

1215

SUNSET CLIFFS

Sewer & Water.

DIETZGEN  
TRADE MARK

---

ENGINEERS'

LEVEL BOOK

No. 410

---

# 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  $1\frac{1}{2}$  see inside of back cover.

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Sunset Cliffs  
Sewer + Water  
City Engineer's Office

ENGINEERING DEPARTMENT,  
SAN DIEGO,  
CITY OF  
CALIFORNIA.

see Roll 336 S. ✓

52 md  
7 cl  
Cajon

SUNSET CLIFFS

Index		Page
SUNSET CLIFFS	Main Sewer Lines	2-31
	Location • Laterals	148
	" • Dead Ends	149
	" • ManHoles	150-153
	" • Settling Tank	154-157

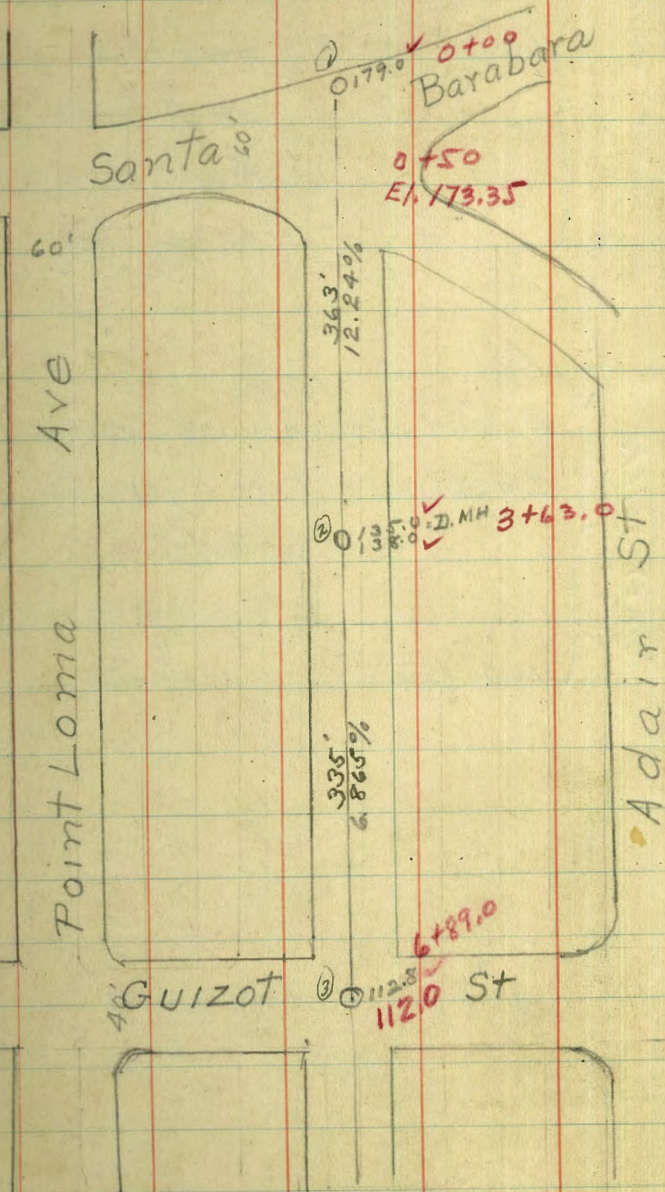
SUNSET CLIFFS

Water		
SUNSET CLIFFS	Material used on Water System	130-131
	Location of Fire Hydrants	132-133
	" • Gate Valves	136-137
	" • $\frac{3}{4}$ " Taps + Service	135
	Water pipe laid to connect Riviera Villas	134

of Pontages, Mills & Shreve 9/26/32 by H.H.

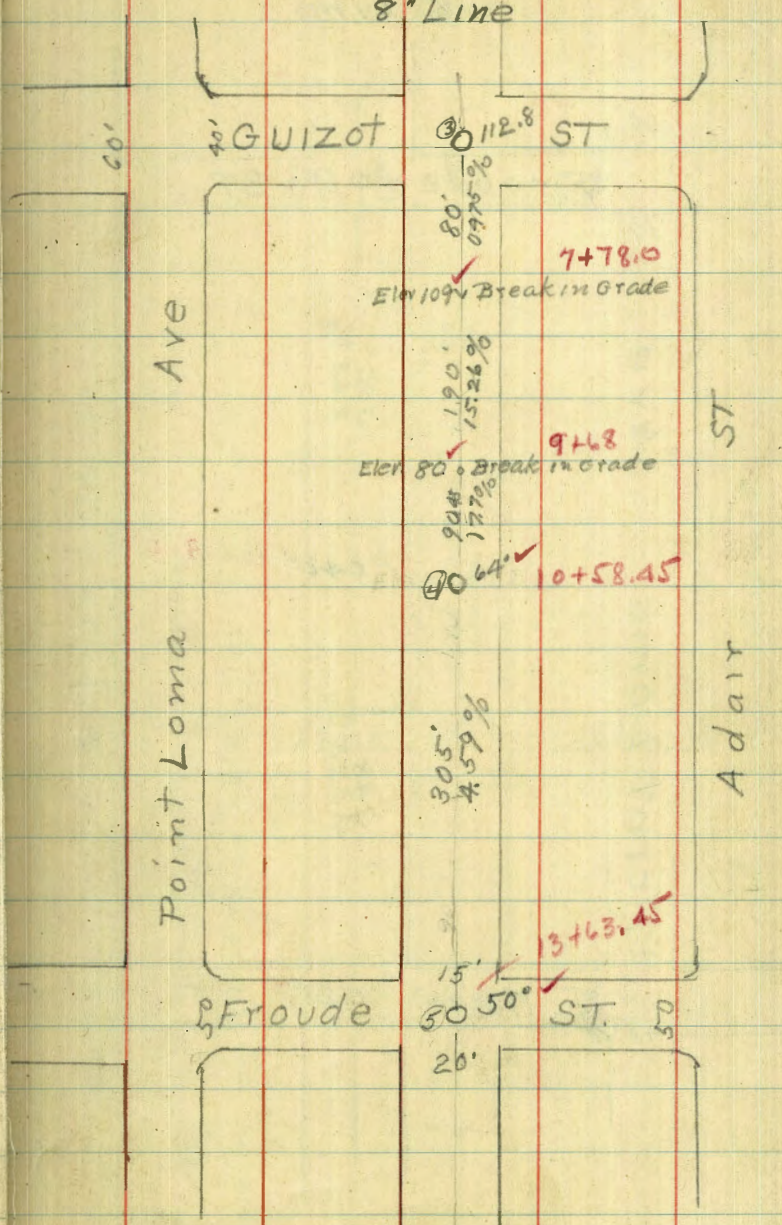
2 Alley bet. Point Loma Ave + Adair St

Bk. 1  
8" Line



Alley bet Point Loma Ave + Adair 3

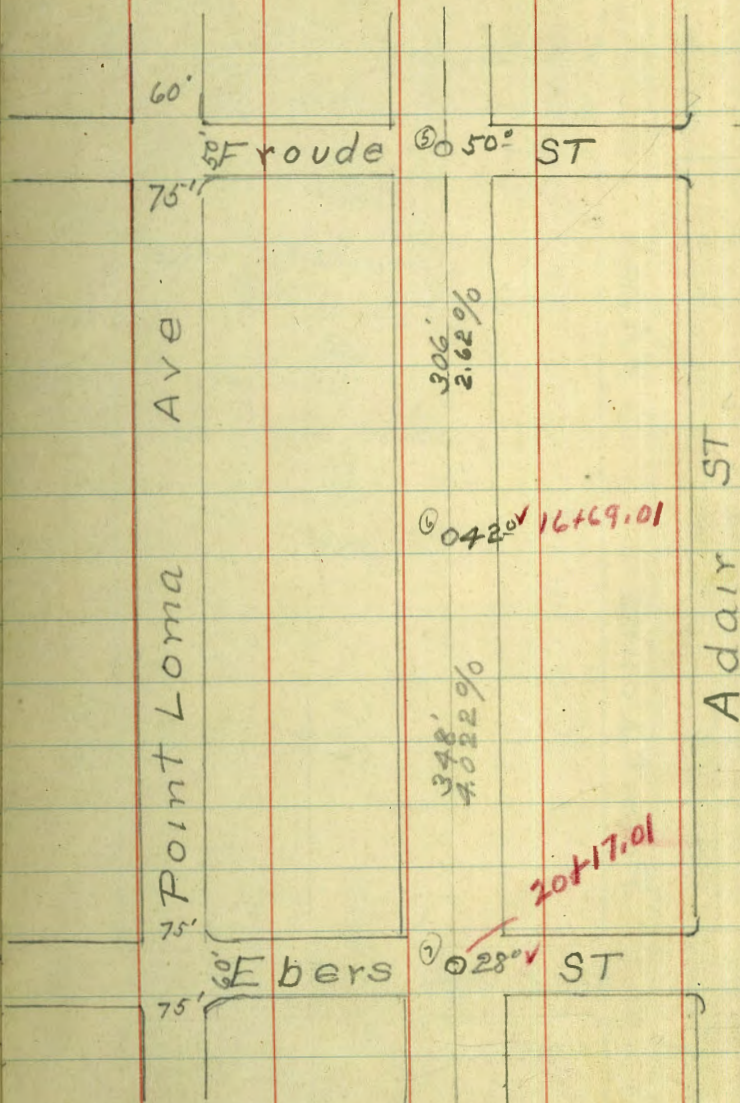
Bk 2  
8" Line



Notes - Figures in red are copied from original notes

4

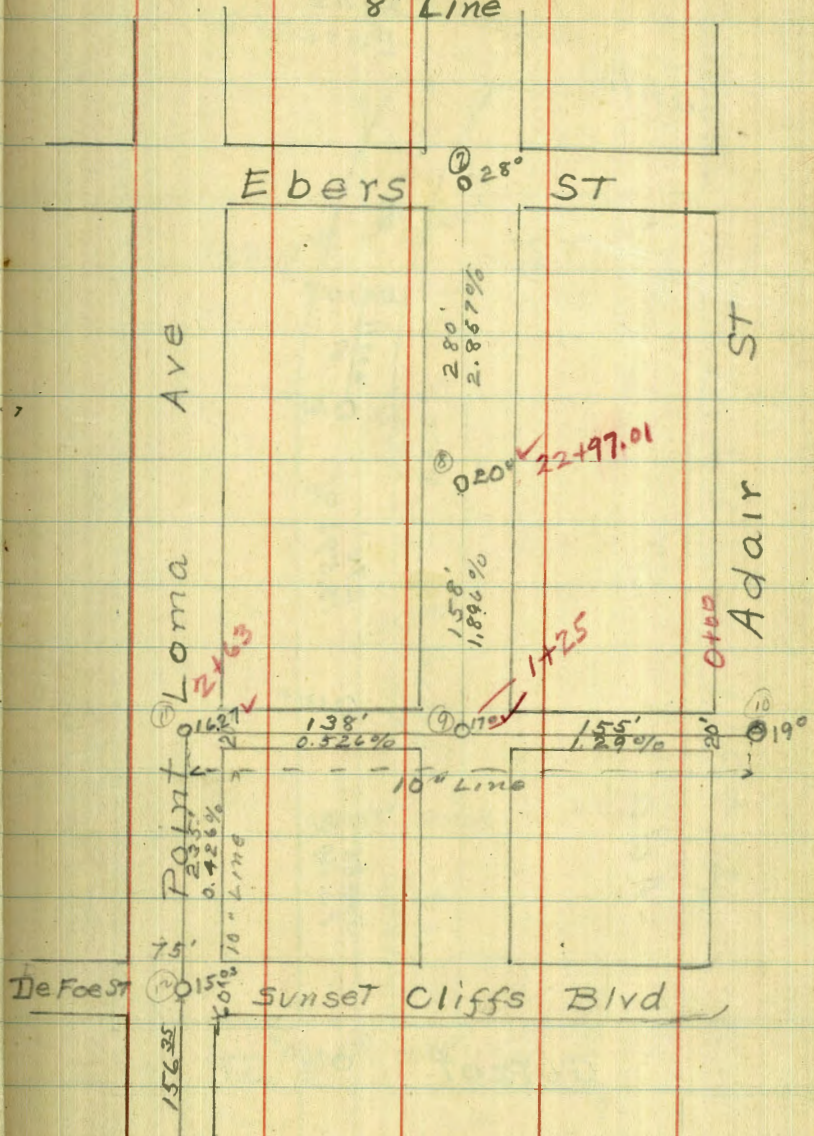
Alley bet Point Loma Ave + Adair St  
BIK 3  
8" Line



