
14
Invert
box +
Pipe

33.54
2.88
14
Grate

0+75 15' Lt. } = End Exist Cl.
15' Lt.

33.33
2.07
15
Cl. End

31.66
2.74
15
G

31.95
2.45
15
G

33.60
1.80
15
Cl. End

0+73 15' Lt. } = Cl. E.C.
15' Lt.

33.21
2.13
15
Cl. E.C.

33.64
2.78
15
G

31.94
2.51
15
Cl. E.C.

33.49
1.91
15
Cl. E.C.

0+66 172 Lt. } = Mid Curve. 10' Radi. Return.
175 Lt.

33.14
2.26
175
Cl.

31.42
2.96
175
G

31.68
2.72
172
G

33.20
2.20
179
Cl.

25' Lt } = Cl. B.C.
25' Rt

0+63 Nly cl. line San Diego Ave.

32.99
2.41
25
Cl. B.C.

32.36
3.04
25
G

32.69
2.71
25
G

33.17
2.28
25
Cl. B.C.

25' Lt } = Cl. E.C.
25' Rt

0+12 Sly. cl. line San Diego Ave.

31.97
3.13
25
Cl. E.C.

31.61
3.79
25
G

31.64
3.76
25
G

31.21
3.19
25
Cl. E.C.

0+09 172 Lt. } = Mid curve 10' Rad. Ret.,
172 Rt.

31.82
3.58
172
Cl.

31.42
3.98
172
G

31.45
3.95
172
G

32.01
3.39
172
Cl.

35.40

35.40

Jefferson - Conde Ely, to low point
in Jefferson.

INDEXED
WK
MAR 22 1949

1400

0+98 10' ft. = & 3' wide conc. walk

0+75

0+1A = Ely line Conde

0+00

BM set 1/2 pipe
south deep
Cora

6.15 13.09 BM#2

I.P. 2.92 19.24 12.80 16.32

0+00 = 10' Nly. Sly. line Jefferson
14' Wly. Ely line Conde and

BM#1 1.61 29.12 — 27.51

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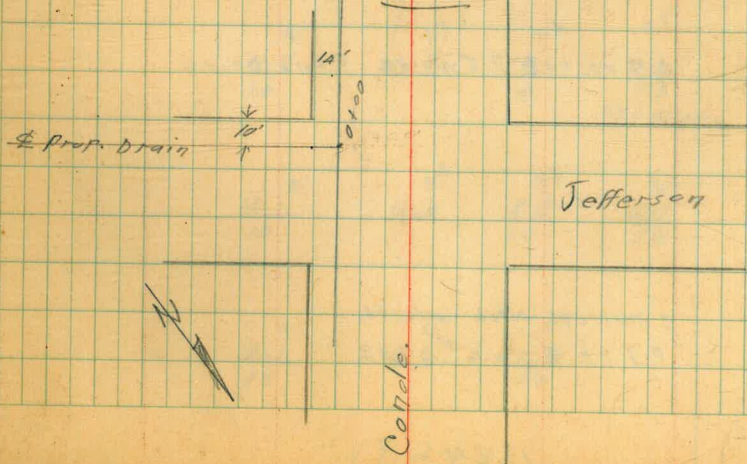
6.6 8.8 11.9
12.6 10.4 11.3
4 25

9.0
10.2
10
Walk

9.4 9.4 9.2
9.8 9.8 10.0
5 5

13.2 13.0 12.8
6.0 6.2 6.4
5 5

5.1
4.1
19.241



BM #1 P46	10.77	28.74	1.23	✓	27.51
TP	19.24	1.29	17.95		

2+30

$$\begin{array}{r} 11.9 \\ 7.3 \end{array}$$

2+00

$$\begin{array}{r} 9.3 \\ 9.9 \\ 10 \end{array}$$

$$\begin{array}{r} 9.4 \\ 10.0 \end{array}$$

$$\begin{array}{r} 9.4 \\ 10.0 \\ 10 \end{array}$$
1+56 6.7 ft. = \pm 7.5 wide conc drive
$$\begin{array}{r} 8.4 \\ 11.0 \\ 10 \end{array}$$

