Sewer Location
Lexington.
572

MEMO
TRANSFER BOOK

F.B. 572

KEUFFEL & ESSER CO.
DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.
NEW YORK.
CHICAGO. SAN FRANCISCO. ST. LOUIS.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

MICROFILMED

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

Preliminary
Sewer Location

ENGINEERING DEPARTMENT,
CITY OF EAST SAN DIEGO.
CALIFORNIA

East of Sisson

Further East of Estrella Park

Indexed to date
Feb. 5, 1918.
Card Indexed to date
Mar. 21, 1917

418-10 7th

Index

Lexington line 1-6

175

19 20 1 2 3 4 5 26 27 8 9 00 1 2 3 4 5 6

Meander Line on Lexington

12+60.32 ΔR 20°28' ✓

S32°20'W

Reset 3-31-21 Bartlett 49'
6+

8+82.86 ΔL 5°40' ? ✓ 8+28 PI Alley ℄ 8+22' South of S.L. Clark

6+43 -
Water Hole
5+35

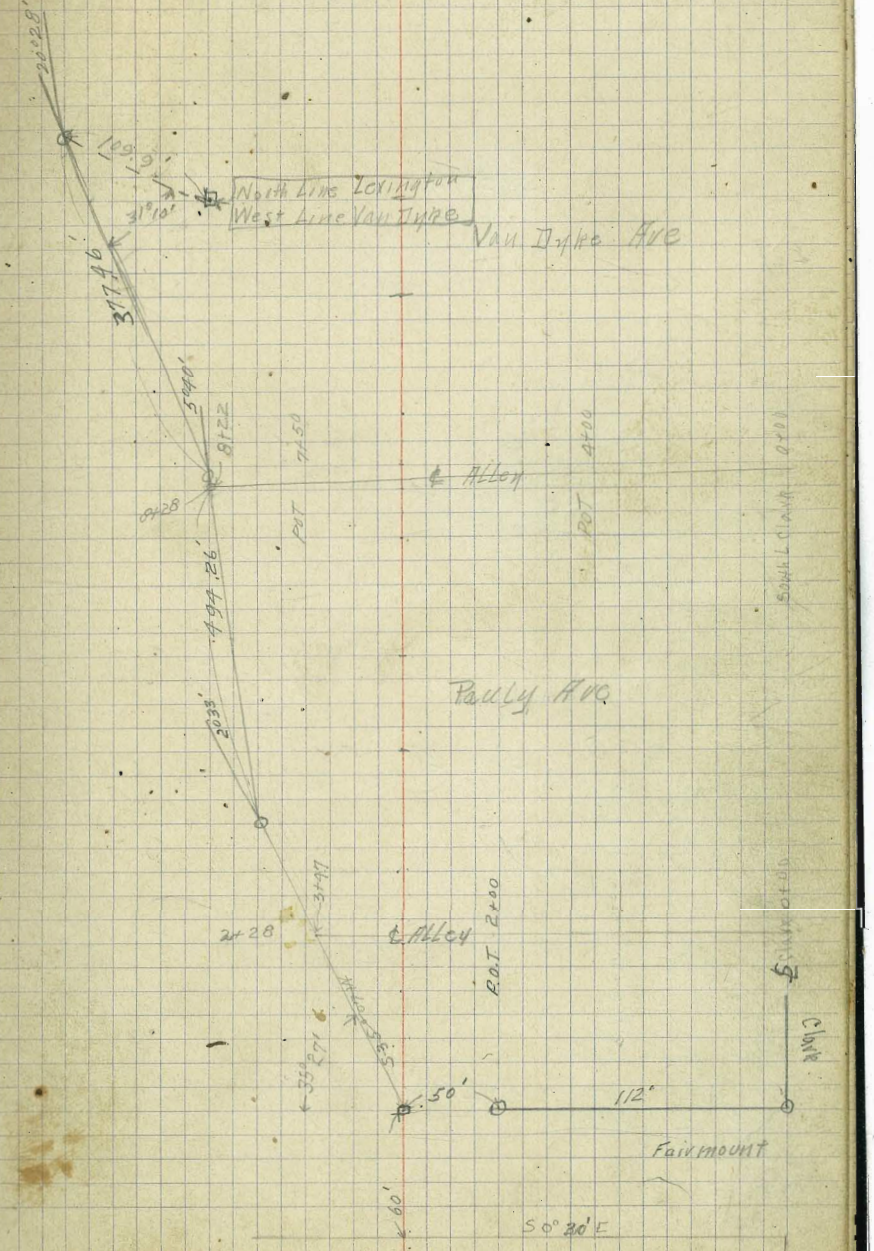
S38°00'W

3+88.6 -ΔR 2°33'

2+28 aprox PI ℄ Alley Bet Fairmount + Pauly + Meander Line on Lexington.

S35°27'W

0+00 on West Line Fairmount 162' South of S.L. Clark



S63°19'

21+40.8 ΔR 18°58' ✓

S44°21'

17+13.8 P.O.T

2363.8

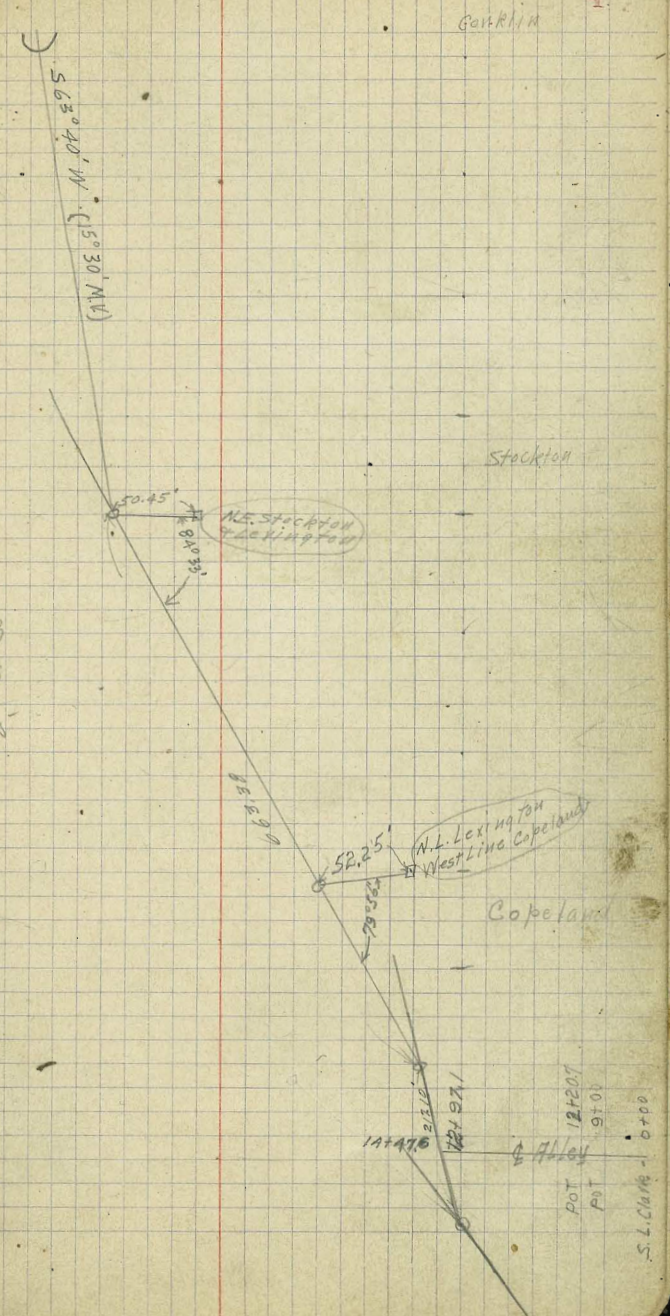
Was N°33' corrected Dec 2-1914 Ford

14+77.42 ΔL 8°27' ✓

S52°48'

14+47.6 PI ℄ Alley Bet Van Dyke + Copeland with Lexington sewer

√12+60.32 ΔR 20°28' ✓



84.58
18.58
65.55

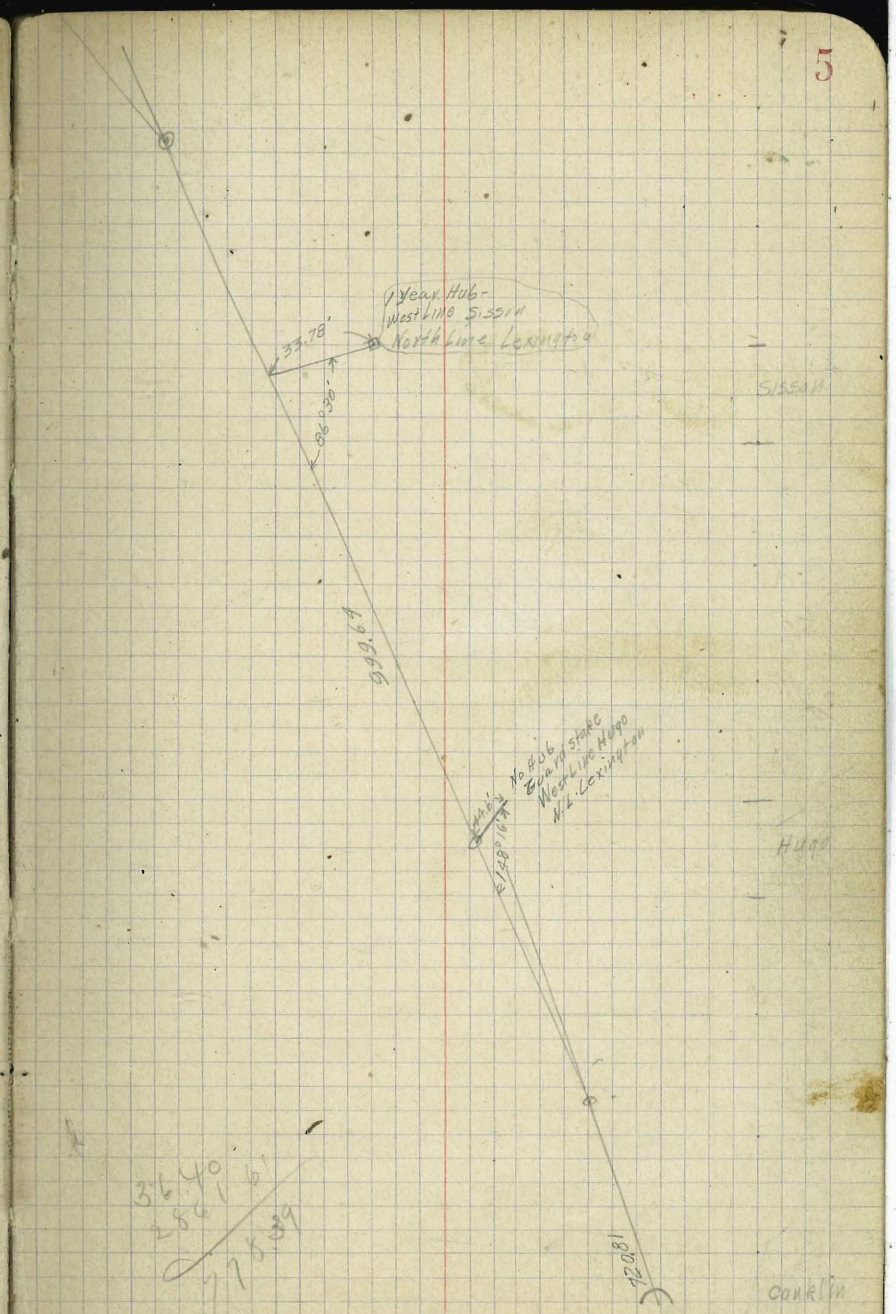
38+61.25 ΔL 8°03'

36+40 P.O.T.

S48°22'W

31+00 P.O.T.

2876.61 ΔL 14°57'



48+25.25

181.13

S24°52'W

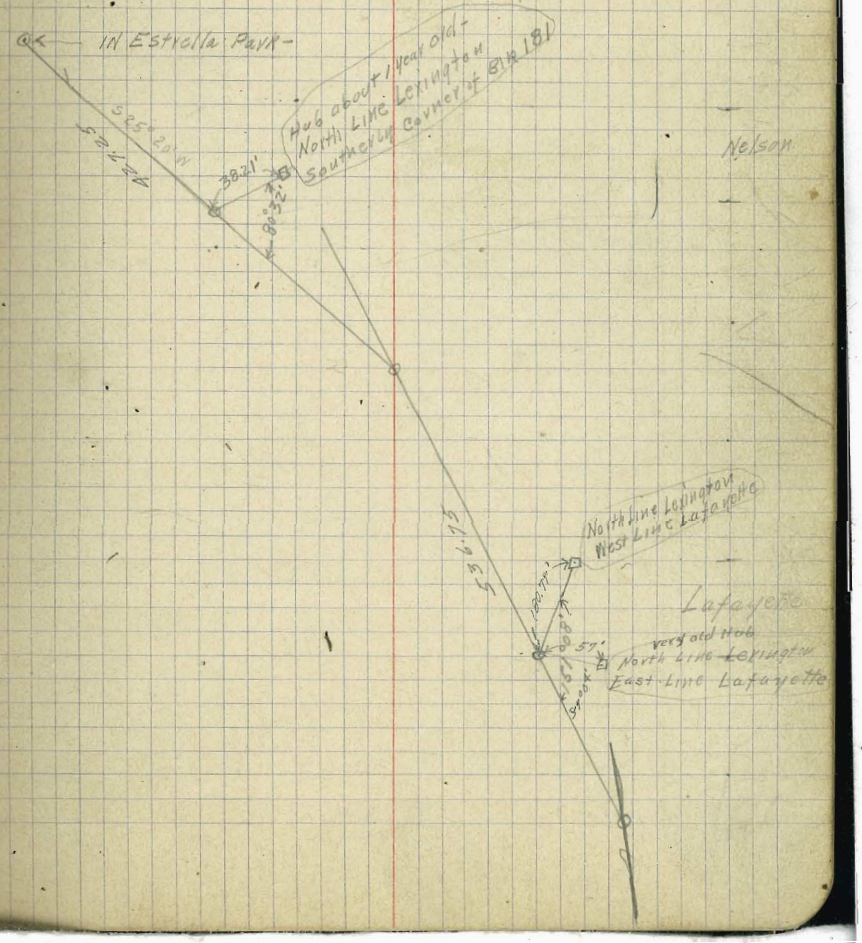
46+44.12 POT

246.12

43+98 ΔL 15°27'

41+00 P.O.T. S 80°19' W

38+61.25 ΔL 8°03'



Prop. Align. of Harbor Drive
Thru Destroyer Base

Moore
3-22-39

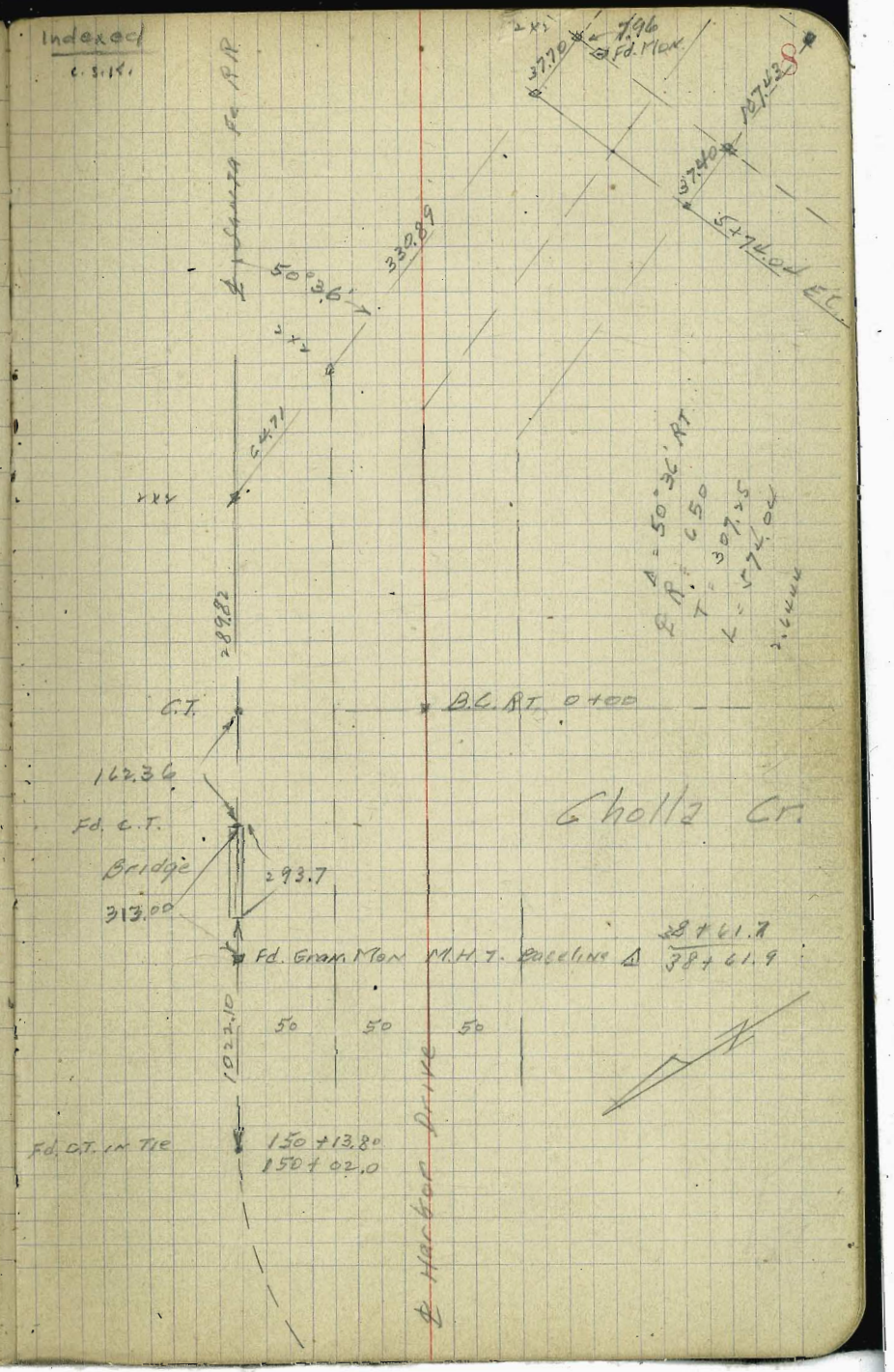
5+74.0℄ E.C.

0+00 B.C. L.T. C.T. IN Tie WITHIN 3 nails.

Fd. C.T. WITHIN 3 nails E'ly end R.R. Bridge
Set by Match

See P. 28-37 Additional Ties

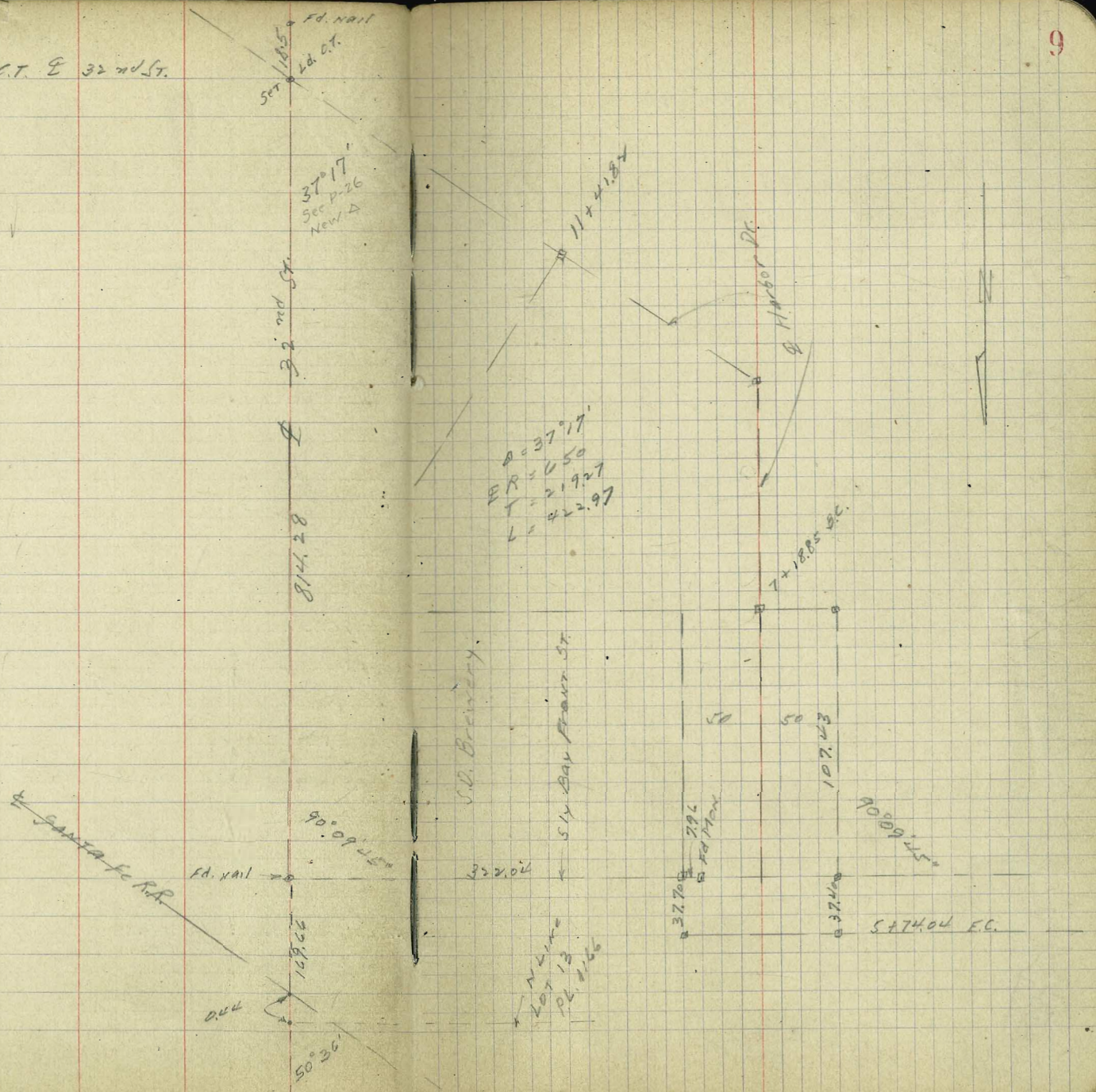
Indexed
C.S.I.C.



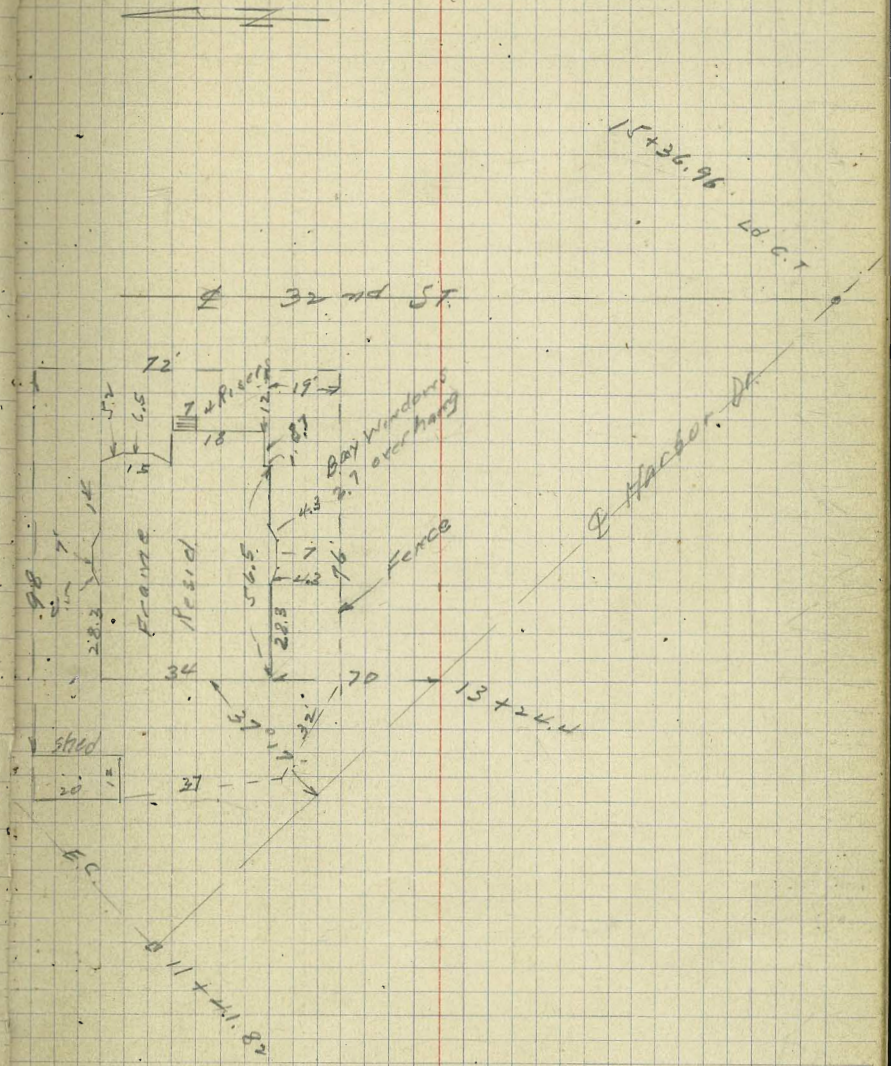
15+36.96 Set Ld+C.T. ℄ 32nd St.

