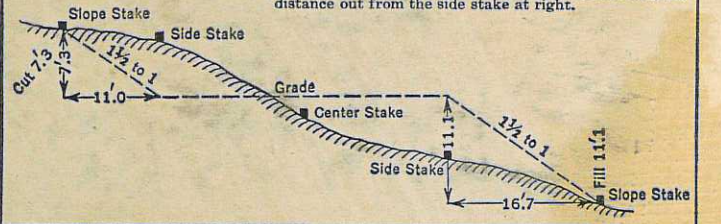
K&E
FIELD BOOK
W 360

1949-1

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

KEUFFEL & ESSER CO., N. Y.

For Curve Tables see end of book

1949-1

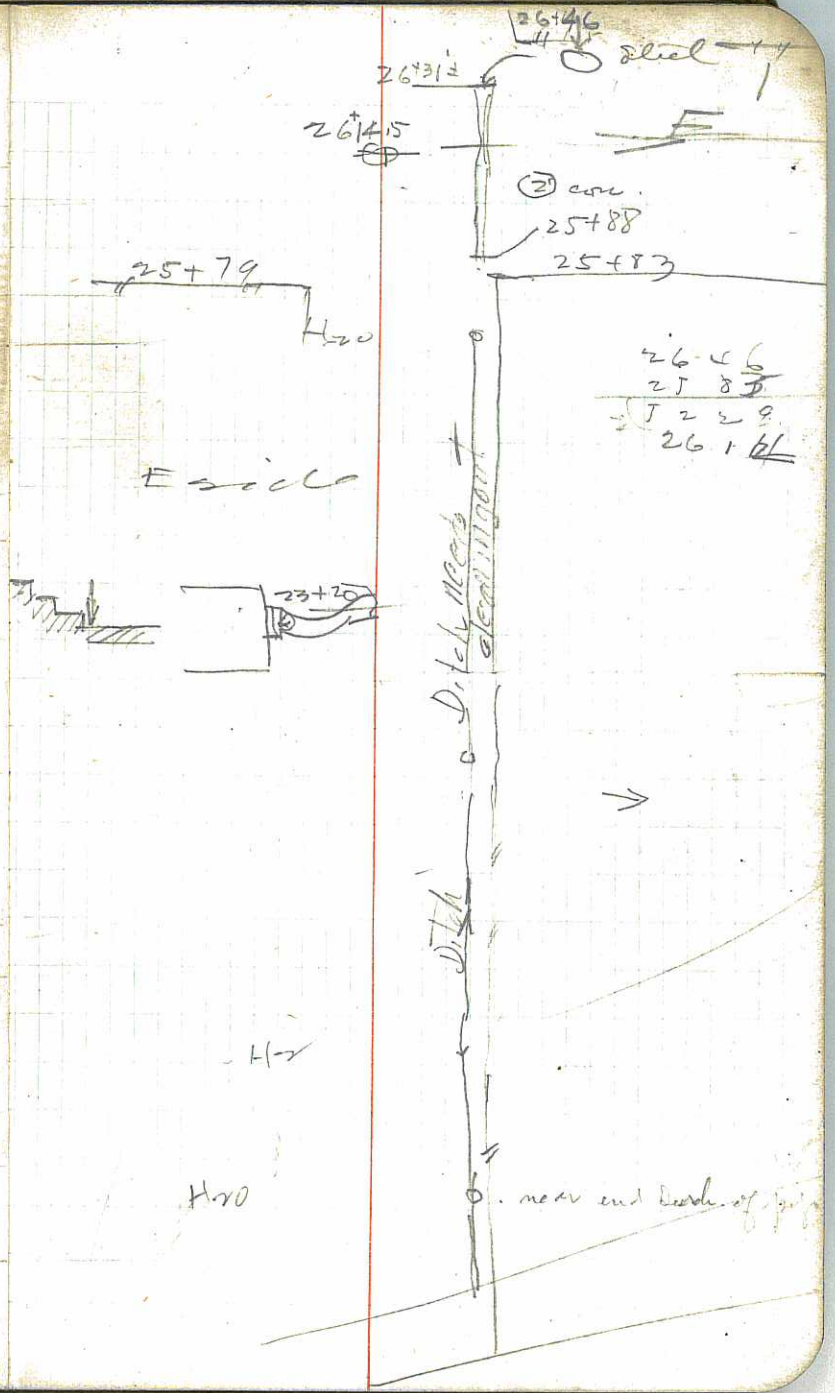
Eugene Shumway

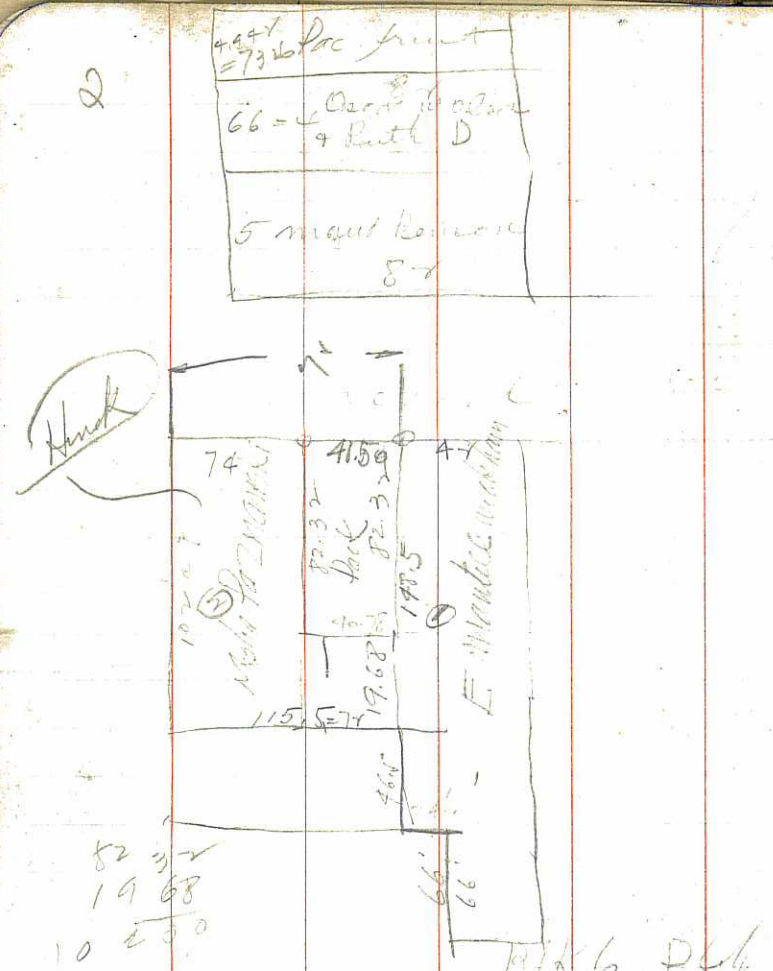
Logan Utah

REGISTERED PROFESSIONAL ENGINEER 513 STATE OF UTAH EUGENE SHUMWAY

The paper in this book **No. 360** is made of **100%** high grade rag stock with a **WATER RESISTING** surface sizing.