042° ✓ 16+69.01

028° ✓ ST

Alley bet Point Loma Ave + Adair St 5  
BIK 4  
8" Line



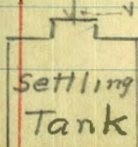
020° ✓ 22+97.01

1725

138' 0.5226%

155' 1.29%

19°



Settling Tank

6 Alley bet Adair + Tivoli

BIK 5

6" Line

Barbara

Santa

120'

DE 172° ✓

11 16.9%

13

270' 12.592%

14

304.85 10.169%

15

0100°

Guizot ST

ST

Adair

ST

Tivoli

0+60  
224030

3+30

4+34.85

Alley bet Adair + Tivoli

BIK 6

6" Line

7

Guizot

13 0100°

ST

320 8.906%

16

160' 9.687%

Elev 56° Break 11+14.85

180.95 6.65%

ST

Adair

ST

Tivoli

5+54.85

12+95.30

Froude

17 044°

ST

Guizot

ST

Adair

Tivoli

ST

ST

Tivoli

Froude

ST

6 Alley bet Adair + Tivoli

BIK 5

6" Line

Barbara

santa

120'

DE 172° ✓

116%

13 0165° ✓

0+60  
L 24° 30'

270'  
12,592%

14 0131° ✓

3+30

304.85  
10.169%

15 0100° ✓

4+34.85

Adair ST

Tivoli ST

Guizot

ST

Alley bet Adair + Tivoli

BIK 6

6" Line

7

Guizot

15 0100°

ST

320  
8.906%

16 0715° ✓

160'  
9.687%

9+54.85

Elev 56° - Break 11+14.85

180.45  
6.65%

17 044° ✓

12+95.30

Adair ST

Tivoli ST

Froude

ST

Alley bet Adair + Tivoli  
BIK 7

8" Line  
Froude 1044° ST

ST

280'

3.571%

0.34° ✓

1575.30

280'

2.321%

0.275° ✓

18455.30

271'

1.296%

0.24° ✓

21726.25

Devonshire Drive

BIK 11

ST

TIVOLI

Alley bet Tivoli + Granger 9  
BIK 8  
6" Line

Santa Barbara

ST

159'

Dead End 191.5° ✓

150' 13.93%

1750 170° ✓

300' 13.2%

4450 131° ✓

300' 11.00%

ST

Granger

GUIZOT 98° 7450 ST



10 Alley bet Tivoli + Granger

Bik 9  
6' Line

Guizot  $098^{\circ}$  ST

ST

330'  
8.787%

ST

12  $069^{\circ}$  ✓ 10-80

330.45'  
7.86%

Granger

25  $043^{\circ}$  ✓ 14-10.45  
Froude ST

Alley bet Tivoli + Granger 11

Bik 10  
8' Line

Froude  $043^{\circ}$  ST

ST

245'  
4.49%

ST

26  $032^{\circ}$  ✓ 16-55.45

245'  
1.22%

27  $029^{\circ}$  ✓ 19-00.45

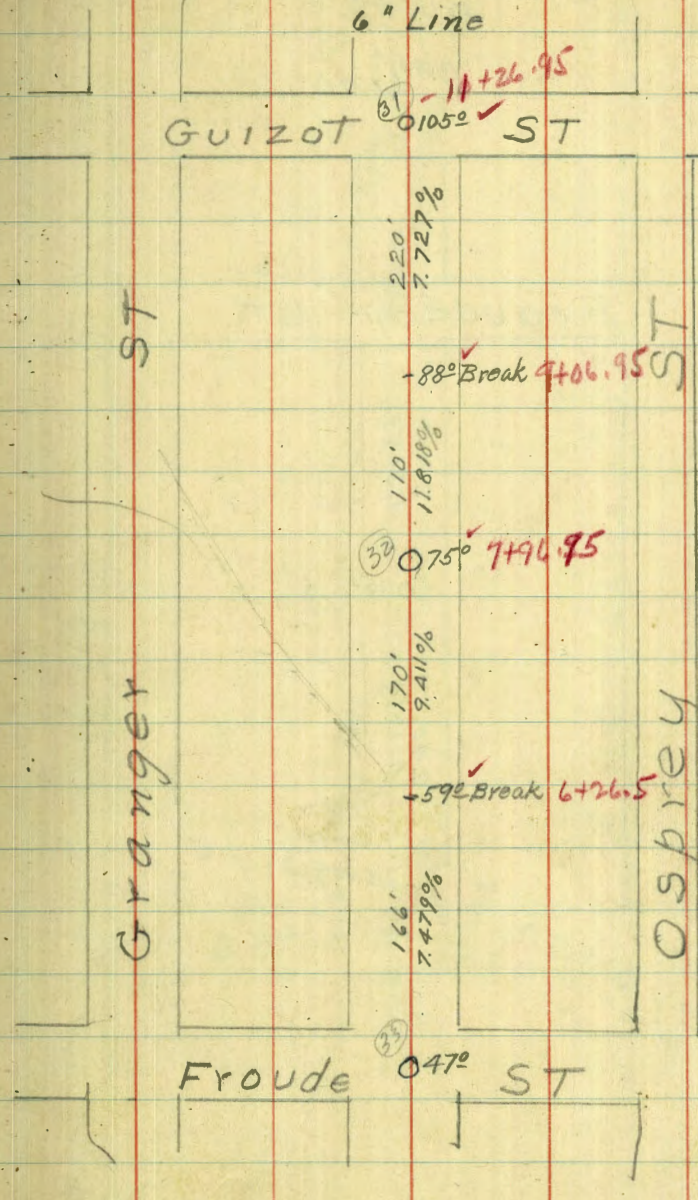
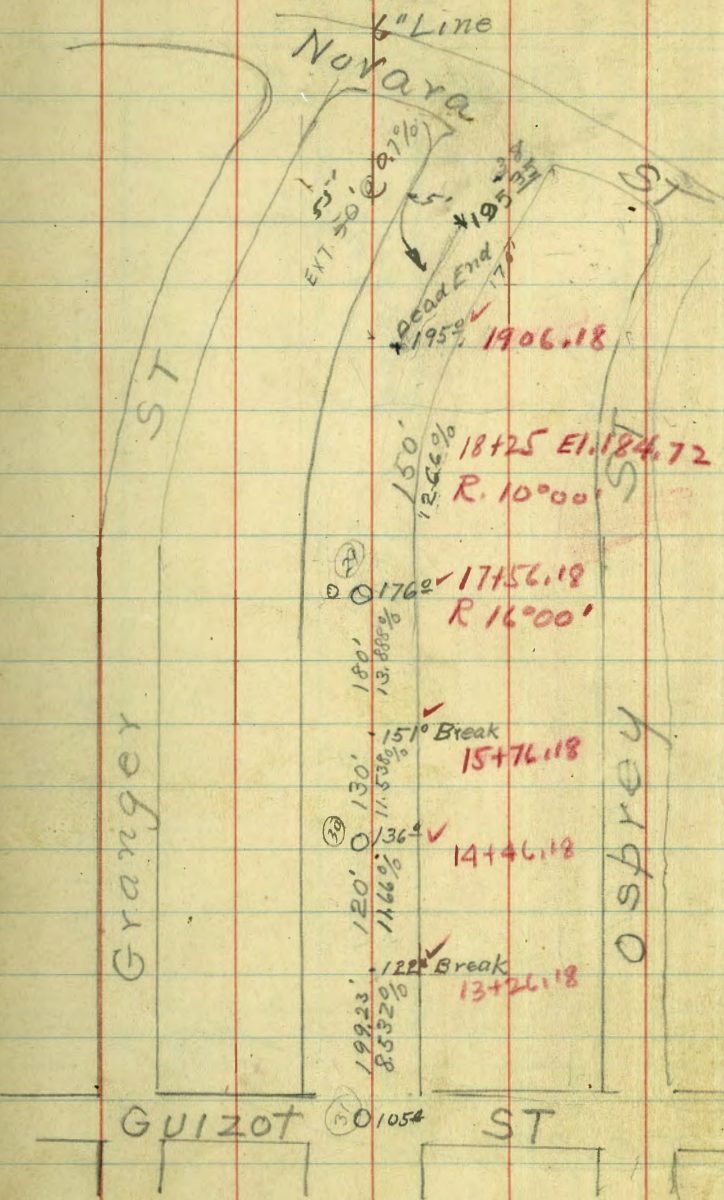
244.42'  
1.22%

Granger

28  $026^{\circ}$  ✓ 21-44.45  
Devonshire ST

12 Alley bet Granger + Osprey  
BIK 12

Alley bet Granger + Osprey  
BIK 13



14 Alley bet Granger+Osprey  
Blk 14

8" Line

Froude <sup>34</sup>047<sup>2</sup> ✓ ST 460.5

220.5'  
5.218%

<sup>35</sup>035<sup>5</sup> ✓ 240

240'  
1.666%

Devonshire Drive <sup>35</sup>031<sup>5</sup> ✓ 0+00

Alley bet Osprey+Alhambra 15  
Blk 15

Novara 8" Line

<sup>36</sup>018<sup>5</sup> ✓ 0+00

119.6'  
5.743%

<sup>37</sup>017<sup>5</sup> ✓ 119.6  
L 28°43'