11+41.82 E.C.

7+18.85 B.C. Lt.



Location of Brewmaster's Resid.
S.D. Brewery Prop.



23 + 21.85 EC.

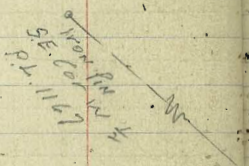
Δ = 13°18'30" Lt.

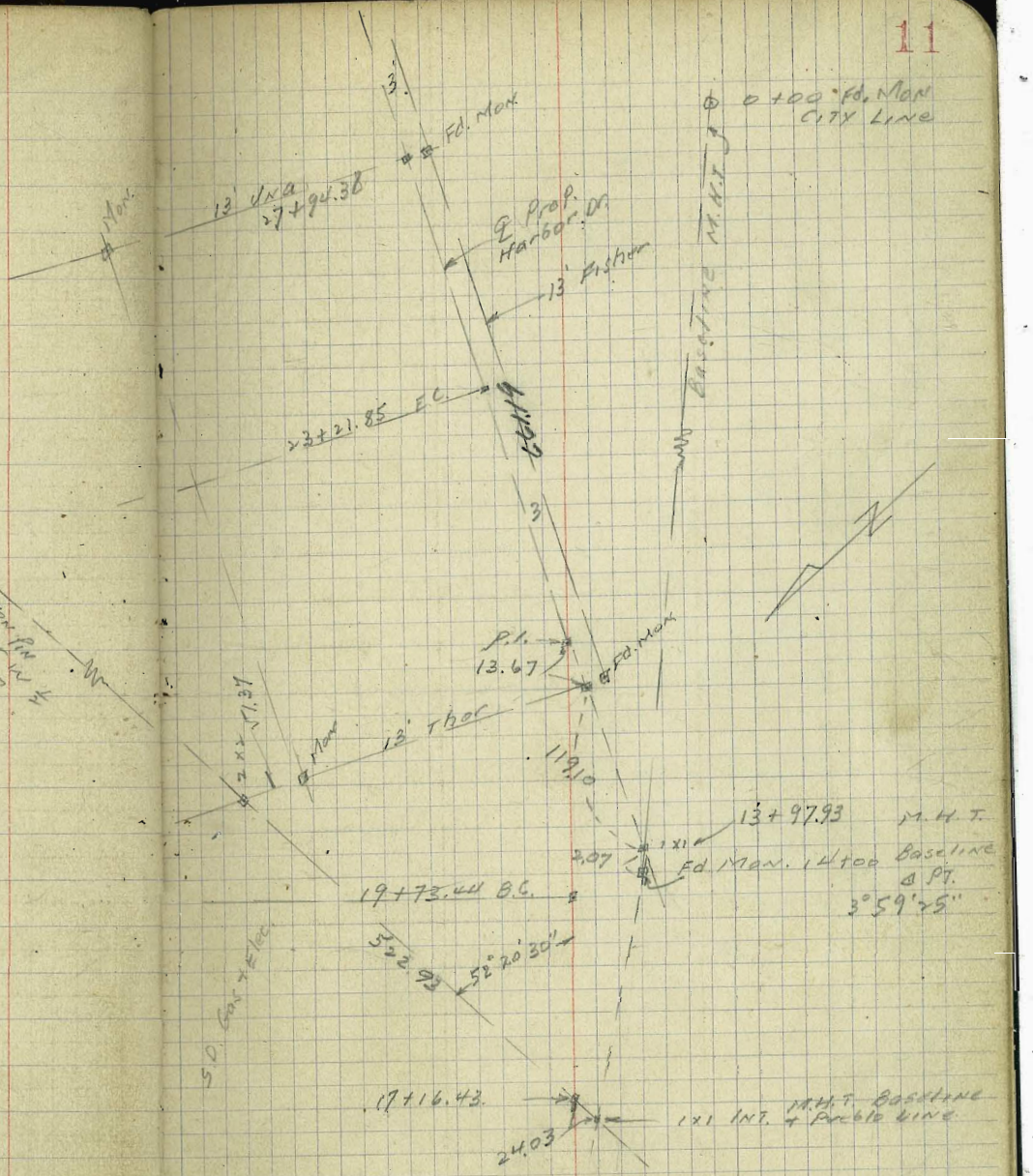
D = 1500

T = 174.99

L = 348.44

19 + 73.44 BC Lt.

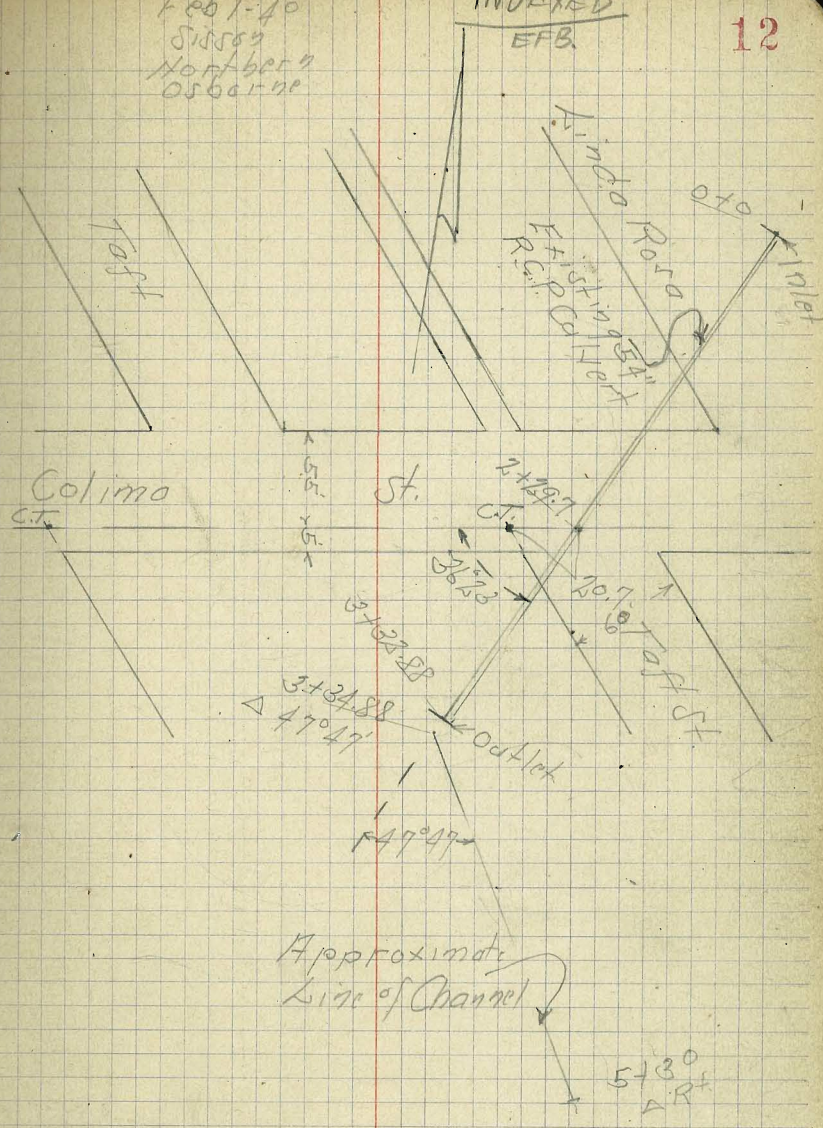




Location 54" R.C.P. Culvert
Colima & Taft.

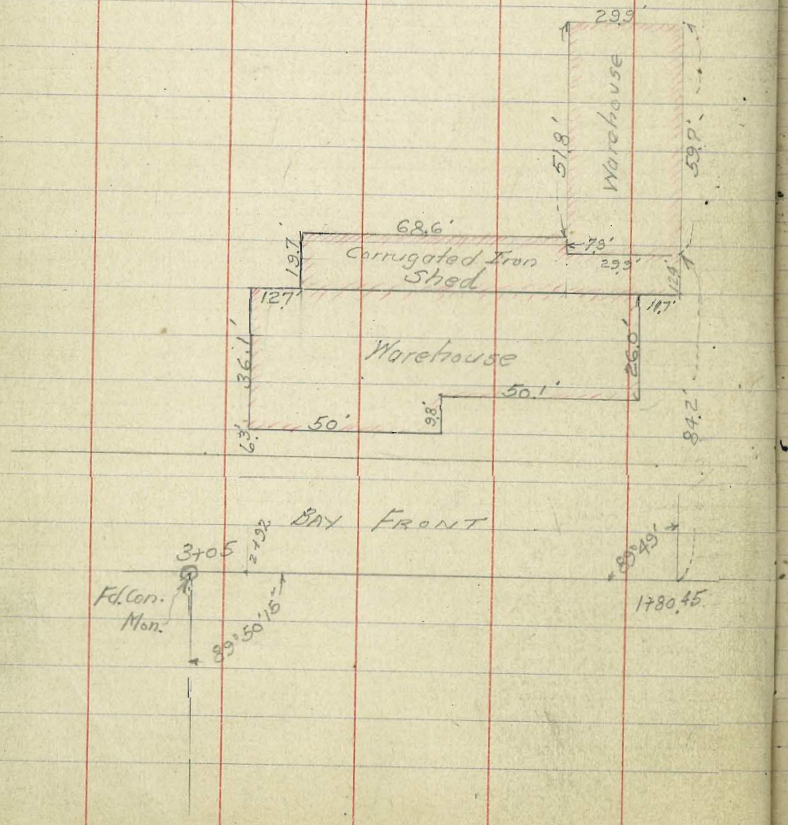
Feb 1-10
Sisson
Northern
Osborne

INDEXED
EFB.



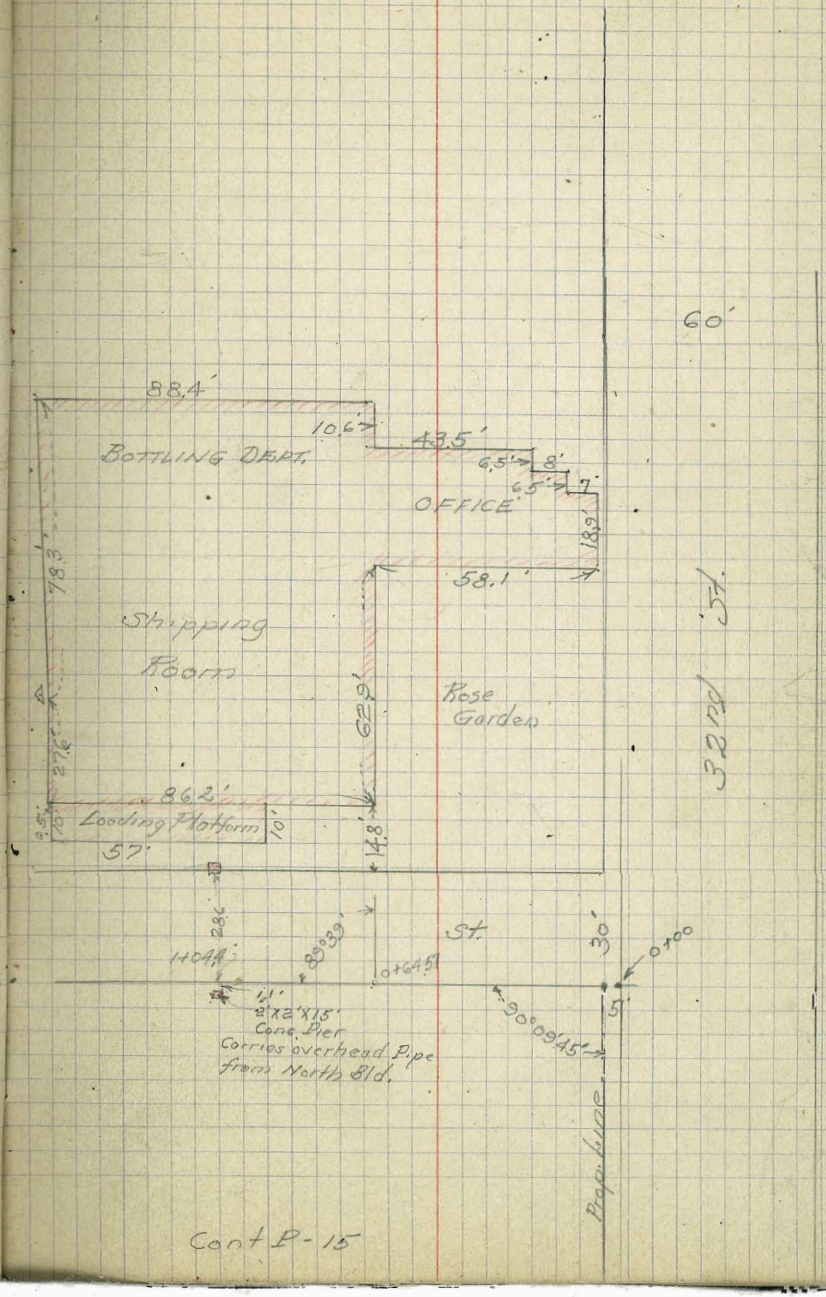
Walker
Bliss
Isbell 12-14-40

Location of Buildings
32nd and Bay Front Street.



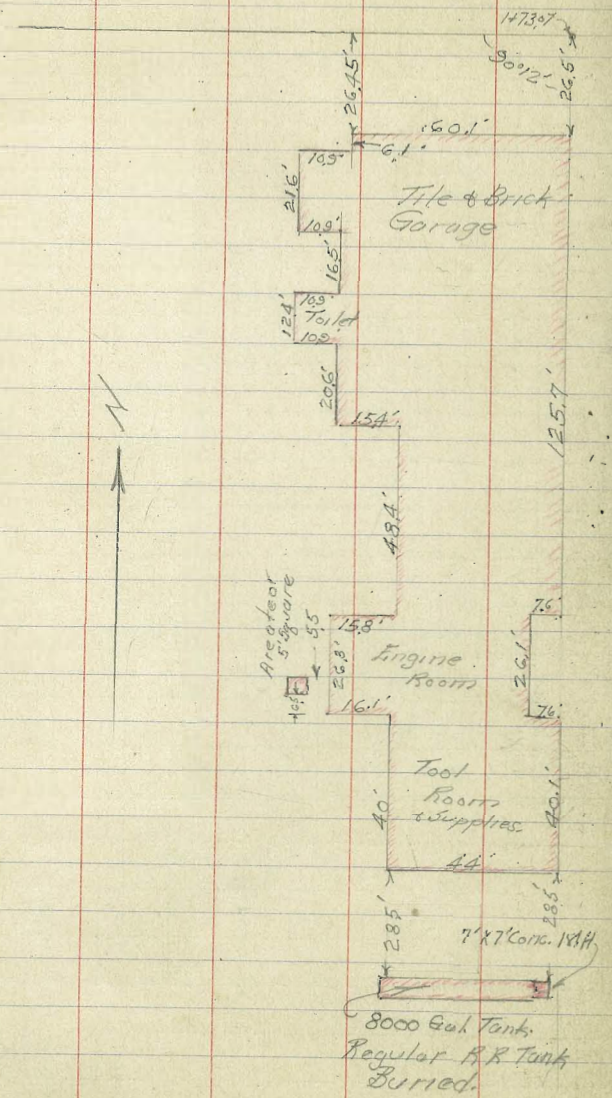
INDEXED
EFB

14

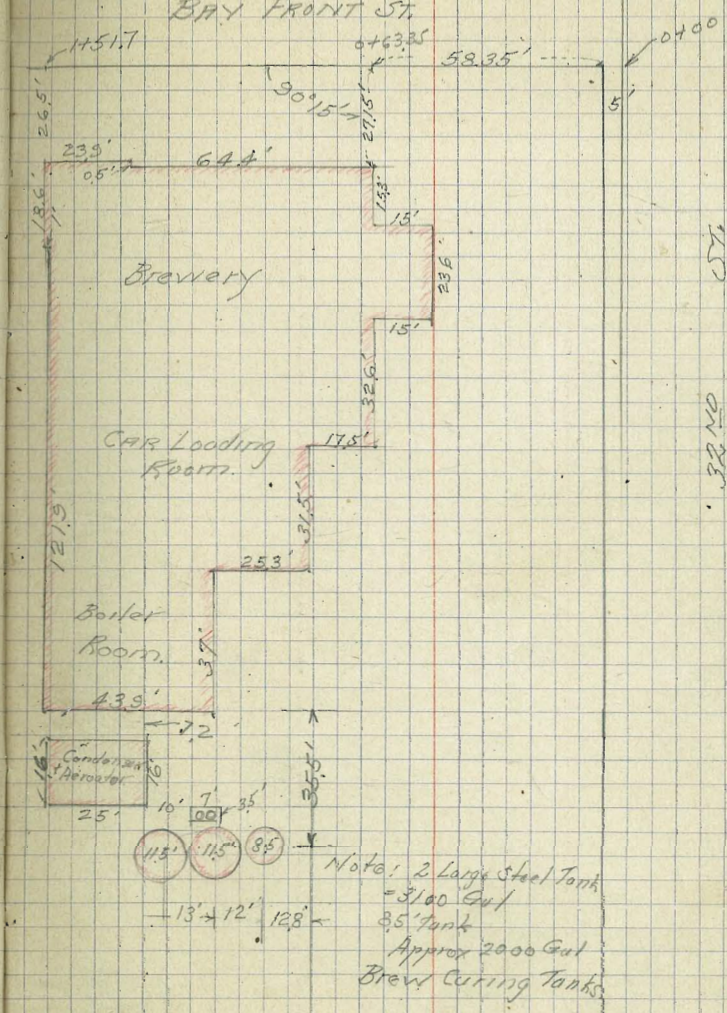


Cont P-15

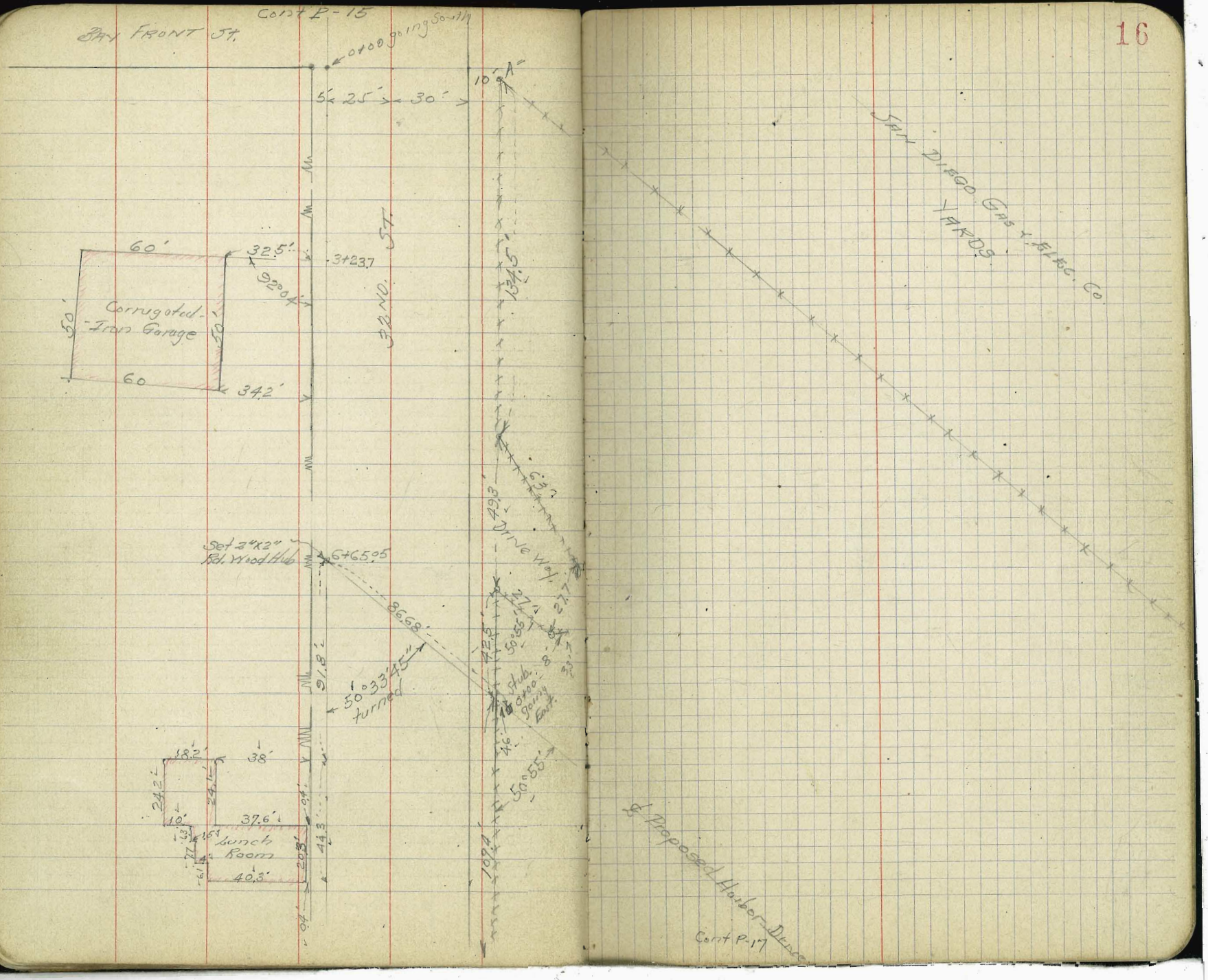
Location Brewery Bldg.
32 ND And Bay Front.
Cont. from P-14