$$\begin{array}{r} 1.9 \\ 11.3 \end{array}$$

$$\begin{array}{r} 8.6 \\ 10.6 \\ 4 \end{array}$$

$$\begin{array}{r} 7.99 \\ 11.25 \\ 7.3 \\ \text{Grd + Conc} \end{array}$$

$$\begin{array}{r} 1.4 \\ 11.38 \\ 30 \\ \text{ON CONC DRIVE} \end{array}$$

1+16

$$\begin{array}{r} 7.1 \\ 12.1 \\ 10 \end{array}$$

$$\begin{array}{r} 6.6 \\ 12.6 \end{array}$$

$$\begin{array}{r} 1.7 \\ 11.5 \\ 10 \end{array}$$

$$\begin{array}{r} 6.8 \\ 12.4 \\ 50 \end{array}$$

± primage ditch to south

1+13 0.7 ft. & Pole #2433

$$\begin{array}{r} 7.1 \\ 12.1 \\ 10 \end{array}$$

$$\begin{array}{r} 6.6 \\ 12.6 \end{array}$$

$$\begin{array}{r} 6.4 \\ 12.8 \\ 50 \end{array}$$

19.24

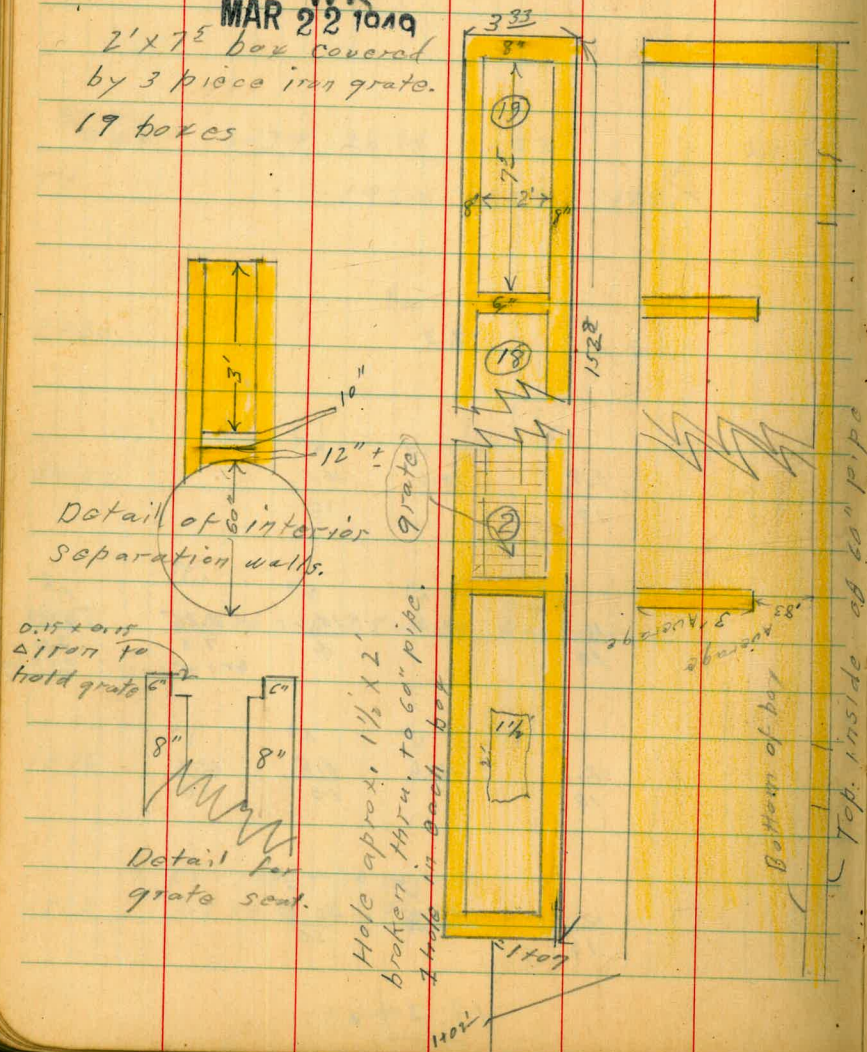
19.24 ✓

Catch basin over 60" culvert
at Santa Fe, Rt. of way.
along Conde St. Produced to South