280'  
11.43%

<sup>38</sup>017<sup>3</sup> ✓ 349.6

288.2'  
12.14%

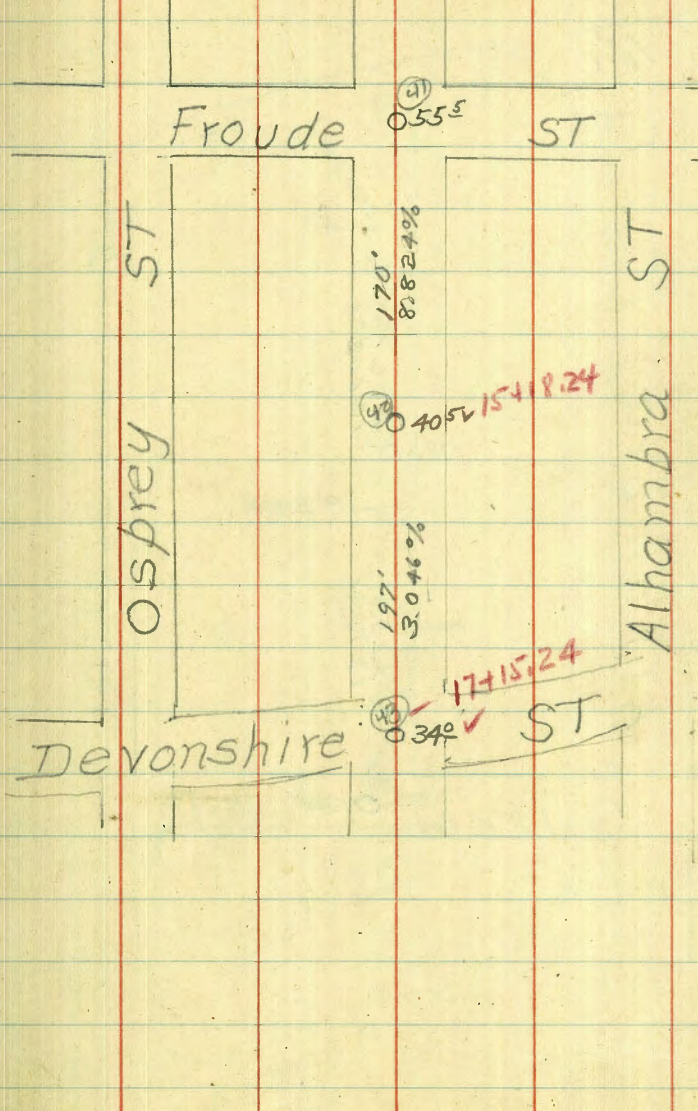
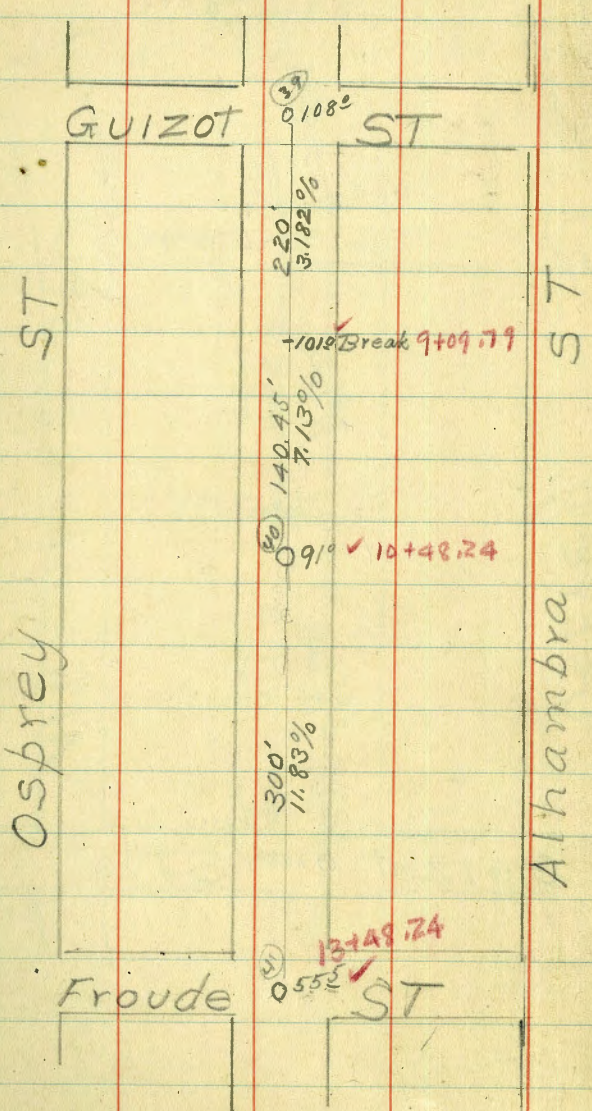
Guizot <sup>39</sup>010<sup>8</sup> ✓ ST 487.79