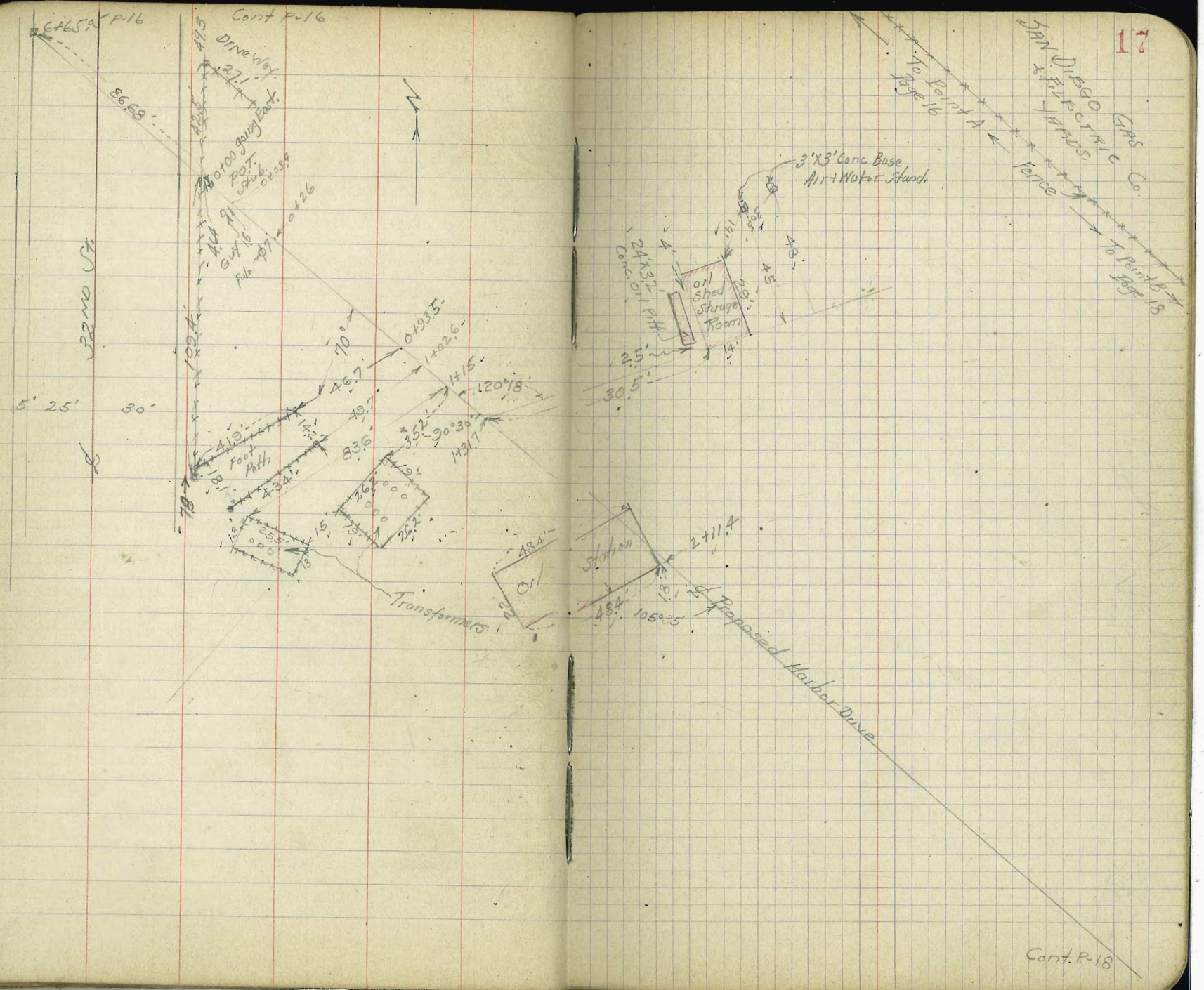


Cont P-14

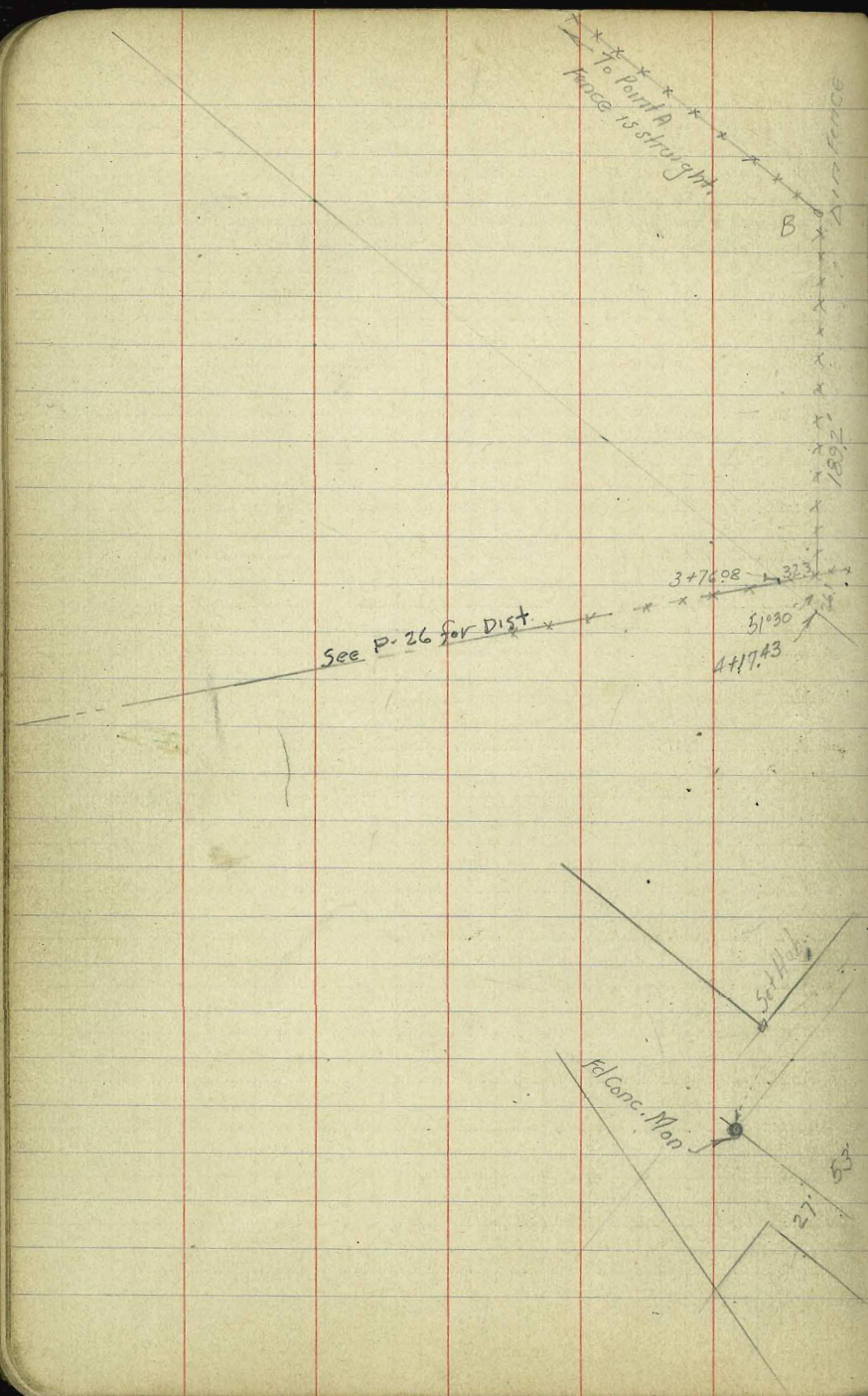


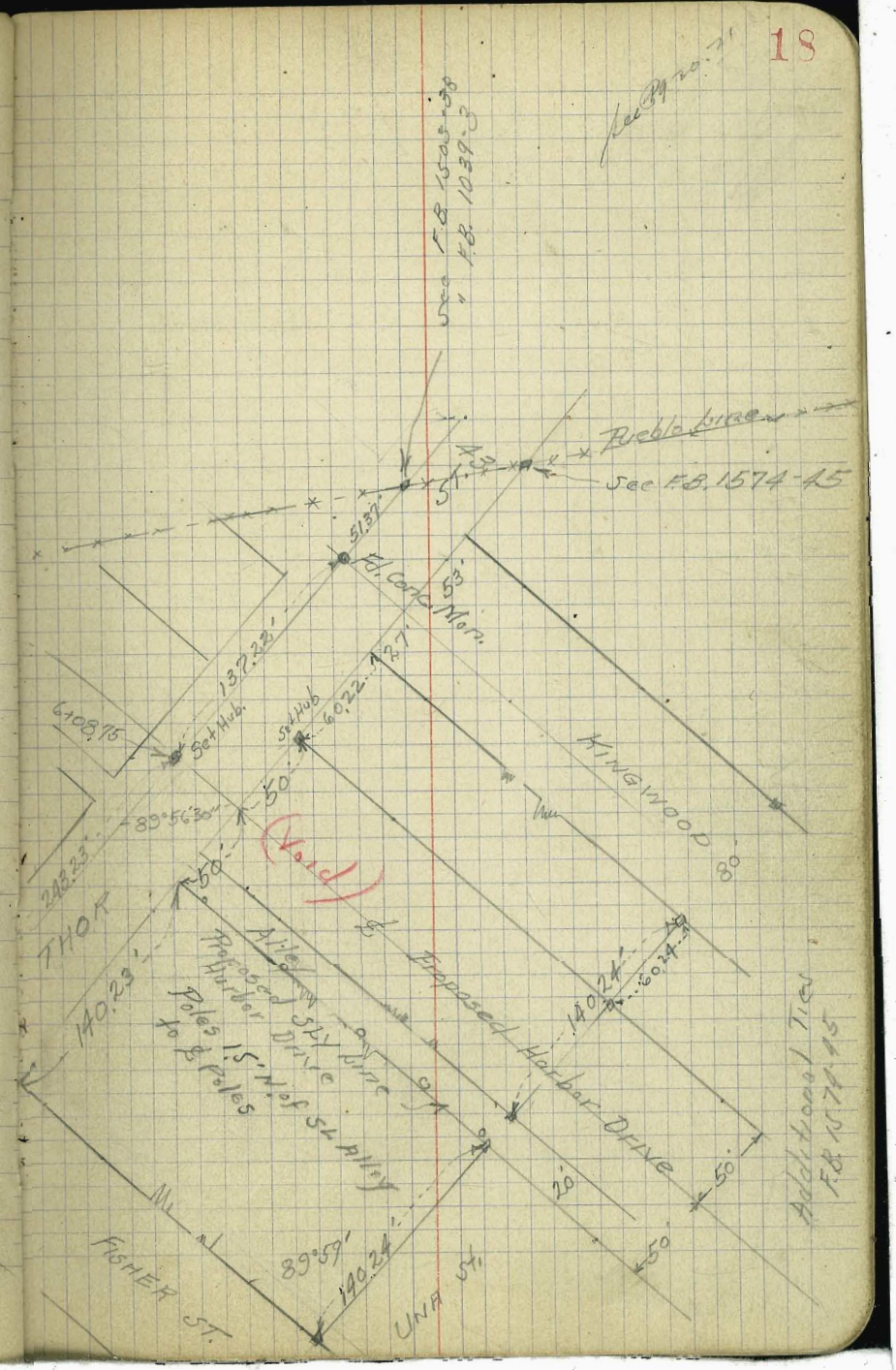
Cont P-16


Cont P-15
BAY FRONT ST.
0+00 going South
5' 25' 30'
10' A
60'
32.5'
3+23.7
92°04'
Corrugated-Iron Garage
50'
50'
60
34.2'
32 NO. ST.
134.5'
63'
49.3'
Drive Way
Set 2"x2" Rd. Wood Hub
6+65.05
86.68'
91.8'
50°33'45" turned
Stub 0+00 going East
50°55'
18.2'
38'
24.2'
24.1'
10'
37.6'
Lunch Room
40.3'
20.3'
44.3'
109.4'
SAN DIEGO GAS & ELEC. CO.
YARDS
℄ Proposed Harbor Drive
Cont P-17



6+65.05 P-16
Cont P-16
Drive Way
86.68'
0+00 going East
POT. Stub
0+03.4
0+26
Guy
Pole
32nd St.
109.4'
5' 25' 30'
70°
0+93.5
1+02.6
46.7
1+15
120°18'
49.7
83.6
90°30'
1+31.7
Foot Path
Transformers
Oil Station
48.4'
2+11.4
105°35'
Proposed Harbor Drive
3'X3' Conc. Base Air+Water Stand.
24'X32' Conc. Oil Pit
Oil Shed Storage Room
30.5'
25'
To Point A Page 16
Fence
To Point B Page 18
SAN DIEGO GAS & ELECTRIC Co. HARDS.
Cont. P-18


To Point A
Fence is straight
Dim Fence
B
189.2'
3+76.08
32.3
51°30'
4+17.43
See P-26 for Dist.
Set Hub
Fd Conc. Mon
53'
27'


See F.B. 1503-38
" F.B. 1039-3
Pueblo Line
See F.B. 1574-45
51.37'
Fd. Conc. Mon.
53'
137.22'
6+08.75
Set Hub
Set Hub
60.22
27'
89°56'30"
50'
(Void)
243.23'
THOR
140.23'
Alley
Proposed SLY Line
Proposed Harbor Drive
Poles 1.5' N of SL Alley to ℄ Poles
℄ Proposed Harbor Drive
140.24'
60.24
KINGWOOD
80'
20'
50'
89°59'
140.24'
FISHER ST.
UNA ST.
Additional Ties F.B. 1574-45

Walker
Bliss
Webb
12-21-40

Harbor Drive Alignment

Proposed change in Alignment from 32nd to Natl. City

20+00

19+00

$\Delta = 29°11'40''$
$\ell R = 1150$
ℓ S.T. 299.48'
$\ell L = 585.97'$
} changed See Notes below

18+00

$\Delta = 29°11'20''$
$\ell R = 1150$
ℓ ST. 299.43'
ℓ L 585.86

17+33.12 = B.C. ℓ St.
+33.07 = ~~B.C. ℓ St.~~ = Stub P.O.T.

17+00

16+00

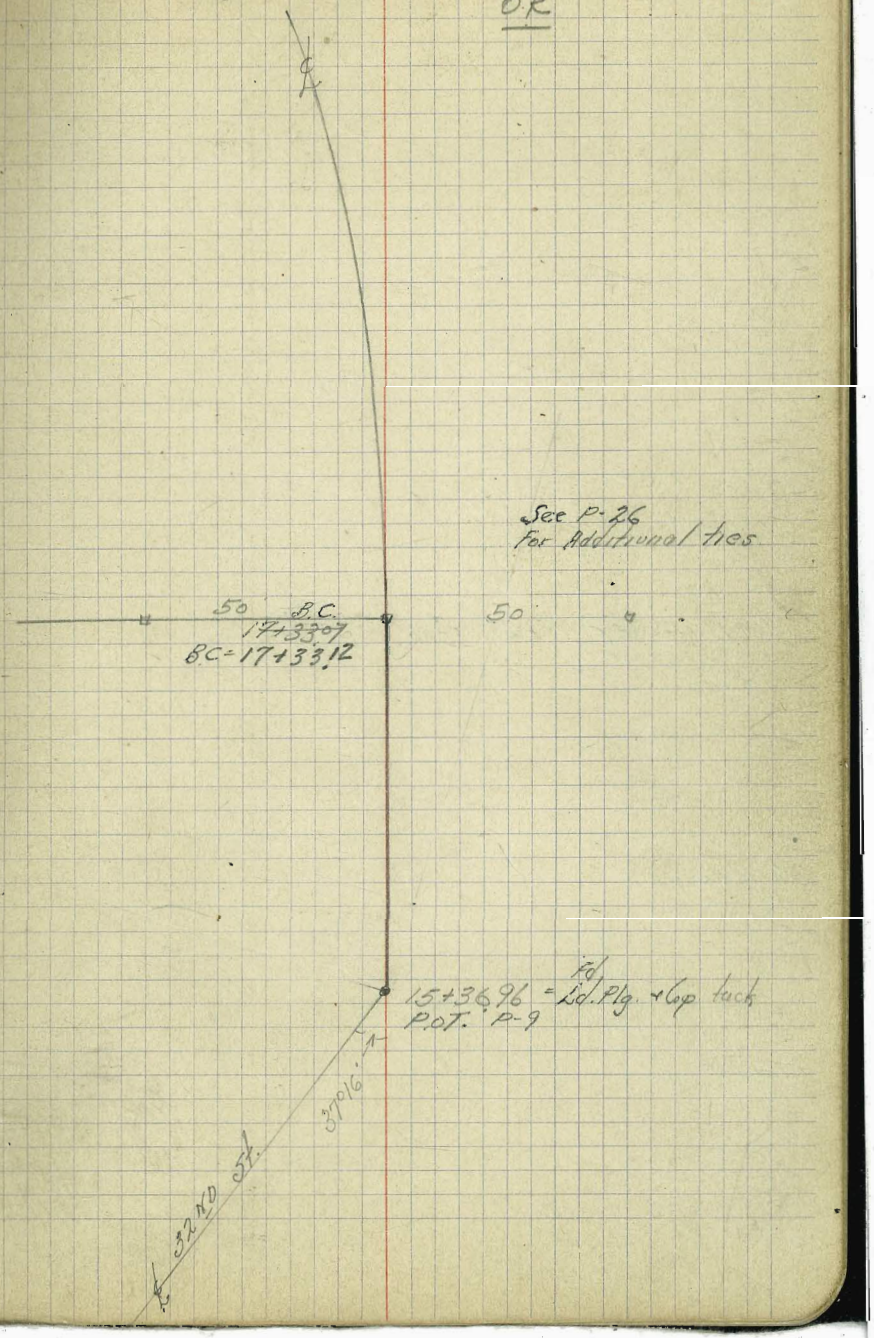
15+36.96 = P.O.T. Page 9 = Ld. Plug C.T. ℓ 32nd

INDEXED
EFB

20

OK

See P-26
For Additional ties



Harbor Drive Alignment
Cont. from P. 20

Station

26+00

25+00

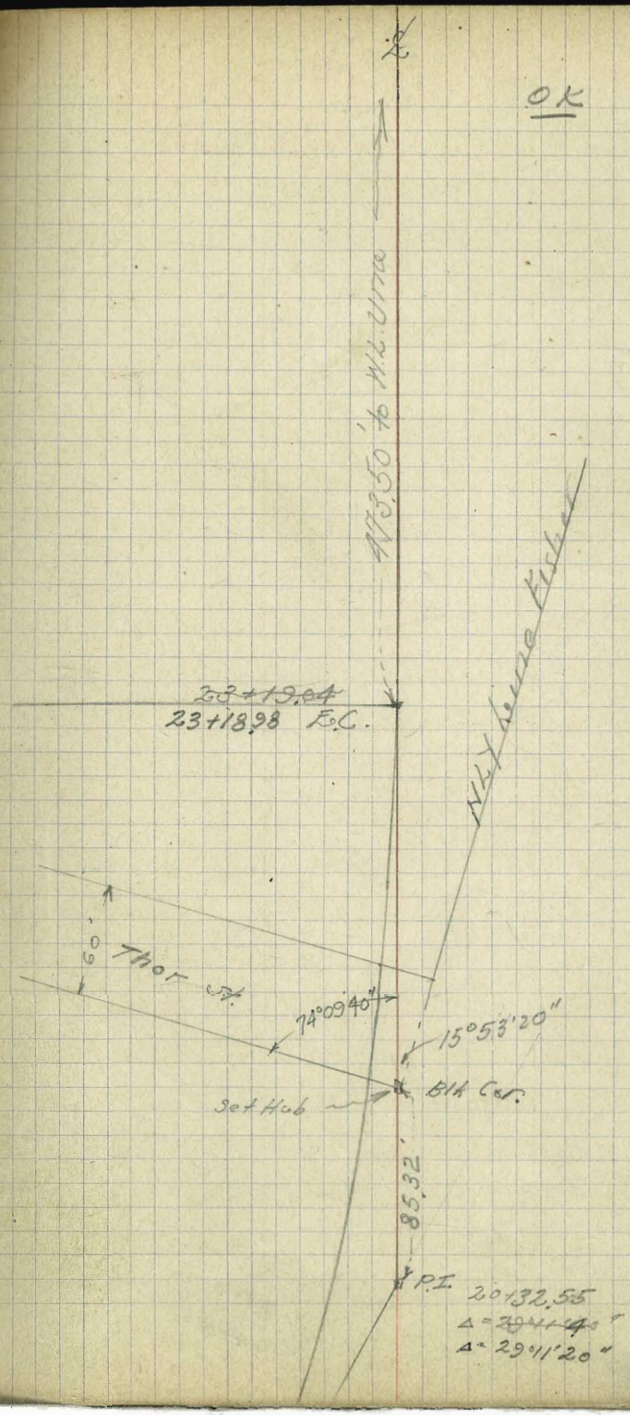
24+00

+19.04 = ~~E.C.~~ = P.O.T. stub.
23+18.98 = E.C.

23+00

22+00

21+00



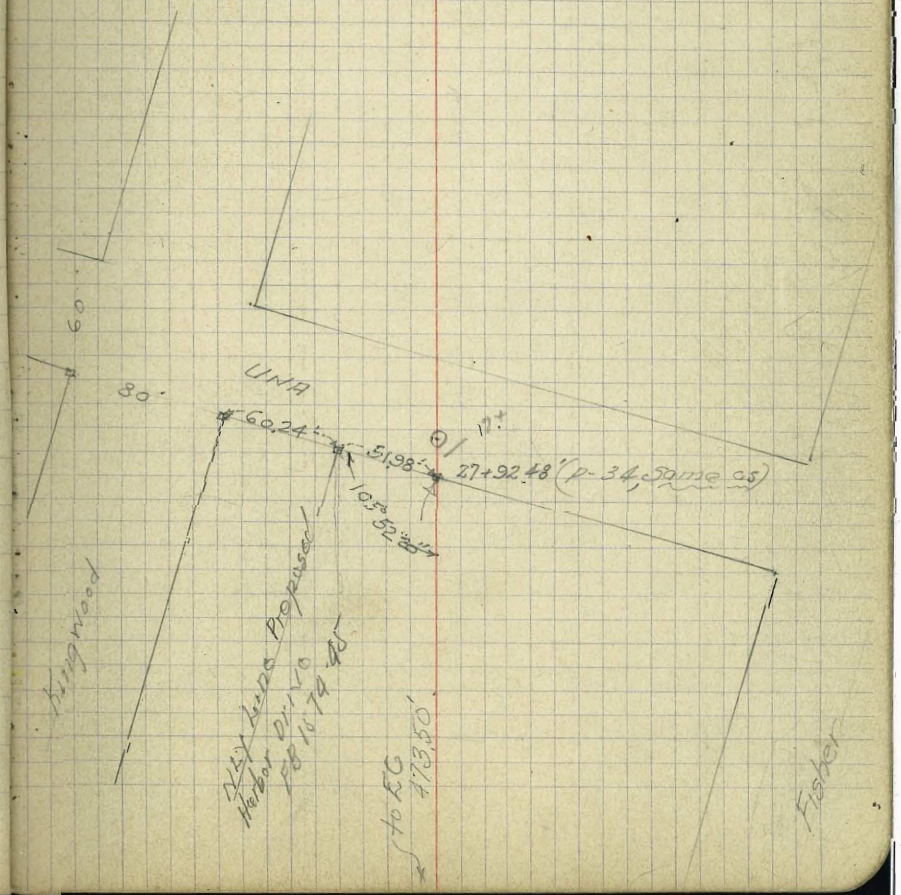
Harbor Drive Alignment
Copy from p. 21

Station	Align	Def Δ
32+00		
~~31+55.9 = B.C. Rt.~~		
31+00		
30+71.68	B.C. Rt.	
30+00		
29+00		
27+92.48 = P.O.T.		
27+00		

℄

OK

22



Harbor Drive Alignment + Ties
Cont. from P. 22

Station
37+00
36+00
35+00
34+00
33+00

FB 572 Harbor Drive Alignment & Ties

41+00

40+00

OK

Δ = 48°19'40"
℄ R = 1722.50'
℄ ST = 772.82
℄ L = 1452.89

Please check this =

~~Δ = 48°19'40"~~
~~℄ R = 1534.73'~~
~~℄ ST = 688.59'~~
~~℄ L = 1294.51'~~

39+00

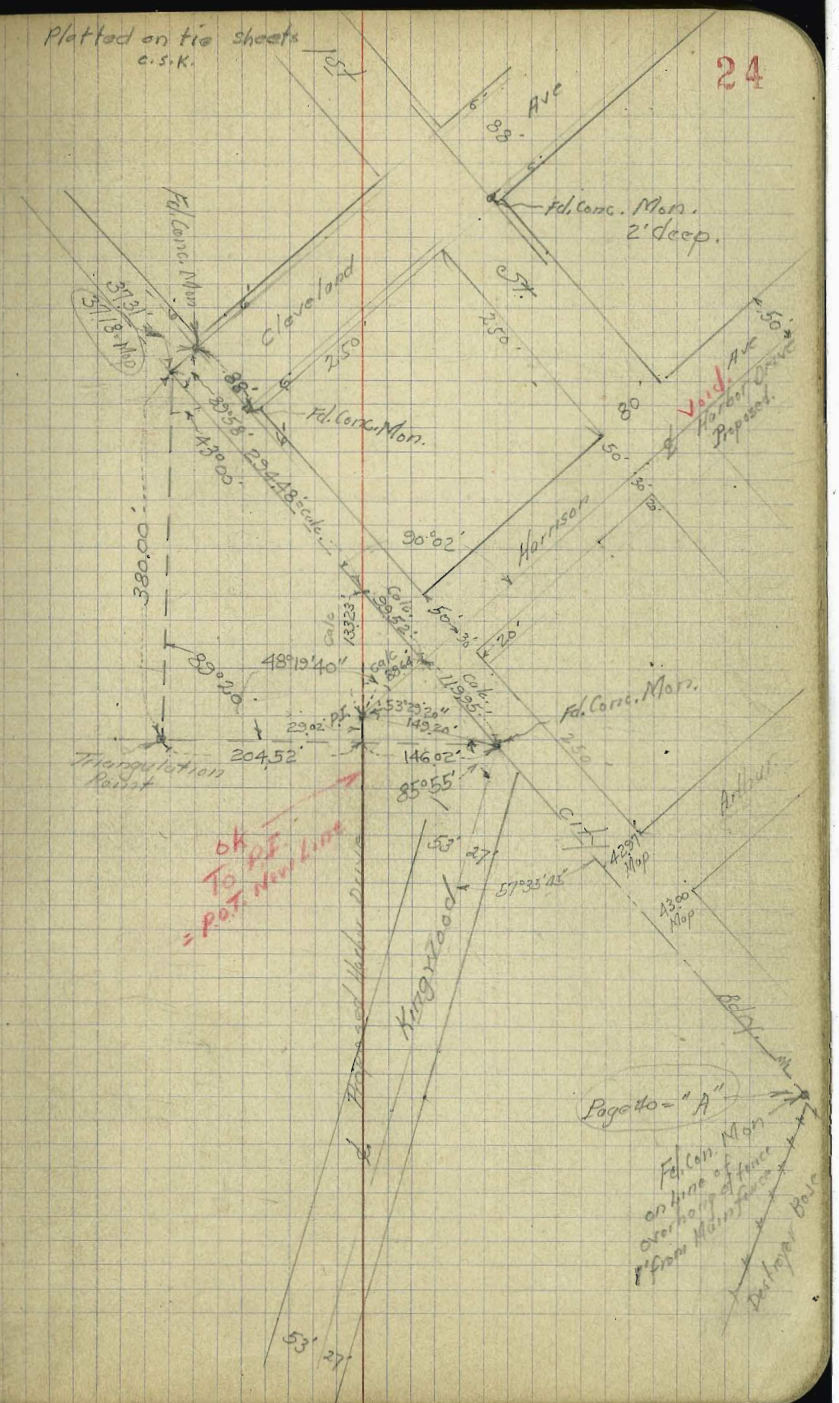
Set Paving stake in edge of Water.

38+44.50 = P.I. Δ Rt. 48°19'40"

38+00

37+00

Plotted on tie sheets C.S.K.



Harbor Drive Alignment & Ties.

Station

45+24.57 = E.C.

