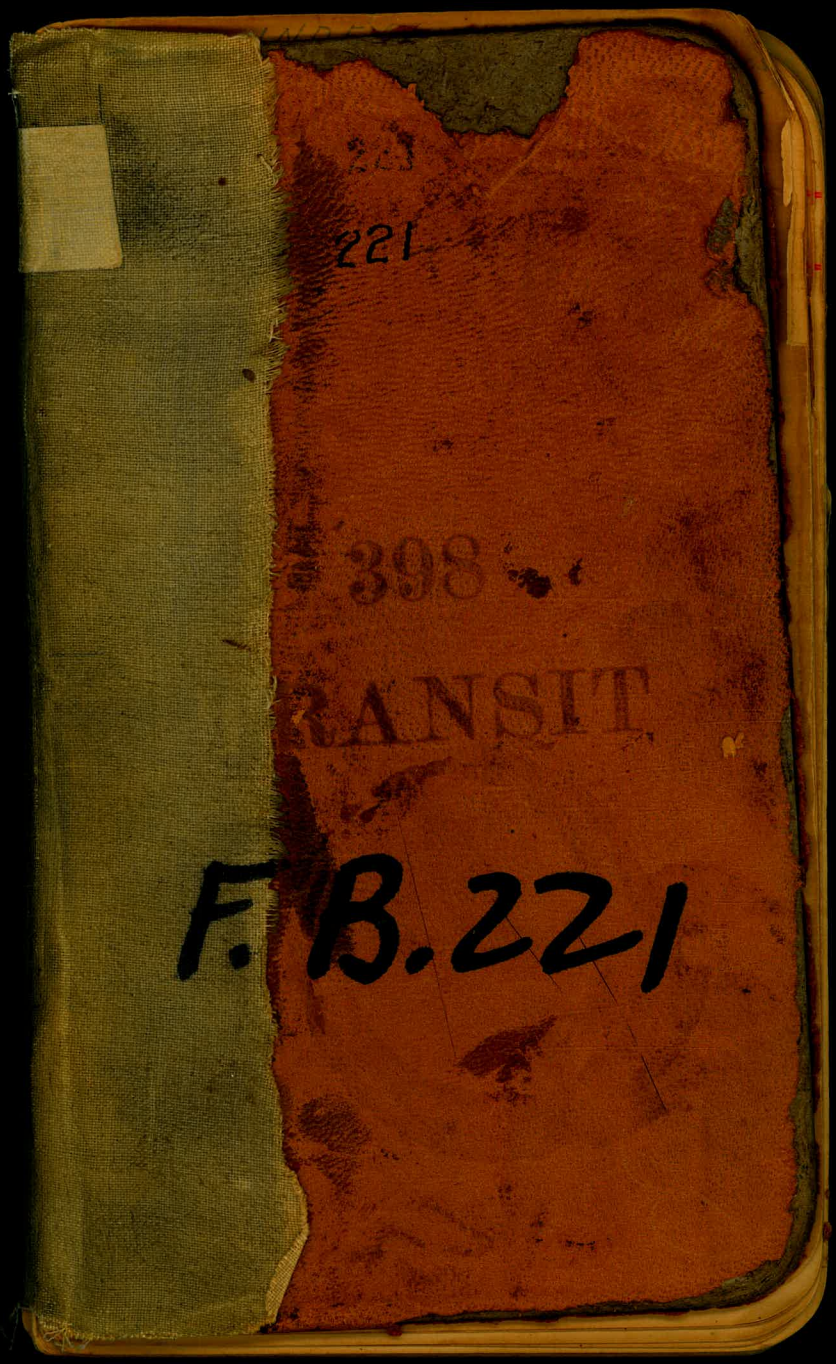

221
398
RANSIT
F. B. 221

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes	Lks.	Minutes	Lks.	Minutes	Lks.
1	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 1/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	60	140

Return to City Engineers Office
City Hall, San Diego, Cal.

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links
0		0		0		0	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

INDEX.

	Pages
Copy original Notes Line "A"	1 & 2
" " " " "B"	3 & 4
" " " " "C"	5 & 6
" " " " "D"	7 & 8
" " " " "E"	9
" " " " "F"	10 & 11
" " " " "G"	12
" " " " "H"	13
" " " " "I"	14
"A" Line	16 & 17
"B" "	19-21
"C" "	22-24
"D" "	25-27
"E" "	28
"F" "	29-31
"G" "	32-34
"H" "	35-36
"I" "	37
"J" "	38-39

These are Carey's notes

See Wheelers original notes in his books 39 & 65 and maps purchased by City from him for the purpose of re-establishing his lines.
Lines re-run by C.L. Carey in this book.
Basis of Carey's Map.
E.L.B.

Copy of Meander Lines.
"A" Line

Defl. R. 1°30'
599.8
134½
1°27'
20+00

19+56.1

Defl. L. 8°30'
699.9'
8°29'
8°26¾'

13+00 Set 16" Iron pin 7" underground apr. 8th

Defl. L. 15°
15°2½'
799.9'

5+00 Set 16" Iron pin. 6" underground Apr 8

66° R.
500.0'

0+00

P.M. Apr 4th

1

W. Line 4th St.
137°29'

65° 59 ~~57 30"~~

3+3 H.O.T.

~~66°~~

16" Iron pin apr. 8

90°

"A"

40+77.7 ⊙ Intersect S. Boundy. of 1282

29+90 ⊙ = 41+39.2 "C" Line

Defl. L. 29°10'
29° 10'
29° 06'

26+00 ⊙

2

4077.7
2990
1087

Sta. 35 "C" Line

"C" Line
(638.85 OK.)

("Sta. 0" 0.50)

"B." Line.

Defl. R. 31°30'

18+00

Defl. R. 46°

13+50

Defl. R. 22°30'

11+00

Defl. R. 27°

8+00

Defl. L. 21°

3+00

107°30'

Defl. from 19°8'30"

0+00 = 786.55' from Sta. 8 on Jany.

1½ Hrs. P.M. Mch. 31st.
2 " am. Apr 1st
2 " pm " 1st
2 " am " 2nd

3

Defl. R 113°35' Well

107 30
13 9 10
120 39 10
120° 42' Measured

120° 42'

16" Iron pin

107°30'

90° W. Line 100' St.

BLK. 38

"B" Line

26+80 ⊙

Defl. R. 20° 48'

579.90 OK.
20° 50'

21+00 ⊙

38 03 1/2
7
45 03 1/2

⊙ Stake 480' E. of E. line 2nd St. East of 100' St. and on center of 4th St. N. of Co. Boundy.

21+97.3 "E" Line

⊙

"C" Line.

Defl. L. 18°30'
18° 34 3/4"
499.8'

22+00 Set 16" Iron pin 5" underground Apr. 6th

Defl. R. 31°
31° 0 1/4'
OK.
559.3
559.5

16+40 Set 16" Iron pin Apr. 6 '04 6" under ground

Defl. L. 11° 45'
11° 46 1/2'
OK.
300.0

13+40 Set 60D. Spike 6" under ground. Apr 6

Defl. L. 12°
440.0'
12° 01'
OK.

9+00. Set 16" Iron pin 6" under ground Apr 6th

Defl. L. 100° 41'
560.0
OK
100° 39 1/2'

3+40 Set 16" Iron pin 6" under ground Apr. 6th

90°
339.5'
OK
89° 58'

0+00 Start at Sta. 4 "A" Line
Set 16" Iron pin 6" under ground Apr. 8

Apr. 5th

Run. Apr. 5th

5

23.33
16 1/2
11.30

Sta. 58+51
old dump

75° 27'
290.3'

89° 58
90° 02'

"A" Line Station 4

"C" Line

41+39.2 ⊙ = 29+90 "A" Line

Defl. L. 123°33'(?)

123°33 1/4' O.K. 638.85'

35+00 ⊙ set 16" Iron pin 6" underground Apr. 6th

Defl. L. 10°30'

10°31' O.K. 799.8'

27+00 ⊙

180
179 60
123 33
56 27

180
179 60
56 26 1/2
123 33 1/2

105° 0' 45"

"A" Line

104°46' Mob

105°00 1/4'

"D" Line

Defl. L. 18° — 18° 1½' ok 490.9

17+50 ⊙ Set 16" Iron pin 6" under ground Apr. 7th

Defl. R. 13° 30' — 250.0' ok 13° 29¾'

15+00 ⊙ Set 16" Iron pin 6" under ground. Apr. 6th ✓

Defl. L. 20° 00' — 399.85' ok 20° 0½'

11+00 Set 16" Iron pin 6" under ground Apr. 7th OH

Defl. L. 13° 00' — 499.9' ok 13° 0½'

6+00 ⊙ Set 16" Iron pin 7" under ground Apr. 7th ✓

Defl. R. 20° 30' — 300.10' ok 20° 33½'

3+00 ⊙ Set 16" Iron pin 6" under ground Apr 7

100° 02¼' R. 100° — 300.0'

0+00 ⊙ Set 16" Iron pin 6" under ground

P.M. Apr. 5th

7

179 60
79 58
100 02

N.E. Cor Blk. No 8

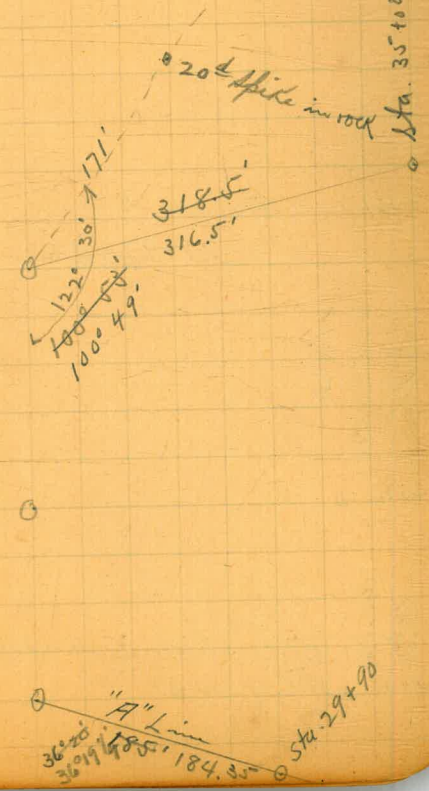
100° 0'

79.87'

W. Side 100' ft

"D." Line.

24.50 / 22.41.1 / 8.9	208.73				
28+00					
Defl. R. 47° 15'	350.0 / 47° 15'				
24+50	old				
Defl. L. 22°	208.73 / OK. / 22° 0½'				
22+41.1	old	Set 16" iron pin 6" underground Apr. 7th OK			



"E" Line.

8+061 ○ = Sta. 22 "B" Line
21+97.3 B line.

Sept. AP.
320 07'
507.1'

3+00 ○

Right.
127°30'

Begin at N. Side 4th St N. & W. side of 2nd
0+00 ○ at E. of 100' St.

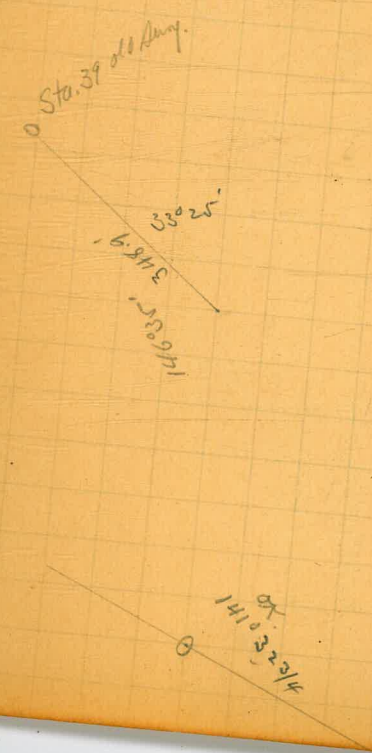
127°30'

"F" LINE

Depl. R. 52° 40'	469.7' ~~52° 46¼'~~	52° 44½'	
17+30			
Depl. R. 26° 00'	25° 59½' 480.25		
12+50			
Depl. R. 40° 00'	46° 01' 40° 02' 450.1'		
8+00			
Depl. L. 6° 00'	600.0' 6° 02'		
2+00			
Left 141° 30'			
0+00			

2 Hrs. Am. Apr 1st
2 " P.M. " 1st
2 " A.M. " 2nd

⊙ 18+99.2F = A21 old Surg.

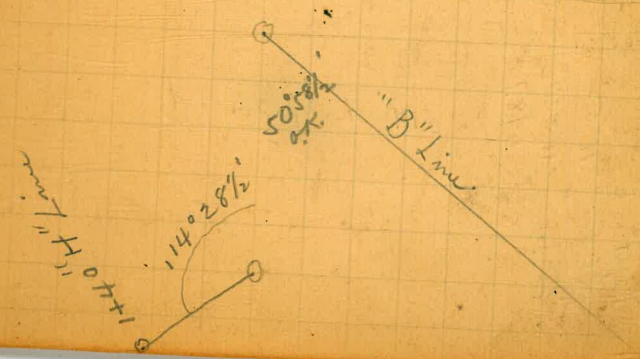


"F" Line.