ST

Osprey

ST

Alhambra



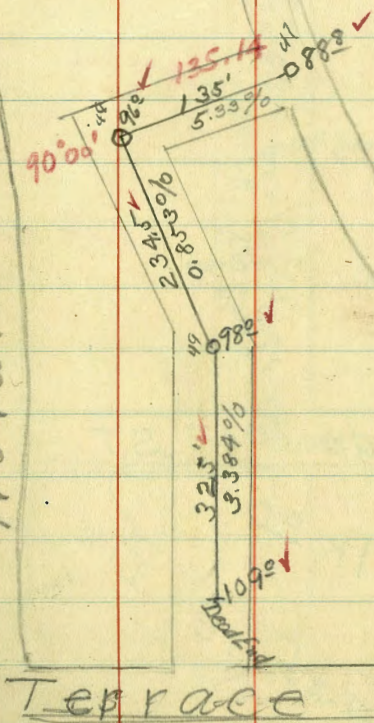


6" Line ST

Hill

ST

Novara



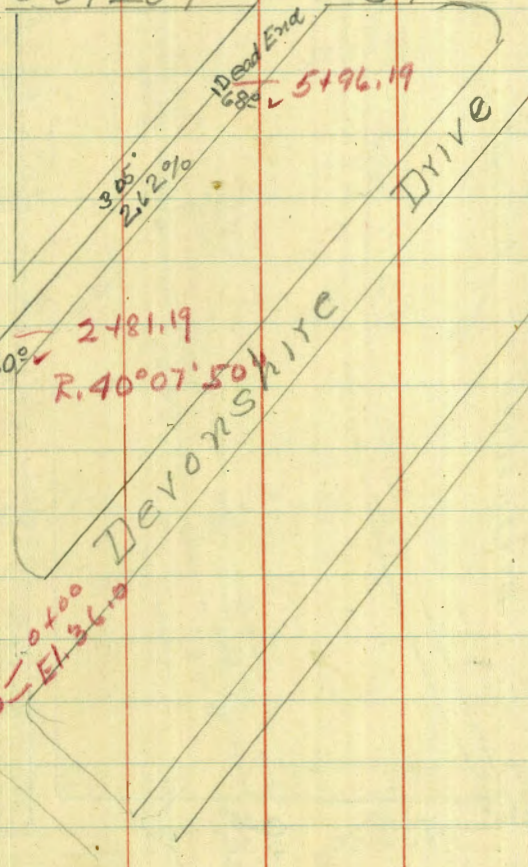
369.64  
 13514  
 5345.0  
  
 690.64  
 369.64  
 325.00

Terrace

GUIZOT ST

Terrace

Froude

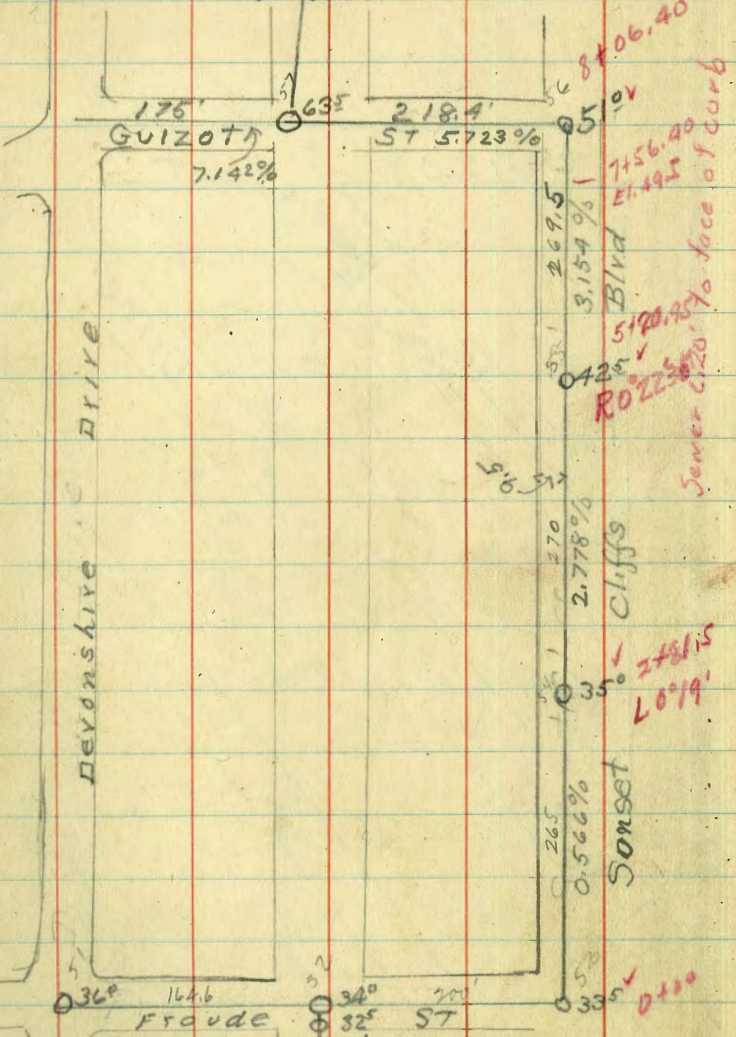


Devonshire Drive

22 Alley bet Sunset Cliffs Blvd + Devonshire Drive

BIK 24

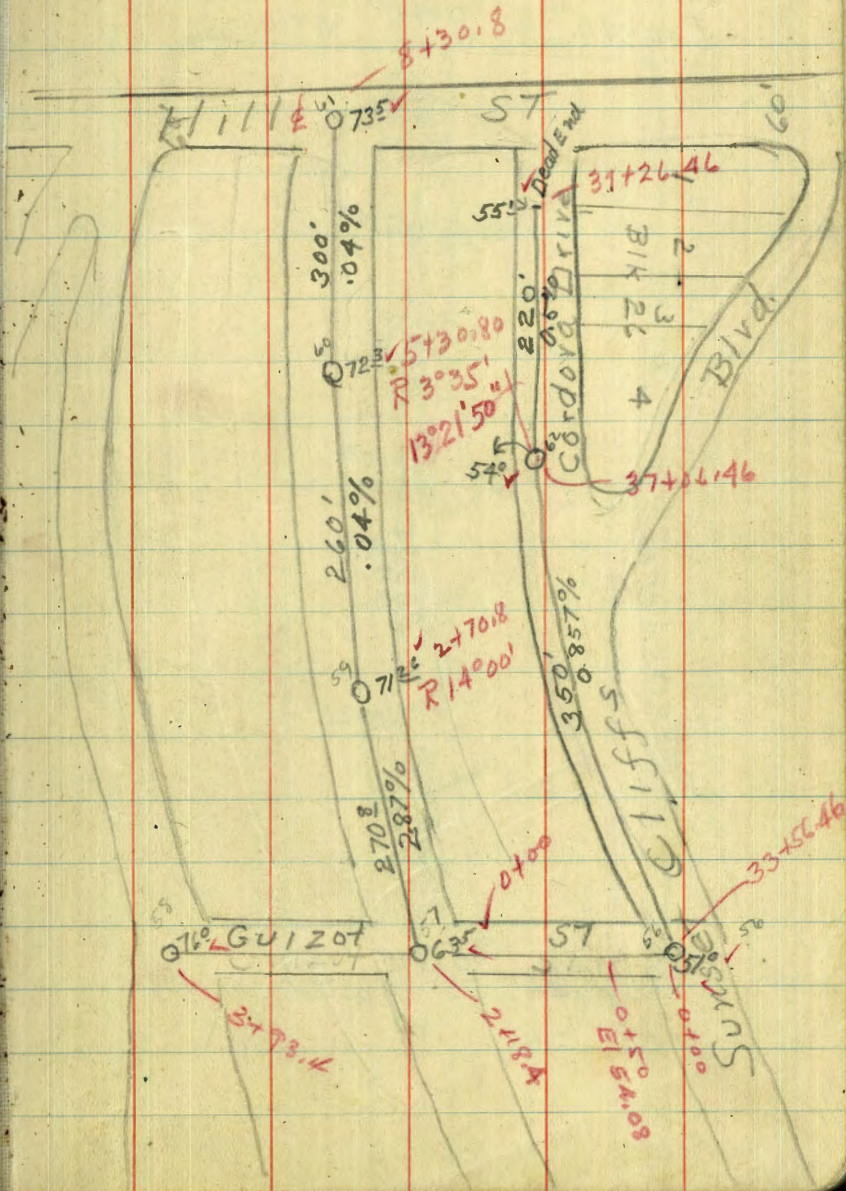
8" Line



Alley bet Sunset Cliffs Blvd + Devonshire Drive

BIK 25

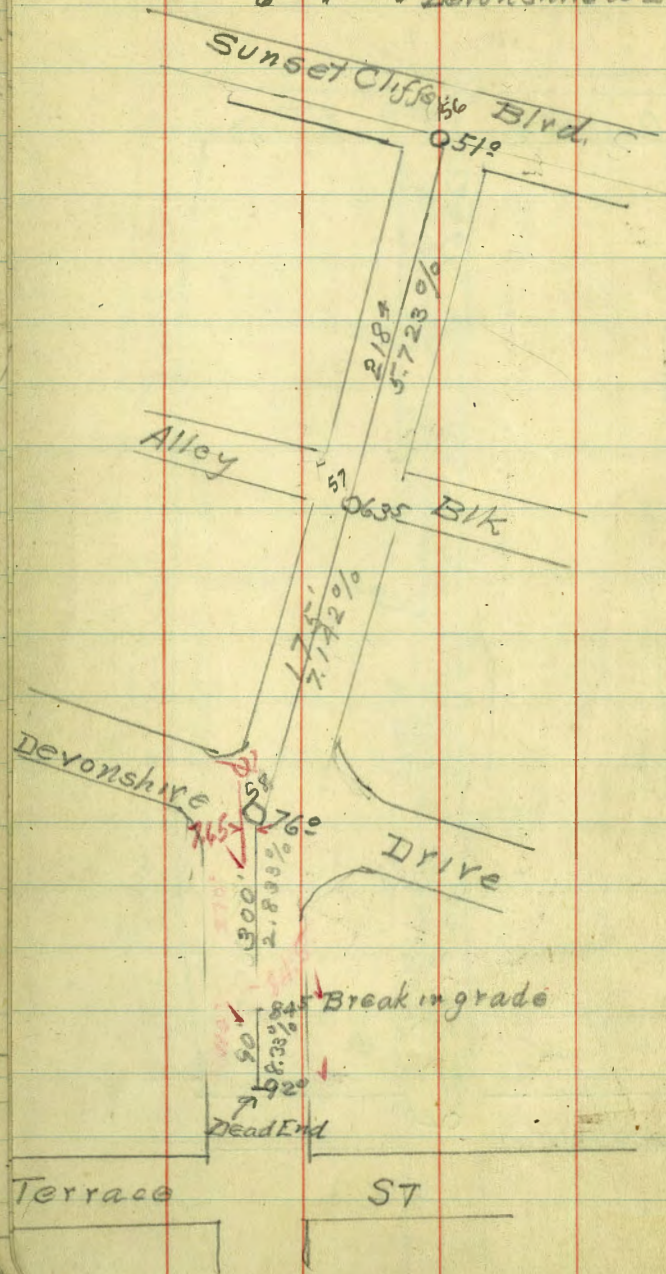
8" Line



26

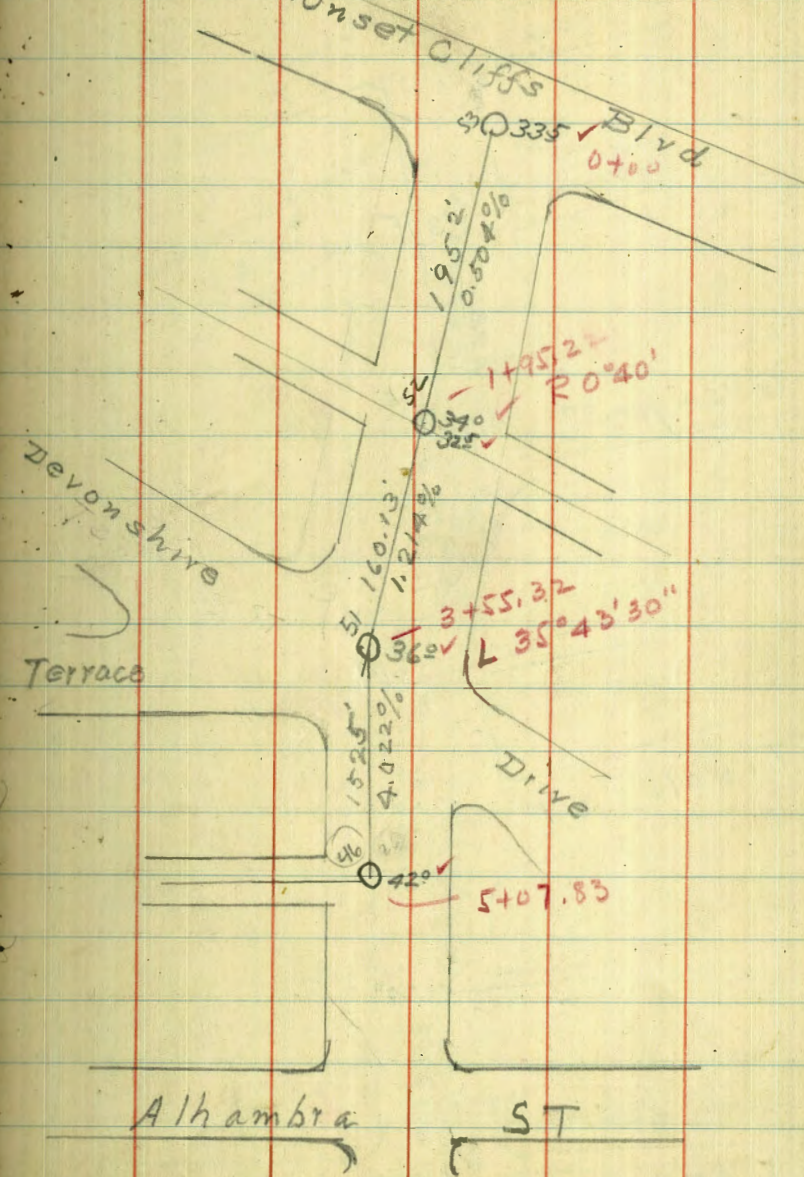
### GUIZOT ST

8" Line From Sunset Cliffs to Devonshire  
6" " Devonshire to Dead End