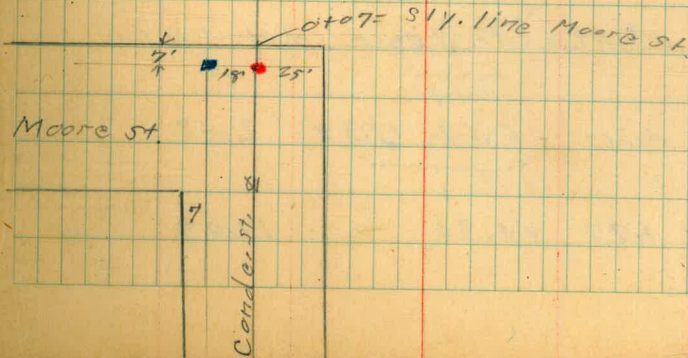
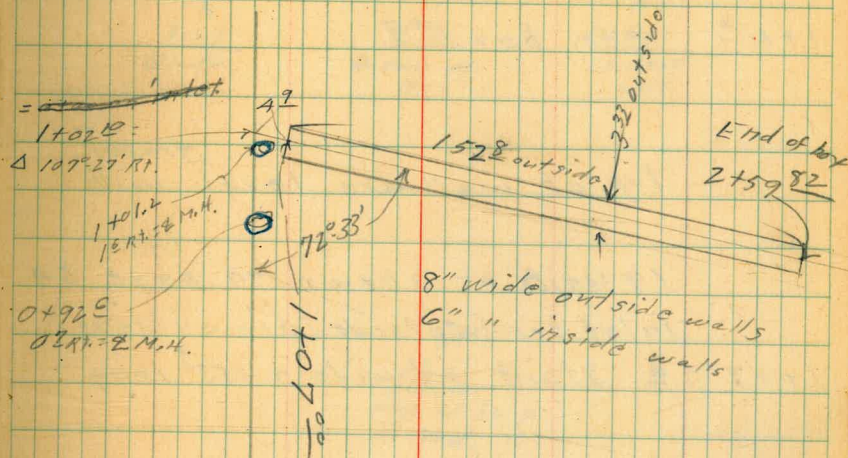
INDEXED

WK
MAR 22 1919

2' x 7 1/2' box covered
by 3 piece iron grate.
19 boxes



54



Box is centered over 60" pipe

1+11⁴ Ctr. box #1

Top of wall are level with
grates.

19 units as shown on page 54
inlet box (outside dimensions)

1+07 = \pm Start 3³³ wide & 153² long

~~0+00 or~~

= Δ 107°-27' RT.

1+02^c = intersect 60" pipe.

(off ctr. of 60" pipe)

1+01^c 1⁵ RT. = Ctr. Storm drain M.H.

0+92^c 0² RT. = Ctr. Sewer. M.H. (P. 54)

T.P.	4.21	6.69	12.38	2.48
------	------	------	-------	------

BM #2, P. 52	1.77	14.86	-	13.09
-----------------	------	-------	---	-------

1+11⁴
5.27
Grate

2+42
9.12
Bottom of
Box

8+32
15.01
INVERT
60"

1+14⁴
5.25
Top of box
& Grd.