24+77.7 ⊙ = 18+00 "B" Line ~~24+78.4~~

Defl. R
42° 5'
~~42° 56'~~
~~42° 58'~~
278.15' ok.
42° 42¼

22+00 ⊙



"G" LINE.

30+78

Defl. L. 38°30'

26+50

Defl. L. 62°30'

20+70

Defl. R. 59°45' 559.45

0.1' short per 100 ft.

15+00

Defl. R. 11°52' 11°53½ 698.7

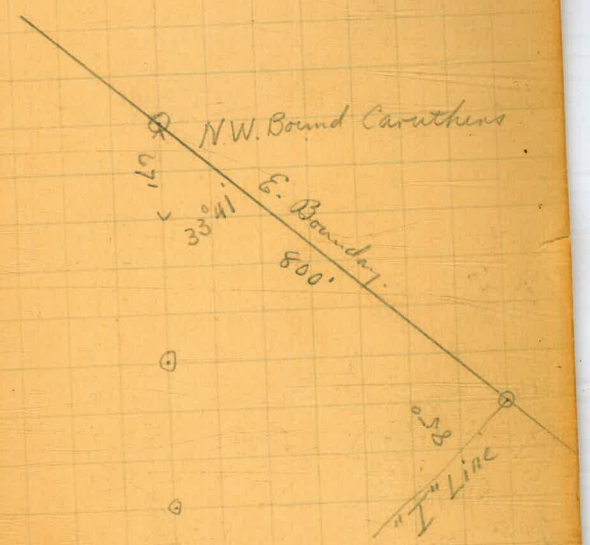
0.19' short per 100 ft.

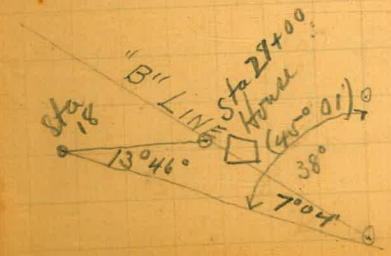
8+00

Right 38°0' 800.60

0+00

Am. Apr. 4th





"H"

10+62 = 8+00 "G"

Defl. R. 47°01'

312.2
47°06'

7+50

Defl. R. 37°

36°53'
209.9'

5+40

Defl. R. 39°30'

39°30
399.65

1+40

Left 114½°

114°28½
140.0

0+00

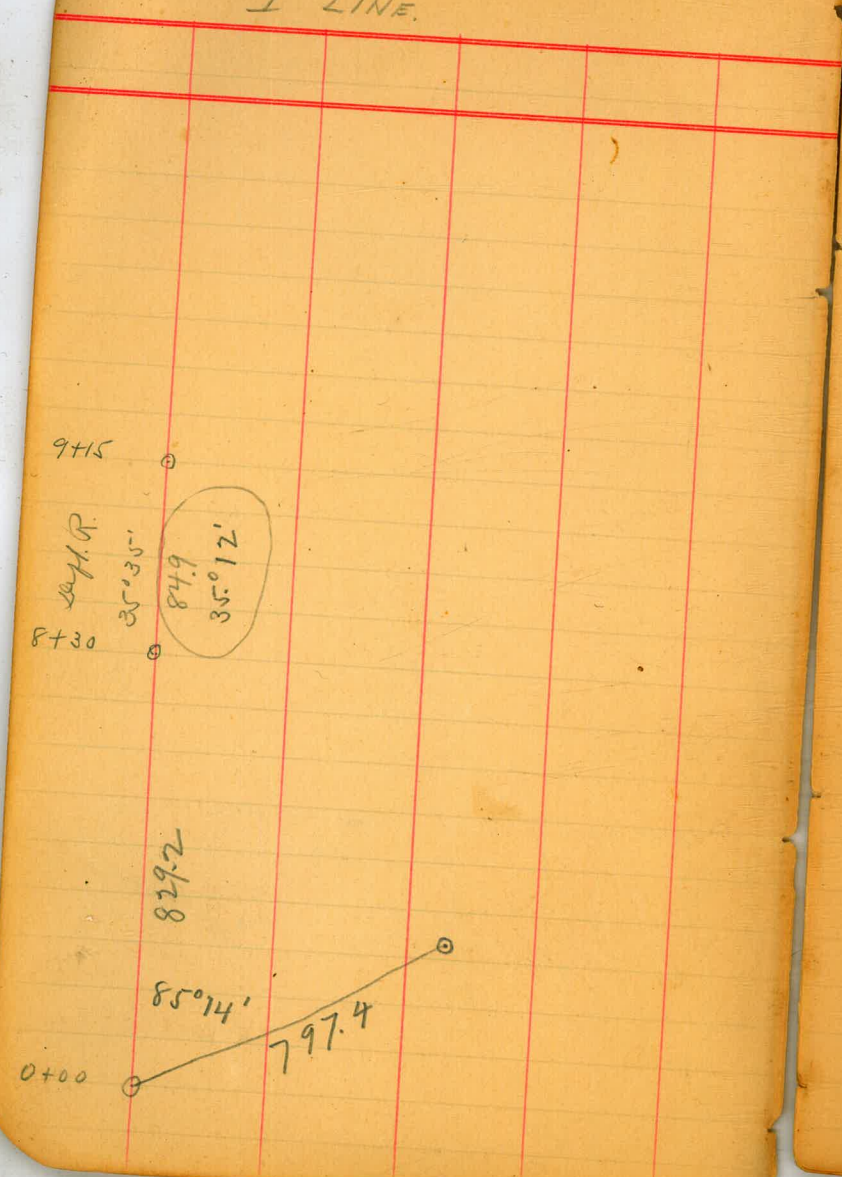
"G" Line

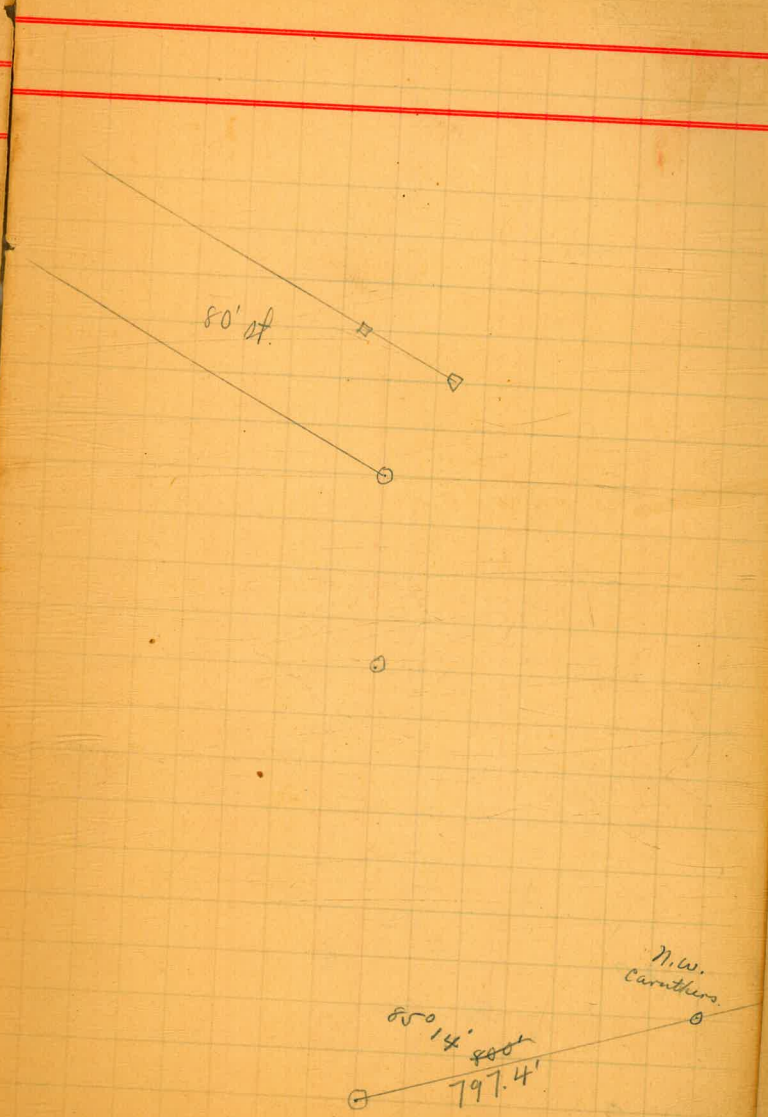
149°44'
O.K.

114°30'

FL

"I" LINE.


9+15
Gaff. R.
35°35'
84.9
35°12'
8+30
829.2
85°14'
797.4
0+00


80' st.
N.W. Carruthers
85°14'
~~800'~~
797.4'

"E" Line

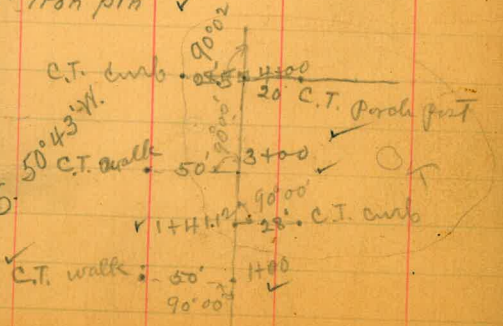
15

1400

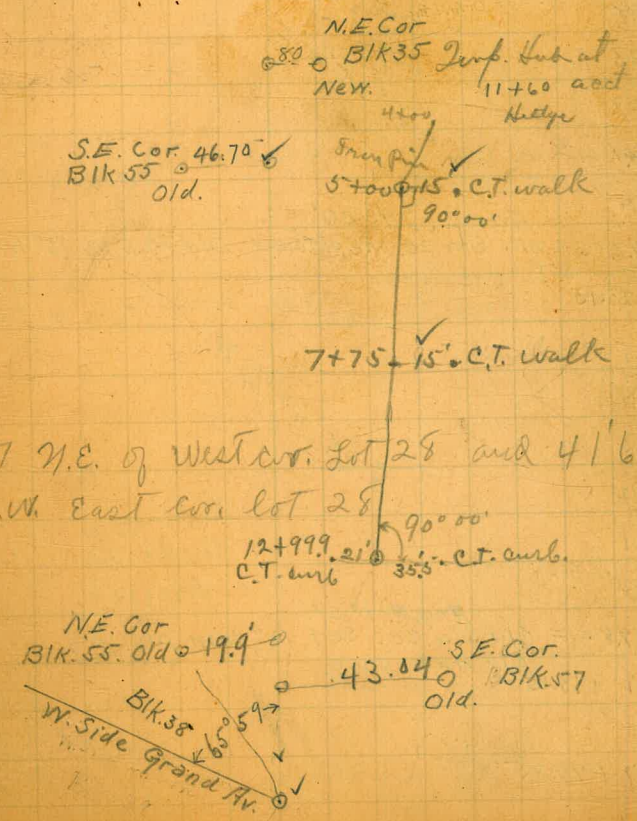
0 0

"A" Line

17+01 C.T. Curb. ✓
16
15
14+49 C.T. curb. ✓ S. 27° 13 3/4' W.
14 ✓
13
12+99.9 = Old Sta. 13 Ang. L. 8° 26 3/4'
11 +79 Old Hub, Replaced by 16" Iron pin. ✓
+62.9 C.T. curb. ✓
11
+43.4 ✓
10
9
8
7+75 C.T. 15' S. 35° 40 1/2' W. South of base line in walk ?
7 De. H.L. 15° 2 1/2'
6
C.T. in walk 15' south of base line ✓
5 Old Hub. replaced by 16" iron pin. ✓
Ang. L. 15° 2 1/2'
4 Set 16" iron pin ✓
3
2
+86.95
+41.12
1
0+47' C.T. curb ✓ C.T. walk
0