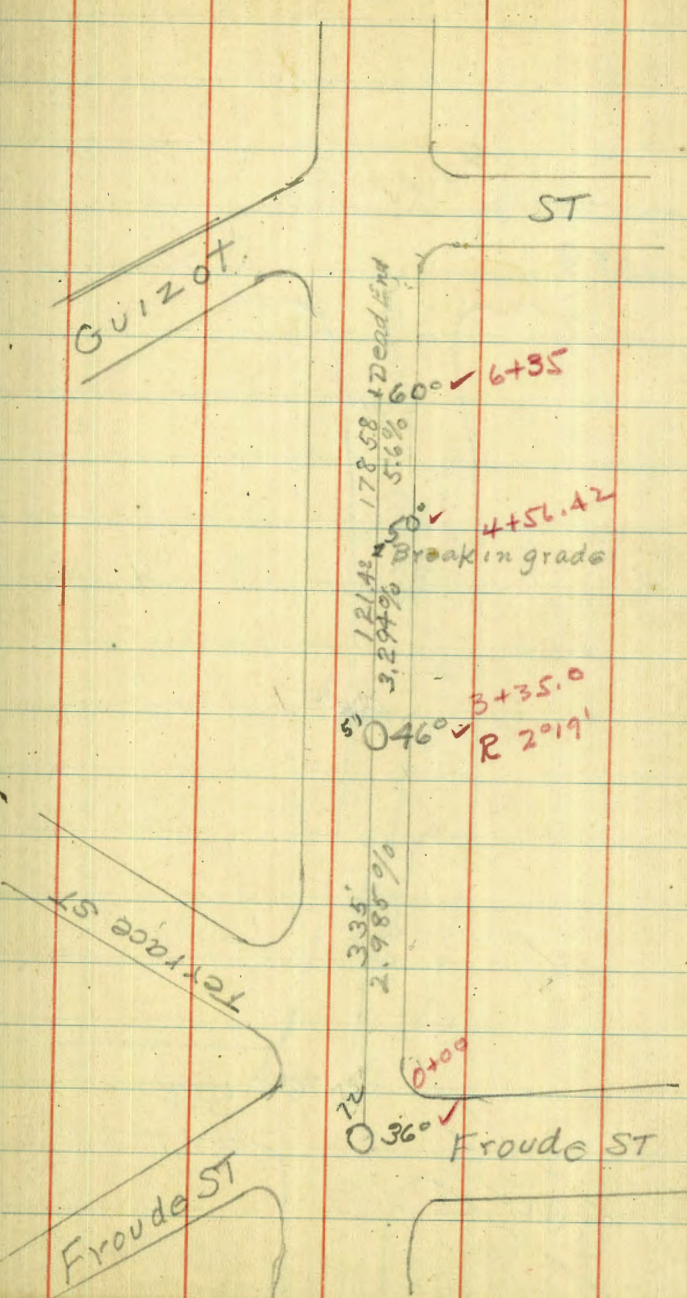
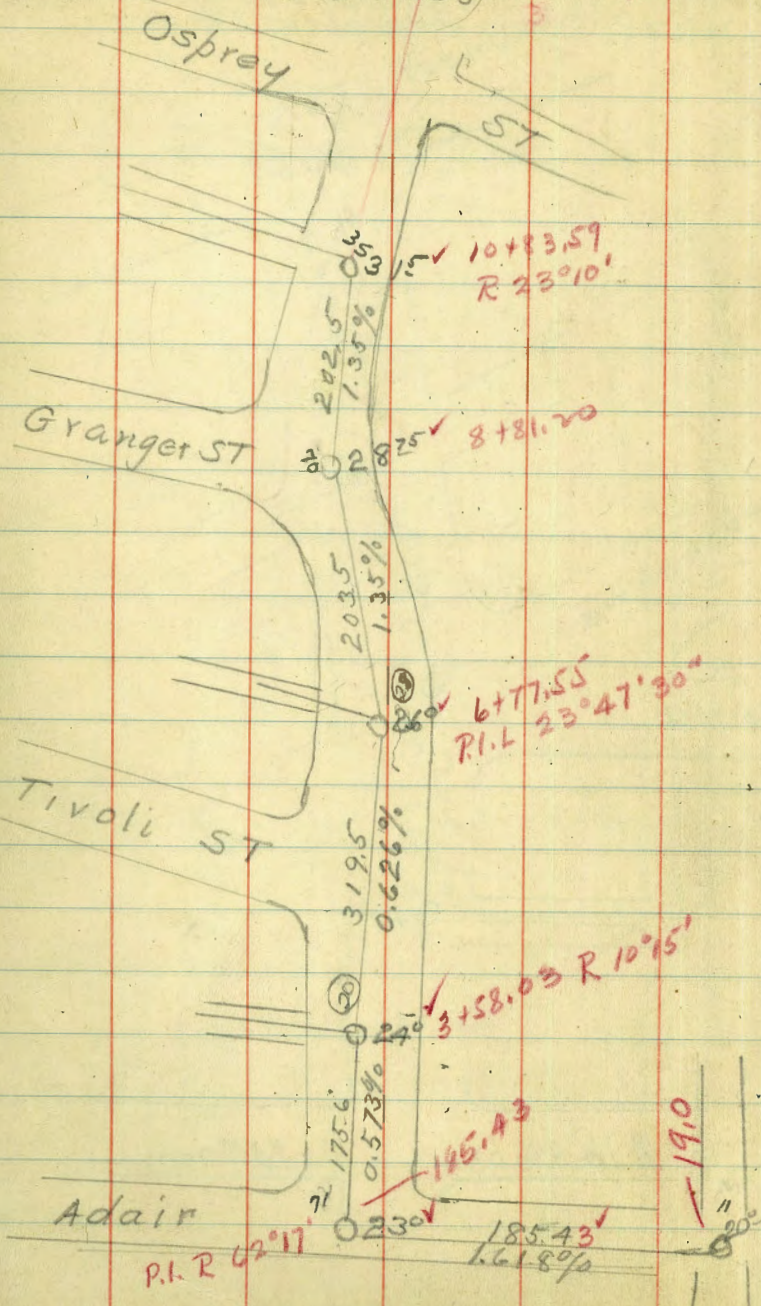


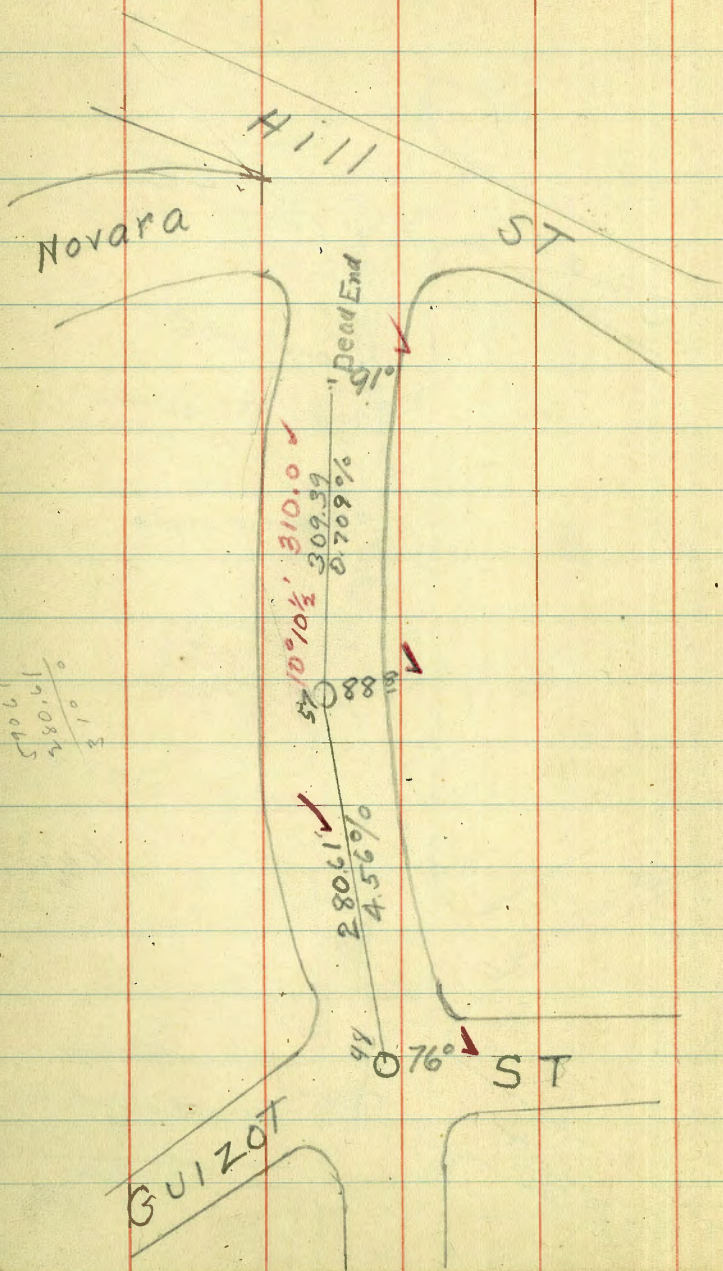
### Froude ST

8" Line From Sunset Cliffs to Devonshire 27.  
6" " Devonshire to Alley between Alhambra Terrace









32

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84

85

The image shows an open notebook with two blank pages. The pages are cream-colored and feature light blue horizontal ruling and red vertical margin lines. The left page is numbered '86' in the top left corner, and the right page is numbered '87' in the top right corner. The notebook is placed on a white surface, and the pages are otherwise empty of any text or markings.