1+75²
14.51
invert M.H.
& 60" pipe

1+04
8.73
INVERT
SEWER
6.69

1+75⁴ ctr. box # 9
$$\begin{array}{r} 11.46 \\ 5.23 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.91 \\ 9.22 \\ \hline \text{Bottom} \\ \text{of box} \end{array} \quad \begin{array}{r} 8.41 \\ 15.10 \\ \hline \text{Invert} \\ 60'' \end{array}$$
1+67⁴ ctr. box # 8
$$\begin{array}{r} 11.46 \\ 5.23 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.51 \\ 9.19 \\ \hline \text{Bottom} \\ \text{of box} \end{array} \quad \begin{array}{r} 8.38 \\ 15.07 \\ \hline \text{Invert} \\ 60'' \end{array}$$
1+59⁴ ctr. box # 7
$$\begin{array}{r} 11.46 \\ 5.23 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.51 \\ 9.20 \\ \hline \text{Bottom} \\ \text{of box} \end{array} \quad \begin{array}{r} 8.35 \\ 15.04 \\ \hline \text{Invert} \\ 60'' \end{array}$$
1+51⁴ ctr. box # 6
$$\begin{array}{r} 11.46 \\ 5.23 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.47 \\ 9.16 \\ \hline \text{Bottom} \\ \text{of box} \end{array} \quad \begin{array}{r} 8.33 \\ 15.02 \\ \hline \text{Invert} \\ 60'' \end{array}$$
1+43⁴ ctr. box # 5
$$\begin{array}{r} 11.46 \\ 5.27 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.45 \\ 9.14 \\ \hline \text{Bottom} \\ \text{of box} \end{array} \quad \begin{array}{r} 8.21 \\ 15.01 \\ \hline \text{Invert} \\ 60'' \end{array}$$
1+35⁴ ctr. box # 4
$$\begin{array}{r} 11.41 \\ 5.27 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.41 \\ 9.11 \\ \hline \text{Bottom} \\ \text{of Box} \end{array} \quad \begin{array}{r} 8.24 \\ 14.97 \\ \hline \text{Invert} \\ 60'' \end{array}$$
1+27⁴ ctr. box # 3
$$\begin{array}{r} 11.41 \\ 5.27 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.40 \\ 9.09 \\ \hline \text{Bottom} \\ \text{box} \end{array} \quad \begin{array}{r} 8.21 \\ 15.01 \\ \hline \text{Invert} \\ 60'' \end{array}$$
1+19⁴ ctr. box # 2
$$\begin{array}{r} 11.39 \\ 5.30 \\ \hline \text{grate} \end{array} \quad \begin{array}{r} 2.44 \\ 9.13 \\ \hline \text{Bottom} \\ \text{box} \end{array} \quad \begin{array}{r} 8.30 \\ 14.99 \\ \hline \text{Invert} \\ 60'' \end{array}$$

6.69

2+39⁴ ctr. box # 17

5.29 grate	9.26 Bottom of box	15.19 invert 60"
---------------	--------------------------	---------------------

2+31⁴ ctr. box # 16

5.26 grate	9.23 Bottom of box	15.16 invert 60"
---------------	--------------------------	---------------------

2+23⁴ ctr. box # 15

5.22 grate	9.16 Bottom of box	15.13 invert 60"
---------------	--------------------------	---------------------

2+15⁴ ctr. box # 14

5.22 grate	9.13 bottom of box	15.14 invert 60"
---------------	--------------------------	------------------------

2+07⁴ ctr. box # 13

5.24 grate	9.29 bottom of box	15.13 invert 60"
---------------	--------------------------	---------------------

1+99⁴ ctr box # 12

5.26 grate	9.30 bottom of box	15.10 invert 60"
---------------	--------------------------	------------------------

1+91⁴ ctr. box # 11

5.23 grate	9.27 bottom of box	15.11 invert 60"
---------------	--------------------------	------------------------

1+83⁴ ctr. Box # 10

5.21 grate	9.27 bottom of box	15.13 invert 60"
---------------	--------------------------	------------------------

6.69 ↓

B19#2

P.52

13.9

13.09

13109

TIP,

12.00

14.48

4.21

2.48

2+59⁸² = inlet box End of box (P, 5A)

2+55⁴

ctr. box # 19

2+47⁴

ctr. box # 18

PC

Notes Redwood. 3-23-59

140
5.29
TOP BOX.