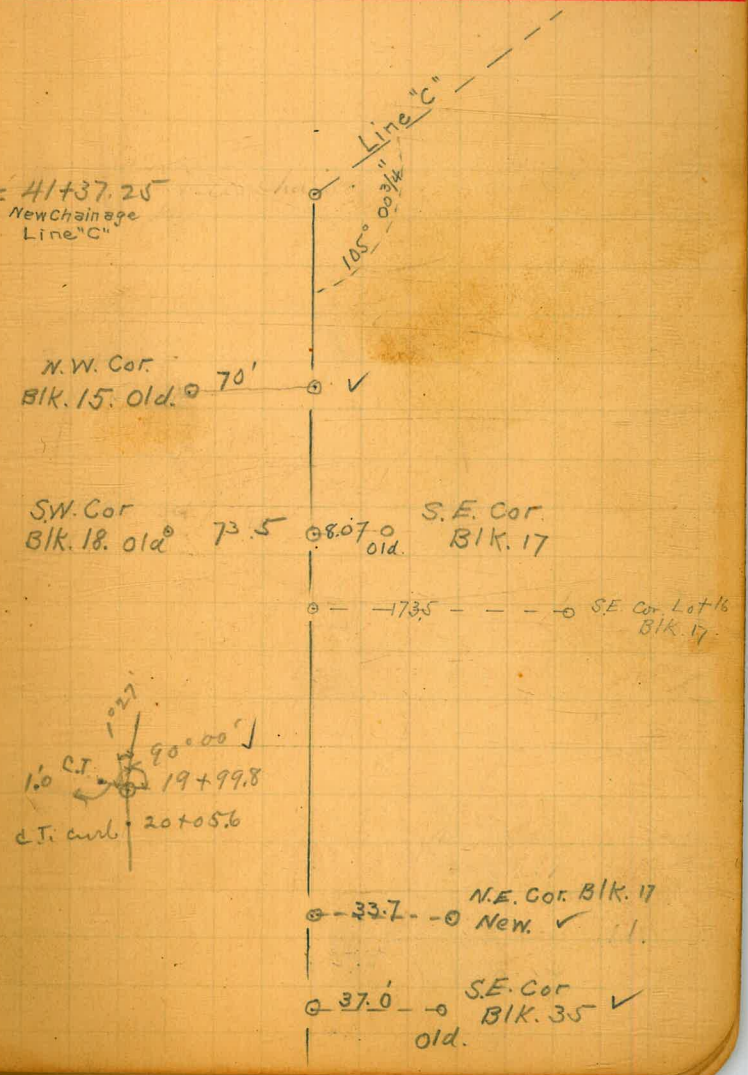


12990
4501
14500



+89.6 ⊙ = Old Sta. 29+90. Replaced Old Hub by 16" Iron pin.
29+78.6 Cross Lot Divn. Line ✓
29
28
27+50 C.T. curb. ✓ S. 0°25'1/4" E.
27
+44.1 ✓
26+30 C.T. curb. ✓
26
Ang. L. 29° 06'
+99.6 ✓ ⊙ = old Sta 26. Replaced Old Hub by 16" Iron pin.
25+36 C.T. curb. ✓
+23.13
25
+99.6
24
23 + S. 28° 40 3/4' W
22
21
20+05.6 C.T. curb.
20
Ang. R. 1° 27'
+99.8 ⊙ = Old Sta. 20. Set 16" Iron pin. ✓
Old Hub gone.
19 +18.15 ✓
18
17+99.85 ✓

= 41+37.25
New Chainage
Line "C"

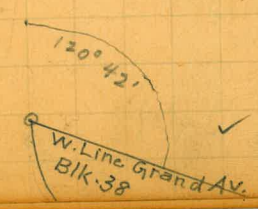


"A"

"B" Line

10+40. 10	8°30'	C.T. walk ✓			
9+20.55 9	19°	C.T. walk 10' edge of private walk ✓	N. 63°		
8	Defl. R.				
+86.55.0 7		= old Sta. 8 ✓			
6+69 6		C.T. curb. ✓	920	786 117.55 669	
5					
4					
3			N. 44° 01½ E		
2					
1					
0+18 0		C.T. curb. ✓			

On acct. of Buildings in the way & because there are no points to be located between station 0 & 8, the old line was not reproduced, but a tangent was run between 0 & old sta. 8.



"B"

Defl. R. 31°30'

20
+69.55
19
+51.55 ✓
18
+86.55 ⊙ = old Sta. 18+00
+71.68
17
+86.55 ✓
+50.83 ✓
16+46.0 C.T. curb. ✓
16
+79.64 Iron pin ✗ north line alley ✗ 4'2 to alley cor.
15
14+13 C.T. curb. ✗
14
+36.55 ⊙ = old Sta 13+50 ✗
13.
12
11+38.55 C.T. curb. ✗
11
10+86.55 ⊙ = old Sta. 11+00

S. 16°50 E

17. 86.55
13 36.55
45°

S. 18°20 E

13 36.55
10 86.55
2.50.00

Defl. R. 46°00'

Defl. R. 22°30'

N. 85°40' E

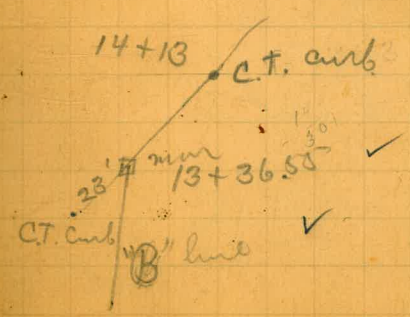
Cross. Cut line Blk. 51 ⊙ Produced ✓

West Cor. Blk. 49 New. ⊙ 47' ⊙ ✓

+71.55 ⊙ 47.5 ✓ N.W. Cor. Blk. 51 Old.

✓ ⊙ 22.0 ✓ N.E. Cor Blk. 52 New.

N.E. Cor. Blk. 59. Old. ⊙ 65.08 ⊙



"B"

+66.45 ⊙ = old sta. 26+80 Center of Park.

26

25

24

23

22 + 14.55 C.T. private walk ✓

22

+86.55 "E" line starts off.

21

+98.55

20+

+86.55 ⊙ = old sta. 21 (bmb) ✓

Defl. R. 20°50'

S 4° 00 W.

"G" Line Sta 0+00

37° 57'

N.W. Cor. Blk. 50 old. ⊙ 483 ⊙ ✓

"C" Line

0.45 short
chk. 299.55 } Childs Barber Taylor
may 28/09

15 S. 16° 14' W

14

Ang. L. 11° 46½'

+39.5 = Old Sta. 13+40. Old Hub replaced by 16" Iron pin (hub set. may 22/16)

13

+85.0 ✓ ✓

12 ✓

+59.5 ✓

11+

10 +99.5 ✓ S. 28° 00½' W

9

Ang. L. 12° 01'

8+99.5 = Old Sta. 9. Old Hub replaced by 16" Iron pin.

7

6

5 +99.5 ✓ S. 40° 01½' W.

4

Ang. L. 100° 39½' ✓

3+39.5 = Old Sta. 3+40. Old Hub replaced by 16" Iron pin

+84.6

2

+39.75 hub N. 39° 19' W ✓ Cross. Center Line Block 55 ✓ 0.3 short

1

0 ⊙

⊙ 30' ⊙ S. Cor. Blk. 56 New.

N.W. Cor. Blk. 35 New ⊙ 61.0 ⊙ Sta. 8+99.5 "C" line Iron pin

W. Side Alley Blk. 55 ⊙ 204.0 ⊙

W. Side Alley Blk. 55 ⊙ 166 ⊙ ✓

⊙ 43' ⊙ (New) N. E. Cor Blk 56

90°

N.W. Cor. Blk. 55 New. ⊙ 18.5 ⊙ ✓

89° 58° ✓

Sta. 4 "A" Line.

"C"

29 ✓

28+08.7 ✓ ⊙

+98.8 ✓ ⊙

27 ⊙ S. 18° 08¾ W.

26+34.83 ✓ ⊙

Ang. L. 10° 31½

26+98.8 = Old Sta. 27+00. Old Hub replaced by 16" Iron pin.

+51.37 ⊙

25

24

23 S. 28° 40¼ W.

22

Ang. L. 18° 34'

21+99.0 = Old Sta. 22+00. Old Hub replaced by 16" Iron pin. ✓

+51.15 ✓

20 ✓

19 ✓

18 ✓ S. 47° 14¼ W.

+62.57 ✓

+49.32 ✓ ⊙

17

Ang. R. 31° 00¼'

+39.50 = Old Sta. 16+40. Old Hub replaced by 16" Iron pin. C.I. in walk.

16

Set hub for west line alley

⊙ 30.13 ✓ (old) S. Corner Blk. 34

226' ⊙ ✓

(old) N.W. Cor. Blk. 16 ⊙ 89.82' ⊙ ✓

(old) S.W. Cor. Blk. 17 ⊙ 93.15' ⊙ ✓

⊙ 42.85 ⊙ ✓

C.T. top wall near Cor. of Green House 34' 31° 00¼'

N.E. Cor. Lot 1 Blk. 17. ⊙ 87' ⊙ ✓ 16+39.5 ⊙

N.W. Cor. Blk. 17 Old. ⊙ 7.02' ⊙ ✓

"C" line 13+39.5 ⊙

"C"

+37.25 = 29+39.6 New Chainage or Sta. 29+90 ✓

41

+12.05 ✓

40

39+23.5 C.T. curb east side E. Prospect ✓

39

38+63.5 C.T. curb at E. Prospect west side ✓

38

+09.55 N. 14° 35' W

37

36

35+25.2 hub just east of wall ✓

35

Ang. L. 123° 33¼

34+98.6 = Old Sta. 35+10. Old Hub replaced by 16" Iron pin. ✓

34+5.2 hub 2.4 from wall E

34+64.4 ×

33+70 hub. 1.9 from Elec. pole S.E. ✓

33

+07.48 ✓

32

31

30+98.5

Old Chainage of Line "A" ✓

✓ Set Hub. for cent. line Blk. 16

N. Cor. Park. Old. 8.9 ✓ Result now no park

27.1 ✓
39.5
Set Hub. ✓

Set Hub. 129' ✓

"D" Line

9

8

7 S. 74° 20' W.

Ang. L. 13° 00½'

6+00.1 ⊙ = old Sta. 6+00. Replaced old Hub by 16" Iron pin.

5

S 87° 20½' W.

4

Ang. R. 2° 31½'

3 ⊙ Replaced old Hub by 16" Iron pin.

2

1 S. 84° 47' W

0 ⊙ Replaced old Hub by 16" Iron pin.

"D"

20

19

18

+63.56

17+49.85 = Old Sta. 17+50. Replaced Old Hub by 16" Iron pin.

Ang. L. 18° 01½' ✓

16

15

+99.85 = Old Sta. 15+00. Replaced Old Hub by 16" Iron pin.

Ang. R. 13° 29¾' ✓

14

13

12

11 = Old Sta. 11+00. Replaced Old Hub by 16" Iron pin.

Ang. L. 20° 00½'

10

48.30' (old) S.W. Cor Sec. 18

"D"

27+99.48 = Old Sta. 28+00. Old Hub gone. Set ✓
16" Iron pin.

+54.8

27+35 hub on line ✓

27

26

+64.60 ✓

S. 75° 02 1/4 W

25

+87.98

Ang. R. 47° 15' ✓

24+49.48 = Old Sta. 24+50. Replaced Old Hub
by 16" Iron pin

23+35.55 ✓

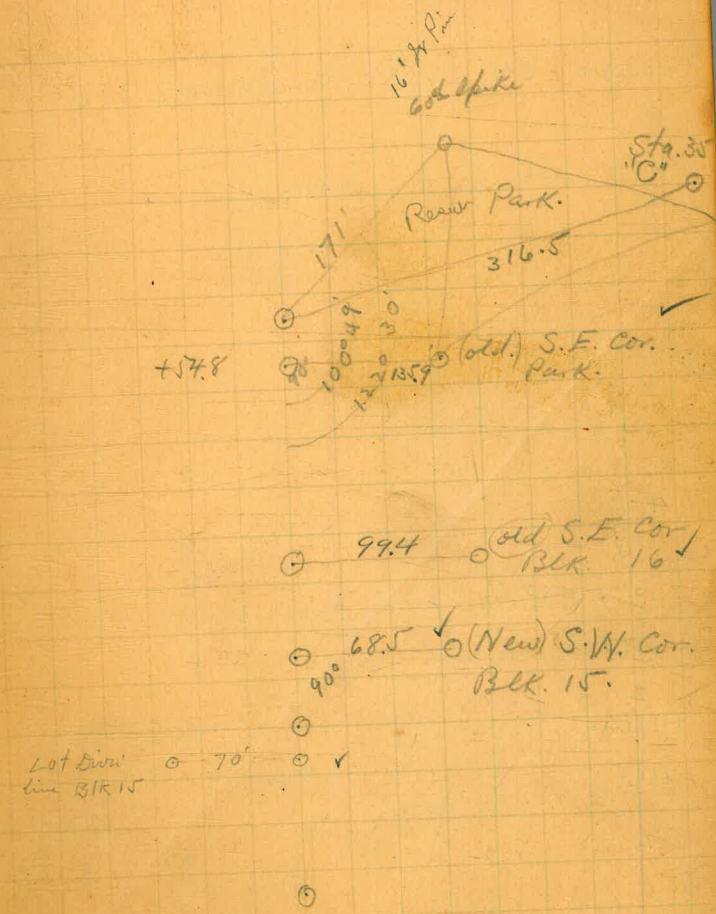
23

S. 27° 47 1/4 W

Ang. L. 22° 00 1/2'

22+40.75 = Old Sta. 22+41.1. Old Hub replaced by ✓
16" Iron pin.

21



"E" Line

+05.3 ⊙ = Sta. 21+86.55 (New chainage) Line "B"

8

7+50 hub. 3.5 from fence

7

6

5

4

Def. R. 32°22'

3 ⊙ Old Hub gone. hub replaced mar 25/15

+45.8

2

+99.65 ⊙

+66.5

1

0 ⊙

30.75 New 7mm cor. BLK. 50

old S.E. Cor

BLK. 51 50.00

old. S.W. Cor. BLK 41

29.8

GARFIELD AV.

37°30'

Block. 40.

Conn. St.