45+00

~~44+50.12 = S.C.~~

44+00

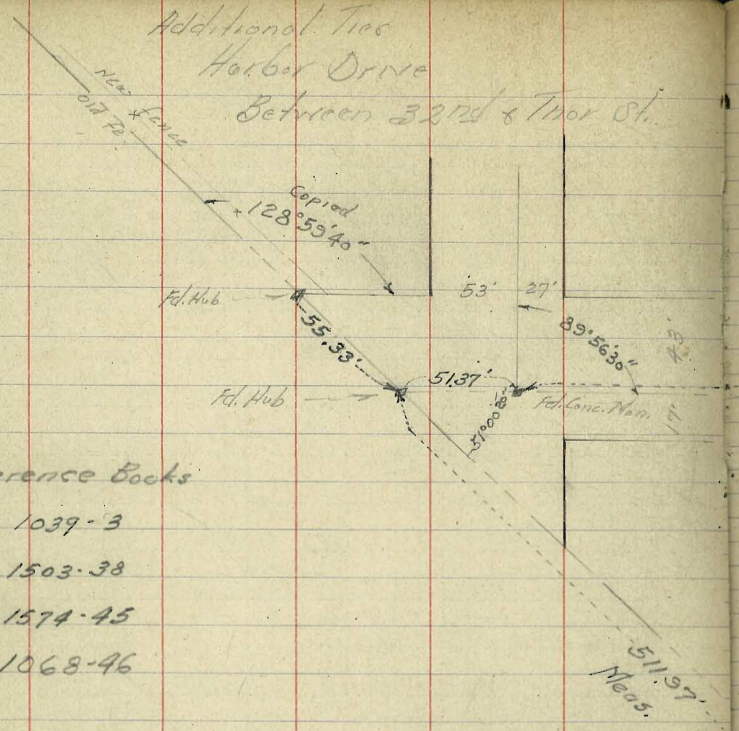
43+00

42+00

Void.

Walker
Moss
Isbell
-213-41

Additional Ties
Harbor Drive
Between 32nd & Thor St.



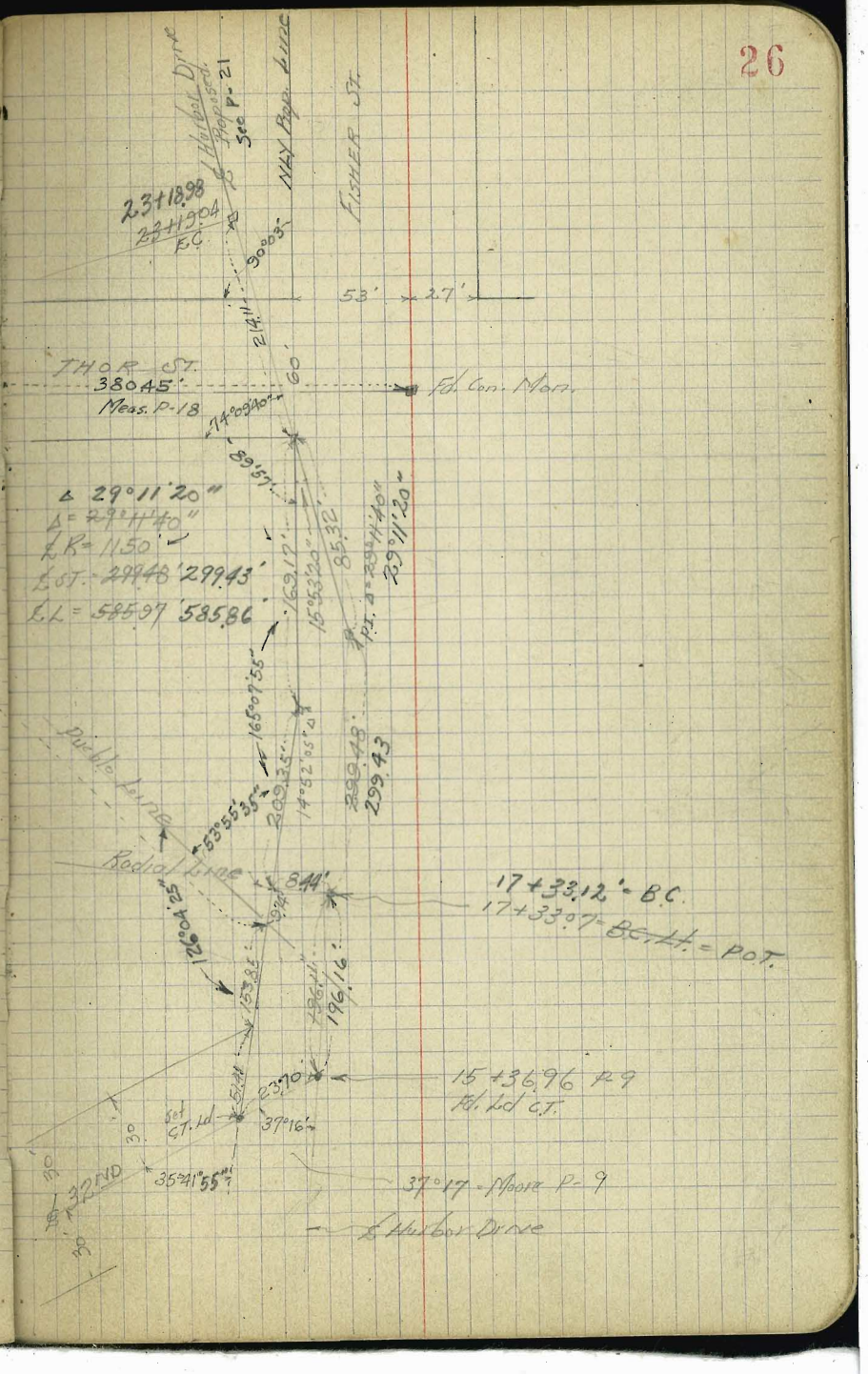
Reference Books

F.B. 1039-3

F.B. 1503-38

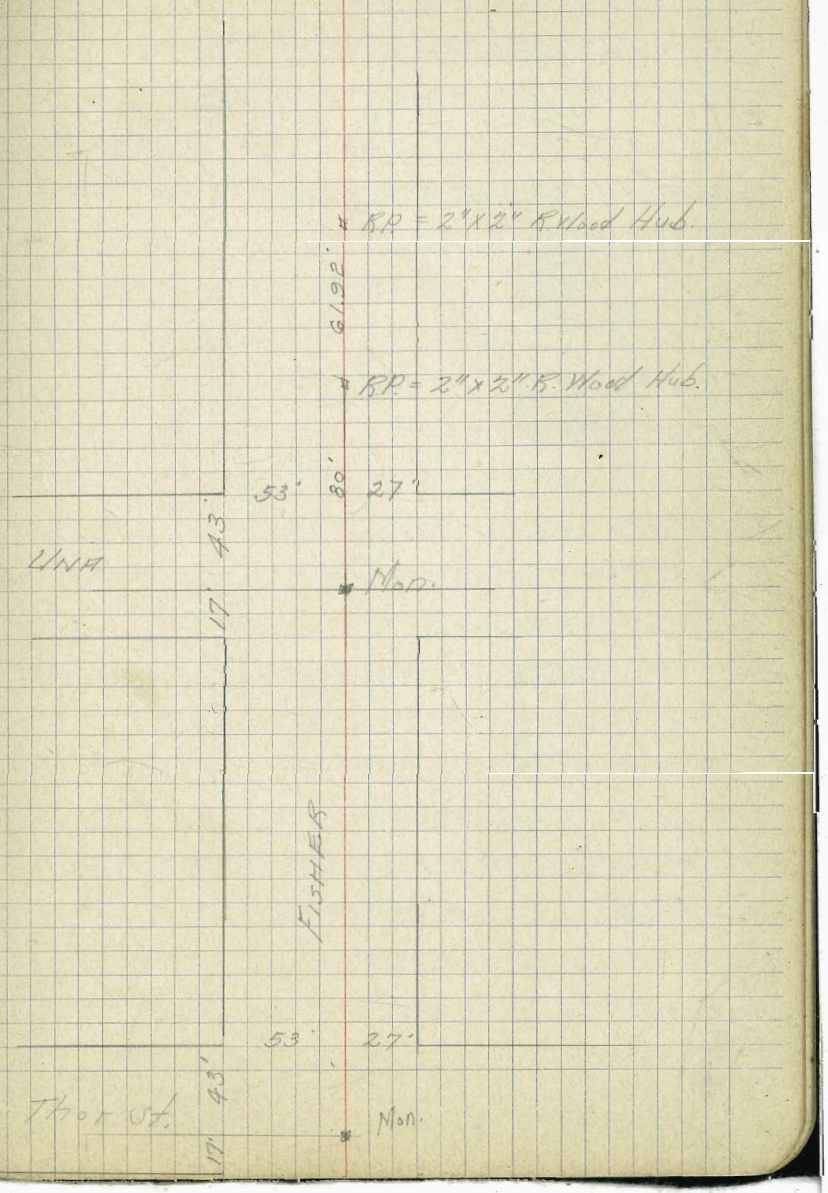
F.B. 1574-45

F.B. 1068-96



Walker
Bliss
Isbell
2-13-41

Reference Points
UNA & FISHER

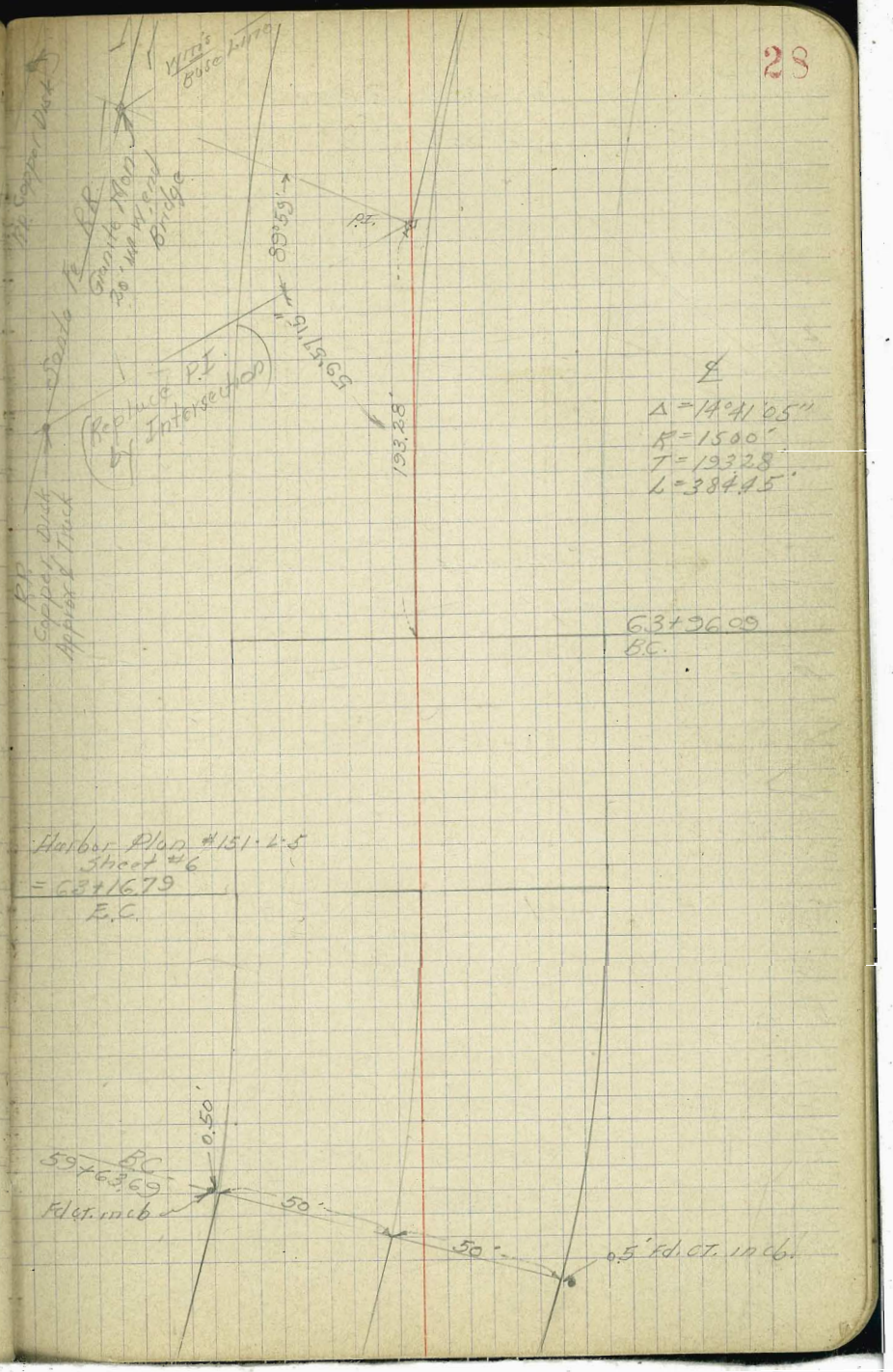


Walker
Bliss
Isbell 3-12-41

Harbor Drive Alignment.

For Cross Sections, See FB 1600-2

+50	4°50.98'	See P. 8-11 - Additional Ties.
66+00	3°53.68'	
+89.38 - P.I. Ramey Stake		Δ = 14°41'05"
+50	2°56.38'	L.R = 1500'
		L.T = 193.28
65+00	1°59.08'	L.L = 384.45
+50	1°01.78'	
64+00	0°4.48'	
63+96.09 = B.C. Lt.		
63+16.79 = E.C.	6°44.62'	
63+00	6°25.34'	
+50	5°28.05'	
62+00	4°30.76'	
+50	3°33.47'	Δ 13°29'15"
61+00	2°36.18'	L.R = 1500'
+50	1°38.89'	L.T = 177.37'
60+00	0°41.6'	L.L = 353.10'
59+63.69 = B.C. Lt.		

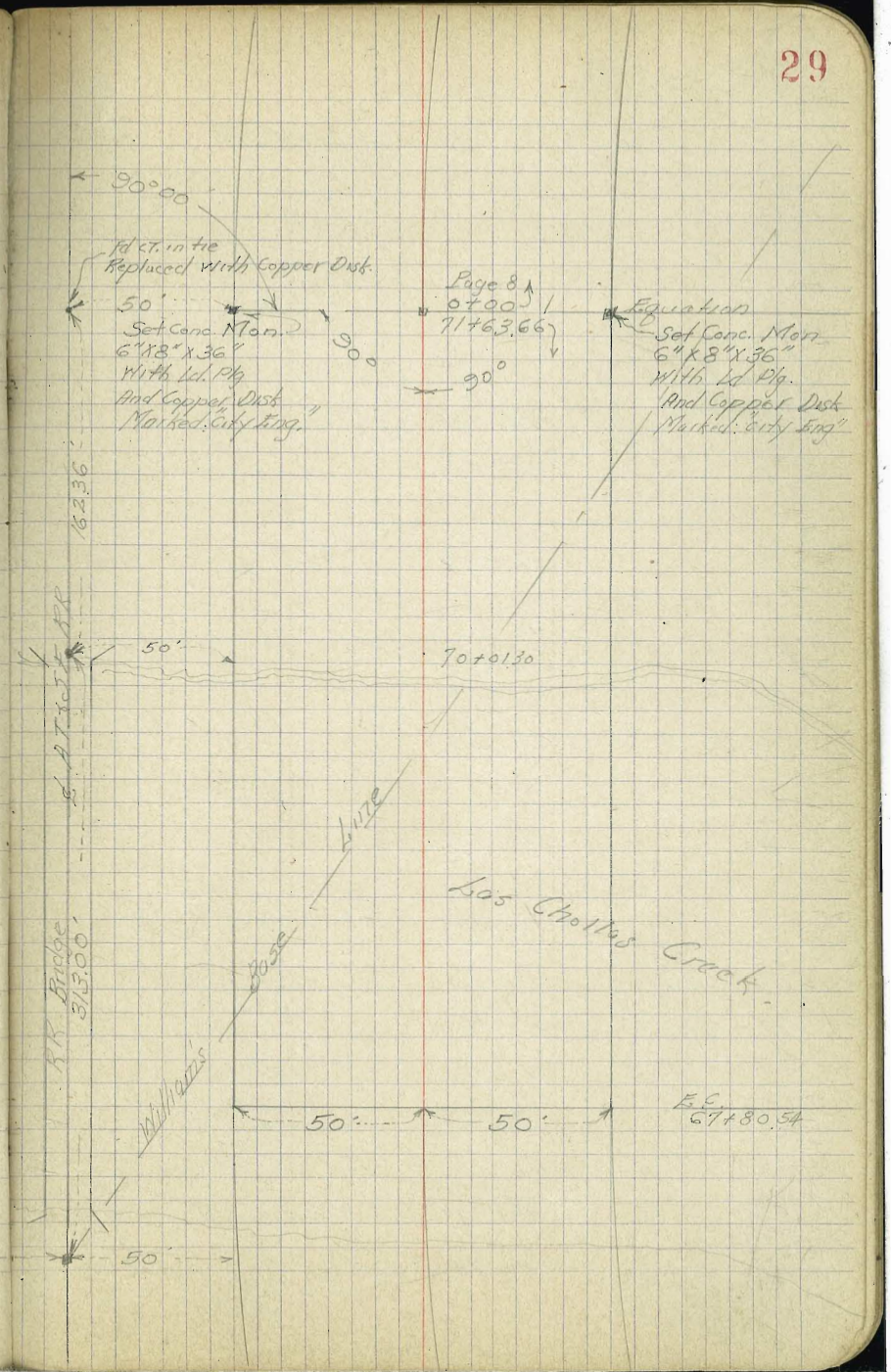


Harbor Drive Alignment

& Cross Sections

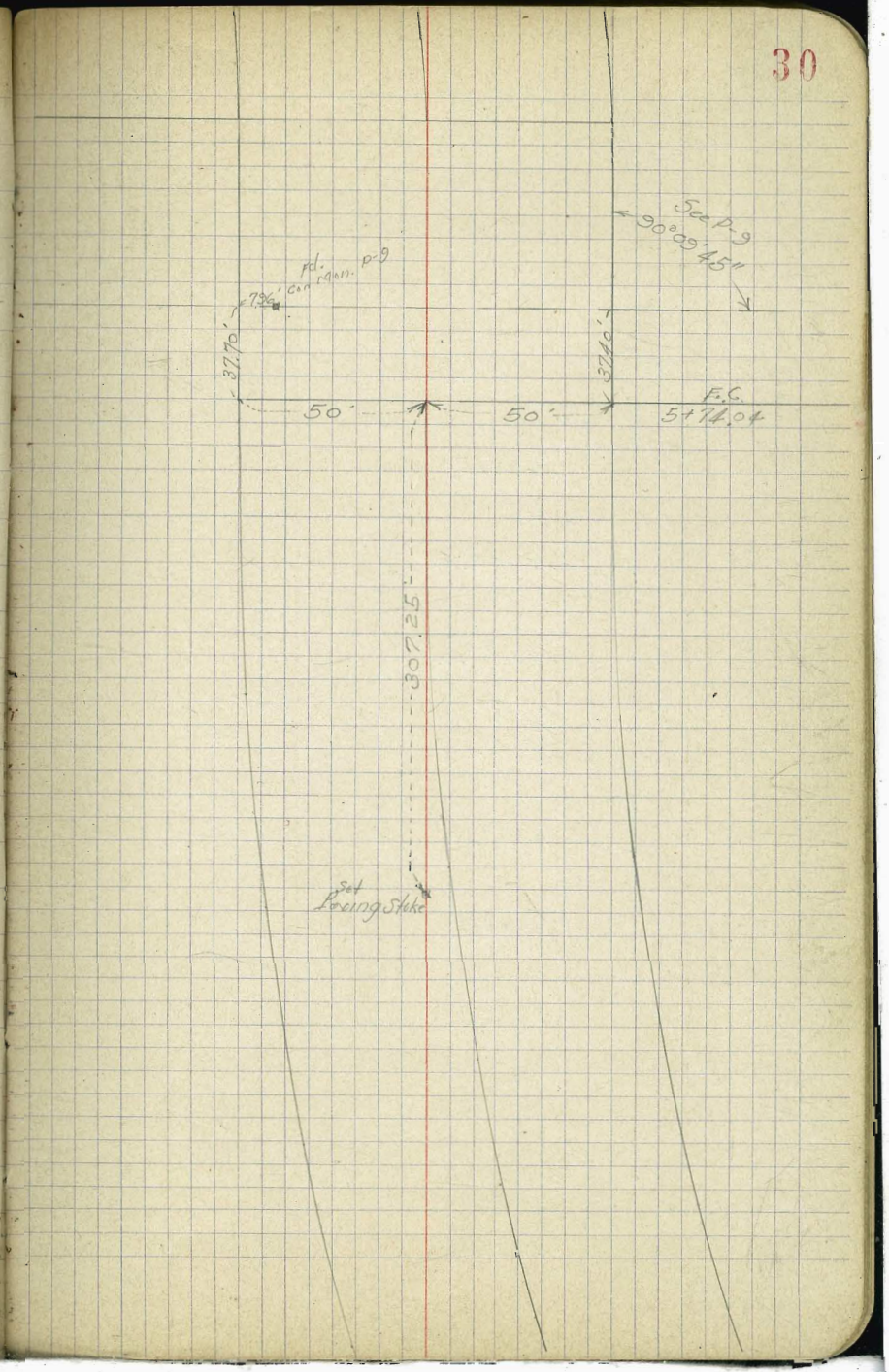
1+00		4°24.44
0+50		2°12.22
0+00	B.C. Eq.	
71+63.66	Equation	
+50		
71+00		
70+00		
69+00		
68+00		
67+80.54 = E.C.		7°20.56'
+50		6°45.58
67+00		5°48.28'

Fd. Monument



Harbor Drive
Alignment

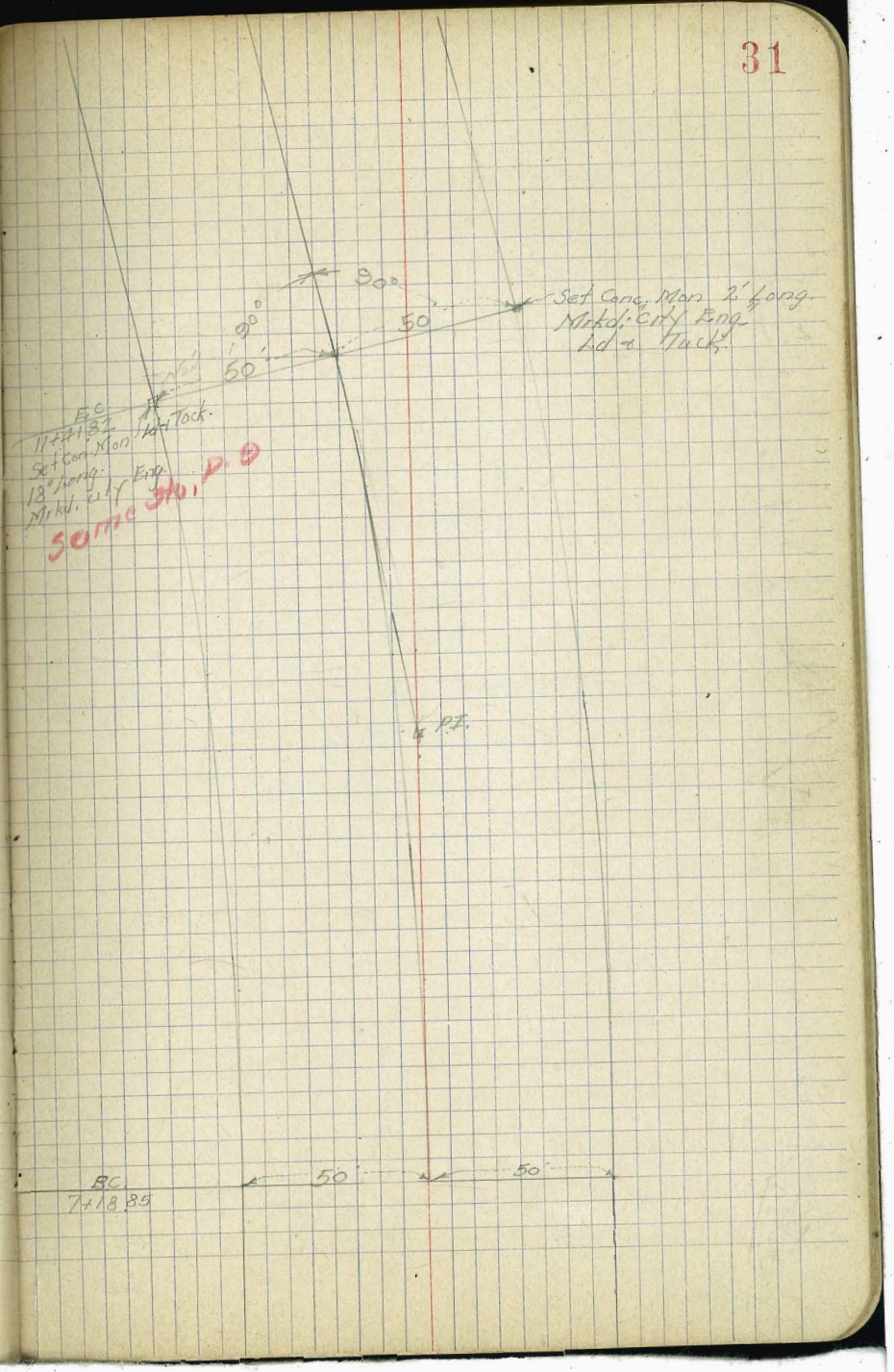
7+00			
6+00			
5+74.04 = P.C.		2.5° 18.0'	
+50		24° 14.42'	
5+00		22° 02.2'	
+50		19° 49.98'	
4+00		17° 37.76'	
			Δ 50° 36'
+50		15° 25.54'	R = 650'
			T = 307.25'
3+00		13° 13.32'	L = 574.54'
+50		11° 01.10'	
2+00		8° 48.88'	
1+50		6° 36.66'	



Harbor Drive

Alignment

12 + 00		
11 + 41.87 = E.C.	18° 38.50'	
11 + 00	16° 47.91'	
+ 50	14° 35.69'	
10 + 00	12° 23.47'	
		Δ = 37° 17'
+ 50	10° 11.25'	R = 650'
		T = 219.27
9 + 00	7° 59.03'	L = 422.97
+ 50	5° 46.81'	
8 + 00	3° 34.59'	
+ 50	1° 22.37'	
7 + 18.85 = B.C. L.L.		