140
5.29
grate

32
9.30
Bottom
of box

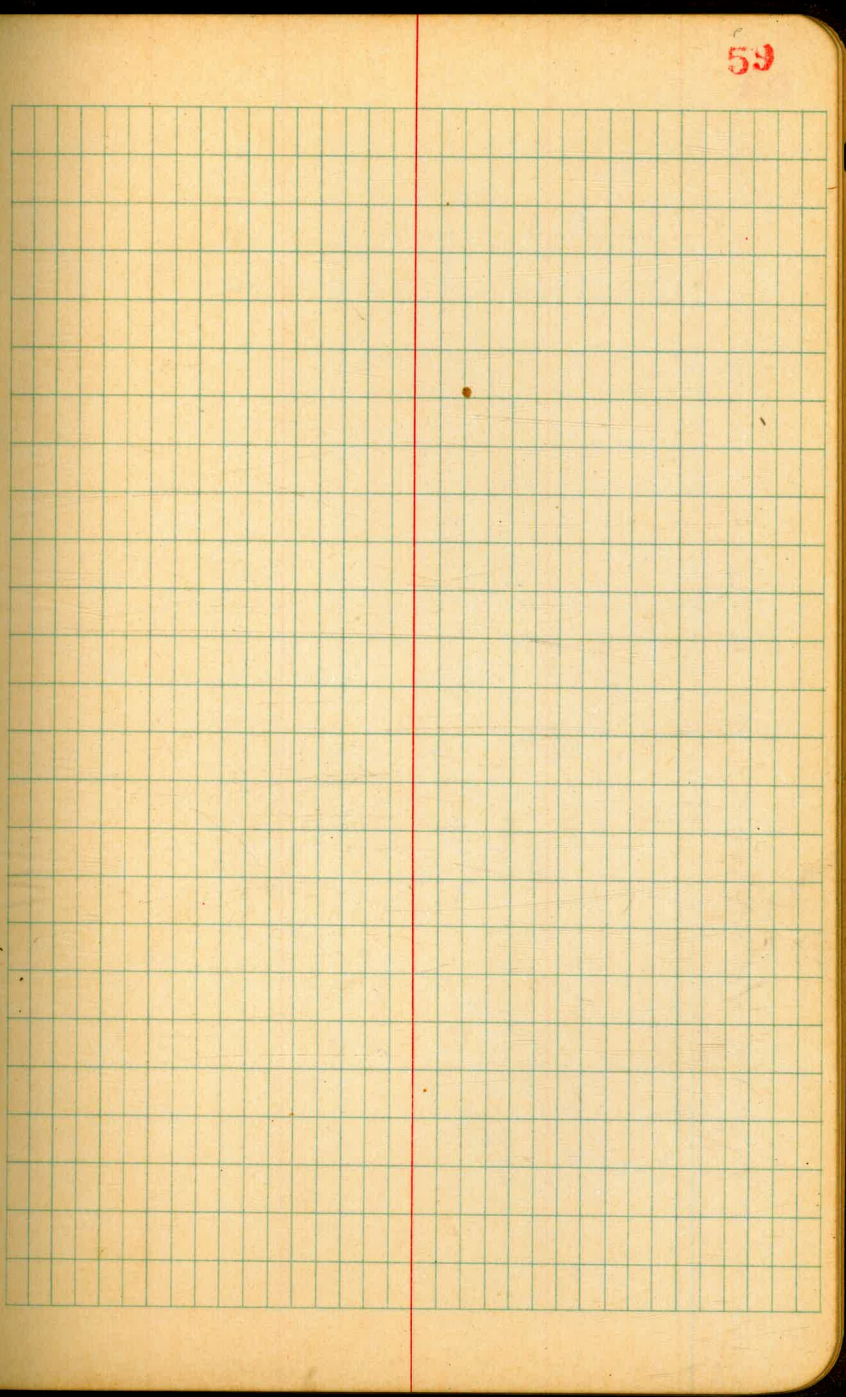