"F." Line

9

8+64 C.T. curb. ✓

8 ⊙ Replaced old Hub by 16" Iron pin. ✓

7

6+40 C.T. walk ✓

6

+66 mar. ✓

5

4+30 C.T. walk ✓ N.17° 08 3/4 E ✓

4

+86.9 ✓

3

Ang. L. 6° 02'

2 ⊙ Old Hub gone. Set 16" Iron pin. copper Tack in walk Mar. 3/15

N.23° 10 3/4 E.

1

0+19.5 copper Tack curb. ✓

0 ⊙

Continued Tangent to Sta. 10+15.95 where the old tangents intersect. Original line could not be reproduced on account of buildings being in the way.

43 6+ 1/2
23 10 3/4
20 50 3/4

✓ S.E. Cor. Blk 59'

⊙ 116 ⊙ 58.3 Old.

intersect Line "B"

50 43
23° 10 3/4
27° 32 1/4

141° 32 3/4

W. side Grand Ave.

Blk. 38

"F"

20

S. 40° 05" E

19
18+31 C.T. walk Ang. R. 56° 44½' ✓
+12.95 = Old Sta. 17+30. Replaced old Hub by 16" Iron pin
18+0.6 C.T. curb.
18

17

16

15

14
13+95 C.T. curb. ✓
+32.7 = Old Sta. 12+50. Old Hub gone. Set 16" Iron pin

13

12

N. 83° 10¼ E

11+95 C.T. curb ✓

11 C.T. curb. ✓
10+31 C.T. Ang. R. 66° 01½' ✓
+15.95 Set 16" Iron pin – mon
10+02.5 C.T. curb ✓
10

1577.9
1474.8
103.1

"F"

+60.8 ⊙ = Old Sta. 17+86.55 (New Chainage) "B" Line ✓

25+41 C.T. Retaining wall. ✓

25

24

+87.1 ✓

23

✓ Ang. R. 42° 42½'

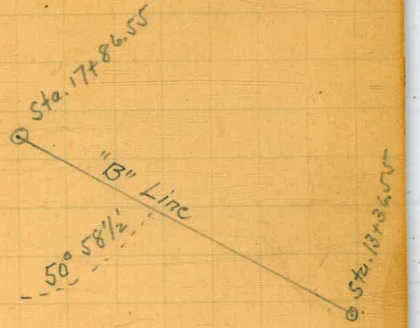
+82.65 ⊙ = Old Sta. 22+00. Old Hub gone. Set 16" Iron pin ✓✓

22

21

20+46 C.T. curb ✓

25 60.8
22 82.65
2.781 5



Cent. Line
Blk. 48 ⊙ — 18' ⊙

"S" Line E.

N. 53° 05½' E.

9

Ang. R. 11° 53½'

+00.6 ⊙ = Old sta. 8. Old Hub replaced by 16" Iron pin.

8

7+98 C.T. curb

+84.65

7

+12.6

6

5

+55.65

+53.65

4

+75.5

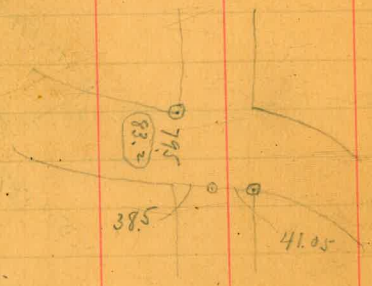
3

2

1

0

N. 41° 5' E.



+90.6 ⊙ S-W. Cor. Blk. 46

12.5 (New.)

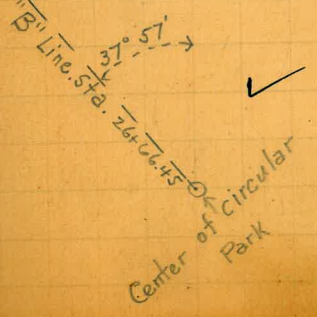
9+06 ⊙ N-W. Cor. Blk. 47 (New)

60'

N-E. Cor Blk. 49

+8.6 ⊙ 10.05 (Old)

N-E. Cor Lot 8. Blk 49 ⊙



"G"

19

+50.95 ▫ Hub. 12/18 Paris

123'

18

+22.1

17

S. 66°24 1/2 E.

chilled 0.5' Plant

16

15

Ang. R. 59°45'

+99.3 ⊙ = Old Sta. 15. Old Hub Replaced by 16" Iron Pin

14

13

12

11

10

2 9+81.5 C.T. Curb

8 9 59
6 6 24 1/2
23 35 1/2
53 50 1/2
99 26 0

⊙ 123. ⊙ N-E. Cor. Blk. 46
New.

⊙ 72.5. ⊙ N-W. Cor. Lot 21, Blk. 46
New.

+71.85 ⊙ 17' ⊙ Corner Blk 46

+99.6 ⊙ 130' ⊙ Center line Blk. 46

⊙ 137' ⊙ Center line Blk. 46

"G"

+65.550 = Old Sta. 30+78. Old Hub gone. Set 16" Iron Pin.

30

29

N. 12° 35½' E.

28

27

Ang. L. 38° 30'

+37.550 = Old Sta. 26+50. Old Hub. Replaced by 16" Iron Pin

26

25

24

N. 51° 05½' E

2.0' short

23

22

62° 35'

21

Ang. L. 62° 30'

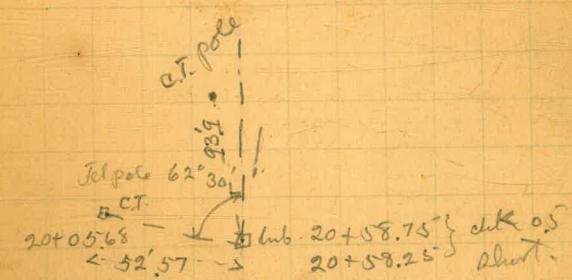
hub set mar. 22/15

+58.750 = Old Sta. 20+70. Old Hub gone. Set 16" Iron Pin

20+05.68 C.T. pole

20

390



"H"

Ang. R. 47° 06'
+49.55 = Old Sta. 7+50. Replaced by 16" Iron pin.

7

S. 35° 28½' E

6

Ang. R. 36° ~~53'~~ 47'
+39.65 ⊙ = Old Sta. 5+40. Set 16" Iron pin. ✓

5

4

S. 72° 21½' E

3

2+29 hub set mar 23/15 ✓

2
1+73 hub — set mar 23/15 ✓
+40 ⊙ Ang. R. 39° 30'
1+27.8 C.T. house ✓
1+22 C.T. roof ✓
1

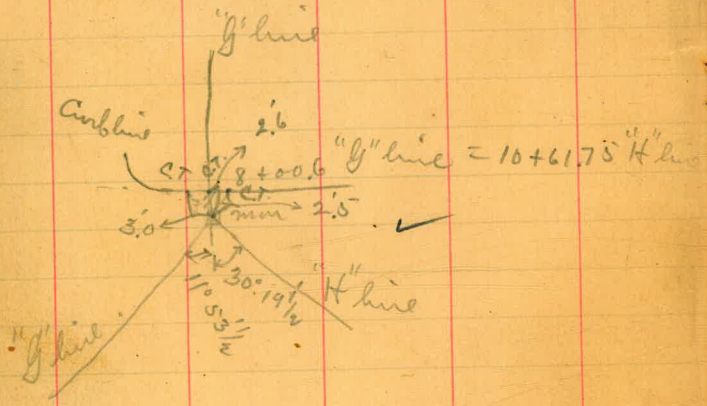
N. 68° 08½' E

0 = Sta. 22+82.65 "F" Line (New Chainage)

← 114° 28½'

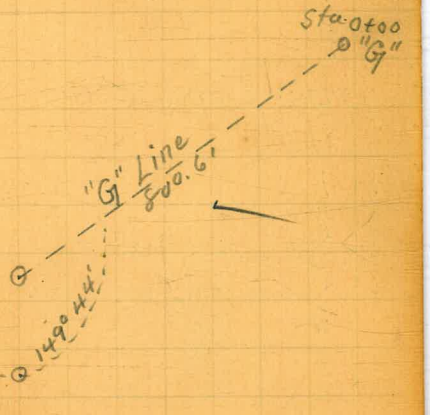
⊙ — → "F" Line 278.15' - - - ⊙ Sta. 25+60.8

"H"



+61.75 = Old Sta. 10+62 = Sta. 8+00.6 "G" Line

10
9+93 C.T. curb
9+20 O.T. wall S 11° 37½" W
9
+50
8



Cross Cent. line Blk 48 ⊙

"I" Line.

+12.55 ⊙ = old sta. 9+15.

9 N. 71°21' W. (337)

+29.2 ⊙ Ang. R. 35°12'

8

7

6

5

4

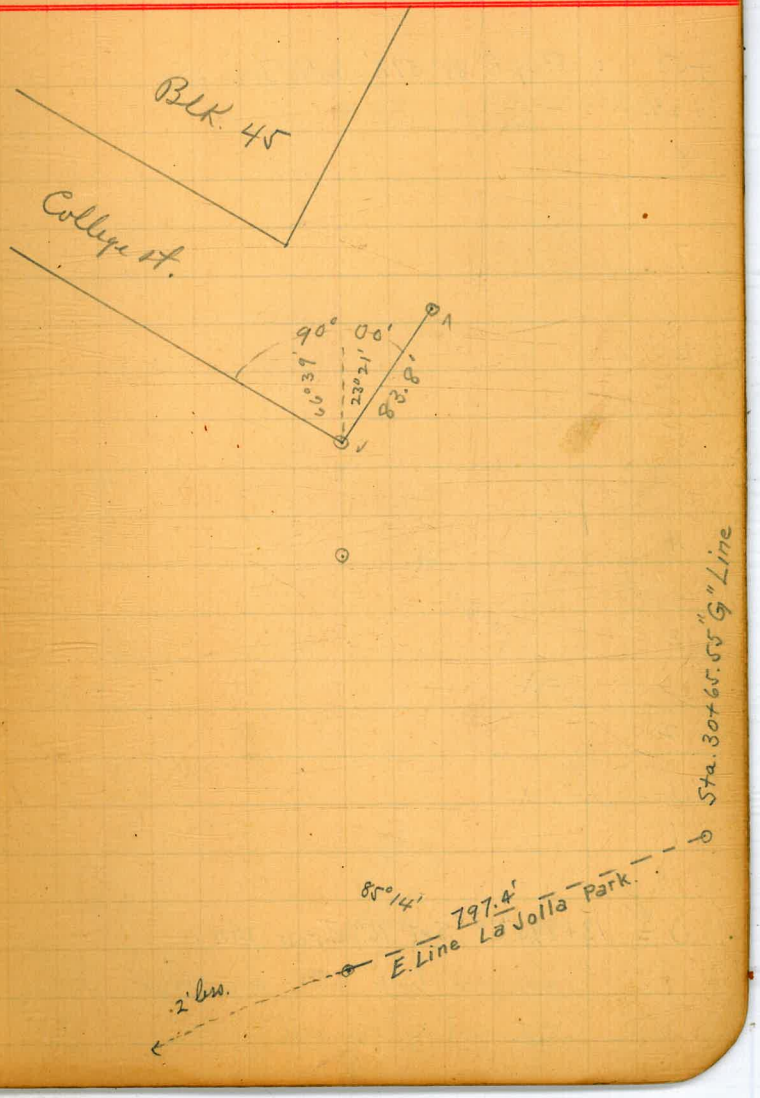
3

2

1

0.

S. 73°27' W. (297)



"J" Line

+50 ○ Ang. R. 88° 57½'. Set 16" Iron pin.

+22

8

7

6

5

4

3

2

1

0 = 13+99.5 "C" Set 16" Iron pin.

pin gure limb. set Dec. 18/12

C.I. set in cement gutter.

N. 1° 24' W.

only 849.3

Measured from 0 too end of course.

Hebilds Tuyer letter

⊙ 67' ⊙ N-W. Cor. Blk. 56 (new)

16.14
1.24

17° 38'
⊘ "C" Line

"J" Line

+55 ○ = Sta. 3+39.5 "C"

14

13

+79.85 ✓

12

11

10

9

N. 87° 33½' E.

"C" Line

47° 32'

S.W. Cor. Blk. 57 ✓ 98.8

New.