	BS	FS	HI	Elev
-1		9.30 ⊕		4608.49
		8.18 ↓ (21)		4609.61
26+14 ℄			4.85	4612.96
25+88			8.40+20	4609.39
26 ℄			7.57	4610.22
26			4.75	4613.04
25	3.54		7.30	4610.49
25		10.36		4614.25
24 ℄			8.40	16.21
23 H20			5.00±	19.61
23+00 ℄			5.50	4619.11
22+76			5.61	4619.00
22				
22 ℄ H20			3.40	21.21
21			3.50±	21.11
21 ℄			1.80	22.81
20 ℄			0.65	23.96
	0.11			4624.61
		11.11		4624.50
20 ℄				
19			12.7	4622.91
19 ℄			9.50	4626.11
18+43				
17+43			11.20	4624.41
17	2.78			4635.61





Berrie
Ranch
BLK. 6 - Pl
Wack 15-

Rockwood 3
Map work
"D" Ct

Man x Wickham

Beg at pt 7x
5 148½ ft.
E of NW cor Lot 6
- E 74½', S 4x 12½'
E of NL 13x
12x16 Gge

Mack P

Beg at NW cor Blk 6 S
NW Cor
of Lot
N of NW with W L of Blk 19.68'
M 88°56' W of NW with NL of
Blk 40.78 Salt R of W
Beg S 89°56' E
of NW cor S 89°56' E 115.50' N 19.68'
M 89°56' W
W 82.32' ±
N 89° 56' W
10x' ± to be
in fallow

Also 1/2 undivided
- over

4 Beg at pt S 89°56 E

80.44 ft of pt on W'ly R/W of Old Rte 6 S 46.50' S 89°56' E 4 11 with N'ly & E'ly bdy of BLK 35.06' N 4 11 with W'ly & Sly bdy of BLK 46.50' N 89°56' W 35.06' to beg

Parcel

Beg at pt on W'ly R/W of Old Rte 6 - S 89°56' E 74' of NW cor of BLK 6 S 89°56' E 41.50' S 52.32' ft; N 89° 56' W 40.78 ft; N 40°30' W 82.32' ± to beg enclosing 0.08 ac ± Subj to R-of-W

Beg at pt on W'ly R/W of Old Rte 6 S 89°56' E 74' of NW cor of BLK 6 S 0°30' E 52.32' S 89°56' E 5.55' N 0°30' W 52.32' ± to N'ly pt on W'ly R/W of Old Rte 6 N 89°56' W 5.55' to beg

Also incl 1/3 int in

for ac:

5

Beg at pt S 89°56 E

80.44 ft of pt on W'ly R/W of Old Rte 6 S 46.50' S 89°56' E 4 11 with N'ly & E'ly bdy of BLK 36.06 ft ± N'ly 4 11 with W'ly & Sly bdy of BLK 46.50' N 89°56' W 35.06' ± to beg

Cont. 0.037 Ac ±

This cut 1/3 int in subj to R-of-W for Hwy 6 as recorded in the W 10' of last bdy

Land bkd as above with exception

to Lot C ±

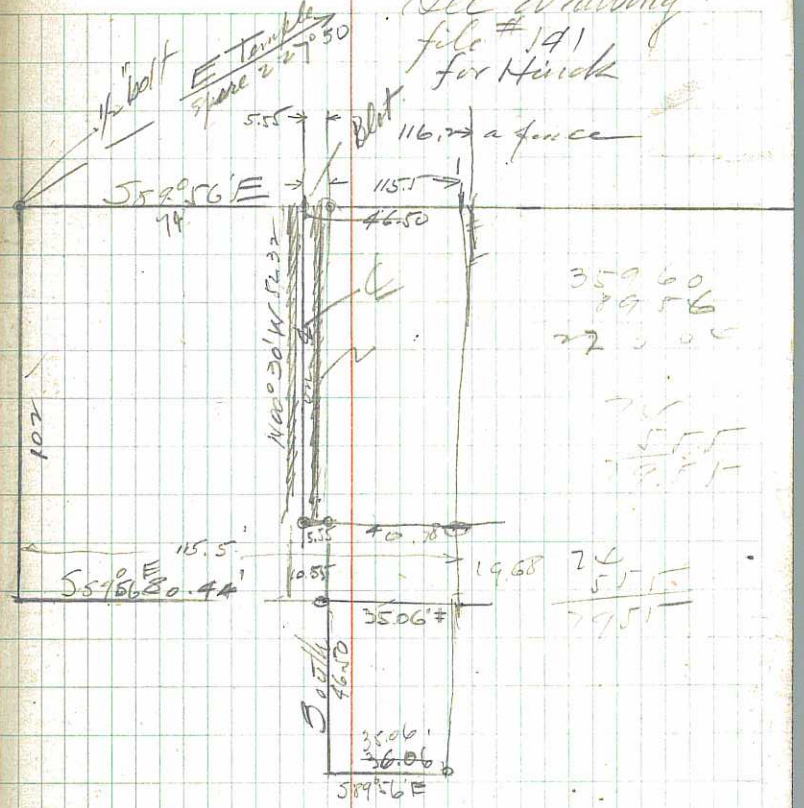
Glen Burnett

238 S I E

6

7

Rec drawing file #191 for Hinck



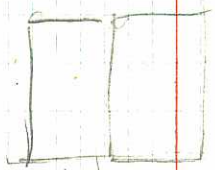
8

	7	270°04	40.4		
	6	270°04	5.55		
5	5	359°30	19.67		
	④	270°04	22.30		
3	3				
	3	359°30	22.32		
		90°04	74		
2					

Bessie Park

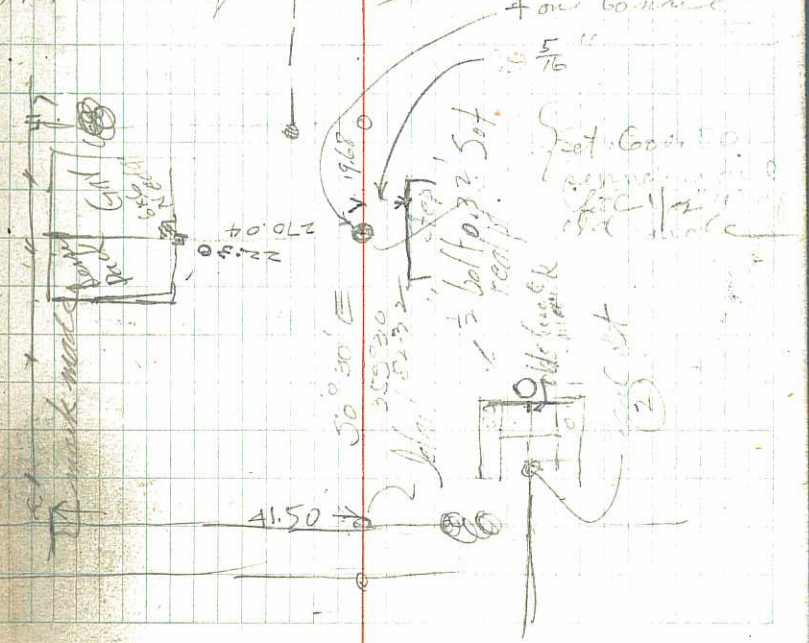
3-18-49

9



nail & stake against fence — 90° thick

Hit on Setge 1½ feet long



10 Ed & Co

Beg on W bdry line of Blk 64 at a pt 12.5 S of NW cor Lot 2, S 20, E 75, N 15, 45° W [illegible] W 70 [illegible]