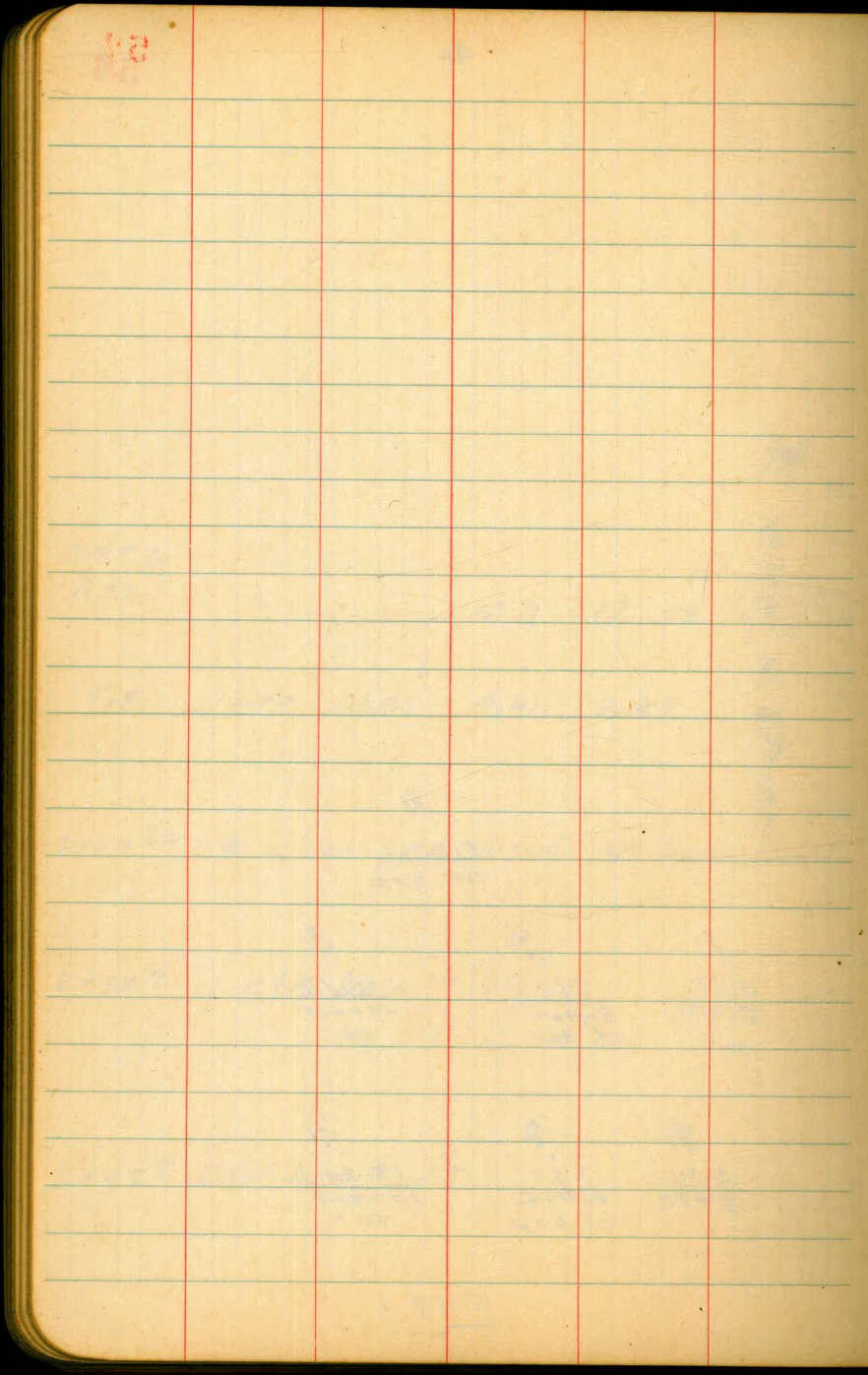
58
15.19
invert
60"