Harbor Drive

Alignment

℄

18+00

1°39.96'

Δ = 29°11'20"

℄R = 1150'

℄S.T. = 299.43'

+50

0°25.23'

℄L = 595.86

+33.12 = B.C. Lt.

17+00

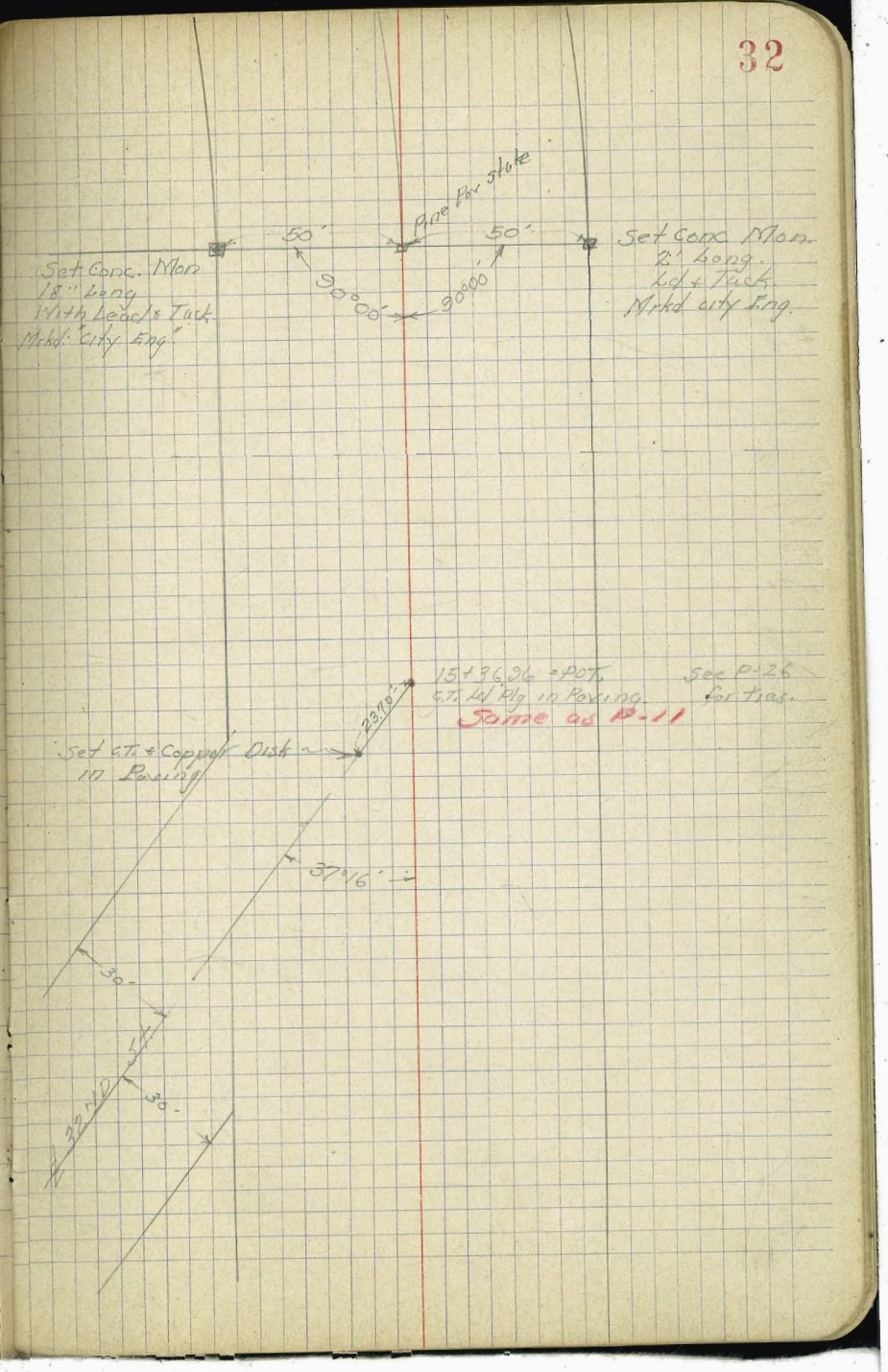
16+00

+36.96 = P.O.T. ℄ and ⊥ Lt.

15+00

14+00

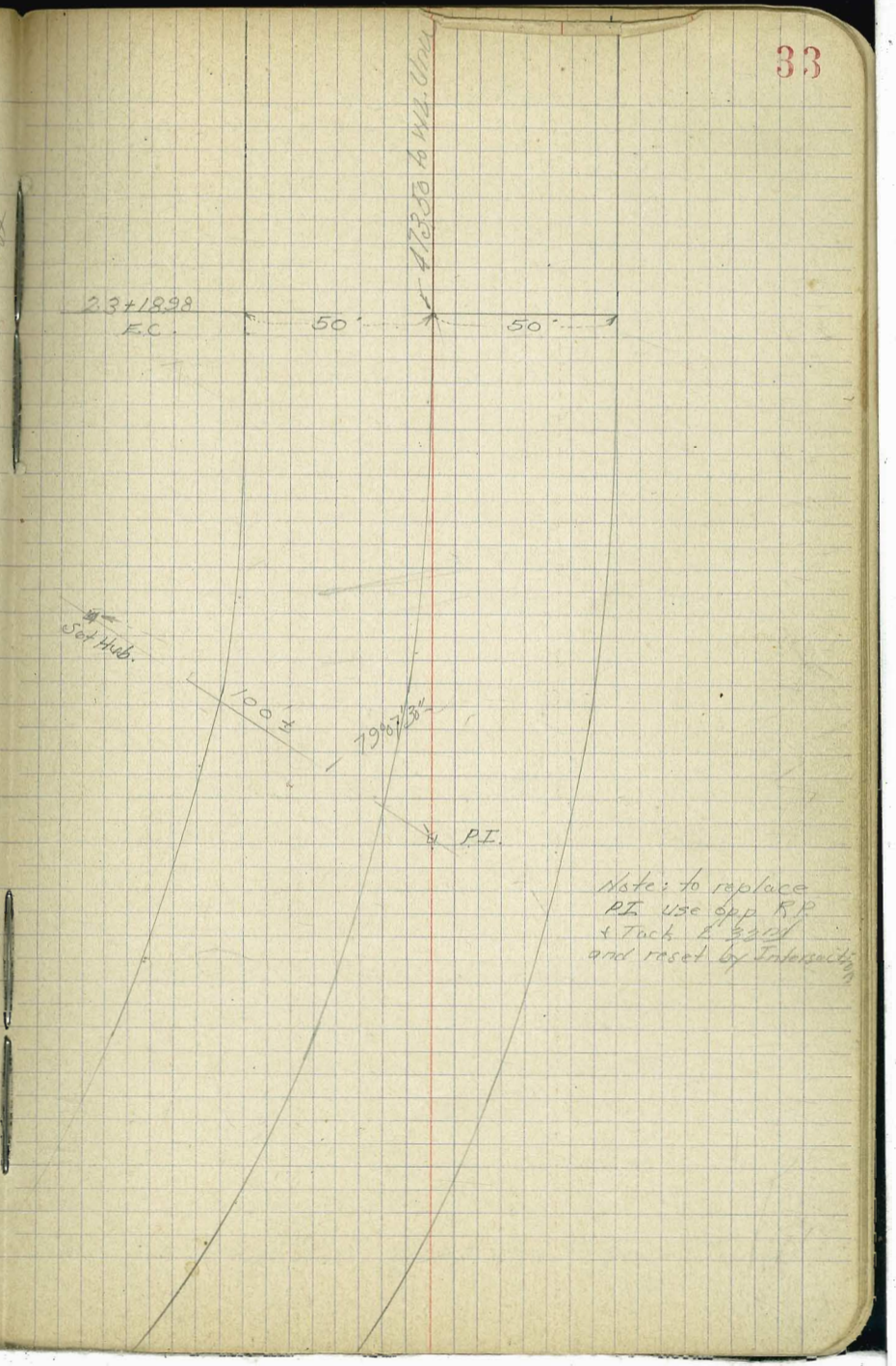
13+00



Harbor Drive

Alignment

24+00		
23+18.98=E.C.	14°35.65'	
23+00	14°07.26'	
+50	12°52.53'	
22+00	11°37.80'	Δ=29°11'40"
		D=11°50'
+50	10°23.07'	T=299.43'
		L=585.86'
21+00	9°08.34'	
+50	7°53.61'	
20+00	6°38.88'	14947'-def per ft.
+50	5°24.15'	
19+00	4°09.42'	
+50	2°54.69'	



Harbor Drive
Alignment

30+00

29+00

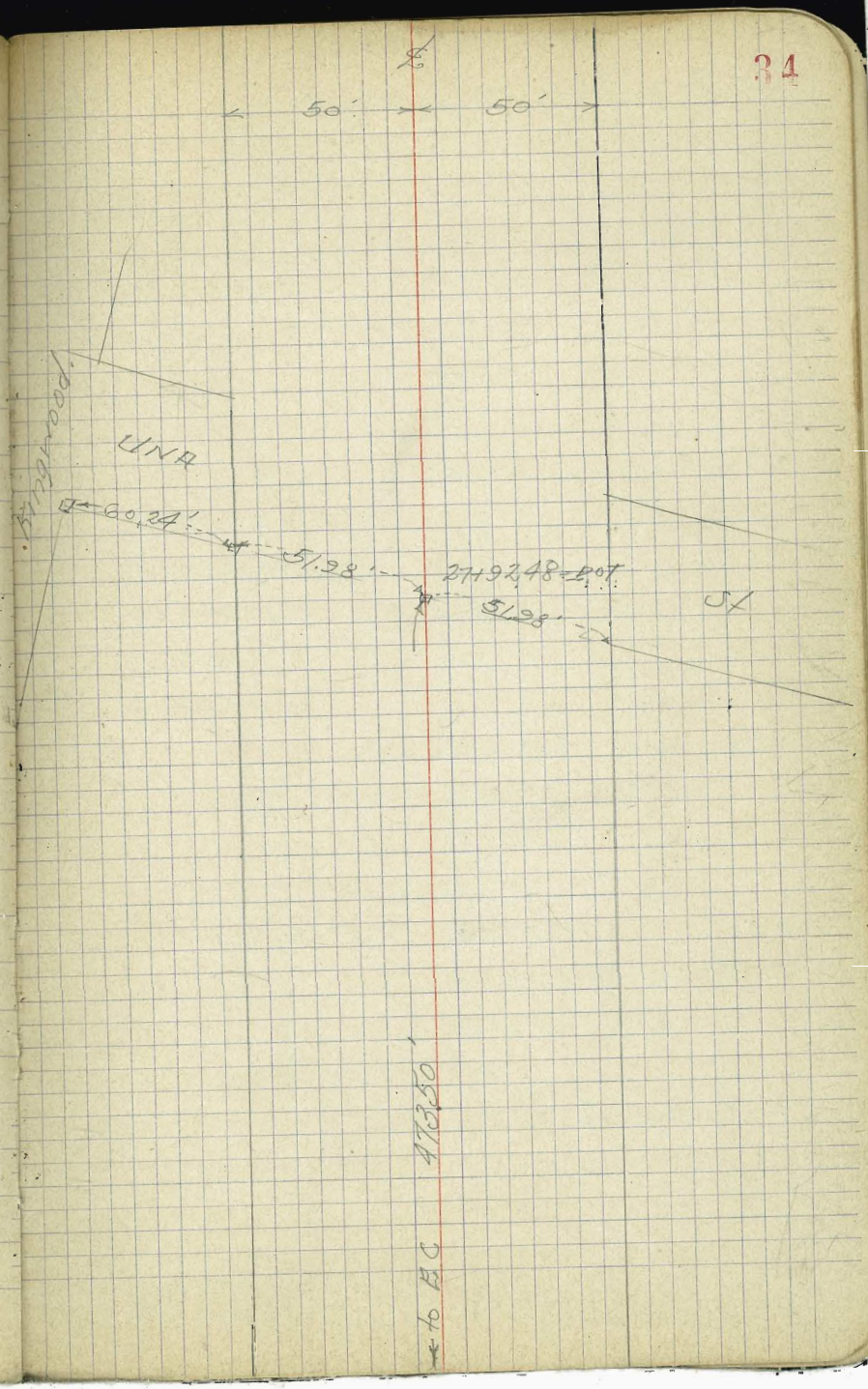
28+00

27+92.48 = POT W.L. UNA St. Page 22

27+00

26+00

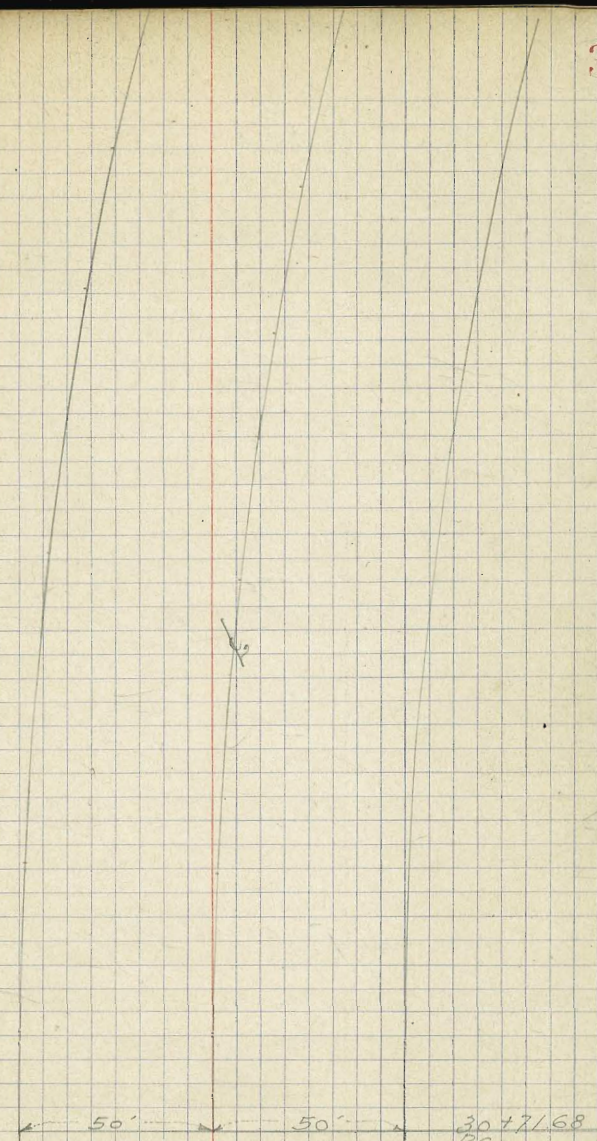
25+00



Harbor Drive

Alignment

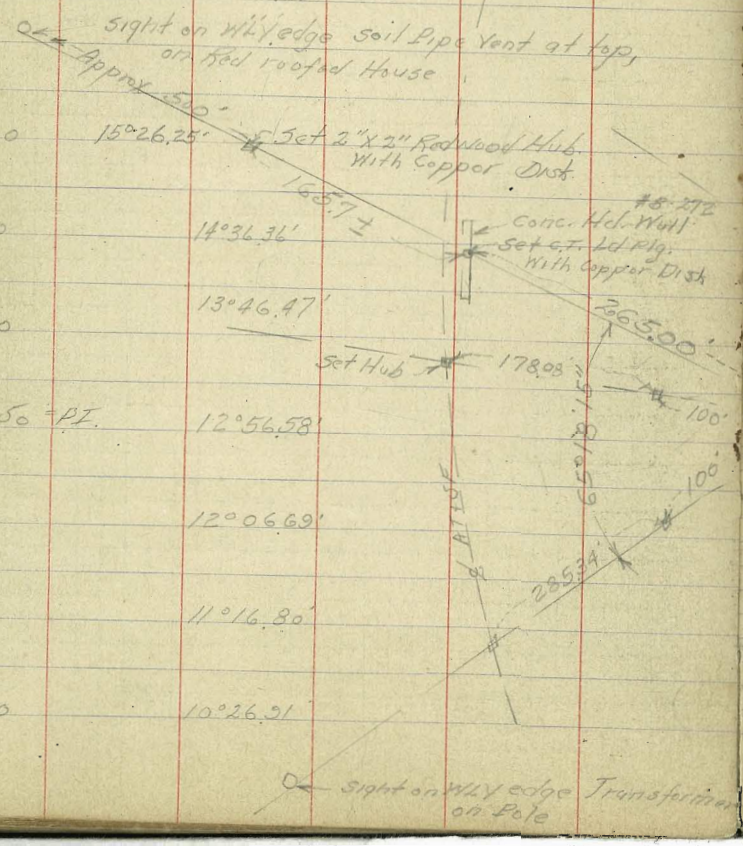
+50		9°37.02		
36+00		8°47.13'		
+50		7°57.24'		
35+00		7°07.35'		
+50		6°17.49'		Δ 48°19'40"
				℄R=1722.50'
				℄ST. 772.82'
34+00		5°27.60'		℄L=1452.89'
+50		4°37.71'		
33+00		3°47.82'		
+50		2°57.93'		
32+00		2°08.04	0°49.84'=50'	
+50	5147=chd 50' Lt.	1°18.15'		
31+00	2913'=chd 50' Lt.	0°28.26'		
30+71.68=B.C. Rt.				

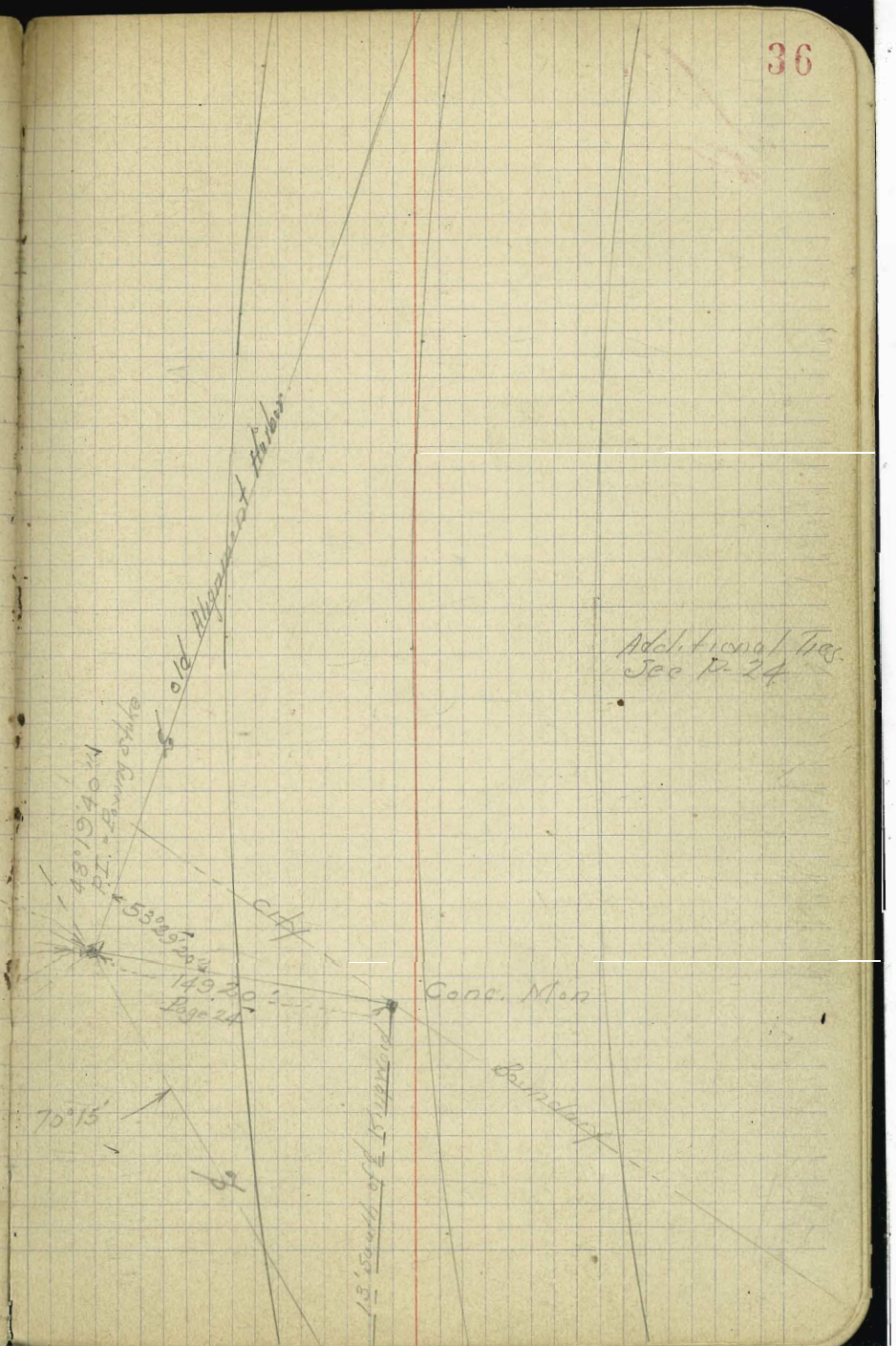


Harbor Drive

Alignment

	Def ∠
43+00	20°25.59'
+50	19°35.70'
42+00	18°45.81
+50	17°55.92'
41+00	17°06.03'
40+50	16°16.14'
40+00	15°26.25'
+50	14°36.36'
39+00	13°46.47'
38+44.50 = P.I.	12°56.58'
38+00	12°06.69'
+50	11°16.80'
37+00	10°26.91