90

91



92

93

94

95

96

97

98

99

100

101

102

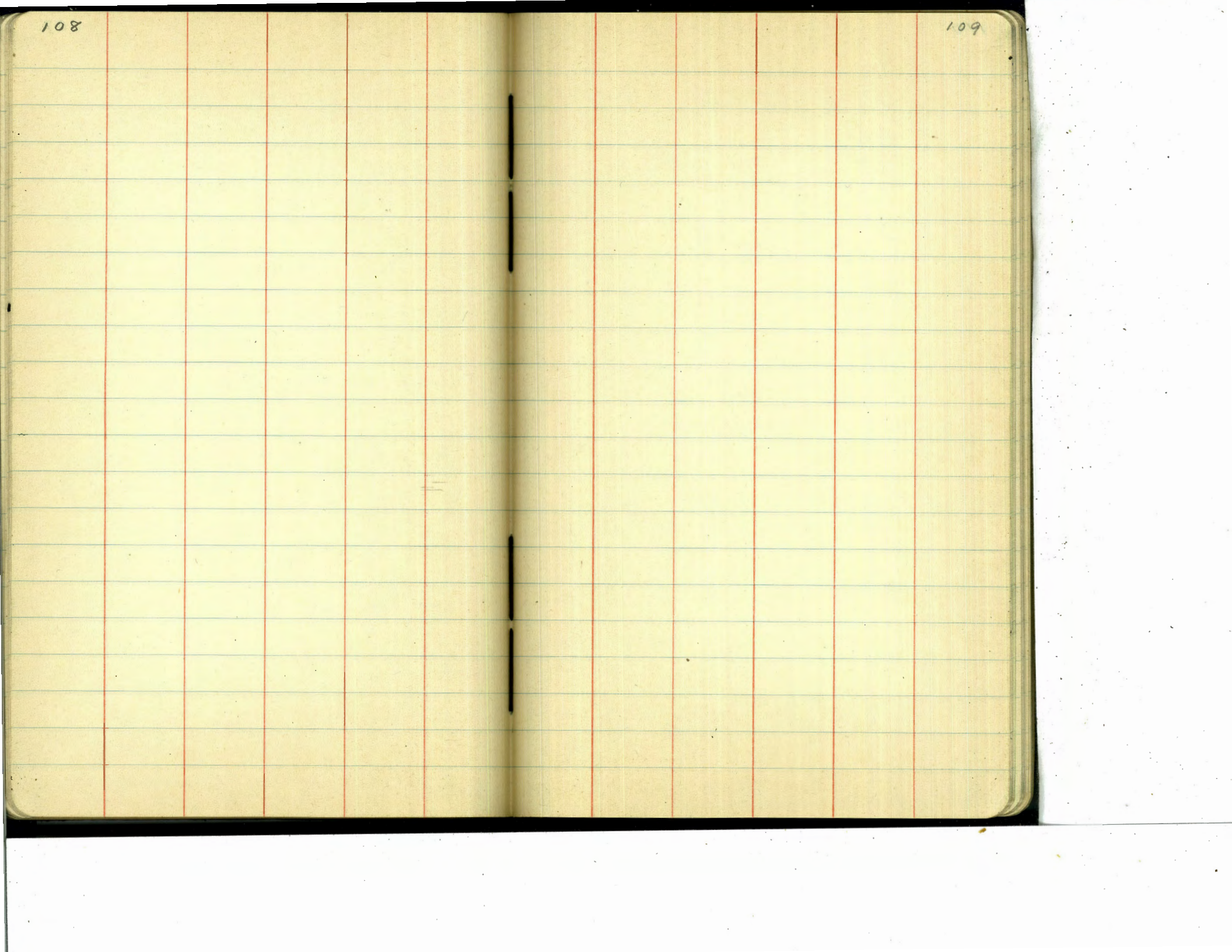
103

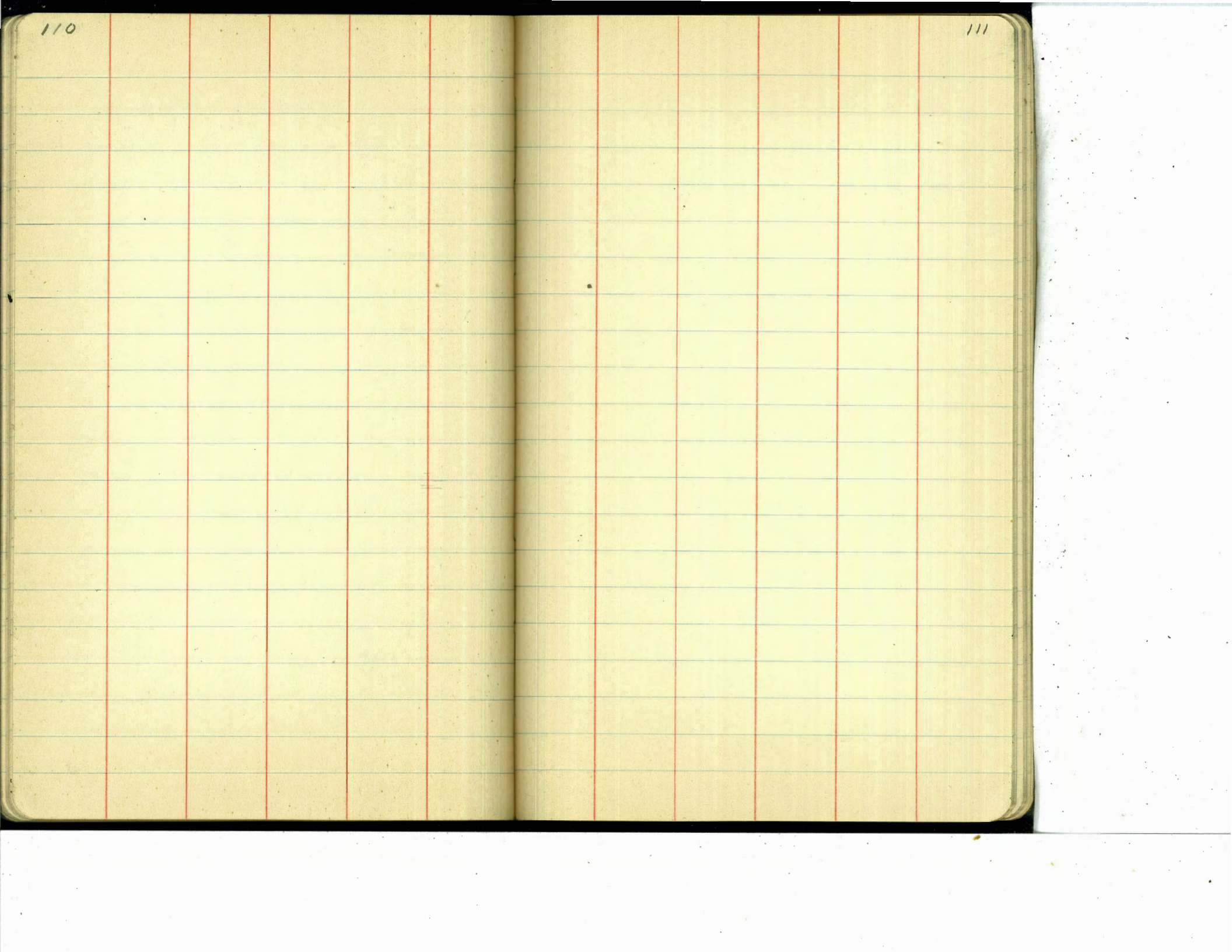
104

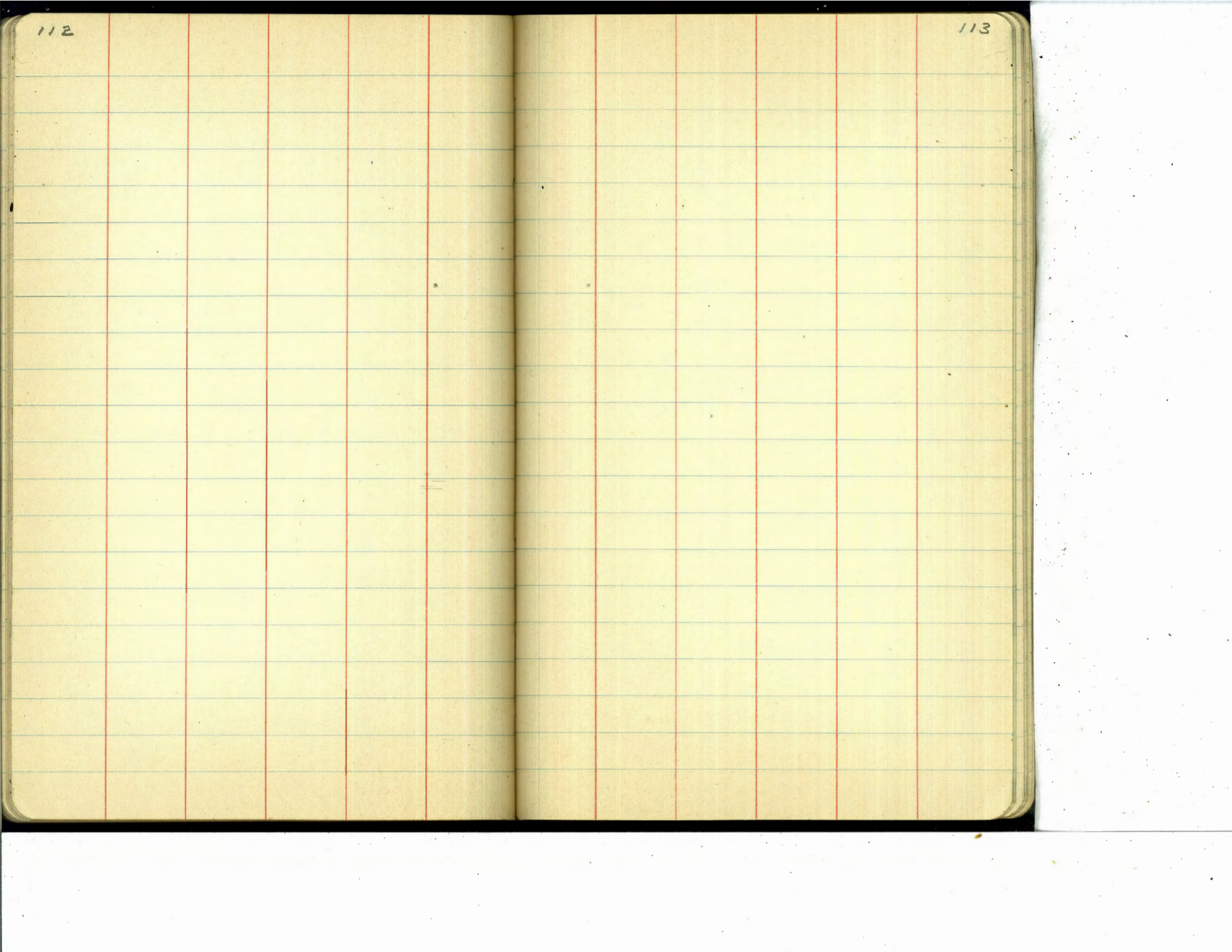
105











114

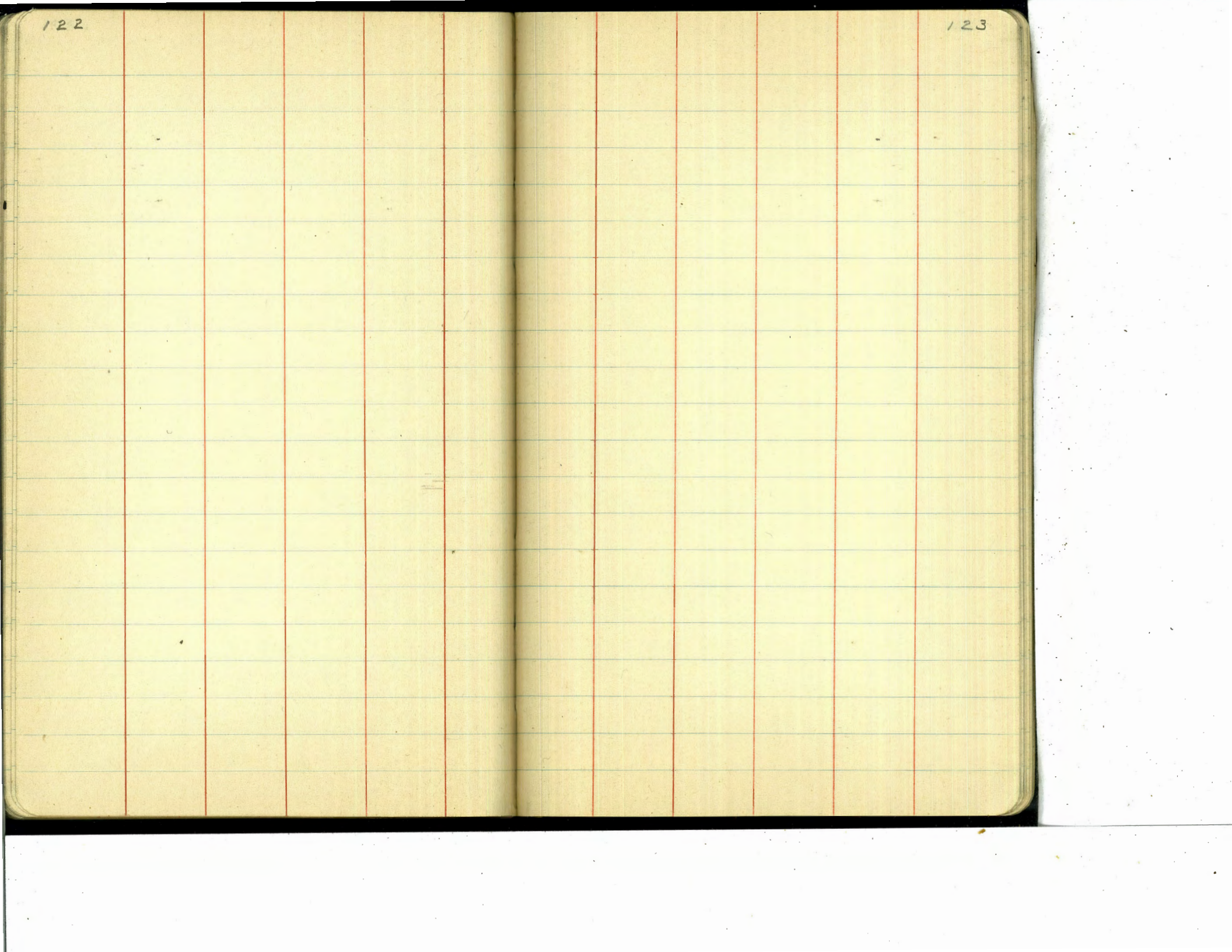
115





120

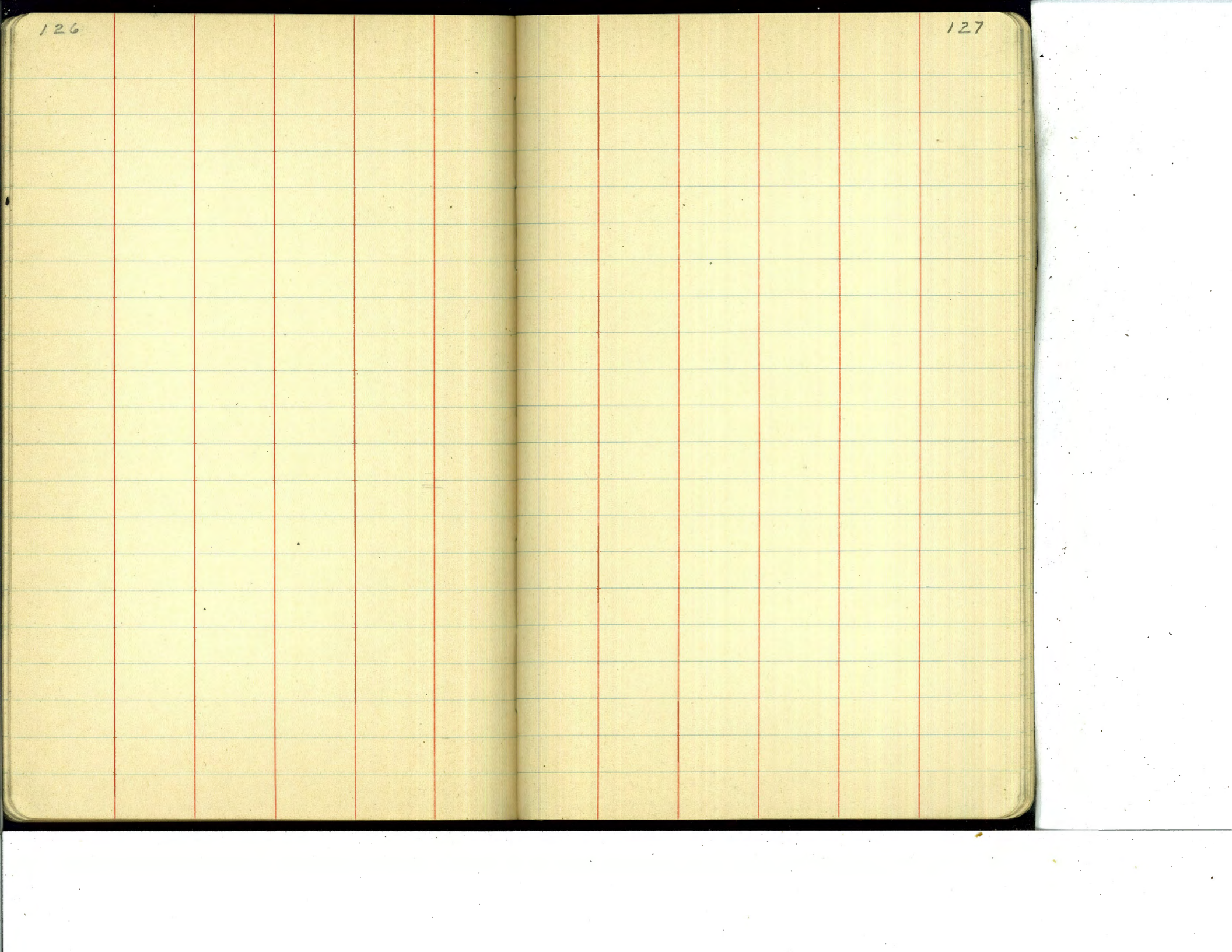
121





124

125



128

129

## Material used on Water System

9814' 6" C.I. Pipe

8676' 4" . . .

4150' 8" . . .

1280' 10" . . .

800' 2" . . .

29720' Total

18-6" 2Way Fire Hydrants

18-6" Hydrant Ells

32-6" Gate Valves

4-8" " "

12-4" " "

1-10" " "

2-10" C.I. Plugs

1-8" " " "

2-8" . . . 90° Ells

6-8X8X6 C.I. Tees

3-10X10X6 " . . .

1-10X10X4 . . .

1-8X8X2 . . .

24-6X6X6 C.I. Tees

2-6X6X4 . . . "

3-4X4X4 . . . .

4-4X4 Reducers

1-4X2 . . . "

3-6" Sleeves

2-4" "

6-6" C.I. 1/8 Bends

3-6" . . . 1/16 . . .

3-6" . . . 1/32 . . .

1-8" . . . 1/16 "

3-4" . . . 1/8 "

3-4" . . . 1/16 . . .

4-2" . . . Ells

2-2" . . . Plugs

1-6" 90° Ell

6-4" 90° . . .



134 Water Pipe laid to Connect Riviera Villas  
10" Pipe

From 10' E of Santa Barbara at intersection of Alley bet.

Point Loma Ave + Adair - South on Santa Barbara to S Line of Trieste  
1-10x10x6" Tee - 1-10" Valve - 640' - 10" Pipe  
6" Pipe

From intersection of Trieste + Santa Barbara

South on Trieste + Novara to intersection of Alley

between Alhambra + Terrace

1-6" Ell 3-6" Tees - 3-6" Valves - 646' - 6" Pipe  
4" Pipe

From End of 6" line intersection on Novara + Alley

bet Alhambra + Terrace South on Novara to Cornish Drive

1-4" Gate Valve E-PL of Cornish - 1-4" Ell

588' 4" C.I. Pipe + 1-6"x4" Reducer connecting 6" + 4" Lines

3/4" Taps + Service pipe laid in Riviera Villas 135  
Brass Fittings + Copper pipe