From Jacob Whitlock to Wm Whitlock & wife to E.L. Everton & wife

Beg at pt 12 1/2 N of SW cor Lot 2 thence W 25 E 10, W 57, S 10, E 57 to beg

Line from Robt J Smith to Wynn Beg at SW cor Lot 3 E 91 1/2 N 56, W 91 1/2 ft, S 56 to beg - with a 12' R of W along to begin

Everton & Everton WD

Beg at pt 58 N of SW cor Lot 3 N 28, E 91, S 57 3/4, W 57, S 18 1/4, W 91 1/2 to beg

G Ed. Wynn — 11

& Manville 56 x 91 1/2

56 / 91 1/2

12' ± R of W

20 ± Street Attache

1 x 8 1/2 136.5 12

E W & BLK 14

74 74 1/2

74 74.5

99 ft 0

25 Everton

91 1/2

56 56

SW cor lot 3

12 ± R of W

70 70

75 5

116.5

57 5 0 ft 5 0 0 5 0 5 0 5

12

66
28
56
150

Bowen

Beg at mile 573-54 r
Eqb. 2 4r 6 2 l adds
W 7 r 6 beg.

Wyoming June 2 to 6

3 - 18 - (3) ½ hour

13

10.25

8 r
.5
8 2.0
5 r
1 r
3 > 6
2 r
11 > 6.
2.0

For Cache Co
Mon. 3-28 - to and
including 30 -
7000 - 6700 = 300 miles

14

		549.3	n & Blk 14
		483.9±	
		449±	
		371.50±	
		300.00	
		296.9	
		231.2	
#6	N	203.3	E
#6		202.75	1/2" Rod with cap
#4		196.75	
		196.5±	
		134.95	
		114.8	
	N		

OF

3-18-49

15

To N & Blk 14

Sur. Serv.

Wing wall

Bldg.

483.9

91.5
1.6
93.1

Concrete

old fence

Survey

7°

203.3
1.6

147.1

203.3

296.9

270°

Boulder

231.2

31°

Steel rod

203.3

270°

146.75

N line Lot 2

3/8" Steel rod

approx lot line
& old post not dependable

134.95

203.3
-.02
95
3.5

Tin Shed

114.8

Joint

S. line Blk 14

16

146.95

146.95
16

91.5
16

202.3

56.3

Ext'd – Bldg 14
270°
Extended with
N line Boyce
Service Bldg
& S line Westbrook
Bldg.

Bldg

Forest
Path

13'

10'

7	270	89.1	on l on the East Evan fell 1-3/4" S of SE cor Old Everett Mattress factory
	270°	93.1'	
6A			
5	270°	97.5	stake & NAIL
4a	270°	93.1	Brass nail in hub
4			

17

146.95
56
202.3

146.95
56
202.3

96.1
15

146.95
56
202.3

1.65

Old Everett Mattress factory

Path

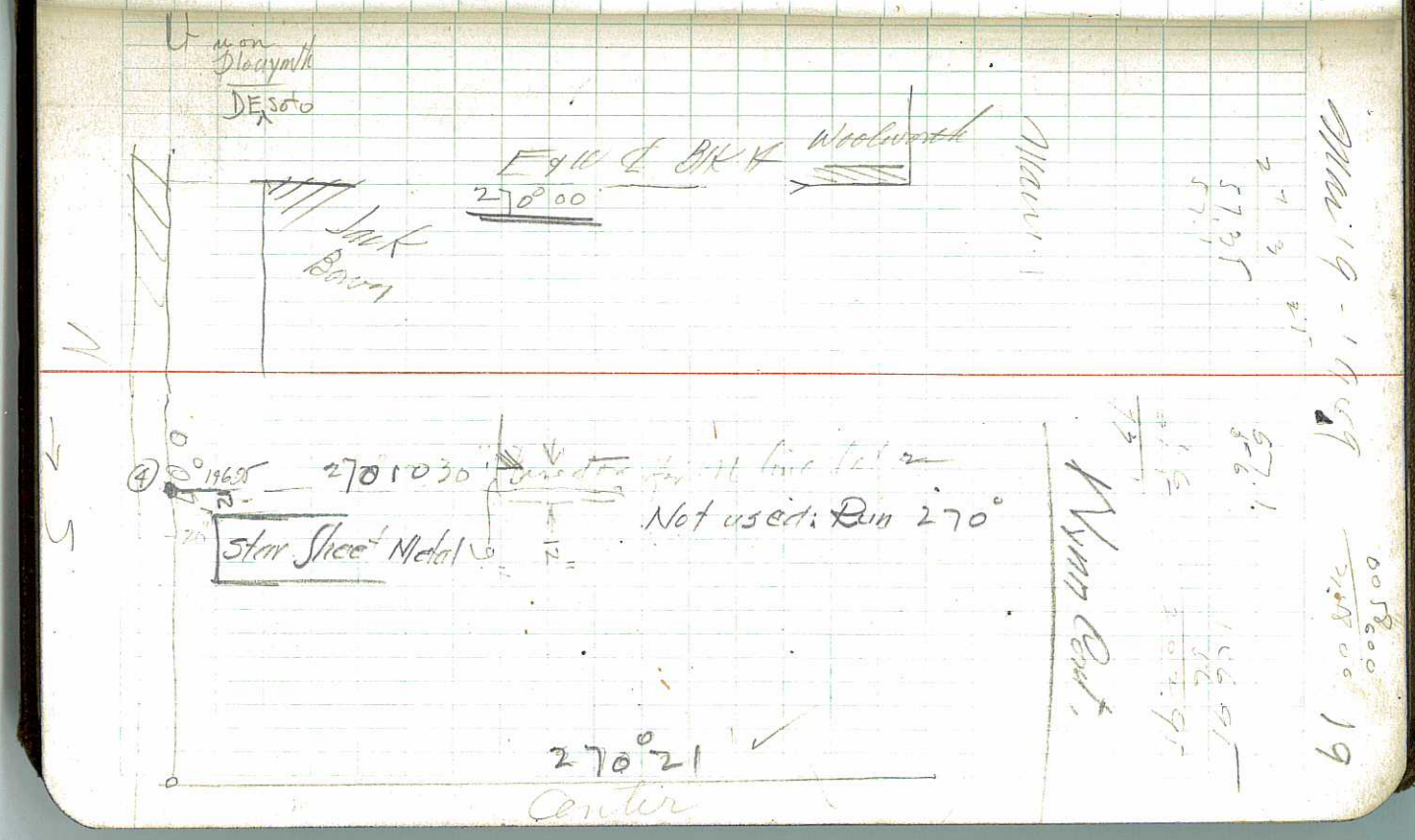
56'