40° 0' ½
2 27' ½
42° 29'

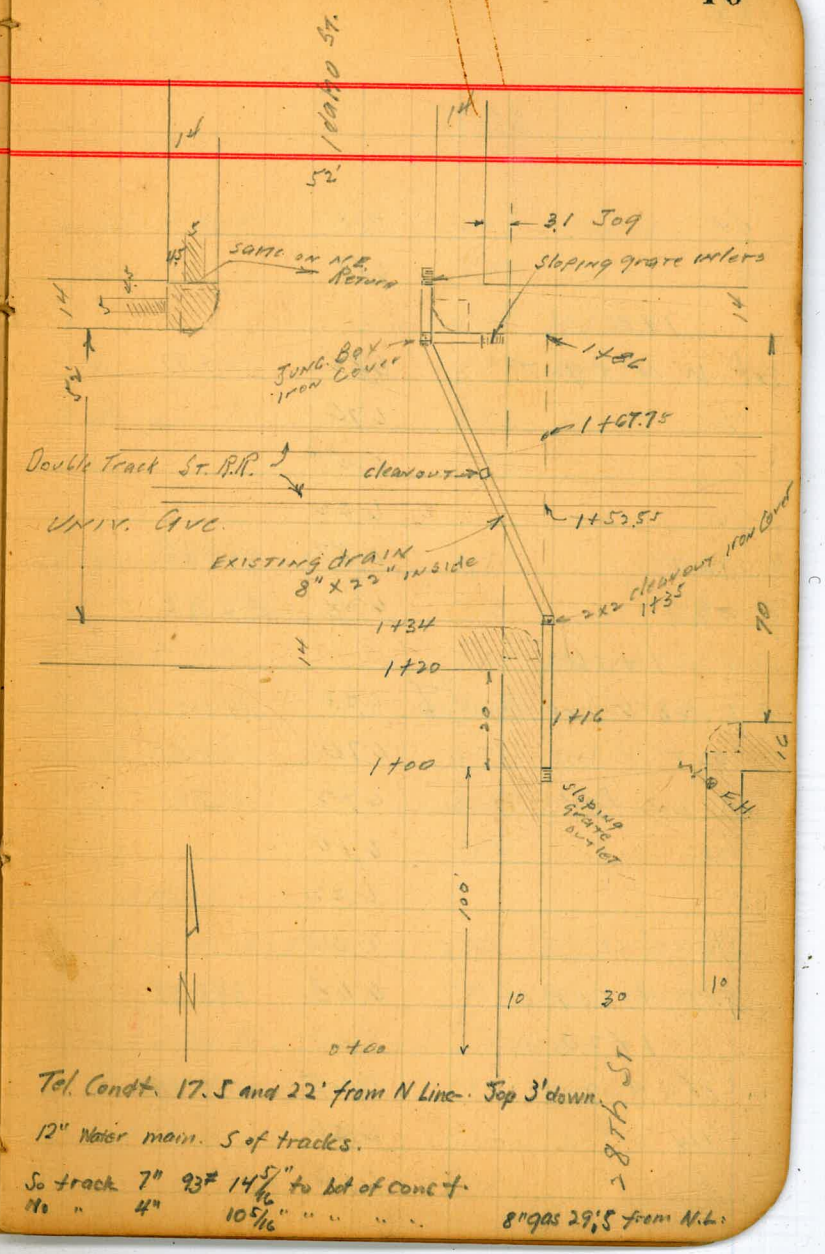
Levels on 28th & Univ.

28th = 50' wide 10' obs 7.5% 30 bet obs.

NW BP	5.70	351.75		346.05	Univ. 28th
100' S of St Univ. To E 0+00					
W cb			7.29	344.46	
" gut			8.01	343.74	NOTE!
1/4			7.45		See RR Co. for Const. on depth of track Ties & Ballast
c			7.07		
1/4			7.01		
gut			7.22		
E cb			6.59	345.16	
0+50					
E cb			6.46	345.29	See Tel. Co. for Conduits also St. Light cables and water and gas
" gut			7.15	344.60	
1/4			6.87		
c			6.90		
1/4			7.33		
W gut			7.96	343.79	
W cb			7.06	344.69	
0+96					
W cb			6.91	344.84	
" gut			8.08	343.67	
+2 Hole here			8.14	343.61	

Indexed C.S.K.

all Return 10' R



351.75

1/4	7.13	
C	6.58	
1+00		
Top W C6 + QUT	6.84	344.91
1/4	6.76	
C	6.59	
1/4	6.52	
QUT	6.87	344.88
E C6	6.78	345.47
1+10		
E.L. 28TH S C6 UNIV Top C6	6.23	345.52
QUT	6.70	345.05
C6 on Pav.	6.42	345.33
1/4	6.16	
C	6.22	
1/4	6.55	
QUT + Top C6	6.68	345.07
1+20.		
W C6 + QUT	6.45	345.10
1/4	6.56	
C	6.16	

351.75

1+27

W C6 + QUT	6.45	345.10
1/4	6.50	345.25
C	5.98	345.77
1/4	5.84	345.91
E C6 on Pav	5.83	345.92
E L " "	5.80	
1+34		
20' W of of WL 28TH	6.90	Top C6
" " "	7.53	QUT
WL 28 TH	6.45	345.10 Top C6
" "	7.18	QUT
W C6 Pav	6.77	344.98
1/4 "	6.33	
C "	5.82	
1+35		
1' E of W C6 28TH	6.76	344.99 Top 2"x2" cover
" " "	7.95	343.80 FL. channel
1+52.55 = Srail of S track		
W C6 28TH Top rail	5.34	346.43
20' W of above " "	5.57	
20 E " " " "	5.07	

Idaho = { 80' wide; 14' curbs; 13' 1/4's; 52' bet. curbs }

351.75

Top clean out Box on ℄ Univ.	5.38	346.37	
F.L. " " " "	7.11	344.64	
1+67.75 = N. rail of N track			
W.C6. of 28th Top rail	5.20	346.55	
20' W of above " "	5.36		
20' E. " " " "	5.01		
1+86 = N C6 of UNIV.			
E.L. 28th to South	4.32	347.43	T. P C6
" " "	5.13	346.62	QUT
W C6 28th to South	4.77	346.98	Top C6
" " " "	5.40	346.35	QUT
8' W " " "	5.60	346.15	QUT + grate
E.L. Idaho + N C6 UNIV	4.85	346.90	Top C6 Pav. + grate
E C6 " " "	4.85		Pav. Top clean out
" " " "	6.14		FL. June. Box
E 1/4 Pav.	5.37		
C "	5.44		
W 1/4 "	5.83		
W C6 "	6.39		
W L Idaho C6	5.87		
" " QUT	4.55		

351.75

N.L Univ Ave

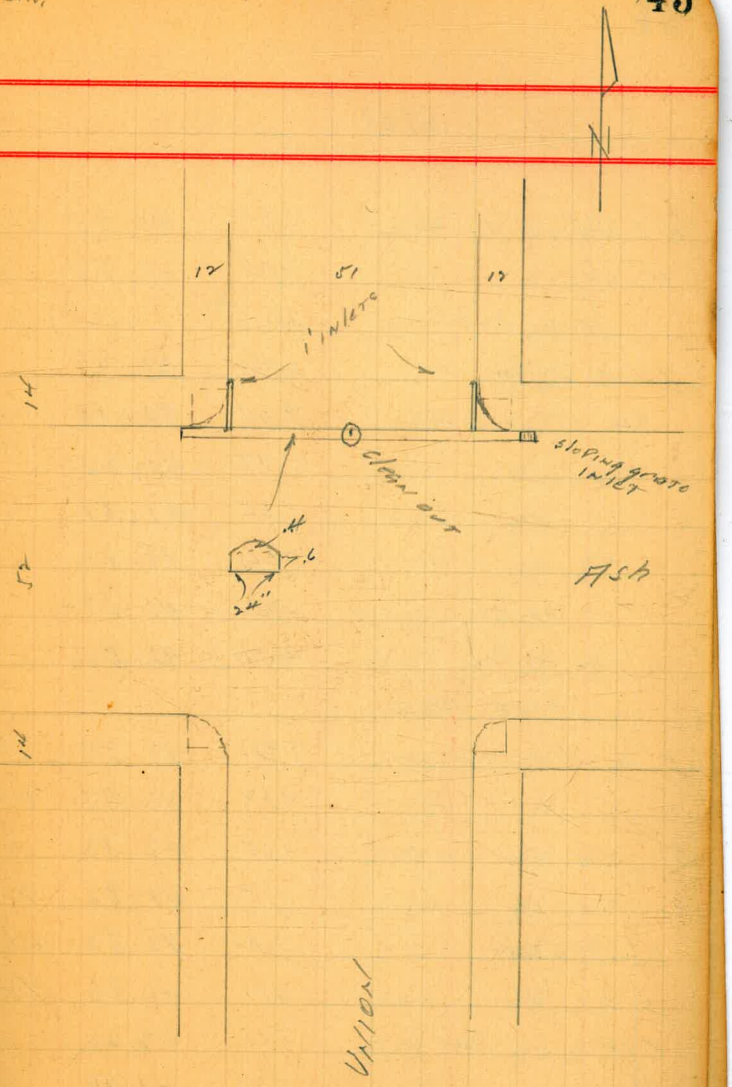
W C6	5.68	
W/ QUT	6.39	
1/4	5.64	
C	5.17	
1/4	5.04	
E C6 Pav. + Top grate	4.87	346.93
5' N of N.L. UNIV. Ave		
E C6	4.81	346.94
E QUT Pav. + grate	5.60	346.15
+2	5.60	
+8	5.05	
1/4	4.99	
C	5.06	
1/4	5.39	
QUT	6.29	6
W C6 TOP	5.72	

Indexed
C.S.K.

Moore
1-5-39

Levels at Union & Ash St.

NWBP	6.40	47.37		40.97	Ash Union
	25' N of NL Ash				
W CB			5.74	41.63	
Gut			6.44	40.93	
1/4			5.48	41.89	
C			4.96	42.41	
1/4			4.85	42.52	
Gut in drive			4.92	42.45	
E CB			—		
	4' N of NL Ash				
E CB			4.75	42.62	
Gut			5.57	41.80	
+1			5.57	41.80	
+5			5.36	42.01	
1/4			5.24	42.11	
C			5.51	41.86	
1/4			5.96	41.41	
+7			6.53	40.84	
+11.5			7.04	40.33	



47.37

1/4 + 12.5 OUT	7.04	40.33
W cb	6.05	41.32
N L ash		
W cb + Pav.	4.16	41.21
F.L. Ex. i'drain	7.27	40.10
1/4	5.99	41.38
C	5.55	41.82
1/4	5.26	42.11
+ 12 F.L. Ex. i'drain	6.30	41.17
E cb + Pav.	4.82	42.55
N cb ash		
25' E of E.L. UNION	3.98	43.39 Top cb.
" " "	4.62	42.75 OUT
6' " " "	4.65	42.72 cb
" " " "	5.55	41.82 OUT
E.L. UNION	4.87	42.50 cb + Top grate
" "	6.41	40.96 F.L. drain
E cb " Pav	5.15	42.22
1/4 "	5.43	41.94
C "	5.70	41.67
C FL	7.13	40.14

47.37

1/4	5.98	41.39
cb	6.30	41.07
W L UNION cb + Pav.	6.46	40.91
" " F.L. outlet	7.74	39.63 Ex. drain
6' W OUT	7.64	39.73
" cb	6.21	41.16
25 " "	6.66	40.71
" " OUT	7.49	39.88
4' S of N cb		
25' W of W L UNION	7.43	39.94
6'	7.19	40.18
W L	6.43	40.94
cb	6.19	41.18
1/4	5.90	41.47
C	5.70	41.67
1/4	5.41	41.96
cb	5.09	42.28
E.L. UNION	4.90	42.47
4' E	5.25	42.12
25 E	4.23	43.14

		47.37		
1/4 +	10' S			
W	25' E		4.10	43.27
	E.L. UNION		4.85	42.52
W/ C	CB		5.09	42.28
E.L	1/4		5.36	42.01
1/4	C		5.44	41.73
C	1/4		5.89	41.48
1/4	CB		6.14	41.23
+	W.L UNION		6.38	40.99
E	25' W/		6.99	40.38
25' E				
"				
6'				
"				
E.L.				
"				
E CB				
1/4				
C				
C				

Topography in front of Block 59

72	48
55	+75
45	+50
44	+25
41	47
44	+75
32	+50
25	+25
23	46
23	+75
28	+50
37	+25
50	45
47	+75
40	+50
20	+25
10	44
16	+75
51	+50
58	+25
49	43
47	+75
	42+50

The base line from which measurements were taken on line parallel with and fifty feet from the westerly line of Block 59, said line being the line on which the levels "C" were Taken.