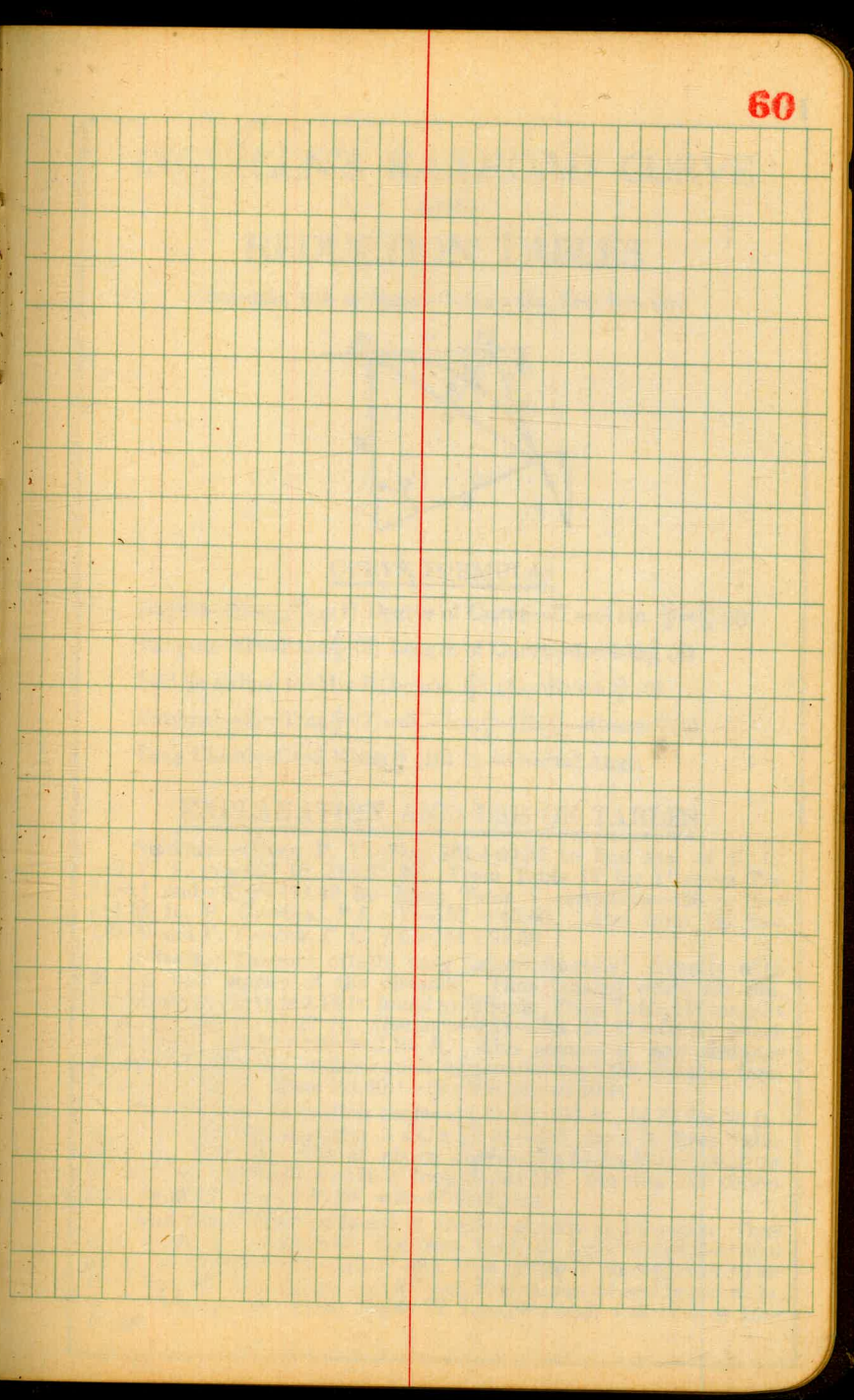
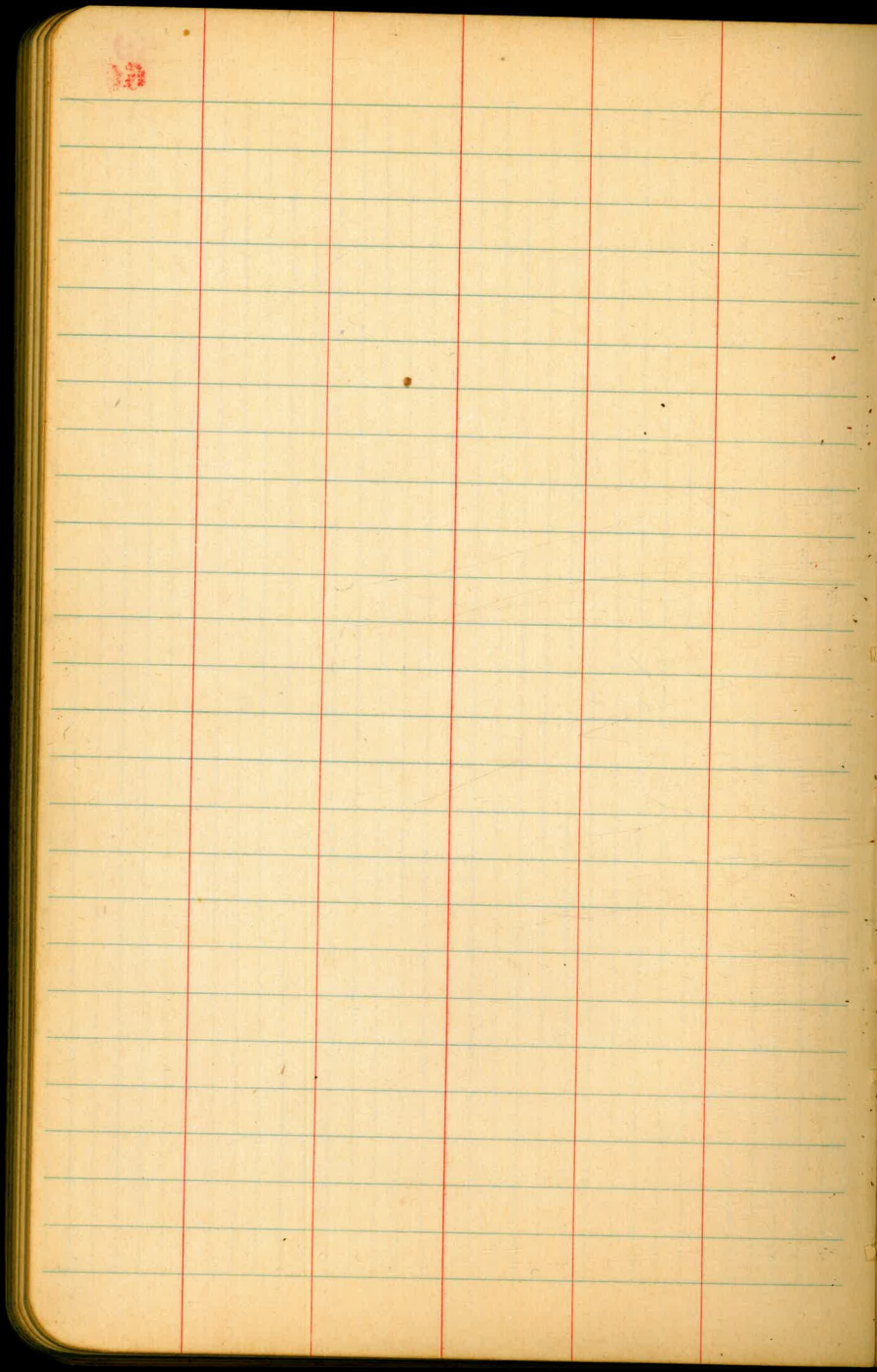
139
5.30
grate