1.6'

3/8" rebar

97.5

hub with brass nail
4a = SE cor Wynn
1.6' – TOTE line


Union Blacksmith
DESOTO
Jack Beam
Full & BRK
270°00'
Woolworth
Main St.
Main St. - 1965
Not used: Run 270°
Star Sheet Metal
270°21'
Center

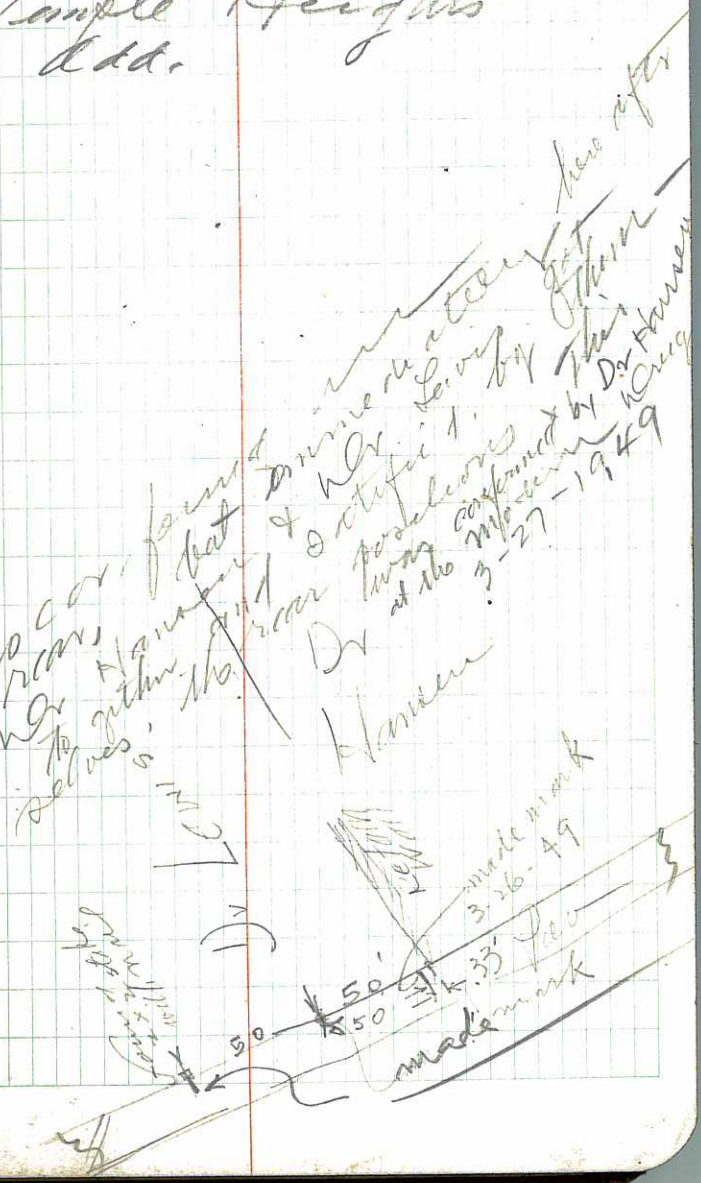
20

Survey for Dr. Lewis 21

3-26-1949.

Temple Heights

Add.



22

Soil Study

#1

3' Sand

3½' " & Gravel

5½' " Gravel & Sand

10' " "

14' " "

3-28-1949

23

Surveyed & Study River Heights Drainage Project along Island Lake Road to Pond & N to woods

Lake Waters

City Officials

Assistants Wayne Watson Jake Thorne Theodore Obron

Engineer A. J. Deutschmann

24

		D S	F S	I N
	9+25			
	9			4.9
	8+65			5.10
	8			10.30
	7			4.15
	+20.6			3.33
	6			2.65
	5	2.05	7.20	
	4			6.56
	3+00			6.25
from				6.52
	2			5.44
	1+72.5			5.20
x (2)	1+48			5.00
	1+23.8			4.90
	1+00			5.66
	0			5.46
(1)		6.10		