See level book No1. Pages 18 – 21

	+75
2	+50
5	+25
10	52
20	+75
5	+50
	+25
3	51
	+75
14	+50
15	+25
24	50
28	+75
49	+50
42	+25
47	49
43	+75
32	+25
41	+50
60	+25
72	48

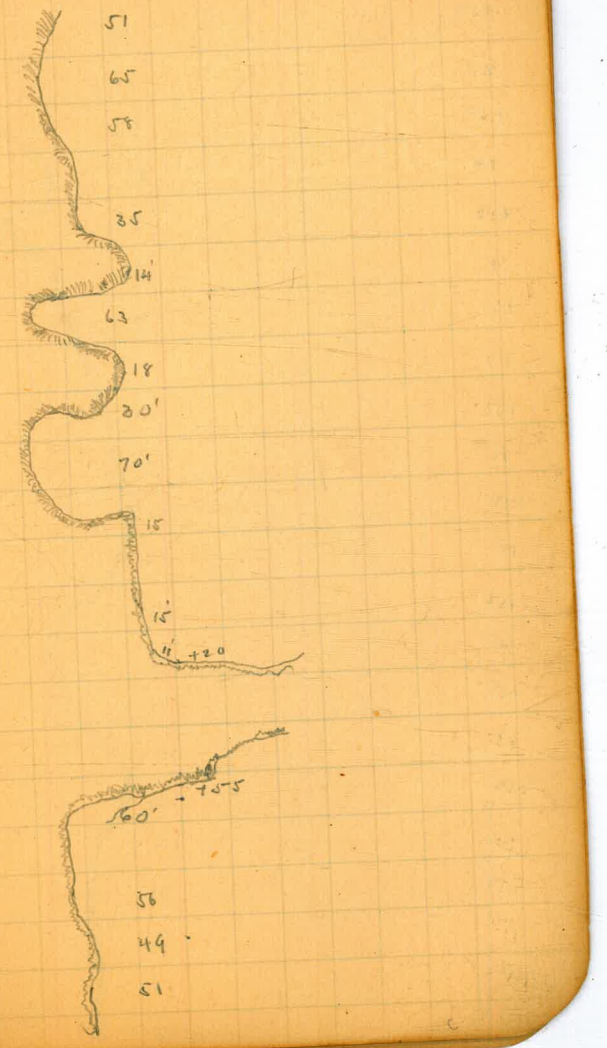
See note Page 21 Level book No1.

Topography On Boulevard
June 2nd

+50					
+25					
4					
+75					
+50					
+25					
3					
+75					
+50					
+25					
-2					
+75					
+50					
+25					
1					
+75					
+50					
+25					
0 0					

Topography on Boulevard
June 2nd

10					
+50					
9					
+75					
+50					
+25					
8					
+75					
+50					
+25					
7					
+75					
+50					
+25					
6					
+75					
+50					
+25					
5					
75					
4+50					



Topography on Boulevard
June 3rd

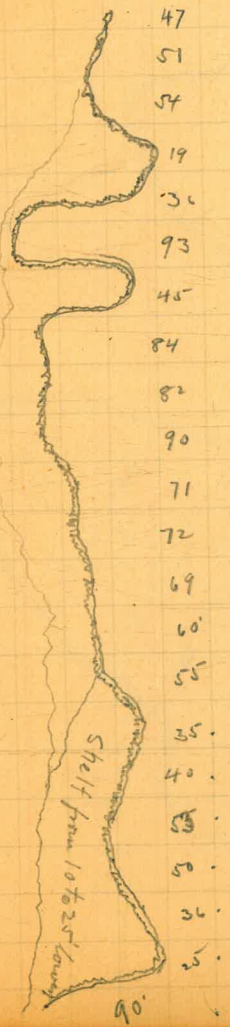
+50					
20					
+50					
19					
+50					
18					
+50					
17					
+50					
16					
+50					
15					
+50					
14					
+50					
13					
+50					
12					
+50					
11					
+50					
10					

Ragged. Brush washes, but can be graded OK.

90
92
87
52
84
59
58
46
42
41
24
37
57
70
69
40
30
45
55
51
51
51

Topography on Boulevard.
June 3 04

31					
+50					
30					
+50					
29					
+50					
28					
+50					
27					
+50					
26					
+50					
25					
+50					
24					
+50					
23					
+50					
22					
+50					
21					
20+50					
10					



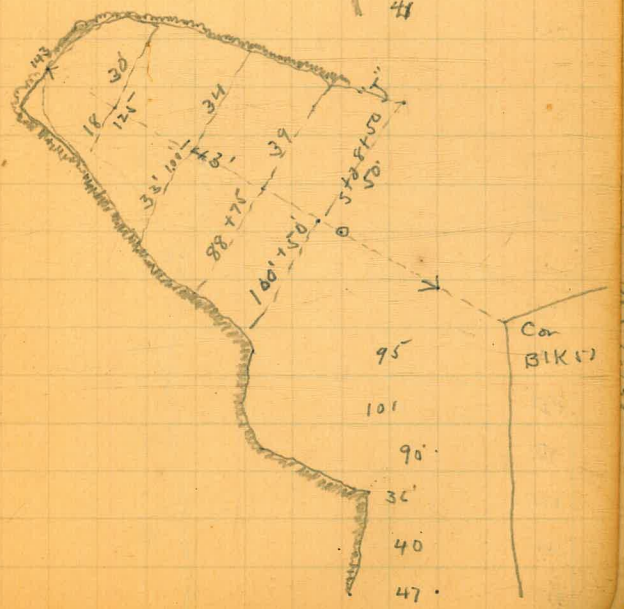
Boulevard.

55

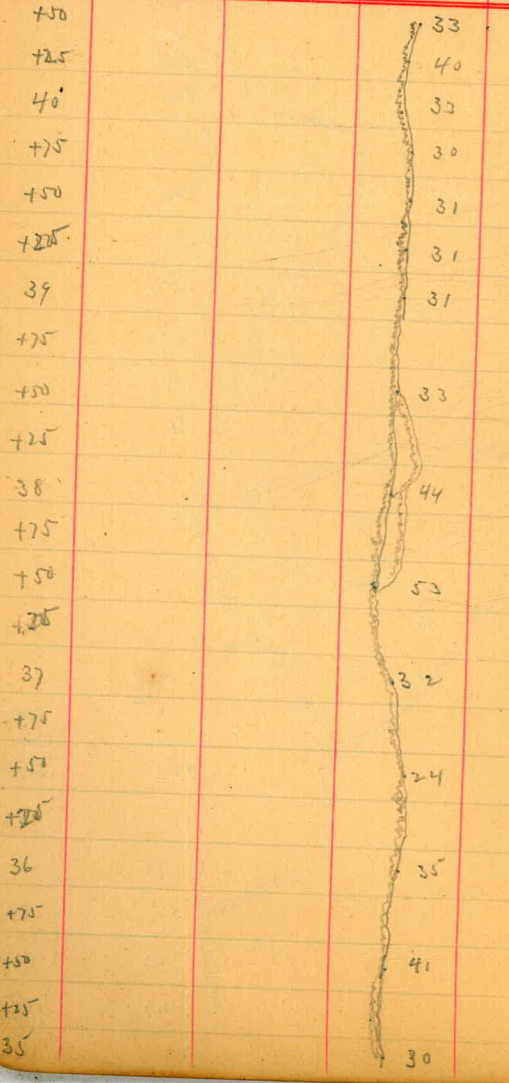
35
+75
+50
+25
34
+75
+50
+25
33
32+75

+25
+25
32
+75
+52
+25
31

30
27
40
40
110
104
95
65
51
47
41



Boulevard


+50
+25
40
+75
+50
+25
39
+75
+50
+25
38
+75
+50
+25
37
+75
+50
+25
36
+75
+50
+25
35
33
40
32
30
31
31
31
33
44
53
32
24
35
41
30

Boulevard

57

43		65
+75		40
+50		60
+25		65
42		80
+75		55
+50		38
+25		20
41		40
+75		
40+50		33

Cave St. Line

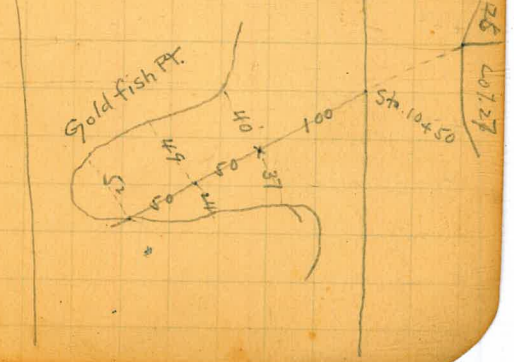
+50	30
16	50
+50	63
15	77
+50	88
14	84
+50	78
13	90
+50	72
12	50
+50	75
11	45
+50	70
10	46
+50	35
9	10
+50	6
8	15
+50	20
7	

Gold fish Pk

See opp Page

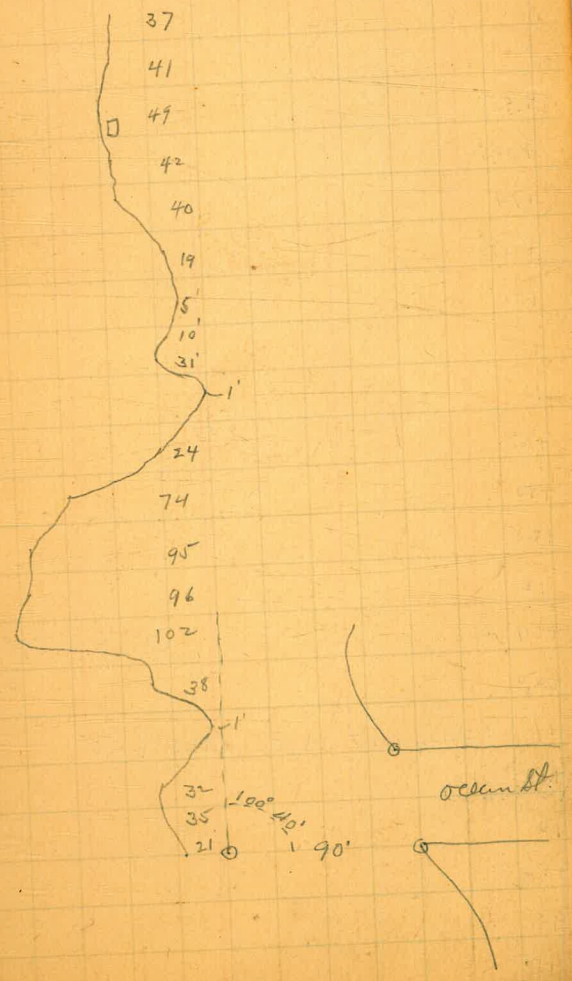
60 x 35

+50	56
18	36
+50	52
+25	68
17	72
+75	65
16+50	30



Boulevard. Park.

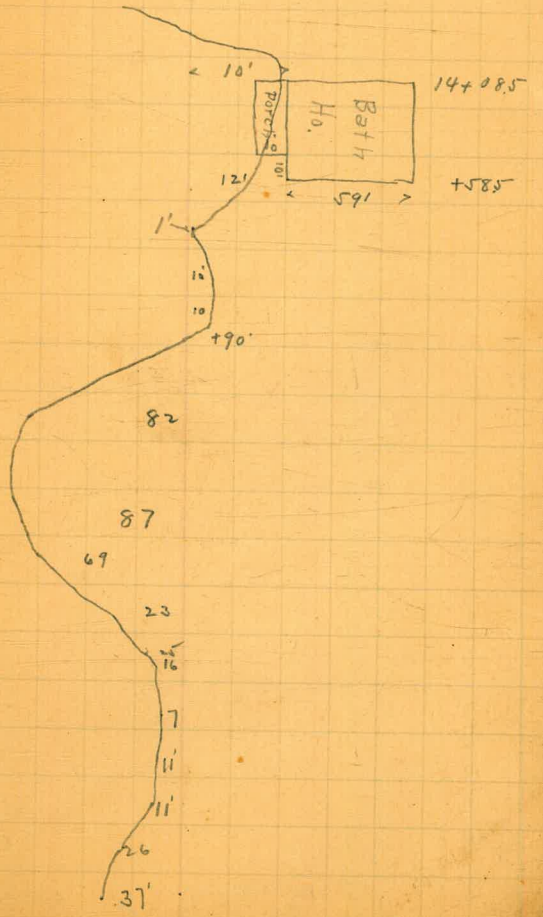
+50'					
8					
+50					
7					
+50					
6					
+50					
5					
+75					
+50					
4					
+50					
3					
+50					
2					
+50					
1					
+50					
+25					
0.					

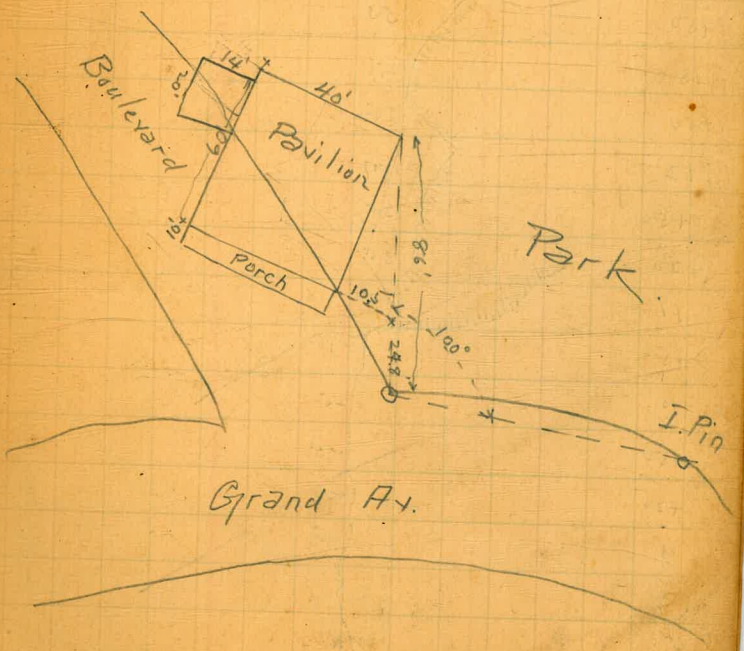


Meander of Park Ocean front.