32
9.25
bottom
of box

57
15.20
invert
60"

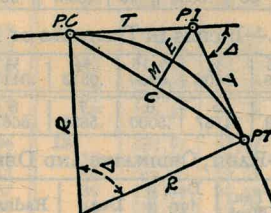
6.69 ↓





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 $= E = T \tan \frac{\Delta}{4}$ (7) $= R \div \cos. \frac{\Delta}{2} - R$ (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° 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° 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 $D = 5^\circ 30'$.

TABLE I.—MINUTES IN DECIMALS OF A DEGREE.

Table with 5 columns of minutes (1-10) and 5 columns of decimal values (0.0167 to 1.0000).

TABLE II.—INCHES IN DECIMALS OF A FOOT.

Table with 11 columns of inch fractions (1-16 to 11-16) and 11 columns of decimal values (0.0625 to 0.9375).

TABLE III.—RADI, ORDINATES AND DEFLECTIONS.

Large table with 5 columns for each degree (Deg., Radius, Mid. Ord., Tan. Offset, Def. for 1 Foot) for degrees 0 to 30.

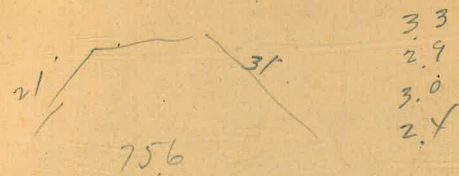
Note. Chord Deflection=2 times tangent deflection.

TABLE IV.—TANGENTS AND EXTERNALS TO A 1° CURVE.

Table with 9 columns: Central Angle, Tangent, External, Central Angle, Tangent, External, Central Angle, Tangent, External. Rows for angles 10 to 50.

136 86
~~147~~
 283 86
~~242 03~~
 2708 89
~~20~~
 27126-

105 167
~~43~~ 93
 62 130



38.0 39
~~108.3~~
 247 3
~~14~~
 261.3

3+27 22' walk 874

6+3730

17
17
34
160
24

287 W 4750
157 4950 28197 4-11/11

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

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.