Elev. 29.5 — 30.6 — 3-28-59

25

Elev. 34+44.1

Elev. = 30.15

4589.84

4584.75

4590.90

4591.72

5+91.4.0

4593.100 — 4595.05

4593.6.4

4593.92

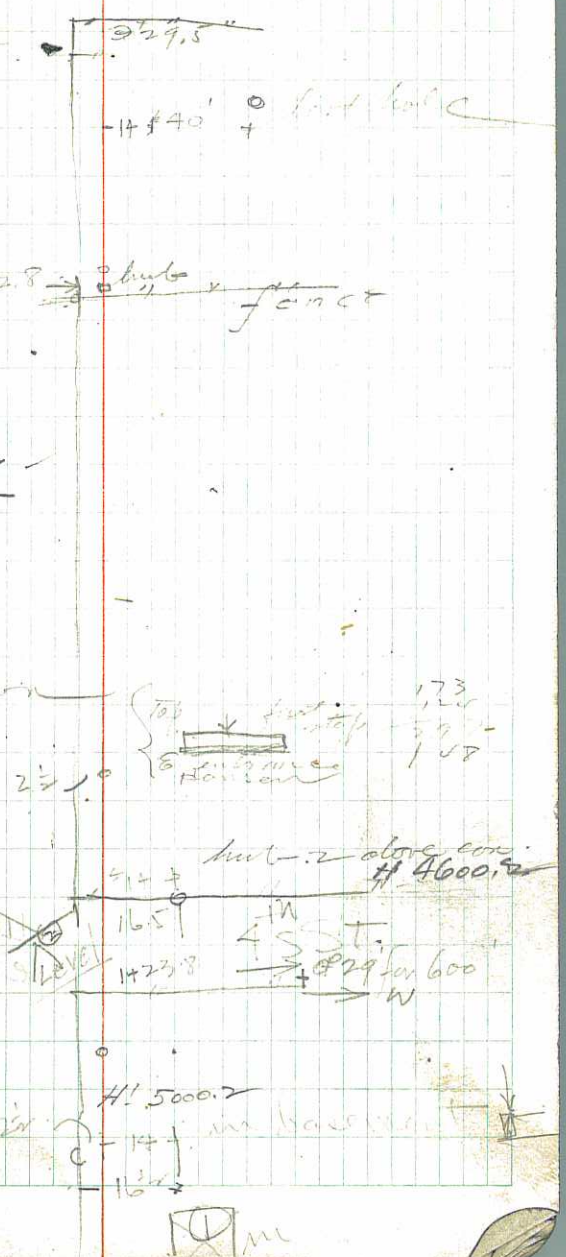
4593.68

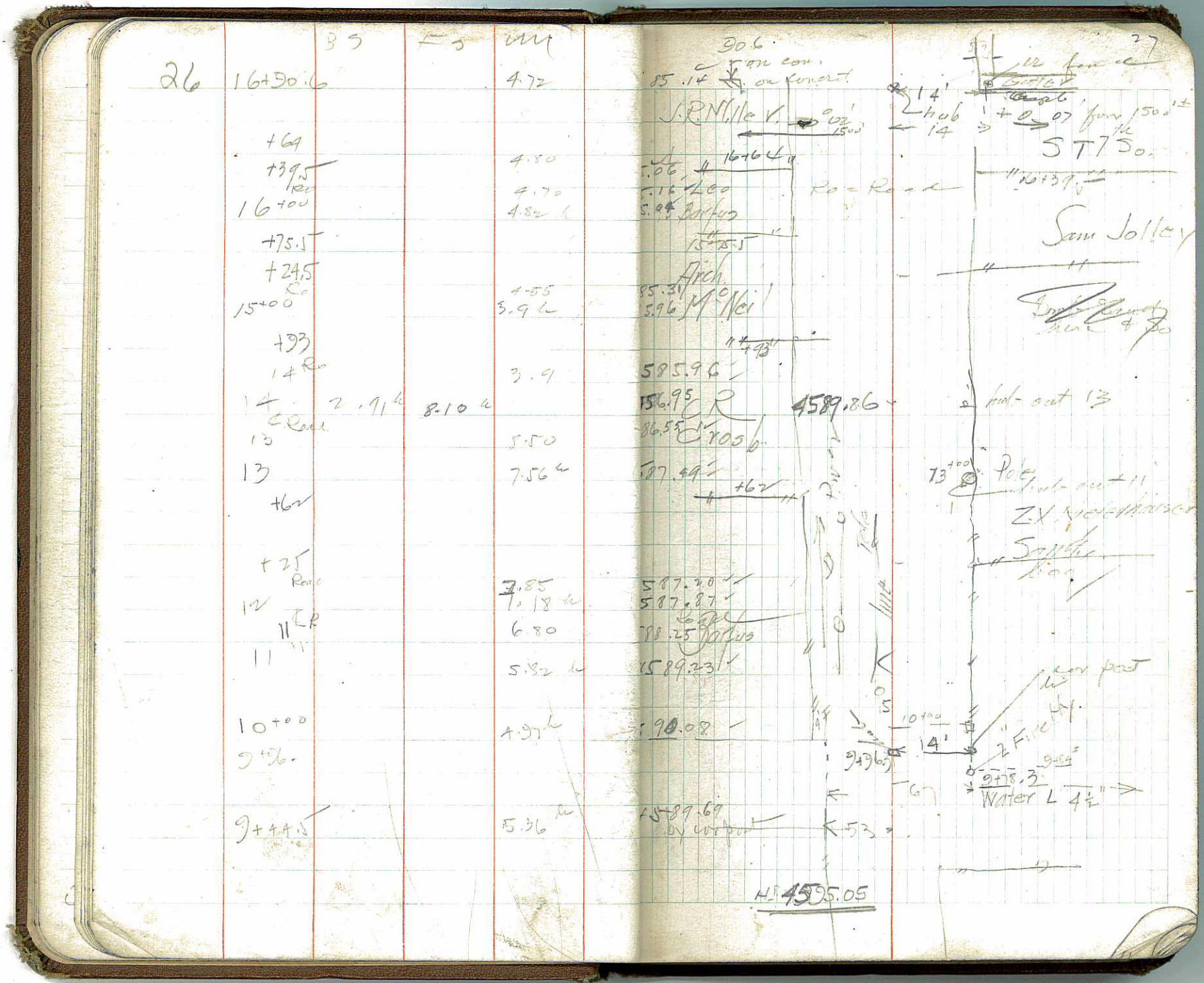
4594.76

4594.54

4594.74

4594.10




26
16+30.6
+64
+39.5 Rev
16+00
+75.1
+24.5 Co
15+00
+93
14 Rev
14
Rev
13
13
+62
+25 Rev
12
11 LR
11
10+00
9+96.
9+44.5
4.72
4.80
4.70
4.82
4.55
5.96
3.9
2.91
8.10
5.50
7.56
7.85
7.18
6.80
5.82
4.97
5.36
B5
F5
30.6
85.14 from con. on concrete
J.R. Nile V.
16+64
5.06
5.16
5.94 Bottom
Arch
85.31
5.96 M.S. Nail
585.96
156.95 R
-86.55 Crown
587.49
+62
587.20
587.87
588.25 Bottom
589.23
590.08
+589.69 Ov Curb
453
Nl 595.05
Rv = Rv + c
4589.86
9+96.5
10+00
14'
9+54
9+58.3
Water L 4½"
27
from 150 ±
14' hub
+0.07 from 150 ±
STS 0.
11+39
Sam Jolley
+70
fwd-out 13
73+00 Pole fwd-out 11
Z.X. Weatherhead
Sam
Jim
Iron post
Z Fire

28

	BS	FS	HI
2 ± Road			7.9
22			8.68 ±
21 ±			4.50
21 +0			5.9 ±
20+00			1.85 ±
+82			
+46			
1.9 ± Road	Ori 9	11.44	
19+00			10.23
			8.12.5 ±
+82			12.30 ±
73			10.30
15 ± Road			5.90
15+00			6.85 ±
17 ± Ro			5.60
17 +00			4.98 ±
16+90.6			