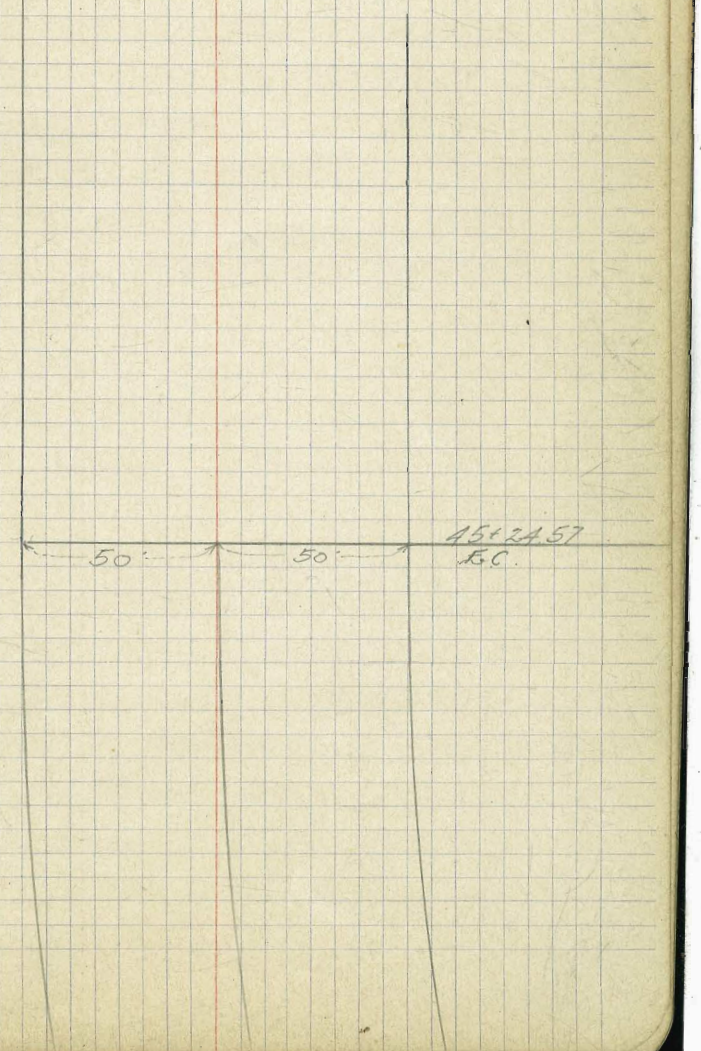




Additional Ties See P. 24

Harbor Drive
Alignment

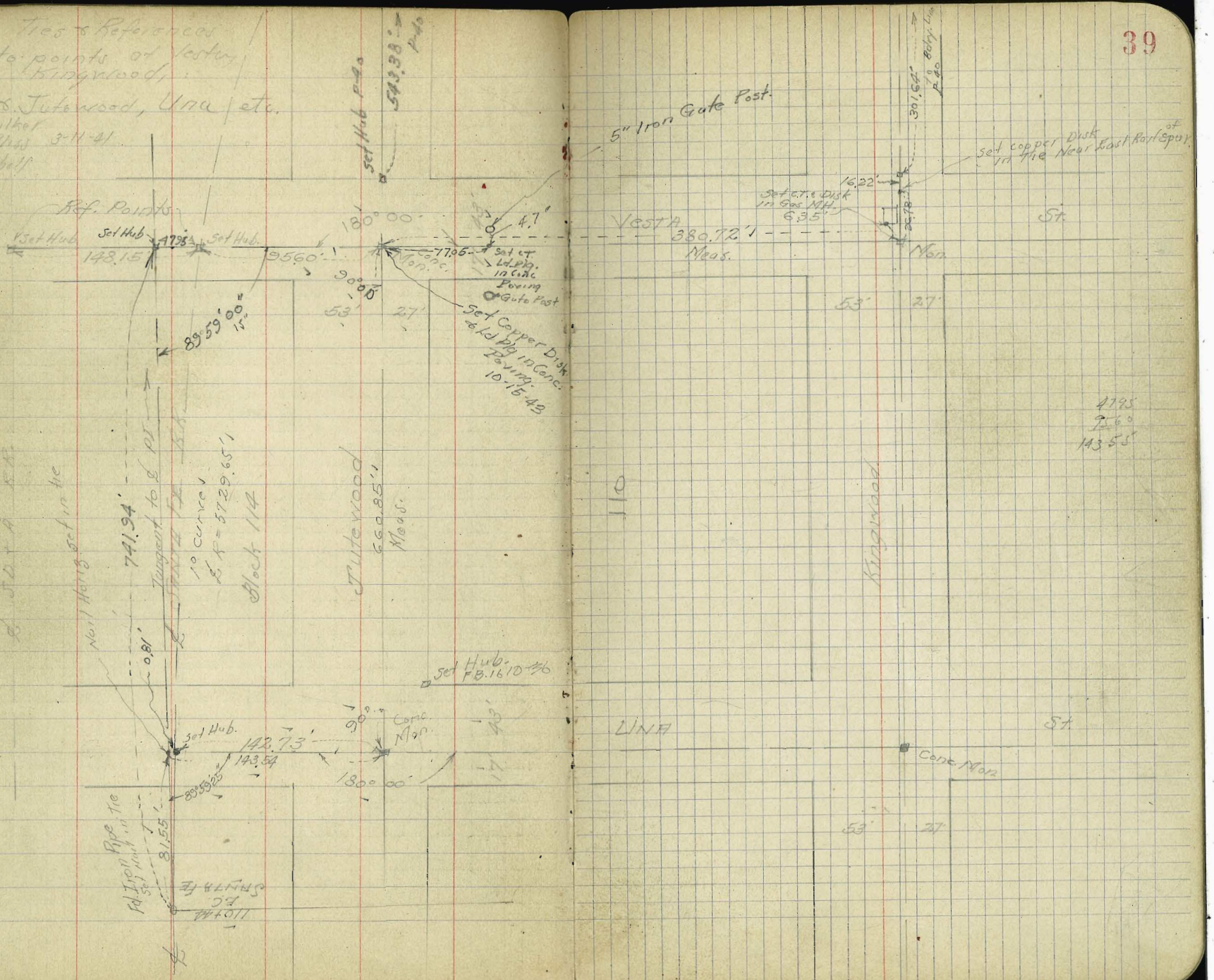
45 + 24.57 = E.C.	25.29 [illegible] 60.24	24°09.83 = Total 24°09.67	10" Sec. Error
45 + 00		23°45.15'	
+50		22°55.26'	
44 + 00		22°05.37'	
43 + 50		21°15.48'	



Ties & References to points of Vesta, Kingwood, & Tuttewood, Una, etc.

Walker Bldg 3-11-41 Isbell

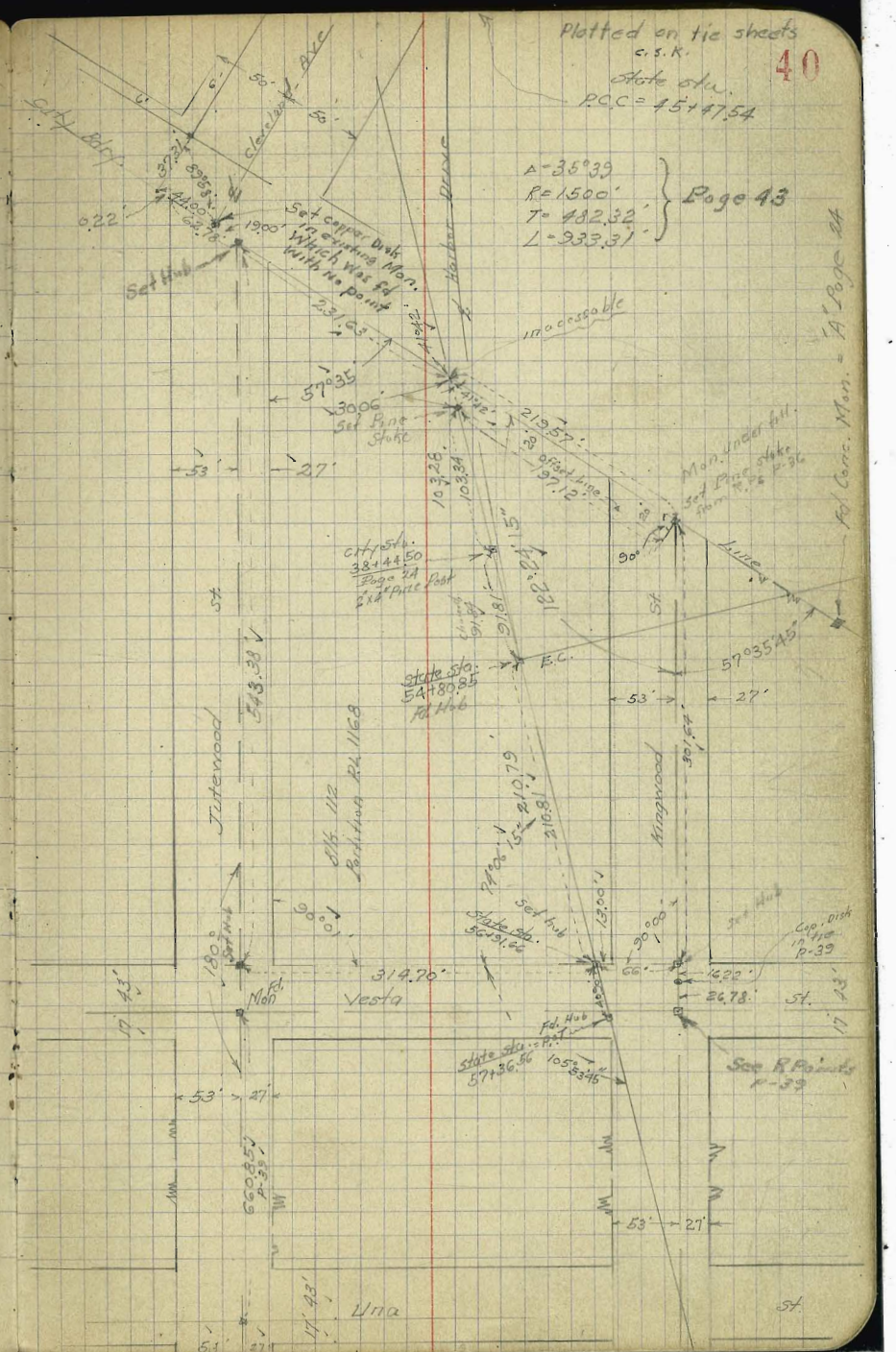
Ref. Points



Walker
Isbell
Eastorly
O. Farrow
6-2-41

Survey Blk 112, Partition P.L. 1168
AND
Ties to Proposed Harbor Drive

Indexed
LM



Walker
Isbell
Easterly
Farrow
5-13-41

— Title —

CHANGE IN ALIGNMENT
HARBOR DRIVE.

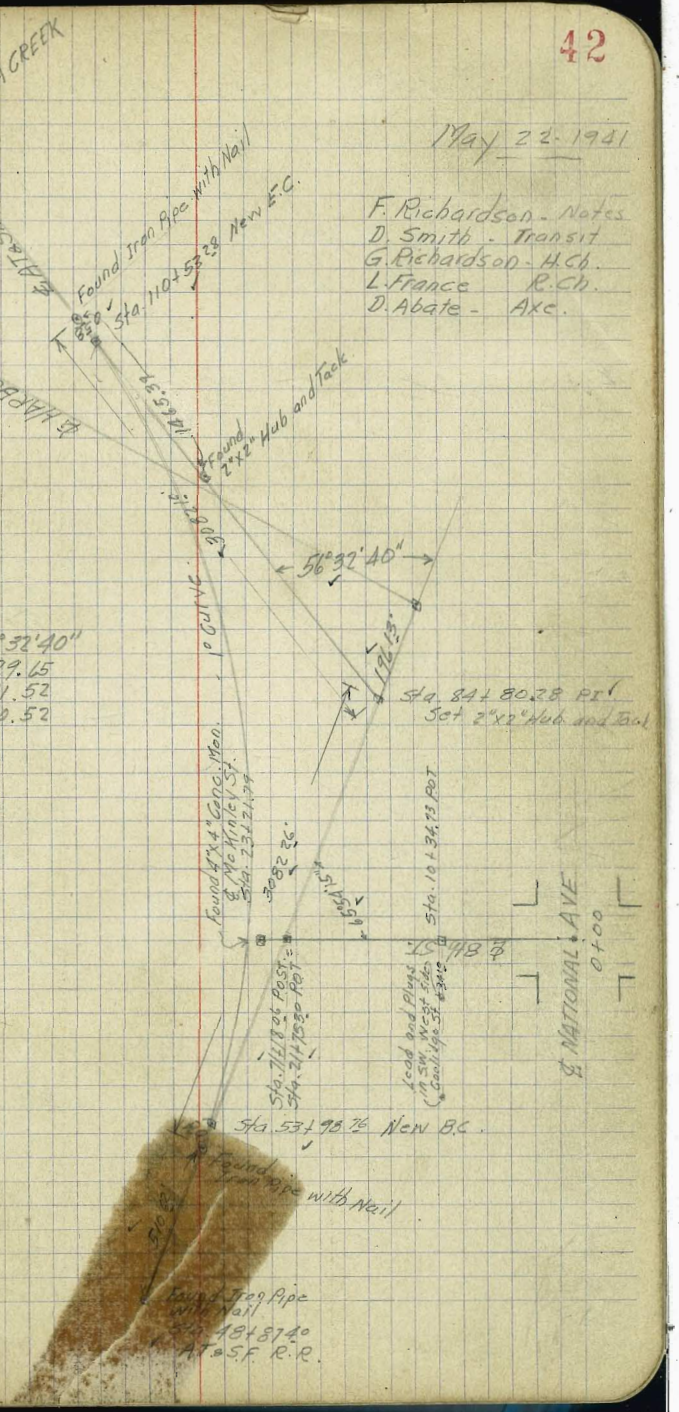
STATE OF CALIFORNIA

- DIVISION OF HIGHWAYS -

A.T.&S.F. R.R. 1° Curve in

Connection with Harbor Drive Alignment.

Sta.	Deflection	Sta.	Deflection
89	17°30.4'		
88	17°00.4'		
87	16°30.4'		
86	16°00.4'		
85	15°30.4'		
84	15°00.4'		
83	14°30.4'		
82	14°00.4'		
81	13°30.4'		
80	13°00.4'		
79	12°30.4'		
78	12°00.4'		
77	11°30.4'		
76	11°00.4'		
75	10°30.4'		
74	10°00.4'	110+53.28 E.C.	28°16.33'
73	9°30.4'	110	28°00.4'
72	9°00.4'	109	27°30.4'
71	8°30.4'	108	27°00.4'
70	8°00.4'	107	26°30.4'
69	7°30.4'	106	26°00.4'
68	7°00.4'	105	25°30.4'
67	6°30.4'	104	25°00.4'
66	6°00.4'	103	24°30.4'
65	5°30.4'	102	24°00.4'
64	5°00.4'	101	23°30.4'
63	4°30.4'	100	23°00.4'
62	4°00.4'	99	22°30.4'
61	3°30.4'	98	22°00.4'
60	3°00.4'	97	21°30.4'
59	2°30.4'	96	21°00.4'
58	2°00.4'	95	20°30.4'
57	1°30.4'	94	20°00.4'
56	1°00.4'	93	19°30.4'
55	0°30.4'	92	19°00.4'
54	0°00.4'	91	18°30.4'
53+98.76 B.C.	0°00'	90	18°00.4'



STATE OF CALIFORNIA

– DIVISION OF HIGHWAYS –

Harbor Drive Alignment in connection with A.T.&S.F. R.R.

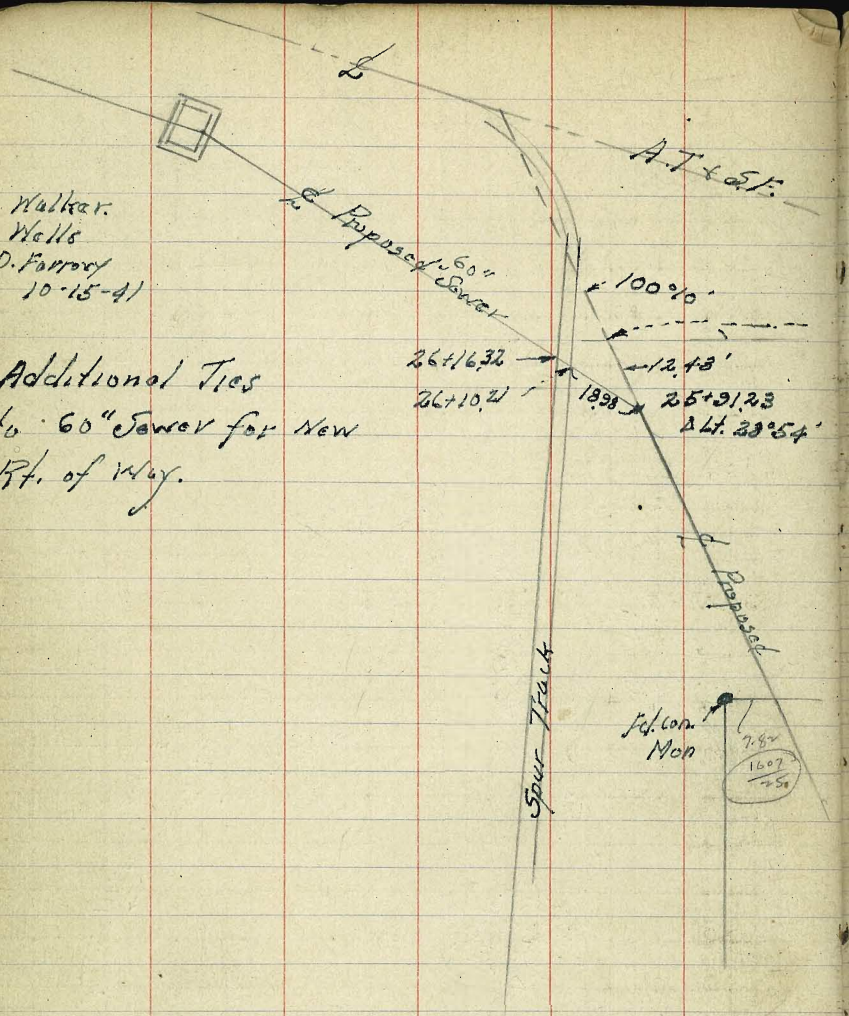
Sta.	Deflections	Sta.	Deflections
42	8°29.6'		
41	7°59.1		
40	7°28.5'		
39	6°58.0'		
38	6°27.5'	54+80.85 EC.	28°05.25'
37	5°56.9'	54	26°32.6'
36	5°26.4'	53	24°38.0'
35+39.19 POC	5°07.88'	52	22°43.4
35	4°55.9'	51	20°48.8'
34	4°25.4'	50+14.20 POC	19°10.50'
33	3°54.8'	50	17°56.9'
32	3°24.3'	49	16°59.6'
31	2°53.7'	48	15°05.1'
30	2°23.2'	47	13°10.5'
29	1°52.7'	46	11°15.9'
28	1°22.2'	45+47.54 PCC.	10°15.75'
27	0°51.6'	45	10°01.2
26	0°21.1'	44	9°30.7'
25+30.84 BC	0°00'	43	9°00.1

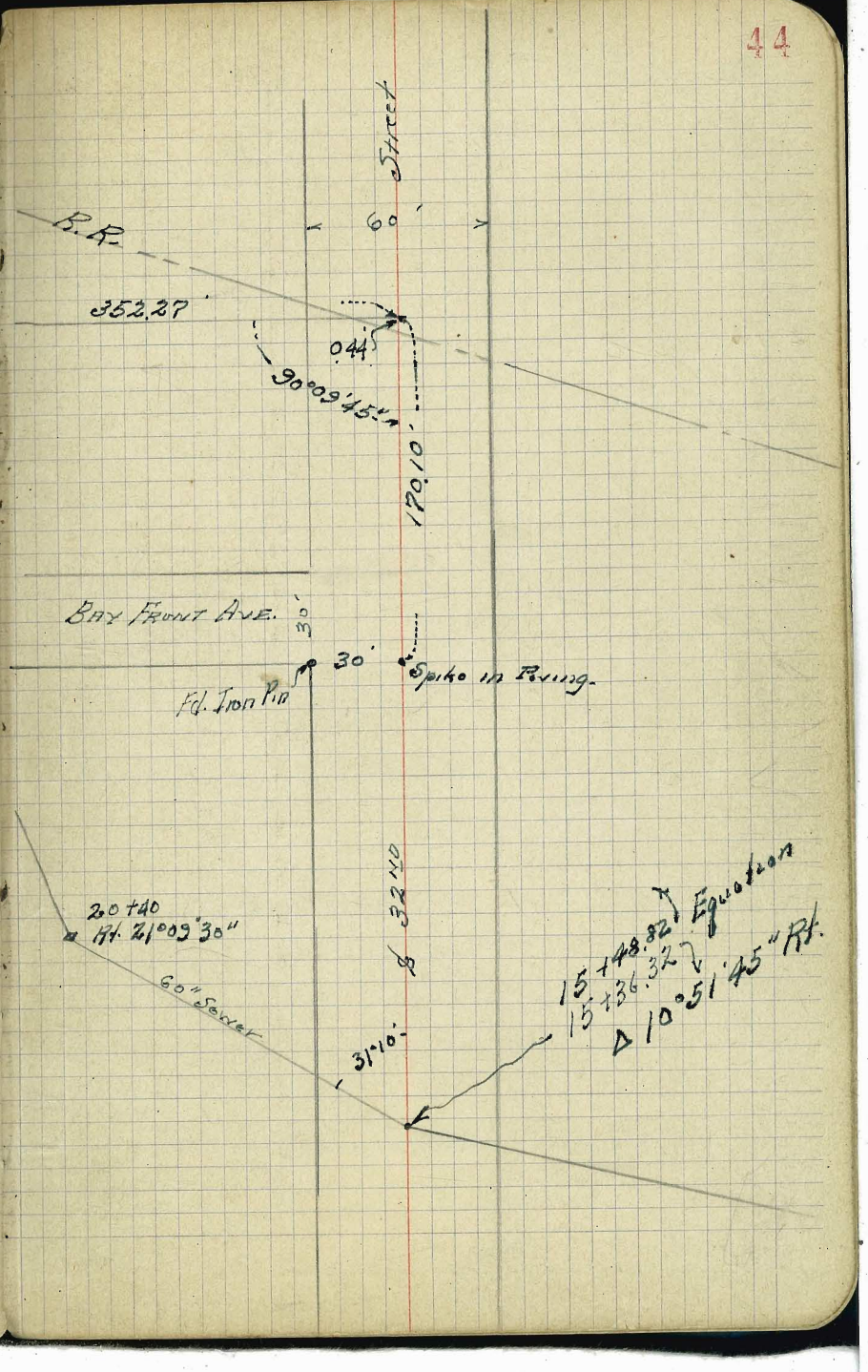
– May 26 –

F. Richardson	– Notes.
D. Smith	– Transit
G. Richardson	– H. Chain
L. France	– R. Chain
D. Abate	– Axe.

Walker
Wells
D. Forrey
10-15-41

Additional Ties
to 60" Sewer for New
Rt. of Way.



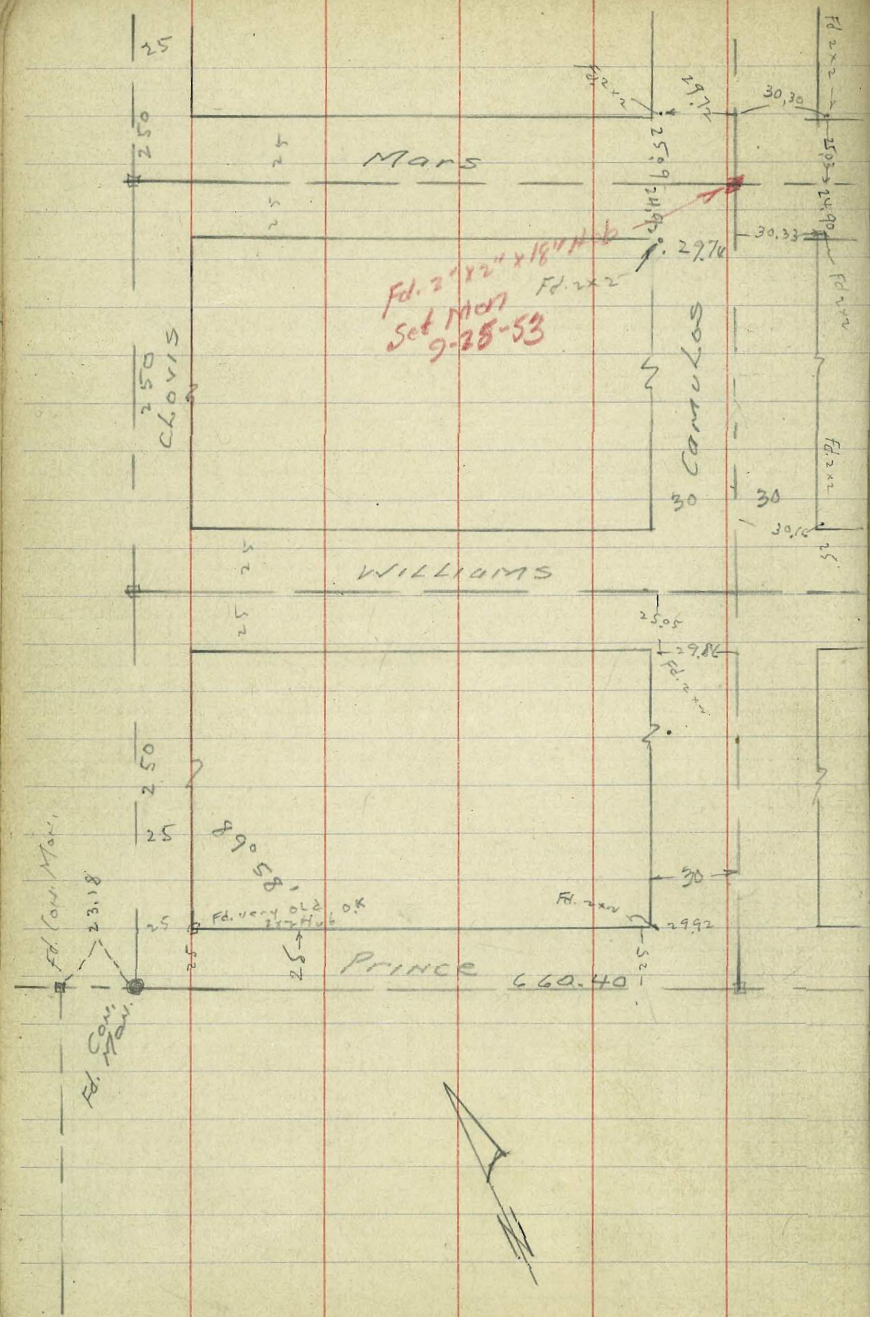


Tie Point Survey and
Prelim. Sewer Levels
Portion of Drucker's Sub.
IN Pueblo Lot 218

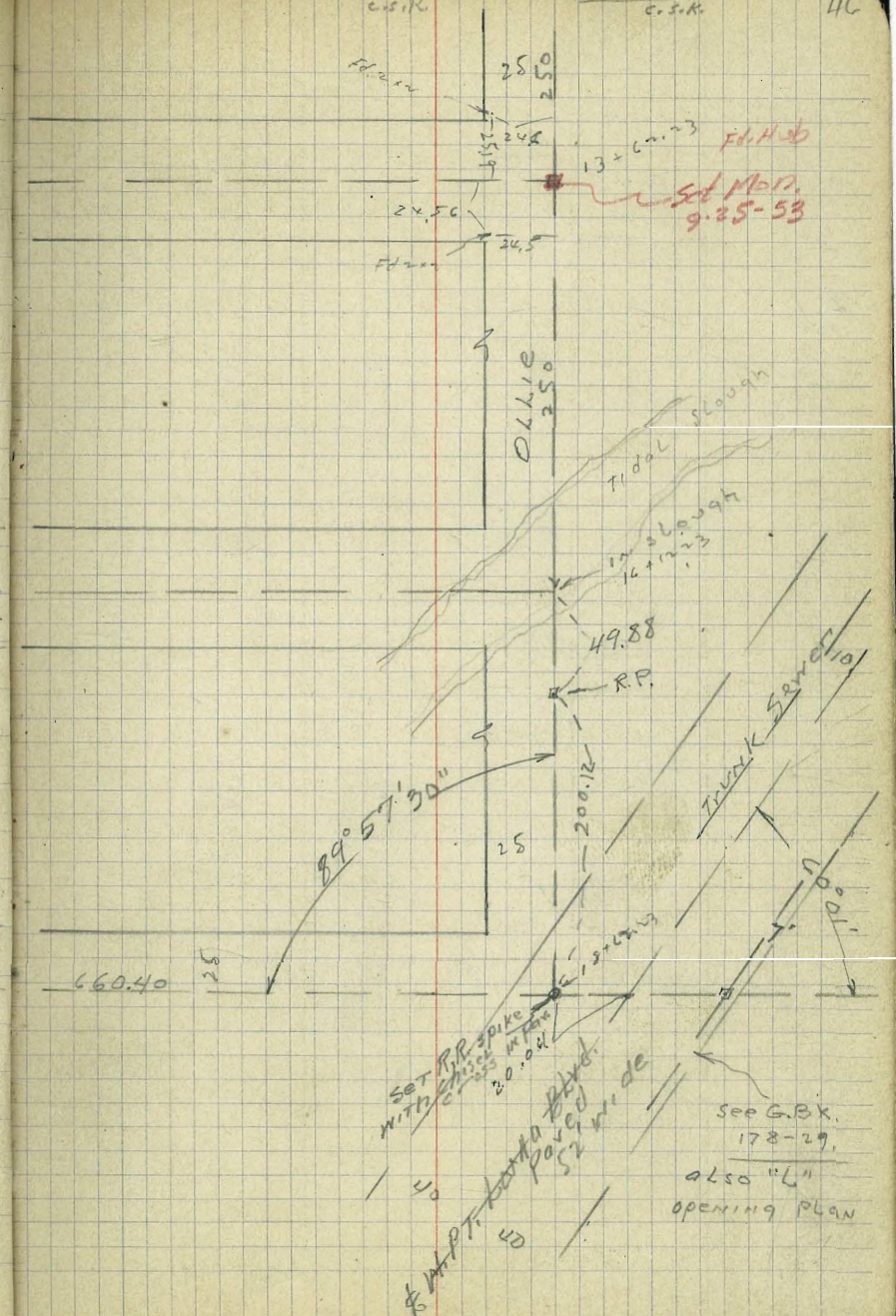
C. Moore
[illegible]
W. Moore
3-6-46

Plotted 5-22-46 C.S.K.

indexed C.S.K.