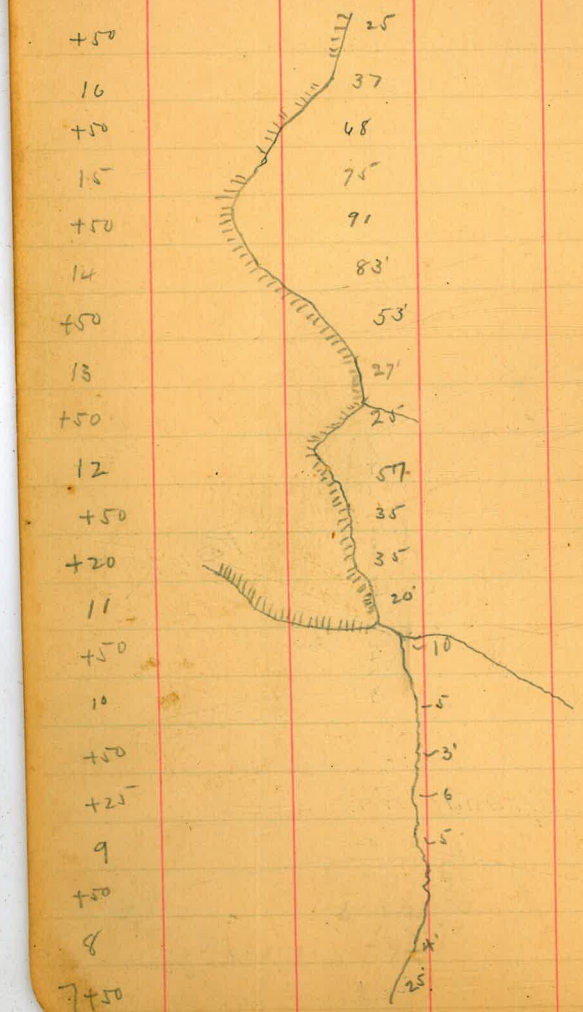
15+56.2 = Sta. 13+32.7 "F" ang. L. on "F" 65° 55'

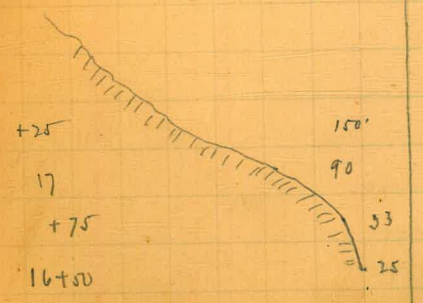
+55
+08.5
14
+58.5
+50
+25
13
+75
+50
+25
12
+64 ⊙ Ang. R. 57° 20'
+50
11 ⊙ Jany cont 25ft Ang R. 50°
+50
10
+50
9
8+50

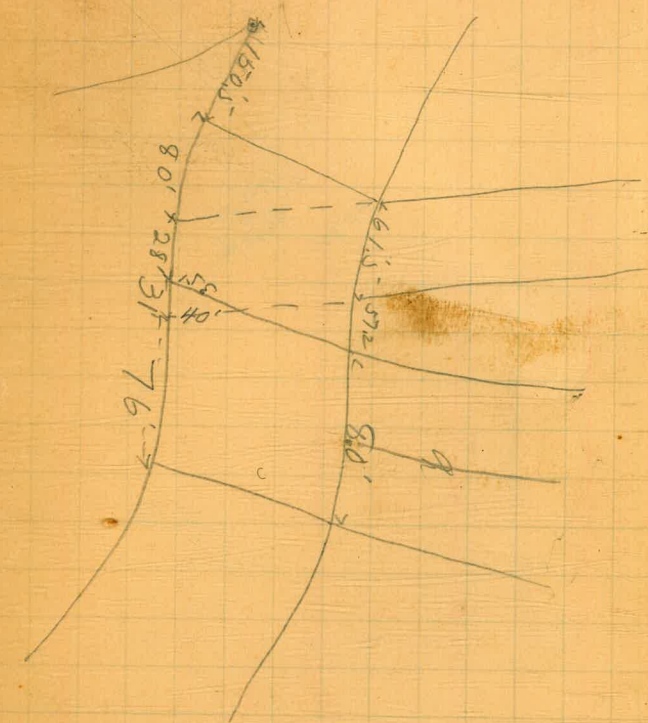


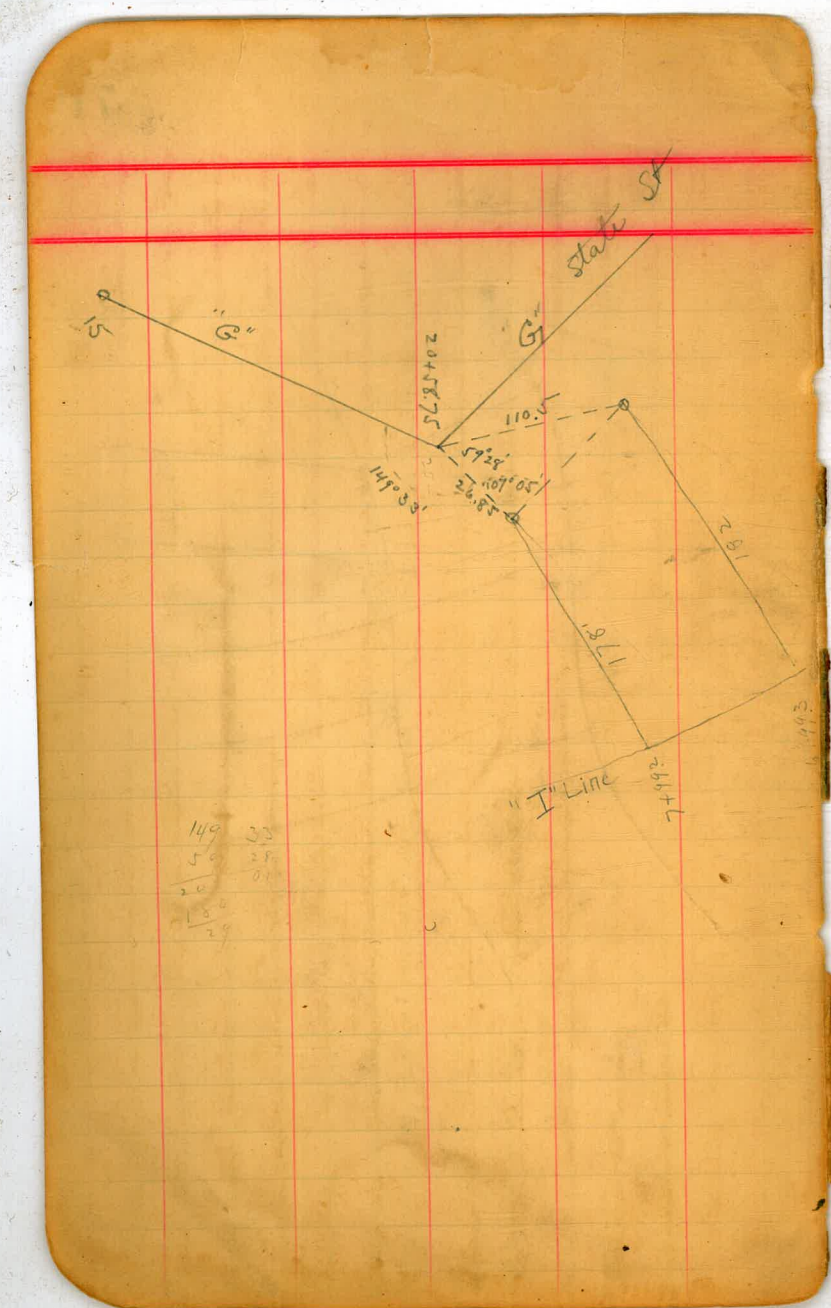

Boulevard
14'
40'
Pavilion
Porch
Park
I. Pin
Grand Av.

Beach Row.

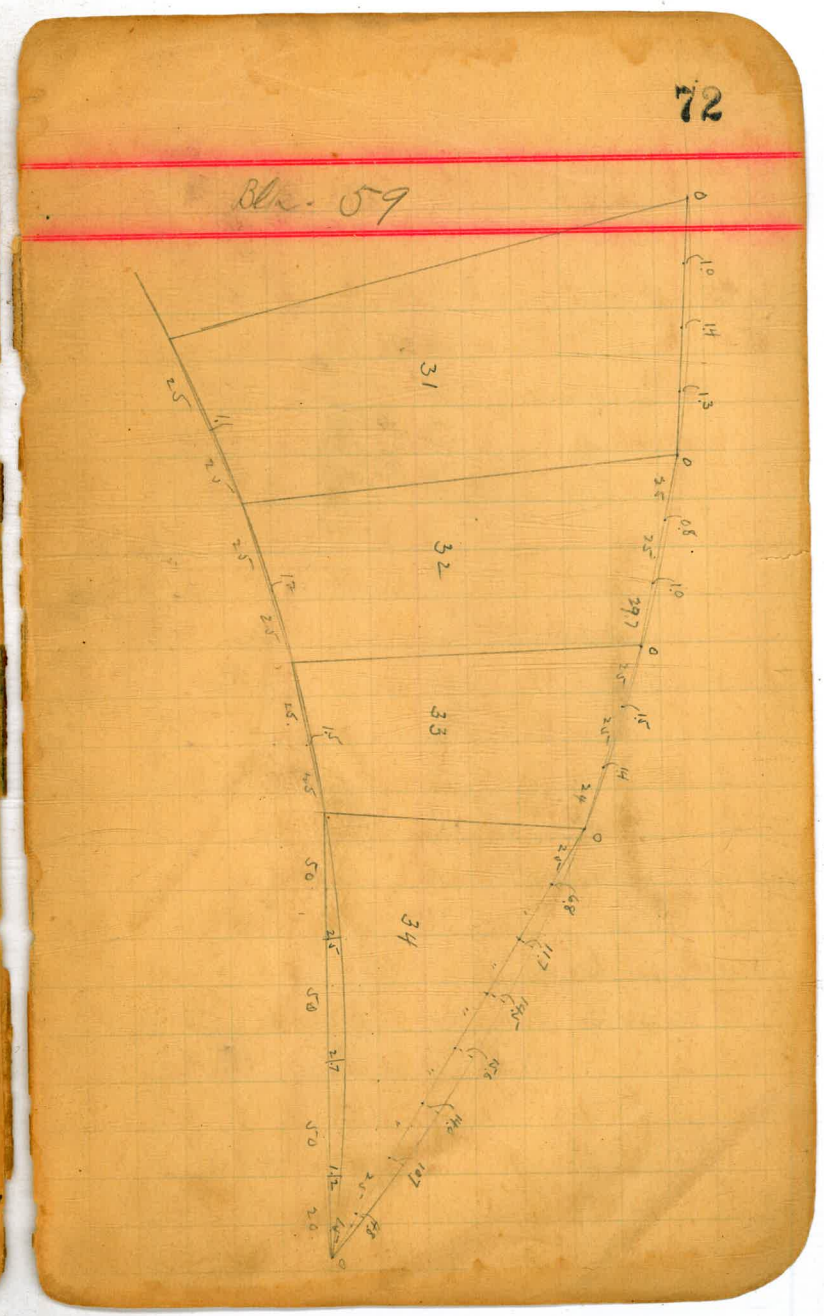

+50
25
16
37
+50
48
15
75
+50
91
14
83'
+50
53'
13
27'
+50
20'
12
57
+50
35
+20
35
11
20'
+50
10
10
5
+50
3'
+25
6
9
5
+50
4'
8
25'
7+50


+25
150'
17
90
+75
33
16+50
25


80'
28'
31'
76'
40'
57.2
80'