29

671
.93 ± 15 tangent
8.81 ± 20' hub
7.71 ± 16 ± from ℄
20 to hub

7476 ± Run 4.
Wash
Boy Scout
trail

Mull 4578.61 ± ℄ I
4478.61 ± ℄ I
drain at face
from radio tower

578.42
579.56 ±
581.38 ± 20'
hub

4" Drain
Drain at face
from west tower

77.56 ±
79.56 ±
83.96 ±
83.01 ± 20' ± hub

20'
Mush

84.26 ±
84.89 ± 19 ± to hub

18' ± Mush

Road
11+90.6

HI 4489.86

16+90.6
6 ± ℄
14 ±

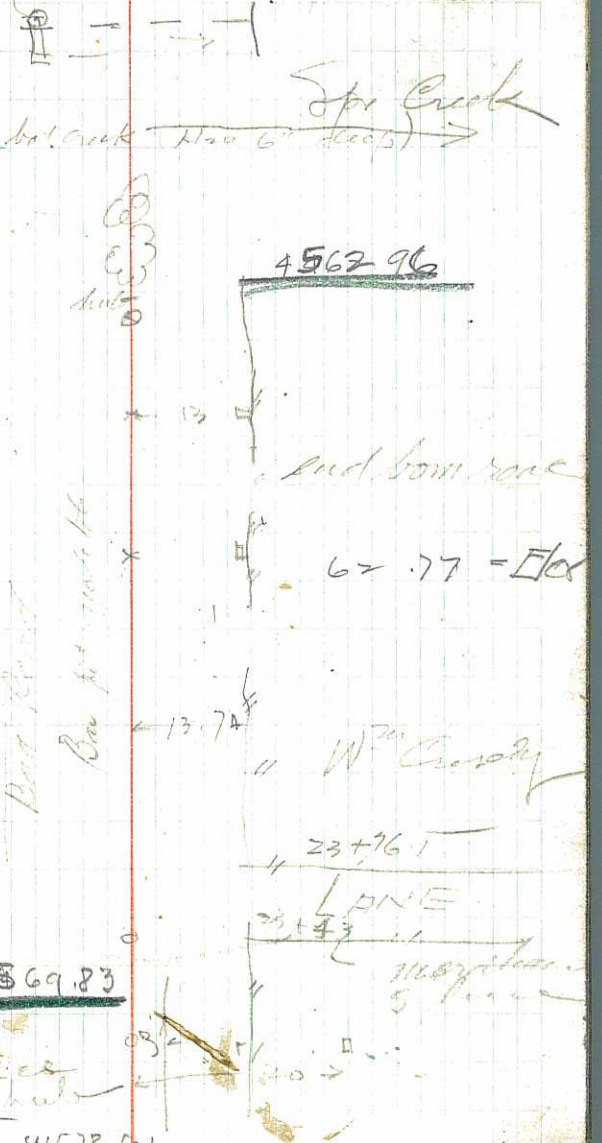
30

		BS	FS		
PM			6.65		550.31 BM
	E Road 27+80			4.9	558.06
	27+80			11.50	551.56
	~~27+80~~				
	26+90 Road	3.93	10.50		559.03
	+90			7.96	561.87
	26 Road			8.15	561.68
	26+00			7.5 gk	561.24
	25 Road			6.1	563.73
	25			7.06	562.77
	24			4.70	565.13
				5.44	564.79
	+76.5				
	+43				
	23 Road	1.96	10.74		567.83
	23+00			11.90	566.31
	22				

R 13 to fence
R 14 to fence

HI 4578.61

HI 4569.83



31

3-31-49 33

Elev Contour Survey

Strong Amp Res

Alt.	BS.	FS	HI	L	Stadia C	Elev
			111.98			
			11.08			
	10 45	10.35				
324° 5'					4.0	10.25
227°30'			4.84	3.00		10.8
230°			10.34	4.00		11.4
218°18'			4.84	5.00		10.3
219°50'			10.34	6.00		11.3
212°			4.84	3.00		4.85
217°			10.34	9.00		10.8
183.30			4.84	4.00		4.89
189°35'			10.34	10.00		10.84
282°			4.84	9.00		13.9
281°10'			10.34	9.00		13.75
355°10'			4.84			
359°30'			10.34	10.00		13.50
			10.88			
①		0.59				
276°47'					30'	
			6.19			
			5.5			
267°47'						
			4.57			

101.47
107
107 R
101.5 R
107 R
101.5 R
107 R
101.5 R
107 L
101.5 L
107 L
101.5 L
100.96
110.95
111.84
110
115.5
110.95
on concrete

Ridge Chimney

Gate Shaft

34

Stadia

Plan	BS	FS	HI	L	C	D	Elev	
317°45			4.9		4.0	10.8		L
323°08			4.9		5.	10.6		L
327°42			4.9	0.95		12.0		L
330°20			10.48	1		11.80		L
347°30			10.48	1.0		12.		L
3 L 90°			4.9		5.0	10.75		L
348°17			4.9		5.0	11.0		L
343°10			4.9		4.0	10.2		L
341°			10.48		4.0	9.9		L
336°10			10.48		5.0	10.9		L
334°16			4.9		4.0	10.4		L
329°13			4.9		5	11.2		L
333°30			10.50		5.	10.7		L
321°08			4.9	1.0		11.5	107	L
318°36			10.48	2.0		11.0	101.5	L
340°02			4.90		3	10.)	107	L
339°05			10.48		4.	10.3	101.5	L
358°55			4.90	1.0		11.70	107	L
358°20			10.48	1.0		11.25	101.5	L
			4.90				107	
			10.48				101.5	

111.98

11.7 5.
10 8 8
10 0 4 6 3.5
491.5

Ed Plastic 11.7

St.
St.

101.5
(A)

36

	BS	FS	IM	L.	C	
235°30'				6		11.5
261°38'			5.29	5		10.5
273°12'			5.29	5		11.0
(7) 284°			5.29	5		10.5
288°15'			5.29	2		7.1
160° ±					300' ±	
(6) 337°30'				4.0	+2°30	10.5
315°10'			5.29	1.0		4.55
(5) 277°30'				5.00		7.85
			5.29			
260°			10.79	10		10.9
			10.29			
			10.80			
			11.15			
5	4.34					
(5) 307°05'	4.48				4.0	11.13
301°41'			4.95		5.0	11.05
(295°10'					45'	
			10.48		5.0	11.4
307°00'			± 9		3.0	10.0
314°20'			4.9		3.0	9.95
317°35'			4.9		3.0	10.35
315°44'			10.48		4.0	10.35
313°38'			10.48		5.0	10.4
241°					48'	

(11.13 / 7136 / 1426)

101.64 / 102.

37

001.59

Pic Saint

#6

101.54

10.5

112.29

start (112.29

(107.50 L

top of rock (1426')

111.95

111.95

(107 R

		BS	FS	CM	L			Elev.
	212°17'			4.61	4		4.07	107.
	1-42°20'							
9		4.32						
9	187°52'		5.00			4x0	10.50	107.29 stake
	162°40'							
	155°30'					6	13.9	
	155°30'					6	13.5	101.5 R
	162°28'							
3	127°05'							
(a)	98°22'							
	185°10'			10.79		5.0	11.8	101.1
	187°52'			5.29		4.0	10.8	
	195°12'			5.29		4.0	10.1	107
	193°10'			10.29		5.0	10.5	101.5
	196°30'			5.29		5.0	10.6	
	200°42'			5.29	1.0		11.45	
	204°50'			5.29	2.0		11.5	
	209°40'			5.29	2.0		11.25	
	208°50'			5.29	3.0		11.5	
	209°20'			5.29	3.0		10.35	101.5
	215°40'			5.29	5.0		11.30	101.5
	226°30'			5.29	5.0		10.9	101.5
	230°			10.79	7		10.0	101.5