East from 10" Line on Santa Barbara - BIK A

Lot 1 = 5' North of S Line

• 2-3-4-5-6-7-8-9-10-11-12-13-14-15 = 20' N of S.P.L

• 16' 20' S of North Prop Line

Trieste Drive - BIK J

Lots 2-3-4-5

Novara Drive BIK K

Lots 2-3-4-5-6-7-8-9-10-11-12-13-14

1-Tap Trieste Drive BIK S

2- " Cordova Drive " 21' Lots 23-2" Line

1 " Alhambra " 20' Lot 2- " "

5 " Devonshire " 22' Lots 23-24-25-26-27

136 Location of Gate Valves

Sunset Cliffs 8" Line is located 12' East of the E of DeFoe St + 2' South of the E of Point Loma Ave

Main Shut off Gate

North Prop Line of Point Loma Ave 12' E of E DeFoe St  
8" Valves

South Prop Line Adair in Alley bet Sunset Cliffs Blvd + Devonshire Drive

" " " Osprey " " " " " " " " " " " "

" " " Froude " " " " " " " " " " " "

" " " Guizot " " " " " " " " " " " "

6" Valves

East " " of Alley Blk 4 bet Ebers + Sunset Cliffs Blvd

" " " Froude + Alley bet Point Loma Ave + Adair

West " " Santa Barbara " " " " " " " " " " " "

East " " Alley bet Sunset Cliffs Blvd + Devonshire on Adair St

West " " Santa Barbara + Alley bet Tivoli + Granger

" " " Froude " " " " " " " " " " " "

East " " Alley bet Sunset Cliffs Blvd + Devonshire on Osprey

" " " Guizot + Alley bet Alhambra + Osprey

West " " Novara " " " " " " " " " " " "

East " " Alley bet Sunset Cliffs Blvd + Devonshire on Froude

" " " " " Cordova Drive " " " Hill St

" " " Novara Alley between Piedmont + Hill "

" " " " " on Osprey

West " " Santa Barbara " " " Trieste

4" Valves

East Prop Line Devonshire in Alley bet Adair + Tivoli

" " " Froude " " " " " " " " " " " "

West " " Santa Barbara " " " " " " " " " " " "

North " " Osprey on Devonshire

East " " Froude in Alley bet Granger + Osprey

West " " Novara " " " " " " " " " " " "