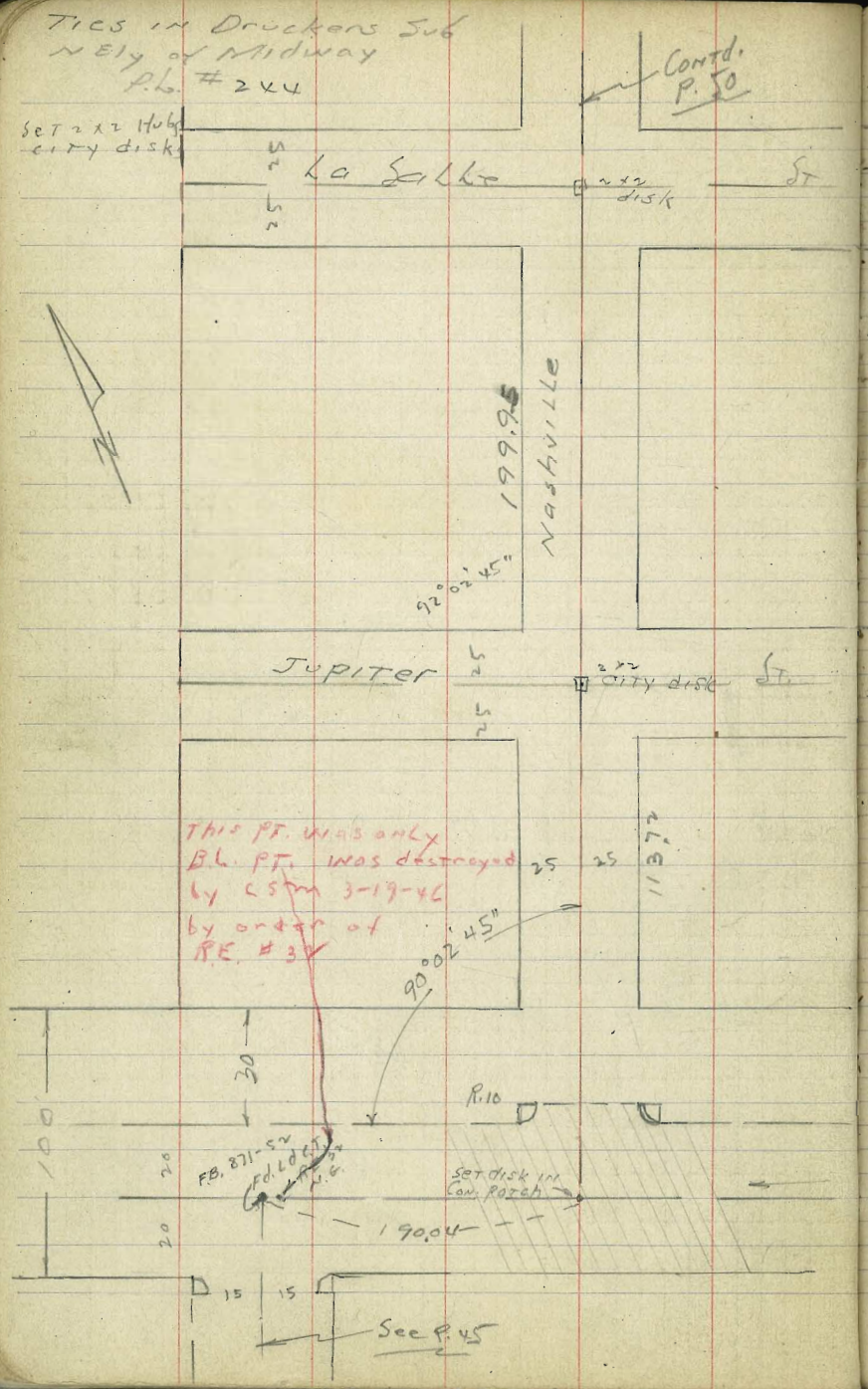


Mars
Clovis
Camulos
Williams
Prince
Fd. 2"x2"x18" Hub
Set Mon
9-25-53
Fd. 2x2
29.72
30.30
29.76
30.33
30.16
25.05
29.86
29.92
89°58'
660.40
Fd. Con. Mon.
23.18
Fd. very old 2x2 Hub OK



Indexed
C.S.K.
Plotted 5-22-46
C.S.K.
46
Fd. Hub
Set Mon.
9-25-53
Ollie
Tidal Slough
49.88
R.P.
89°57'30"
200.12
Trunk Sewer
660.40
Set R.R. spike with chisel cross in face
20.04
See G.B.X.
178-29.
also "L"
opening plan

Ties in Druckers Sub
N Ely of Midway
P.L. #244



Indexed
C.S.K.

Ref. Books, etc.

F.B. 871-52 = Ld. C.T.'s set by F.M. about 1931?

" 1375-4

Roll # 4654

" # 4614 Con. Mons set about F.Bk.? 1914??

Gr. Bk. 178-29-30

" 179-76

Fd. Survey disk R.E. #32 about 1945 at E of Midway and Pueblo Line on Ollie St.

Survey by Elder of Lot in Blk. bet Midway + Liberty St and Ollie and Camulas

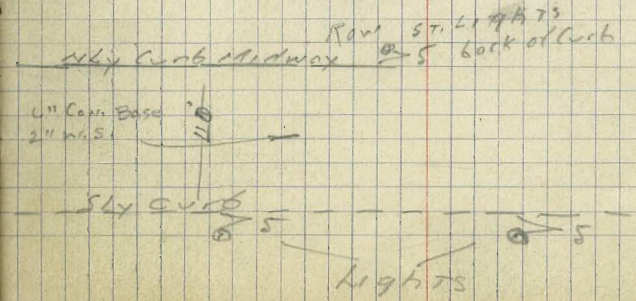
Survey by R.E. #4847 at Wly Cor. of Ollie + Liberty

Fd. some Lot Surveys in Sly portion of Druckers P.L. 218 No tks. in hubs and just recently set. No Identification.

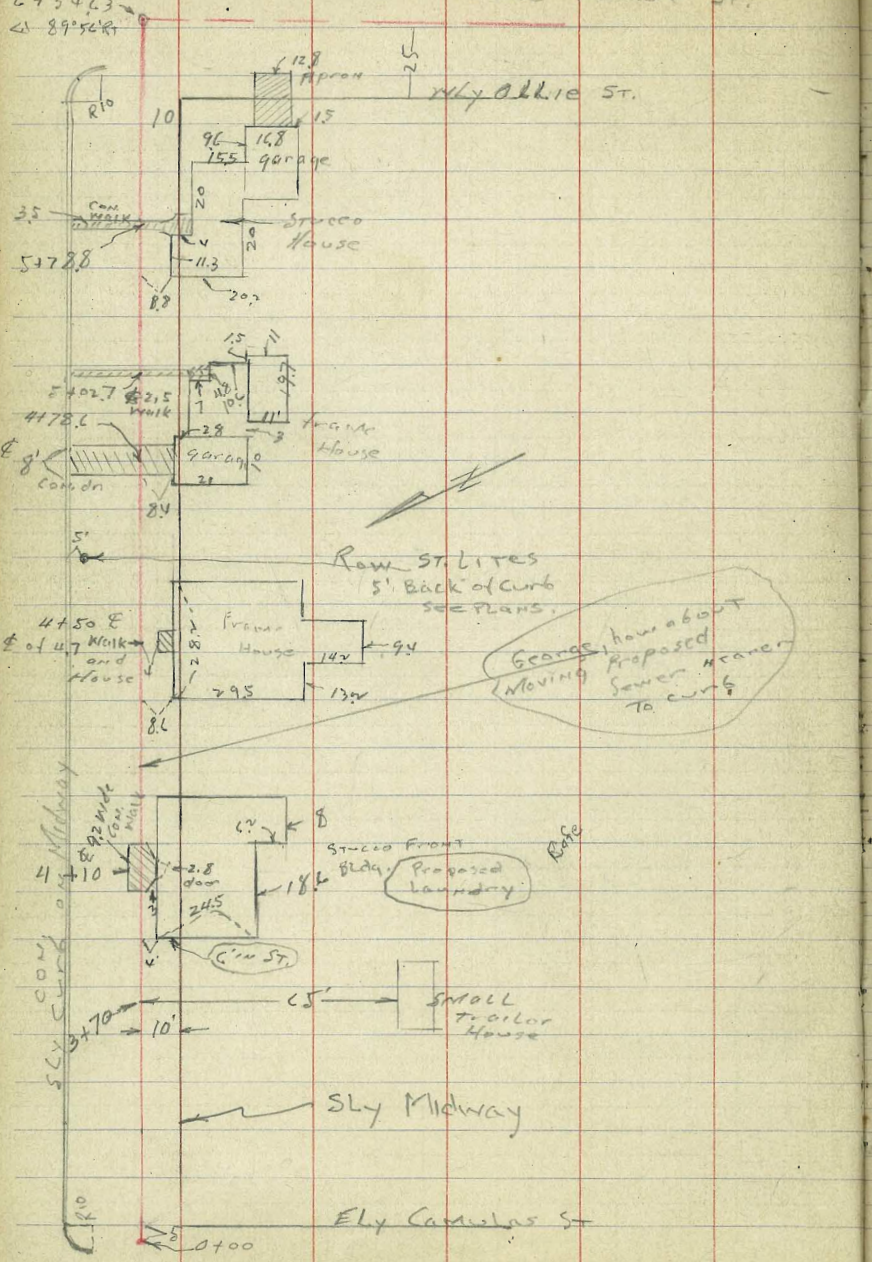
Ld. + C.T.'s set by F. Miller fit existing curb returns very good

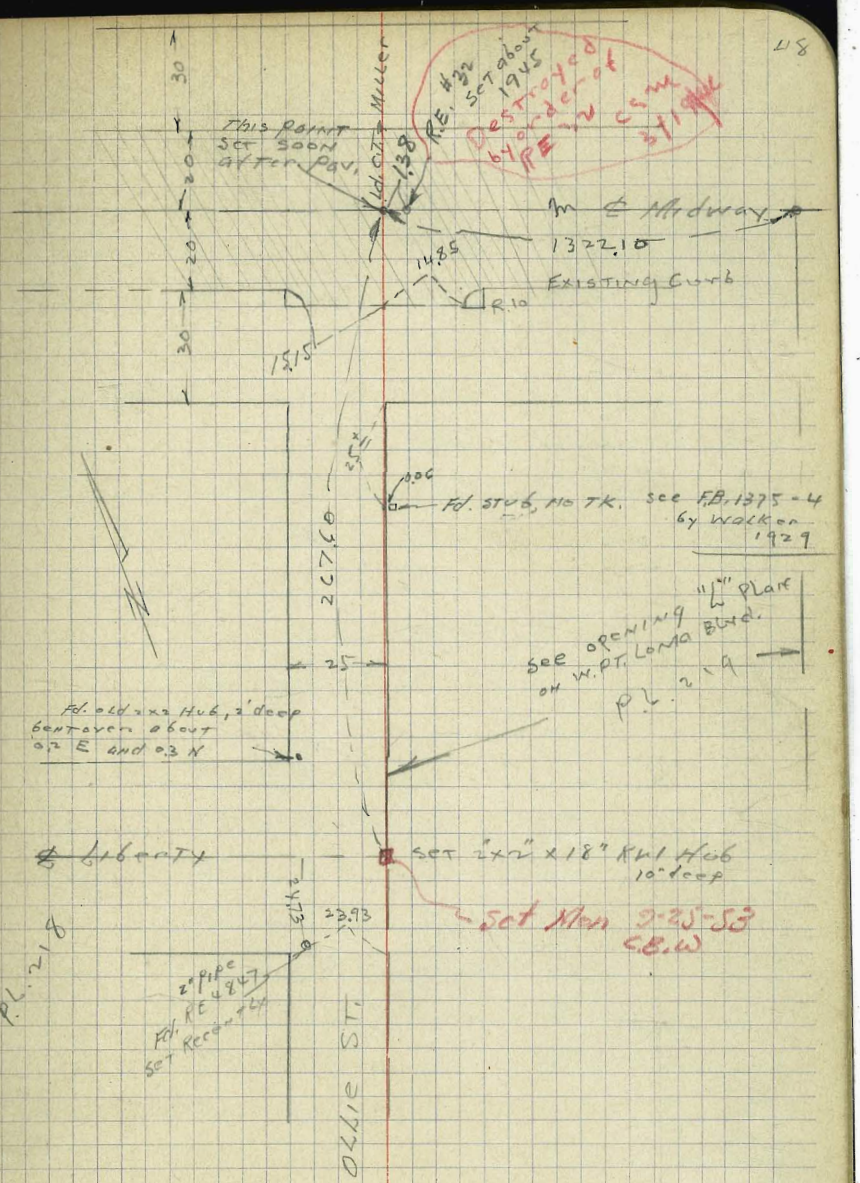
Also see opening "L" sheet on W. Pt. Loma Blvd.

C.S. Moore
3-18-46



Location of Houses on Sly side of Midway, betw. Camulos & Ollie St.





Con. Levels on proposed Sewers
3-12-46. in Drucker's Sub. P.L. 218

Top hdwl. BMBP Sly end Box Culv.	5.11	8.01		2.90	150' Wly from Midway W. Pt. Lomo Blvd.
T.P.	4.45	6.92	5.54	2.47	

Levels on Midway bet. Camulas & Ollie

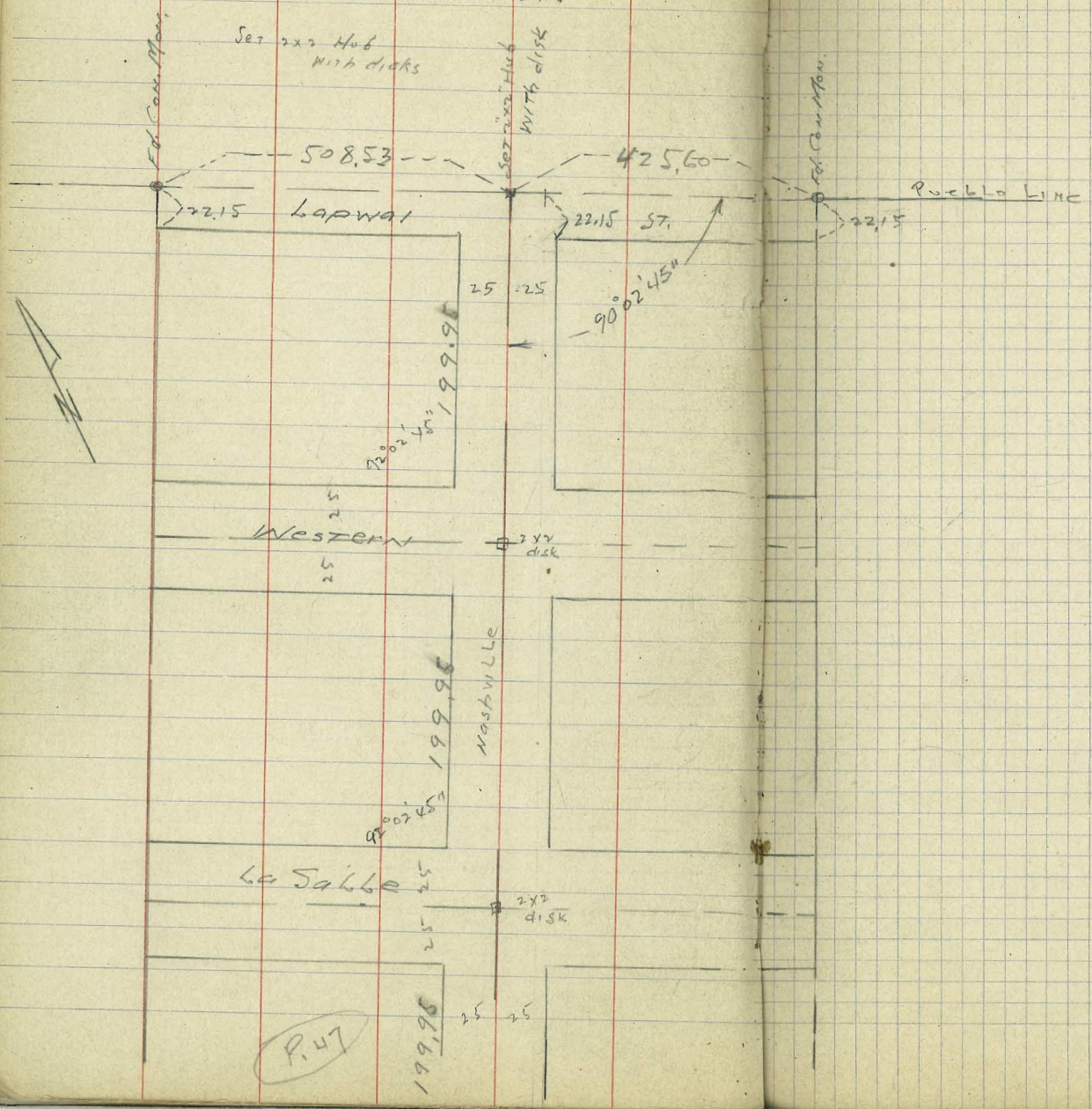
0+00 = 5' W of EL. Camlos		6.7	0.22	
20' Lt of 0+00 Top Curb Ret Midway & Camulos		5.35	1.57	B.C. Ret.
0+15		7.9	-1.0	
+35		6.7	0.2	
+50		7.6	-0.7	
1		7.6	-0.7	
+50		7.3	-0.4	
2		7.1	-0.2	
+25		7.0	-0.1	
+35		6.0	0.9	
+70		5.7	1.2	
+75		7.1	-0.1	
3		6.5	0.4	
+25		7.4	0.5	
+50		7.1	0.2	
+53		5.4	1.5	
+70		5.2	1.7	
" 65 Rt to Trailer House		4.9	2.0	Floor EL.
4+00		5.2	1.7	ground 1' lower

Laundry to be ~~Cafe~~ (49) Floor EL. Same

4+10 on ℄ 9.2 wide Con. walk	4.95	1.97	
4+50	4.6	2.3	
" 4 Rt. edge ℄ 4.7 wide walk	4.56	2.36	
" 8.6 Rt. to house	4.35	2.57	Floor
4+78.6 ℄ 8' Con drive	4.77	2.15	to gar
5+02.7 ℄ of 2.5 Con walk	4.94	1.98	
" 18.2 Rt to House door	4.71	2.21	Floor
+50	5.2	1.7	
5+78.8 ℄ of 3.5 wide walk	4.87	2.05	
" 12.8 Rt to door house	4.12	2.80	Floor
6+00 Lawn	5.2	1.7	
6+09.63 = WL Ollie	5.2	1.7	
" 20' Lt Top Curb South	4.87	2.05	
T.P. Chisel Square B.M. 4.15 6.10	4.97	1.95	Ctr. Wly Return Midway and Ollie
6+34.63 = Δ 89°56' Rt. Stub	4.8	1.3	Via Ollie St on Pueblo Line
+50	5.2	0.9	
7	5.6	0.5	
+50	5.9	0.2	
8	6.0	0.1	
+50	6.2	-0.1	
8+62.23 ℄ Liberty	6.1	0.0	
9	5.9	0.2	
Set nail B.M. in P.P. Swly Ollie & Liberty	5.36	0.74 ✓	
+50	5.9	0.2	

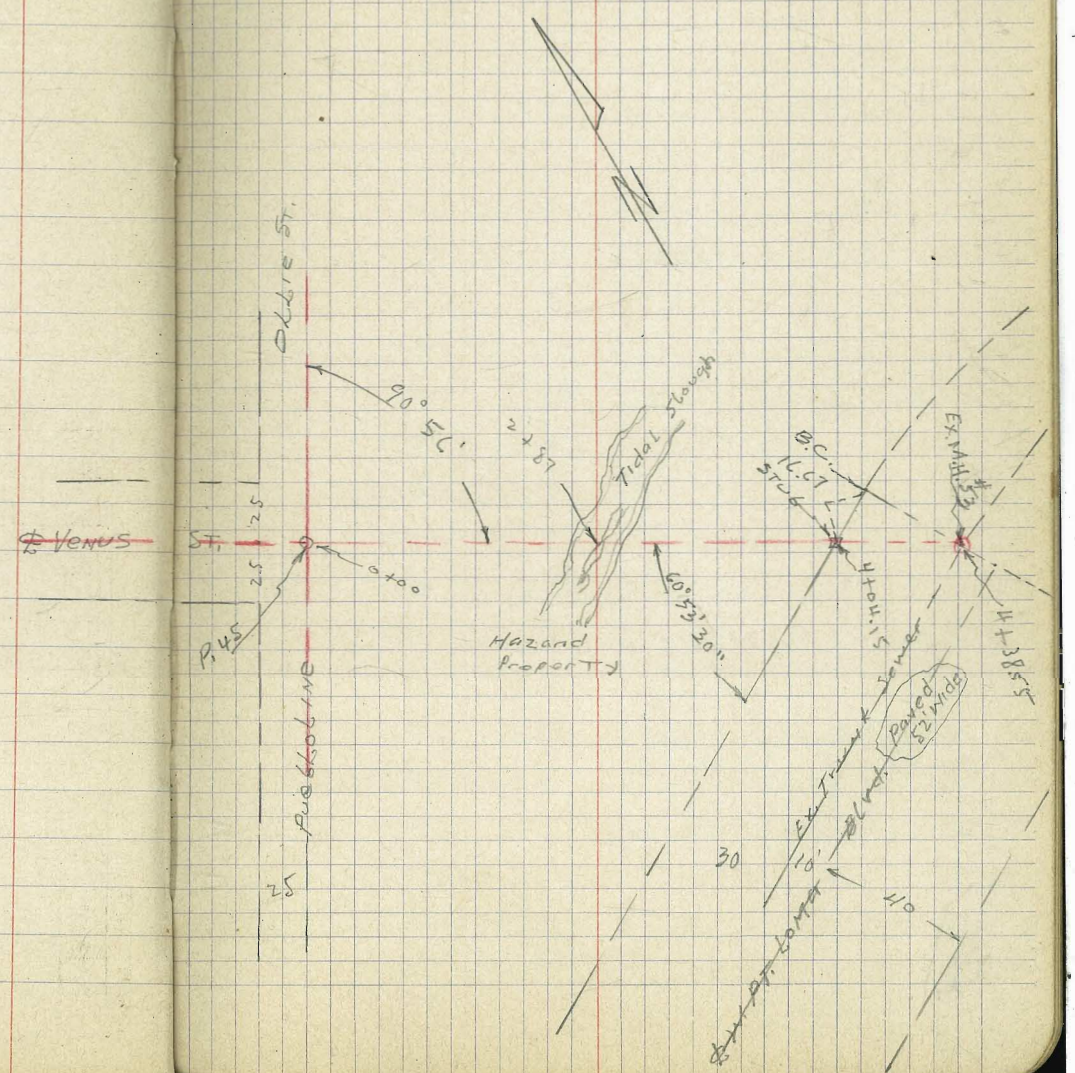
Contd. P. 52

Ties, Drucker's Sub.
in Pueblo Lot 24 V



P. 47

Line to Main Trunk Sewer on W. Pt. Loma Blvd. from Venus and Ollie Sts.