410

Az	BS	FS	m	L	C	V
20°55			4.35	2		10.1
209°			4.35	4		10.2
20508			4.35	5.0		10.35
113°			4.35	4.		13.3
211°20			4.35	4.		7.2
112°20			9.85	3		12.1
223°45			4.35	3		5.46
2°49'30"			4.35	4		6.00
231°			4.35	4.		4.86
95			4.35	5		14.00
			9.85	5.		13.75
95°			4.35			
			9.85			
			10.31			
10	4.20					
			10.37			
	4.19					
10 20°40'		4.40		6		10.4
20°08			4.61	2.0		6.95
199°30			10.11	9.00		11.0
224°20			4.61	4.00		6.4

107.15 L 3-31-49 111.35 R

11.35

E/C

107 L

L

R

101.5 R

107 L

107 L

107 L

R

101.5 R

101.5

107.15

111.35 on H2O 4-1-49 set 2°08 55 9

Apr 1-1949

101.08

111.40

107.21

107 L

L

L

111.61 = +1

411

111.35 107.21

10°

21 43 1

107.15

30

1/4 ∫ 2 ( )

101.5

111.35

101.5

7 35

1 53

107

12 9 5

13.5

on H2O 4-1-49

111.35 set 2°08 55 9

Apr 1-1949

3-31-49

412

Check 4-1-49

Direct feedback check from control chamber (down)

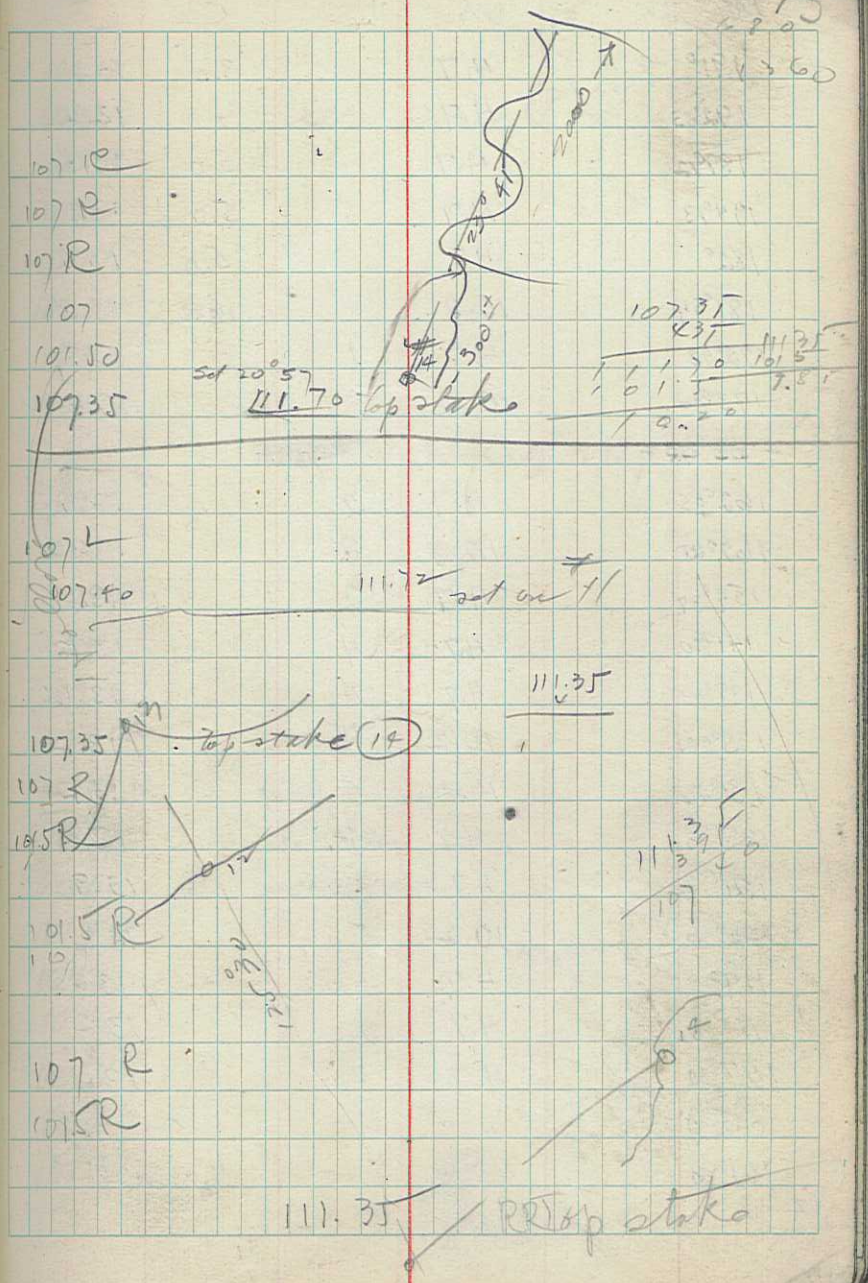
	$S	F
	0.	
5		—
5		
9		

413

on Strong arm 4-1-49

24.37
9
53.37 (12)
53
57.44
111.00
4.25
49.33

90°50'			4.70	1.		12.00
82°30			4.70	1.		13.2
78°48			4.70		7.00	13.8
72°			4.70	0		14.00
			4.70			
			10.70			
14	4.35					
331°				4.		5.20
335 10'				5.		5.9
11			4.37			
14						
20057	4.1				5.00	10.5
156°20					6.0	13.4
156°				0.		14.6
142			4.35	1.0		14.2
142°13			9.85	2		13.8
14 ~~20057~~	~~4.1~~				5.0	~~10.5~~
13						
12 125°3'			9.31	1.5		14
125°30			9.85	3		14.0
11 20352			3.95	2.0		10.1
10						



Hz	BS	FS	HI	L	C	D	—
191°			4.7		3.0	13.6	107 R
192°33			4.7		4.0	13.4	107 R
189°12			4.7		5.0	13.5	107 R
184°13			4.7		5.0	13.3	107 R
182°			4.7		5.0	13.2	107 R
181°54			10.2		6.0	13.5	101.5 R
172°13			4.7	1		13.8	107 R
173°35			10.2	1		13.6	101.5 R
66°48							
162°25			4.7	2		13.95	107 R
162°20			10.2	2		13.45	101.5 R
154°31			4.7	2		13.1	107 R
141°30			4.7	4		13.8	107 R
137°43			4.7	4		13.60	107 R
138°22			10.2	4		13.2	101.5 R
131°56			10.2	5		13.2	101.5 R
127°33			4.7	4.		13.	107 R
121°12			4.7	5.0		13.9	107 R
120°30			10.2	5.0		13.2	101.5 R
114°			4.7	4.0		13.65	107 R
111°35			4.7	3.0		13.2	107 R
107°30			4.7	3x0		13.4	107 R
102°53			10.2	3.0		13.3	101.5 R
101°50			4.7	3.0		13.7	107 R

14

sec. line (?) Long stick driven in at this point.