State St
"G"
"G"
15
20+58.75
110.5
59°28'
149°33'
107°05'
26.85
"I" Line

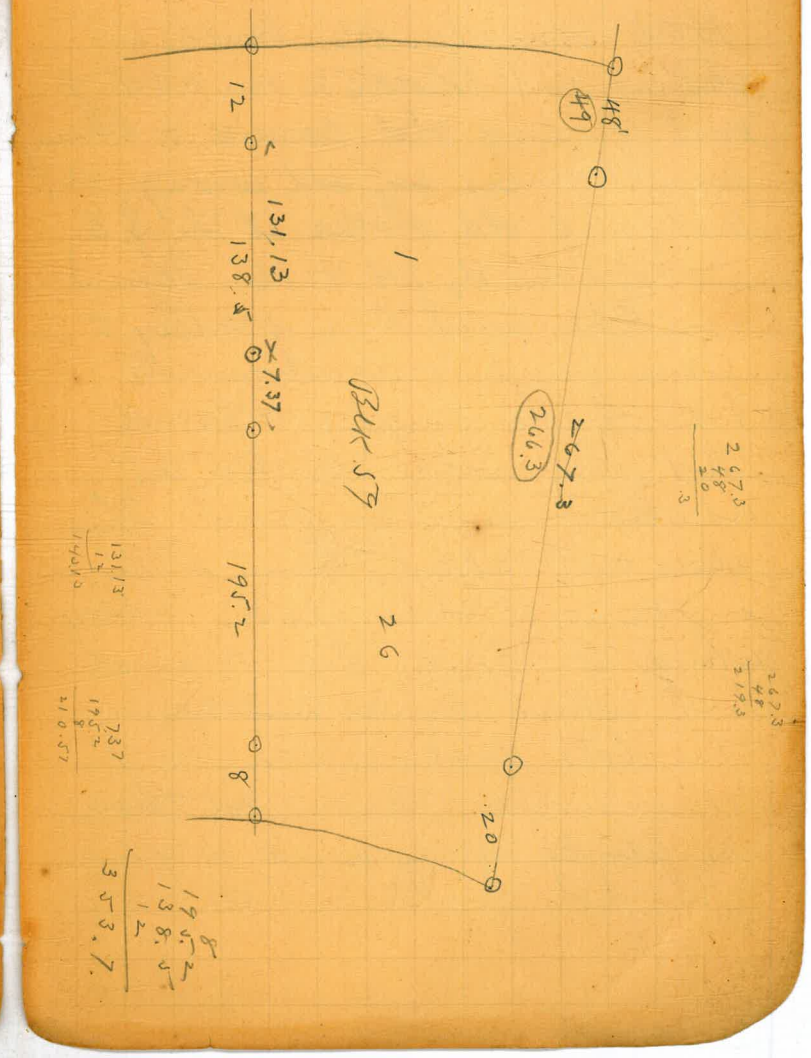


Blk. 59
31
32
33
34

9 52
1° 44

18 04 1/2
9 2 1/4
+9 52
18 54 1/4

Ang on "F" at Sta. 5+51 to up cut.
Alley 40° 24' Right

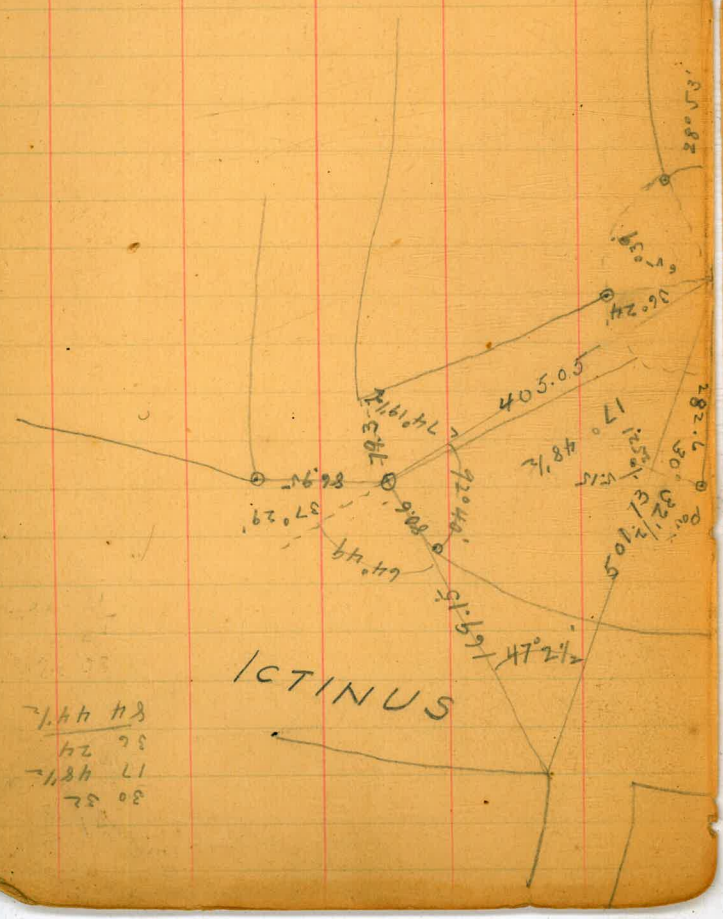


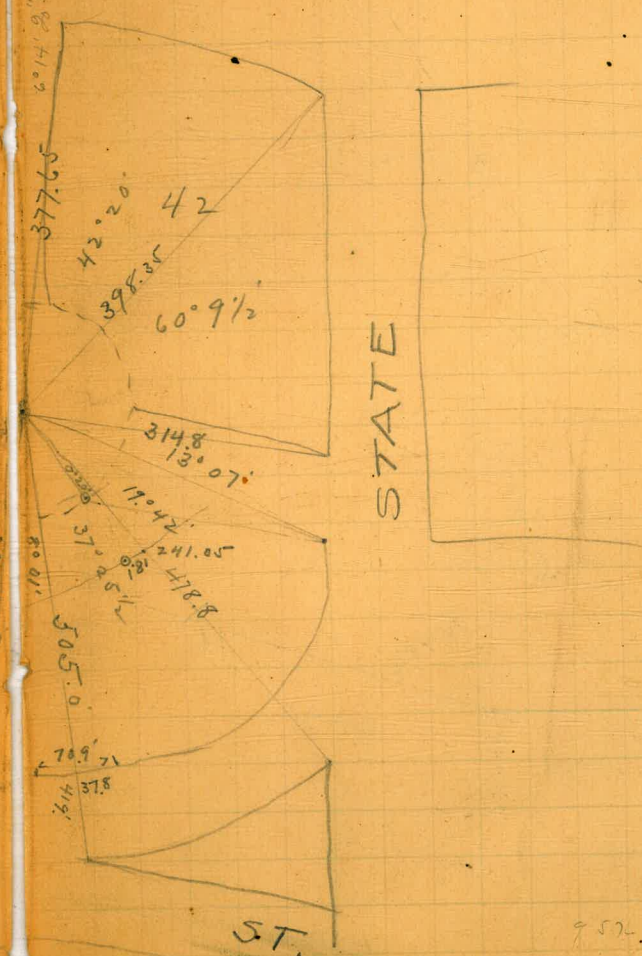
Apr. 30th 04.

Block 52

Had considerable trouble in staking out Block 52 on acct. of not finding old corners & because present fences are all wrong. At last found old stakes at the S.E. Cor. of lots 11, 14 & 16. Then I ran the west line of alley & ran full measurements taking the angles & found that they were all 90°25' as shown on blue print. This does not check with some stake on the west side of the alley which I think are original but which would not give the lots full width so I discarded them as there is plenty of ground to give the lots full width.

From Cut Park to S.W. Cor. 41 – 403.25
" " " " "E" ⊙ 501.13





112.3
56.5
138.4
307.2

42 20
60 9½
13 07
19 42
37 25½
8 01
180 45 0

478.8
237.75
241.05

84 43½

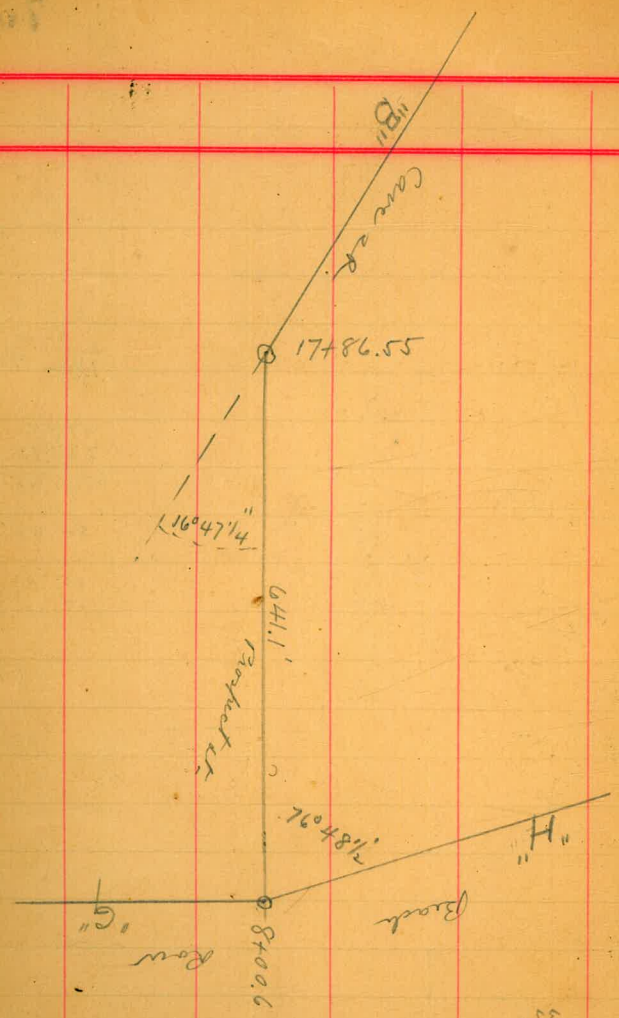
35 33
17 16½
8

405.05

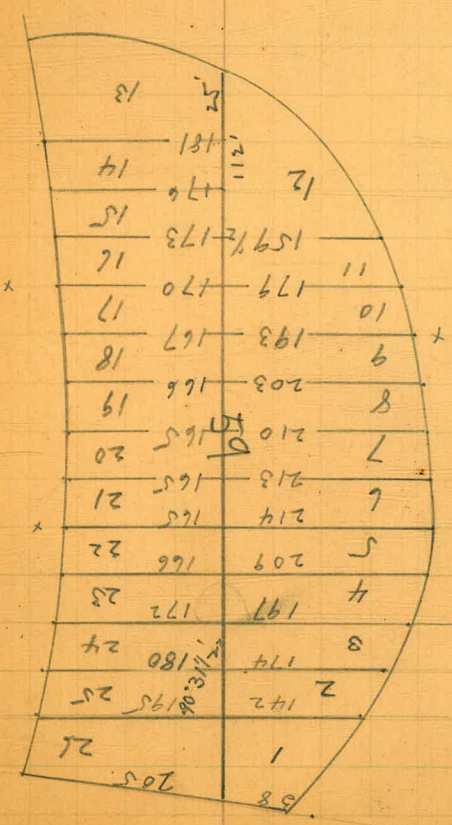
37 25½
8 01
45 26½

37 25½
19 42
57 7½

952


"B"
Cave ck.
17+86.55
16°47 1/4"
641.1'
Project St.
76°48 1/2'
"H"
Beach
"G"
Row
8+00.6

209
174
35'

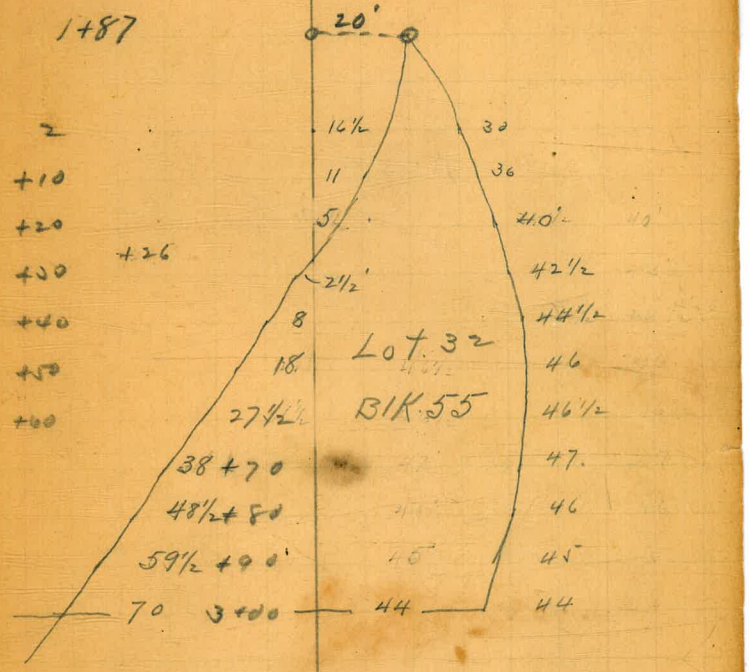

58
205
1
21
2
142
195
25
3
174
180
24
4
197
172
23
5
209
166
22
6
214
165
21
7
210
165
20
8
203
166
19
9
193
167
18
10
179
170
17
11
159 1/2
173
16
12
176
14
181
13
25'
112'
90°31 1/2'

0
+619.0

Angle Right going North on Orange Ave at Center St. y 07'

Ang. Right, going North on Grand Ave. at Connecticut St. y. 03'

1+87



April

	1	2	13	14	20	21	22	23	24	25	26	27	29	30	31
G. J. Rennie	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
J. A. Johnston	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8

May

	1	2	13	14	20	21	22	23	24	25	26	27	29	30	31
G. J. Rennie	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
J. A. Johnston	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
F. Woodworth															

June

	1	2	13	14	20	21	22	23	24	25	26	27	29	30	31
G. J. Rennie	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
F. Woodworth	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Geo. Lambert															8

Pipe line runs 5' East of So-E. Cor of railing on Bridge about 1 1/4 Miles North of Crossing of Summy line.
Angle at above approx. 7' R. going North.

179.54 Spike in No. Gate post on La Jolla road near Sta. 43+71

City Hall, San Diego, Cal.

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10 45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38 27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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