Sewer Levels on Ollie St. Contd. from p. 49

		6.10		
10 +00			6.0	0.1
+50			6.0	0.1
T.P.	5.3L	5.5r	5.9r	0.6
11			5.7	-0.2
+12.23	& Venus St.		5.8	-0.3
+50			5.2	0.3
Set nail	PP Sw Cor BM Venus & Ollie		6.00	1.08
12			5.2	0.3
+50			5.6	-0.1
13			5.7	-0.2
+50			5.3	0.2
+62.23	& Mars		5.2	0.3
14			5.1	0.1
+50			5.2	0.3
15			5.1	0.4
+50	edge Slough		5.0	0.5
+57		soft mud	9.6	-4.1
16 +12.23	& Williams		10.3	-4.8
+27			10.2	-4.7
+33			7.2	-1.7
+60	edge Slough		5.6	-0.1

5.5r

17		5.2	0.3
150		4.0	1.5
18		3.5	2.0
+62.23	= Prince St	3.0	2.5

Sewer Levels Bet. Intersection of Venus + Ollie + Ex. M.H. #53 on W. Pt Loma Blvd.

S.W. Nail in PP.	6.14	7.22	1.08	Venus + Ollie P.52
0+00 = Venus + Ollie Sketch P.51		7.5	-0.3	
+30		6.0	1.2	
+50		5.6	1.6	
1		6.0	1.2	
+50		6.4	0.8	
2		6.7	0.5	
+45		6.2	1.0	
+51	Slough, Soft Mud	10.7	-3.5	
+77	" "	11.0	-3.8	
+82	" "	13.2	-6.0	
+87	" "	11.0	-3.8	
3	" "	10.8	-3.6	
+16		4.0	3.2	
+60		4.2	3.0	
4+04.15	Wly W. Pt. Loma Blvd.	3.7	3.5	
+19		3.1	4.1	
+20	edge pav	3.40	3.8	
4+38.55	Pav. over M.H. #53	2.72	4.5	
"	M.H. Rim	3.15	4.07	
"	M.H. Fl.	14.88	-7.66	
check to Starting B.M		4.31	2.91	2.90
				0.01

offsets to ℄ Front of houses.

Sewer Levels on Liberty St. Ollie to Clove

BM Nail PP	3.51	4.25	0.74	SW Cor Ollie & Liberty
0+00 = Pueblo Line on Ollie St		4.2	0.1	
+50		4.7	-0.4	
+55		4.7	-0.4	
"	35' Rt Floor House	3.1	1.2	
1+00		4.6	-0.3	
+50		4.7	-0.4	
"	31' Lt Fl. House	1.8	2.5	
+83		4.7	-0.4	
"	55 Rt Fl. House	3.0	1.3	
+90		4.7	-0.4	
"	32 Lt. Fl. House	3.7	0.6	
2		4.8	-0.5	
+58		4.9	-0.6	
"	31 Lt Fl. House	1.6	2.7	
3		5.1	-0.8	
+40		5.2	-0.9	
"	50' Rt Fl. House	2.8	1.5	
4		4.9	-0.6	
+50		4.8	-0.5	
5+02		5.3	-1.0	
"	45 Lt Fl. House	2.5	1.8	
+50		5.4	-1.1	
6		5.5	-1.2	

Liberty St.

		4.25		Sewer	
6 + 59.78	℄ Camulos.		5.2	0.9	
Nail PP. T.P. SE Gr.	2.93	3.01	4.17	0.08	Liberty Camulos
7 + 00			4.1	-1.1	
+ 50			4.0	-1.0	
8			4.2	-1.2	
+ 50			4.4	-1.4	
9			4.4	-1.4	
+ 50			4.7	-1.7	
10			4.8	-1.8	
+ 50			4.6	-1.6	
11			4.9	-1.9	
+ 50			5.1	-2.1	
+ 75			5.7	-2.7	
12			5.3	-2.3	
+ 50			5.5	-2.5	
13			5.5	-2.5	
+ 19.6	Pueblo Line on Clovis		6.5	-3.5	

Sewer Levels on Clovis St. Pueblo Line 54
℄ Liberty to Pueblo Line on Prince St.

		3.01		
0 + 00 = ℄ Liberty St.			6.5	-3.5
+ 05			5.8	-2.8
+ 50			5.4	-2.4
1			5.1	-2.1
+ 50			5.1	-2.1
+ 75			5.1	-2.1
+ 80			5.8	-2.8
2			5.9	-2.9
+ 05			5.0	-2.0
2 + 50 ℄ Venus			5.4	-2.4
3			5.2	-2.2
+ 50			5.6	-2.6
4			6.0	-3.0
+ 40			5.7	-2.7
+ 44			6.4	-3.4
+ 65			6.1	-3.1
+ 70			5.9	-2.9
5 + 00 ℄ Mars			5.7	-2.7
T.P.	4.52	2.74	4.79	-1.78
+ 50			5.2	-2.5
6			5.2	-2.5
+ 50			4.8	-2.1
7			4.5	-1.8
+ 30			4.6	-1.9

Pueblo Line on Clovis St.

2.74

7+40		6.2	-3.5
7+50	℄ Williams	5.0	-2.3
8		4.6	-1.9
+50		4.8	-2.1
9		4.7	-2.0
+50		4.8	-2.1
10 = Pueblo Cor		4.9	-2.2
Iron Pin. 4"x4" Con. T.P. Mon. 23.18 wly of Mon. on Swly Cor Pl 218.		4.86	-2.12

℄ Sewer Levels on Venus St.
Ollie Lily to Clovis

B.M. Swnail P.P. 2.40	3.48	1.08	Ollie & Venus P.52
0+00 = ℄ Venus & Pueblo Line		3.8	-0.3
+25		3.5	0.0
+50		3.4	0.1
1+00		4.0	-0.5
+50		4.3	-0.8
2		4.5	-1.0
+30		4.7	-1.2
" 41 Rt Fl. El. House		1.7	1.8
+50		4.8	-1.3
3		4.7	-1.2
+50		4.5	-1.0
4		4.7	-1.2
+50		5.0	-1.5
5		5.2	-1.7
+50		5.5	-2.0
6		5.3	-1.8
+59.9 = ℄ Camulas		5.3	-1.8
T.P. 3.24	2.35	4.37	-0.89
7		4.1	-1.7
+50		4.1	-1.7
8		4.0	-1.6
+50		4.3	-1.9
9		4.3	-1.9

		2.35	℄	Venus St
9 x 50			4.3	-1.9
10			4.5	-2.1
x 50			4.3	-1.9
11			4.5	-2.1
x 50			4.6	-2.2
12			4.8	-2.4
x 50			4.8	-2.4
13			4.6	-2.2
13 + 19.8 ±	Pueblo Line Clovis		4.7	-2.3

℄ Levels on Mars St.
Clovis Ely to Ollie St.

2.35

0 + 00 =	Pueblo Line on Clovis	5.1	-2.7
x 50		4.7	-2.3
1		4.9	-2.5
x 50		4.7	-2.3
2		4.4	-2.0
x 50		4.4	-2.0
3		4.5	-2.1
x 50		4.3	-1.9
4		4.3	-1.9
x 50		3.9	-1.5
5		3.9	-1.5
x 50		3.7	-1.3
6		3.4	-1.0
+ 60 ±	℄ Camulos	3.4	-1.0
7		3.0	-0.6
x 50		3.1	-0.7
T.P. 5.11	4.44	3.02	-0.67
8		4.9	-0.5
x 50		4.9	-0.5
9		4.9	-0.5
x 50		4.8	-0.4
10		4.5	-0.1

Sewer Level on Mars St.

4.44

10 + 50		4.4	-0.0
11		4.5	-0.1
+ 50		4.4	0.0
12		4.1	0.3
+ 50		4.0	0.4
13		3.8	0.6
+ 20	± Pueblo Line on Ollie	3.9	0.5

℄ levels on Williams St.
Ollie Wly to Clovis

4.44

0+00 = Pueblo Line on Ollie St		In Slough	
0 + 44	in Slough	8.3	-3.9
0 + 45	Top bank Slough	6.1	-1.7
0 + 65		3.9	0.5
1		3.7	1.7
+ 50		3.7	1.7
2		3.9	0.5
+ 50		3.9	0.5
3		4.1	0.3
+ 50		4.0	0.4
4		4.4	0.0
+ 50		4.5	-0.1
5		4.7	-0.3
+ 50		4.8	-0.4
6		4.7	-0.3
+ 60.2 ± ℄ Camulas St.		4.7	-0.3
T.P. 3.46	3.93	3.97	0.47
7		4.3	-0.4
+ 50		4.4	-0.5
8		4.5	-0.6
+ 59		4.7	-0.8
9		4.9	-1.0
+ 50		4.8	-0.9

3.93

		Williams St.	
10		5.1	-1.2
+50		5.2	-1.3
11		5.2	-1.3
+50		6.0	-2.1
12		6.4	-2.5
+50		6.2	-2.3
13		5.7	-1.8
+20 + =	Pueblo Line Clovis St.	6.3	-2.4

Sewer Levels on Pueblo Line on Prince St.
Clovis to Ollie St.

3.93

Check to T.P. P.55	6.08	-2.15	-2.12 / 0.03
0+00 = Sw'ly Cor of Pueblo Lot 218	6.1	-2.2	Clovis & Prince
+50	6.1	-2.2	
1	5.7	-1.8	
+50	6.2	-2.3	
2	5.9	-2.0	
+50	5.6	-1.7	
3	5.6	-1.7	
+50	5.0	-1.1	
4	4.8	-0.9	← approx. 50' Rt = Slough
+50	4.7	-0.8	
5	4.9	-1.0	
+50	5.6	-1.7	
6	6.0	-2.1	← approx. 25' to Rt = N edge Slough
+50	5.3	-1.4	
+60.4 ℄ Cornulos	4.3	-0.4	
T.P. 4.73 4.52	4.4	-0.21	
6+70	5.3	-0.8	
" 6' Rt N edge Slough	8.0	-3.5	
7	5.3	-1.8	
" 3 Rt	5.5	-1.0	
" 7 Rt in slough	8.0	-3.5	

Prince St
Sewer

4.52

7+25			4.8	-0.3	
"	7' Rt.		5.6	-1.1	
"	10 Rt	Slough	8.2	-3.7	
+50			6.7	-2.2	
"	1 Lt	Top Slough	4.7	-0.2	
"	3 Rt	Bot. "	8.5	-4.0	
+75			8.6	-4.1	
"	5 Lt	Top Slough	4.9	-0.4	
"	2 Rt	Slough	9.8	-5.3	
8		Top n edge "	5.4	-0.9	
"	2 Rt	in slough	9.1	-4.6	
+30			8.3	-3.8	
"	2 Lt.	Top bank	5.5	-1.0	
"	3 Rt.	in Slough	8.7	-4.2	
+40		Top bank "	5.3	-0.8	
"	4 Rt.	in "	8.5	-4.0	
+50			5.1	-0.6	
"	6 Rt	Top Bank Slough	5.2	-0.7	
"	8 Rt	in "	8.6	-4.1	
9			5.1	-0.6	23 Rt. to Slough
+50			5.1	-0.6	
10			5.0	-0.5	60' Rt to Slough
+			4.8	-0.3	
11			4.8	-0.3	
"	14 Rt	Top Bank Slough	4.2	0.3	
"	24 Rt	in "	8.4	-3.9	

4.52

11+09	Top Bank Slough	4.9	-0.4
+15	in Slough	8.3	-3.8
+40		9.3	-4.8
+47		11.0	-6.5
+54		9.4	-4.9
+58		8.3	-3.8
+97		7.7	-2.2
12+07	Top bank Slough	2.0	2.5
+50		1.8	2.7
13+00		2.5	2.0
+04		1.3	3.2
+10	edge Pav.	2.5	2.0
13+20.8	= Pueblo Cor. R.R. spike in Pav.	2.0	2.5

℄ Sewer Levels on
℄ Camulos St.
Prince to Midway

T.P. P. 57	3.70	4.17		0.47	Williams Camulos
0+00 = Pueblo line on Prince			4.5	-0.3	
+40			5.1	-0.9	
+60			6.4	-2.2	
+87			4.3	-0.1	
1			4.5	-0.3	
+50			4.6	-0.4	
+60			5.7	-1.5	
+70			4.8	-0.6	
2 +00			5.7	-1.5	
+10			4.6	-0.4	
+50	℄ Williams		4.5	-0.3	
3			4.7	-0.5	
+50			4.9	-0.7	
4			5.5	-1.3	
+50			5.3	-1.1	
5	℄ Mars		5.2	-1.0	
T.P.	3.41	3.49	4.09	0.08	
5+50			4.4	-0.9	
6			4.5	-1.0	

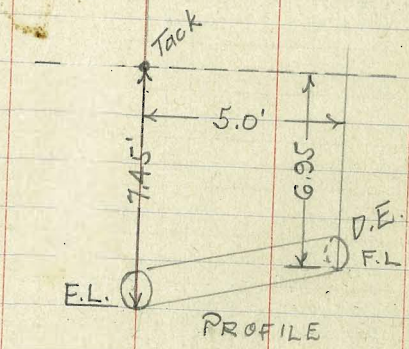
3.49

6+50	5.2	-1.7	
7	5.4	-1.9	
+50 ℄ Venus St	5.7	-1.8	
8	4.8	-1.3	
+50	4.9	-1.4	
+75	4.7	-1.2	
" 57' Rt. to ℄ Front of House	1.1	2.4	Floor El.
9	4.5	-2.0	
+50	4.6	-1.1	
10 ℄ Liberty	4.4	-0.9	
Check to Nail. T.P. in P.P. Sly Con Camulos Liberty	3.42	0.07	0.08
10+50	4.4	-0.9	
11	4.6	-1.1	
+50	5.1	-1.6	
12	3.9	-0.4	
+13	4.5	-1.0	
+39 ± on Pav at Midway approx. 10' Sly from curb.	2.6	0.9	

Location & EL. of sewer
at 60th & Carroll

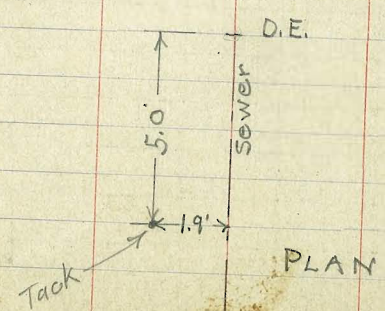
NWBP.	3.85	469.97		466.12
T.P.	3.60	465.44	8.13	461.84
Nail in pav.			6.77	458.67

4-4-46
Copy of Notes of Ole Moen as transmitted by G.E. Moore.



458.67
7.45
451.22

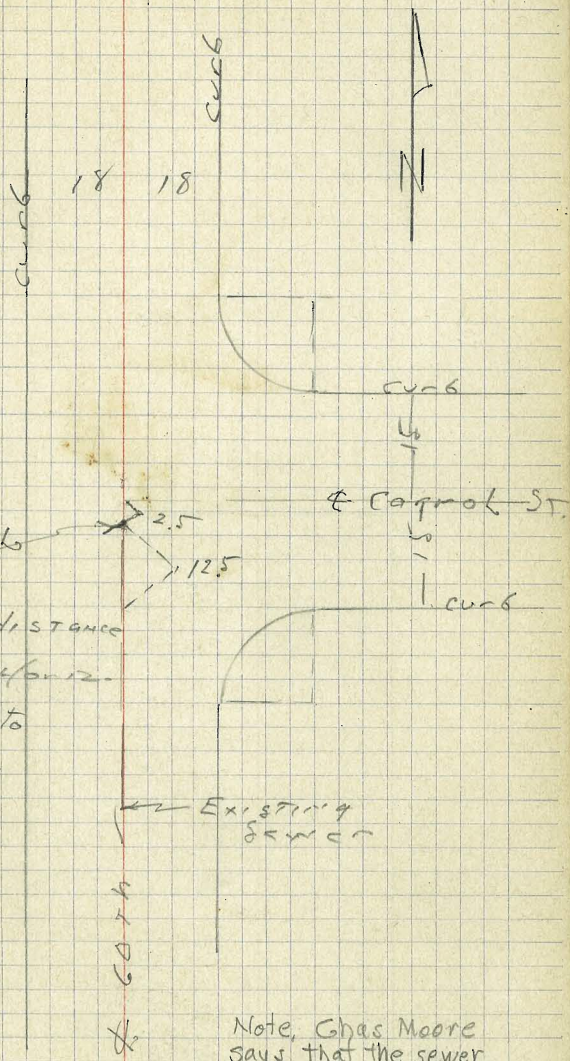
458.67
6.95
451.72



C Moore
Sommermeyer
H Moore
Begg
4-2-46

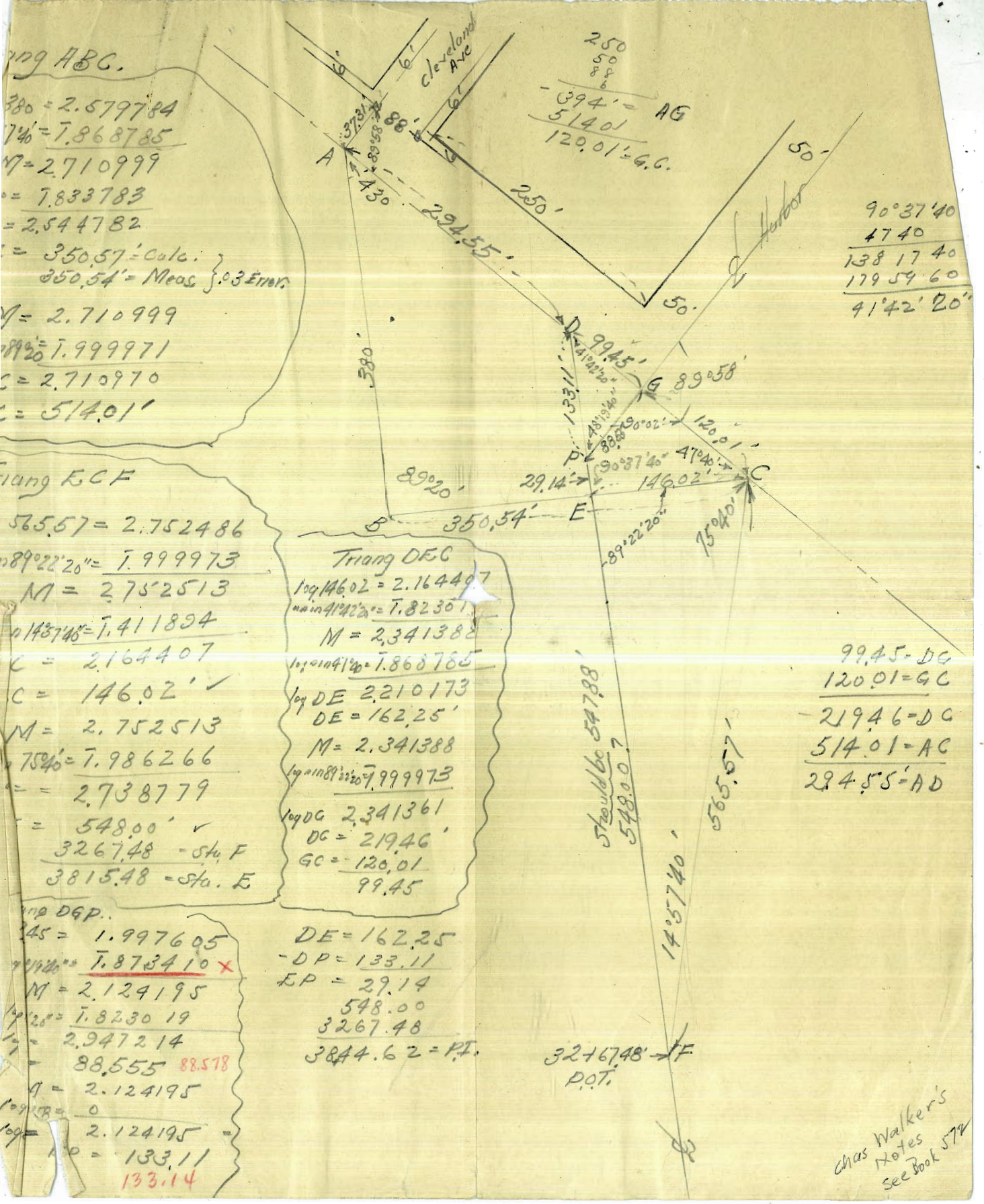
indexed
C.S.K

61

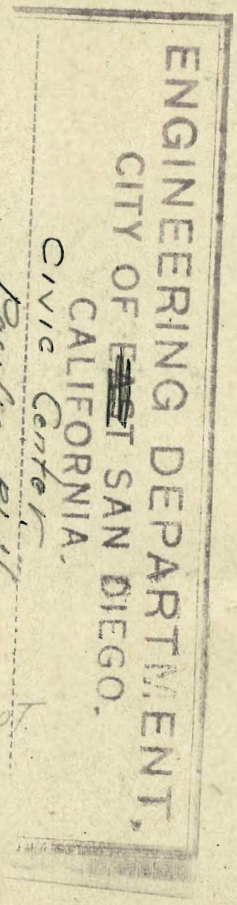


"Moen" will give you the distance vertically & horiz. from nail to Ex. D.E. when uncovered.

Note, Chas Moore says that the sewer is on the center of 60th St. The nail or tack is 1.9' west of ℄ of street and sewer
G.R.H.
4-5-46



ng ABC.
380 = 2.579784
7°40' = $\bar{1}$.868785
M = 2.710999
= $\bar{1}$.833783
= 2.544782
= 350.57' = Calc.
350.54' = Meas. } .03 Error.
M = 2.710999
89°20' = $\bar{1}$.999971
C = 2.710970
C = 514.01'
Triang ECF
565.57 = 2.752486
89°22'20" = $\bar{1}$.999973
M = 2.752513
14°57'40" = $\bar{1}$.411894
C = 2.164407
C = 146.02'
M = 2.752513
75°40' = $\bar{1}$.986266
= 2.738779
= 548.00'
3267.48 = Sta. F
3815.48 = Sta. E
Triang DEC
log 146.02 = 2.164407
min 41°42'20" = $\bar{1}$.823017
M = 2.341388
log min 41°40' = $\bar{1}$.868785
log DE 2.210173
DE = 162.25'
M = 2.341388
log min 89°22'20" = $\bar{1}$.999973
log DG 2.341361
DG = 219.46'
GC = 120.01
99.45
ng DGP.
45 = 1.997605
19°40" = $\bar{1}$.873410
M = 2.124195
20" = $\bar{1}$.823019
= 2.947214
= 88.555 88.578
M = 2.124195
log 88 = 0
log = 2.124195
= 133.11
133.14
DE = 162.25
-DP = 133.11
EP = 29.14
548.00
3267.48
3844.62 = P.I.
250
50
88
6
-394' = AG
514.01
120.01' = G.C.
cleveland Ave
6'
6'
6'
6'
37.31'
89°58'
88'
A
430
294.55'
250'
50'
50'
Harbor
380'
D
99.45'
41°42'20"
133.11'
G
89°58'
48°19'40"
88.58
90°02'
120.01'
P
90°37'40"
47°40'
C
29.14'
146.02'
89°20'
B
350.54'
E
89°22'20"
75°40'
Should be 547.88'
548.00'
565.57'
14°57'40"
32+67.48' F
P.O.T.
90°37'40
47 40
138 17 40
179 59 60
41°42'20"
99.45 = DG
120.01 = GC
219.46 = DC
514.01 = AC
294.55' = AD
Chas Walker's Notes See Book 572



DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.