North " " Terrace on Froude

South " " " " " Guizot

East " " Guizot " Terrace

West " " Novara in Alley bet Alhambra + Terrace

East " " " " " on Cornish

North " " Intersection of Hill + Novara on Devonshire

2" Valves

West " " Alley bet Cordova + Devonshire on Hill St

North " " " " " Alhambra + Terrace " Froude

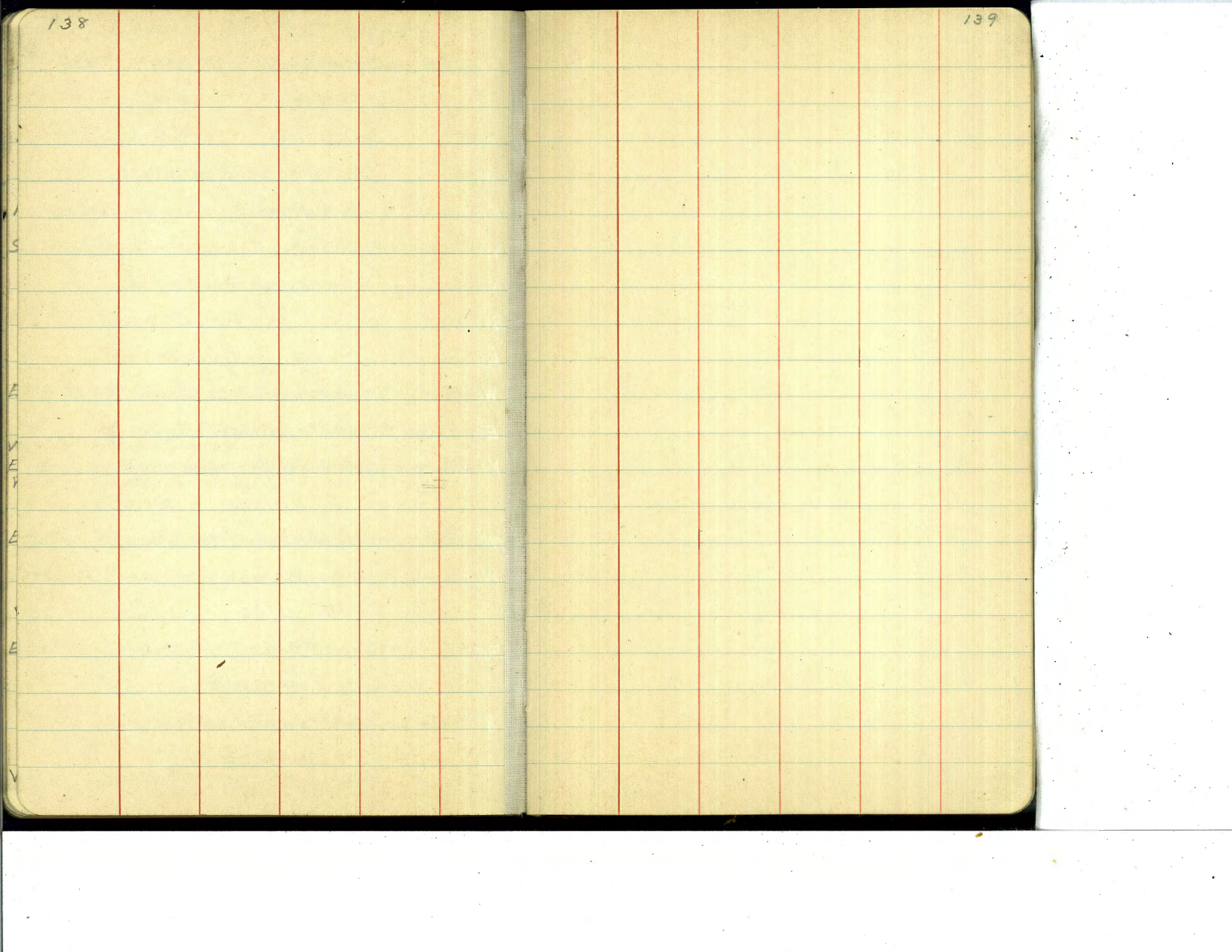
10" Valve

East " " Trieste on Santa Barbara

Main Shut off Gate for Tract

8" Gate on North P.L. of Point Loma Ave +

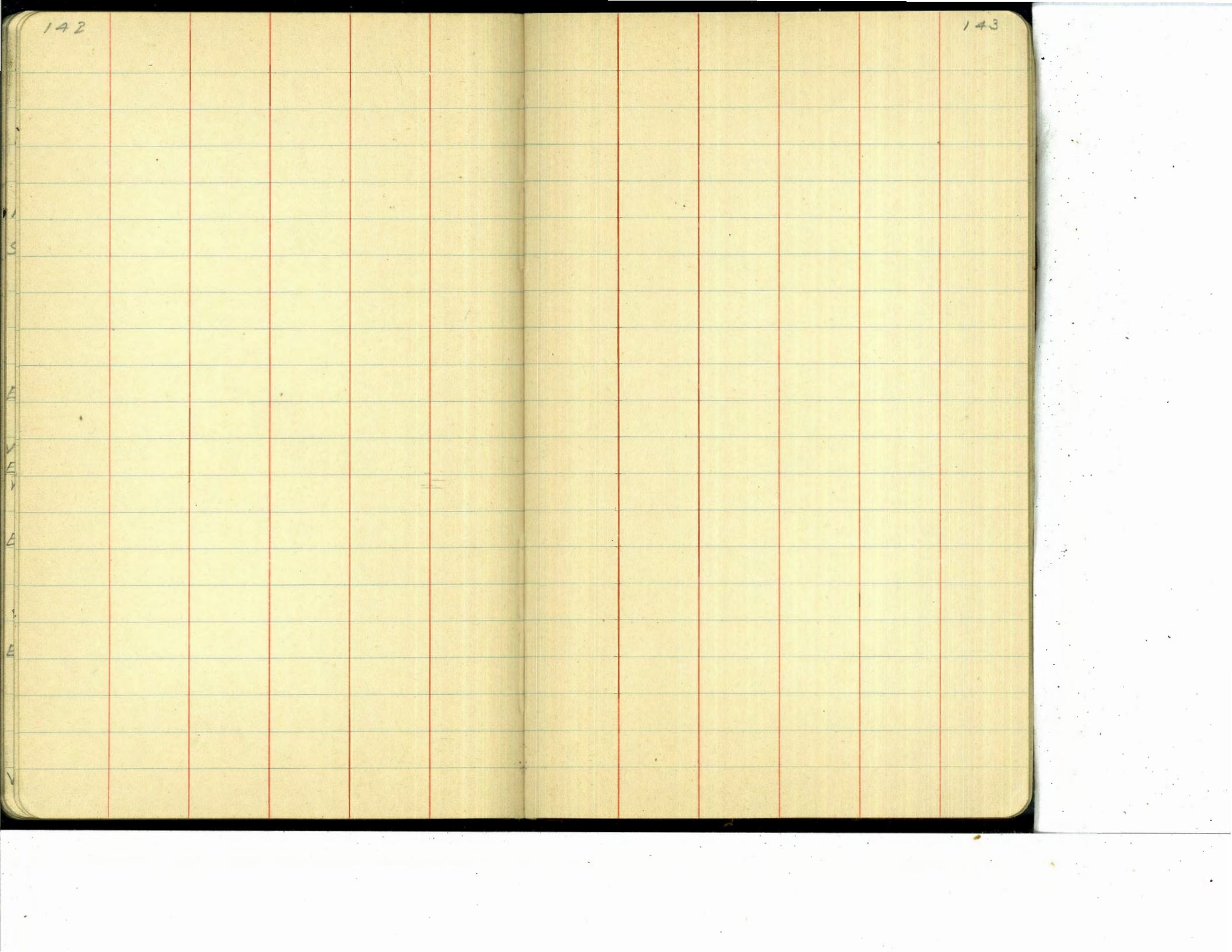
12' South of E DeFoe St.





140

141



144

145

## Concrete Sewer Pipe Laid

11983' 8"

12850

8786' 6"

8670'

684' 10"

265

72 ManHoles

67 M.H.

3 D.M.H.

10 Dead Ends

10 D.E.

## Location of Sewer Laterals

4"

Devonshire Drive bet Terrace + Guizot ST ✓

Lots 4-6-7-8-9-10-11 - BIK 23

Lateral on lot 4 30' 3" P.C., others 10' from low side of lot  
These laterals are in to 6" inside of curb only.

Devonshire Drive bet Guizot + Hill ST ✓

Lots 18-19-23-24-25-26-27 - BIK 22

These laterals are 10' from low side of lot, laterals are in to 6" inside of curb only.

Guizot ST bet Terrace + Devonshire Drive ✓

Lots 4-6-8-10-12-14-16 BIK 22

These laterals are in to P.C. Lateral on Lot 4 is at 9/4 P.C.C.

Froude ST bet Alhambra + Terrace ✓

Lot 3 - BIK 20

Lot 21' 3" of M.H.

Cordova Drive bet Sunset Cliffs Blvd + Hill ST

Lot 2 = 10' South of North Line of Lot 2 BIK 26 ?

• 4 = 135' North • South • • • 4 • "

Note: - These additional notes were obtained from the originals held by  
Portages, Mill & Shreve 9/24/52 by H.H.

## Location of Dead Ends

Alley bet. Adair + Tivoli BIK 5-634<sup>85</sup> ✓

" • Tivoli • Granger " 8-750 • • • • 150' E of MH 12

" • Granger • Osprey • 12-779 • • • • 250' • • • 30

" • Alhambra • Terrace • 18-330 • • • •

" • Guizot • Devonshire • 23-315' South of MH &amp; Terrace

" • Novara • " • 22-330 North - MH # 49

Devonshire Drive - 300' South of MH # 53 - Laid to Pavement Grade

Guizot ST 390' North • • • 52 • • • •

Devonshire " 325' South • • • 51 • • • •

Cordova • 220' • • • 59

Note - The 2 Dead Ends on Devonshire Drive + on Guizot  
ST are laid to top of Pavement + cleanouts capped with  
C.I. Water PlugsAll other clean outs are approx. 1' below surface  
when laid





## Settling Tank Elevations

Elev Top of Parapet Wall	18.2
" " " Tank	15.5
" Flow Line Inlet Chamber	11.5
" " " Outlet "	4.0
" Top of Concrete Sea Wall	3.5
" Flow Line through " " "	-3.0
" " " 149' West " " "	-9.29
" " " End of Outfall	-12.00
Length of 8" Pipe West of Sea Wall	241'

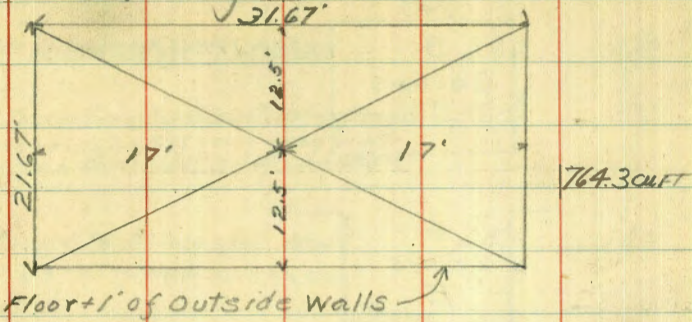
11 Piers 42" x 30"

1 " End of Outfall 7' x 42"

1 Double in Rock 15' x 30"

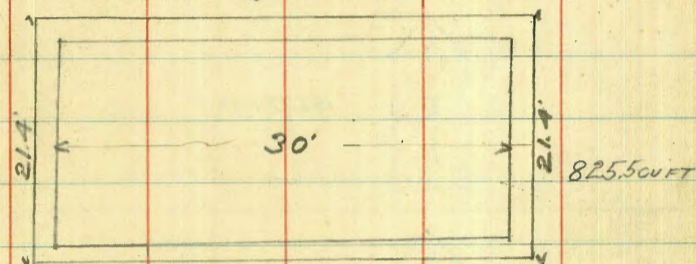
1 " " " 8' x 30"

Concrete Channel in Rock West of Sea Wall 18" x 3' x 15'

Concrete  
Settling Tank

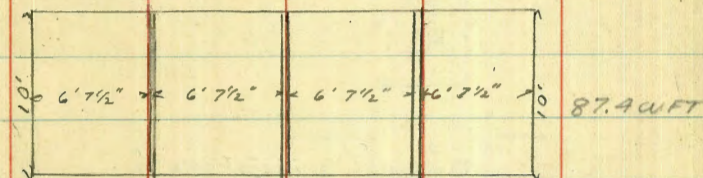
764.3 cuft

Outside Walls From Bottom of Beam C to Bottom of Beam B = 12'



825.5 cuft

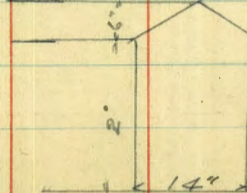
## Division Wall



87.4 cuft

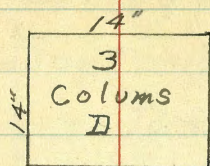
4 - 6' 7 1/2" Panels bet Columns  
10' Height + 4" Thickness of Wall

## Beam C

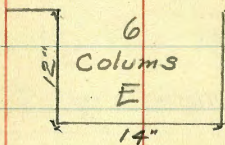


Length of Beam 18'  
 Width " " 14"  
 Height " " 24' } 142.5 cuft  
 $\Delta = 25 \times 1.17 \times 18 \times 3 = 15.8 \text{ cuft}$

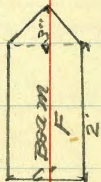




1.17 X 1.17 X 10' Height of Col. x 3 = 41.1 cu ft

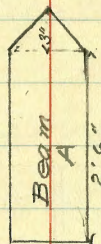


1.17 X 1 X 10' Height of Col x 6 = 70.2 cu ft



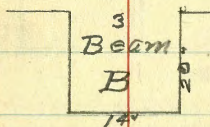
19.67 X 10.6 =

209 cu ft



19.67 X 13.1 =

258 cu ft



1.17 X 1.67 X 20' x 3 =

117 cu ft

Concrete Poured cu. yds Cement

Sept 24<sup>th</sup> Hopper Floor + 1' of Walls 28.3 172

Oct 11-12 From bottom of Beam Level to Bottom of Beam B 49.4 373  
including part of South wing wall  
curtain wall-inlet-outlet chambers

Oct 19<sup>th</sup> Poured Deck + Parapet Wall 25.0 150

158

159