W¼C of NW of 1. ~~Corked post~~

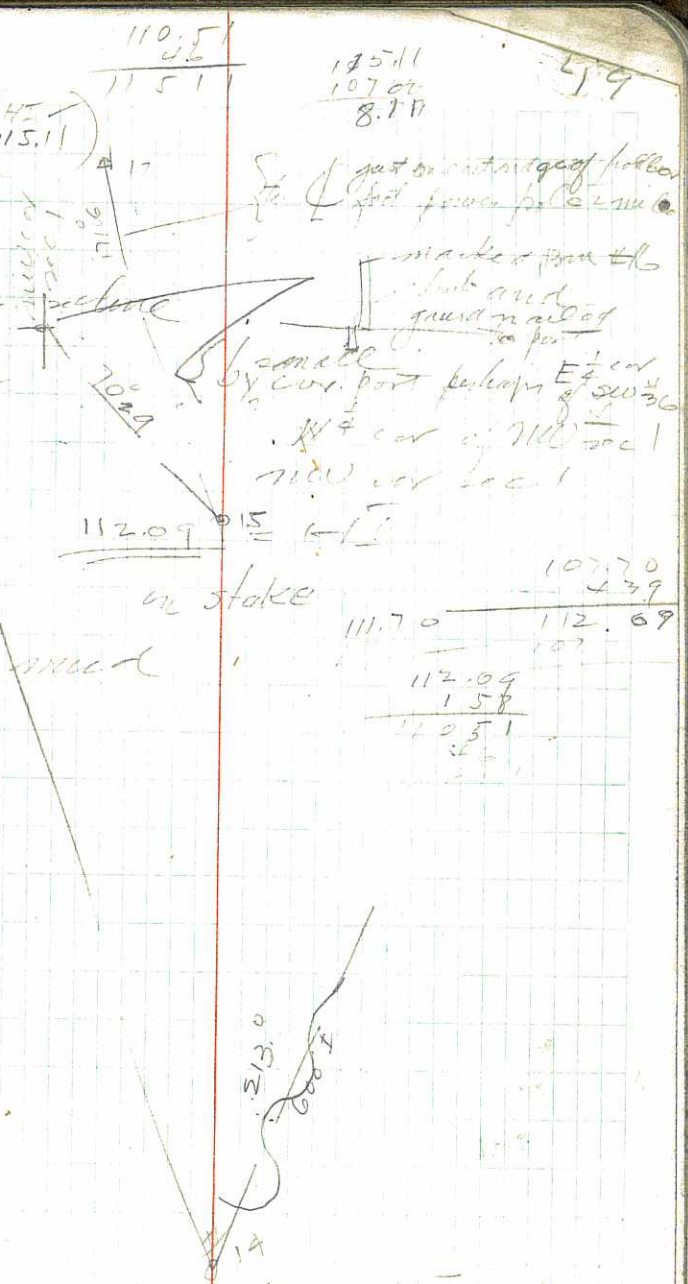
N. Line sec. 1

N. Line sec. 1

ach. offset

7.111.70
2 #14

	BS	FS	HI	L	C	Elev
17			7.89			107
17	4.60					
17 - 17°06	1.58			1.00		4.13
157°14			5.09	4.0		1.00
152°36			5.09	1.0		5.9
153°06			5.09	1.0		4.50
# 16 164°14			2.62	2		5.25
5031 ✓						
7029 ✓						
15	4.39					
# 10 (20°57)						
15 - 21°48	4.00				3.00	11.50
18 21316					2.00	10.2
215°15'			4.7		3.00	11.10
21°17			4.7		4.00	11.45
220°47			4.7		4.0	10.4
224°10			4.7		5.0	10.6
222°40			4.7	1.0	5.	10.7
223°48			4.7	2.0		11.6
230			4.7	4		11.4
234°40			4.7	3.0		10.55
242°			4.7	3.0		8.05
252°05			4.7	4.0		7.4
246°			4.7	4.0		7.85
136°25			10.20	10.00		5.22
14 -						10.44



		BS	FS	cm	L	C		
1	184			5.1	6x		13.4	R
2	175°20			8.1		10.0	13.4	R
	171°					10.00	13.4	R
	166°45			5.1	1x		7.2	R
	158°10			5.1	4x		13.7	R
2	149°40			5.1		9.0	13	107 R
19	139°			8.1	7.0		13.5	107 R
18	173°21		X.1	8.1	4.00		10.35	10
	162°			8.11	5.00		10.35	107 L
15	351°06							
17								

171 0 6.1

54

115.11

13.6

107 L

107 R

110.51

115.11

52

Ob on #1

26643
26641
26642 ~~26~~ 1120

to house ohm

53

Apr 1- 1949

N + 4° 19.8' 0.97
3378 .24
- 4 3308 3288
1644
3288

5 - + 4° 23.07 12
12

~~26~~ 42.12
60 47.46 12
7
4.5

8460

Strongarm Arm
Reservoir

54

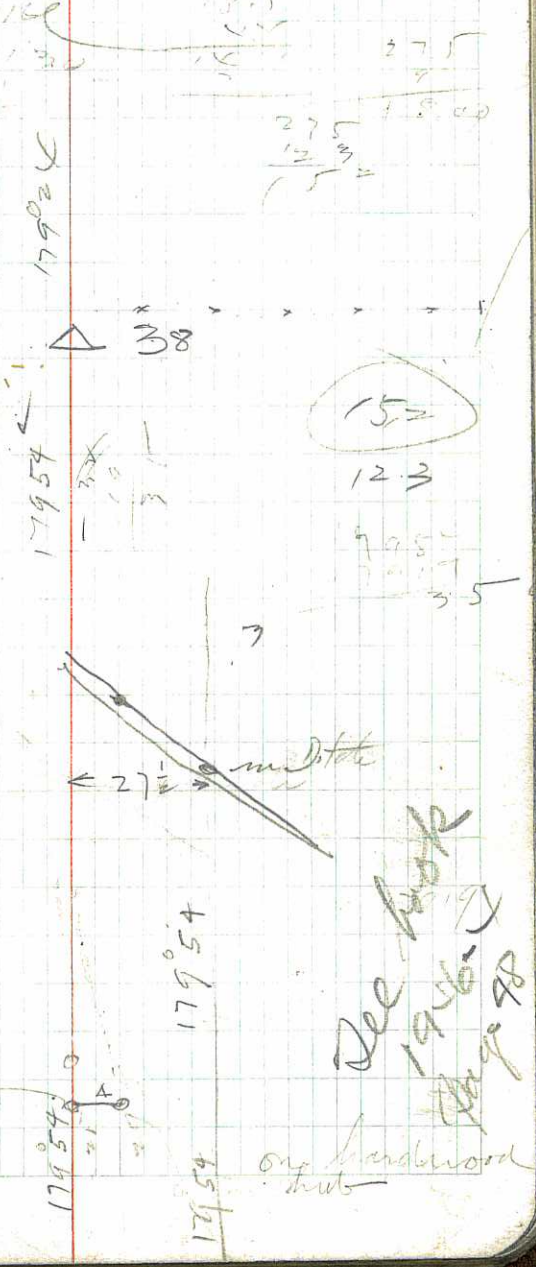
1810

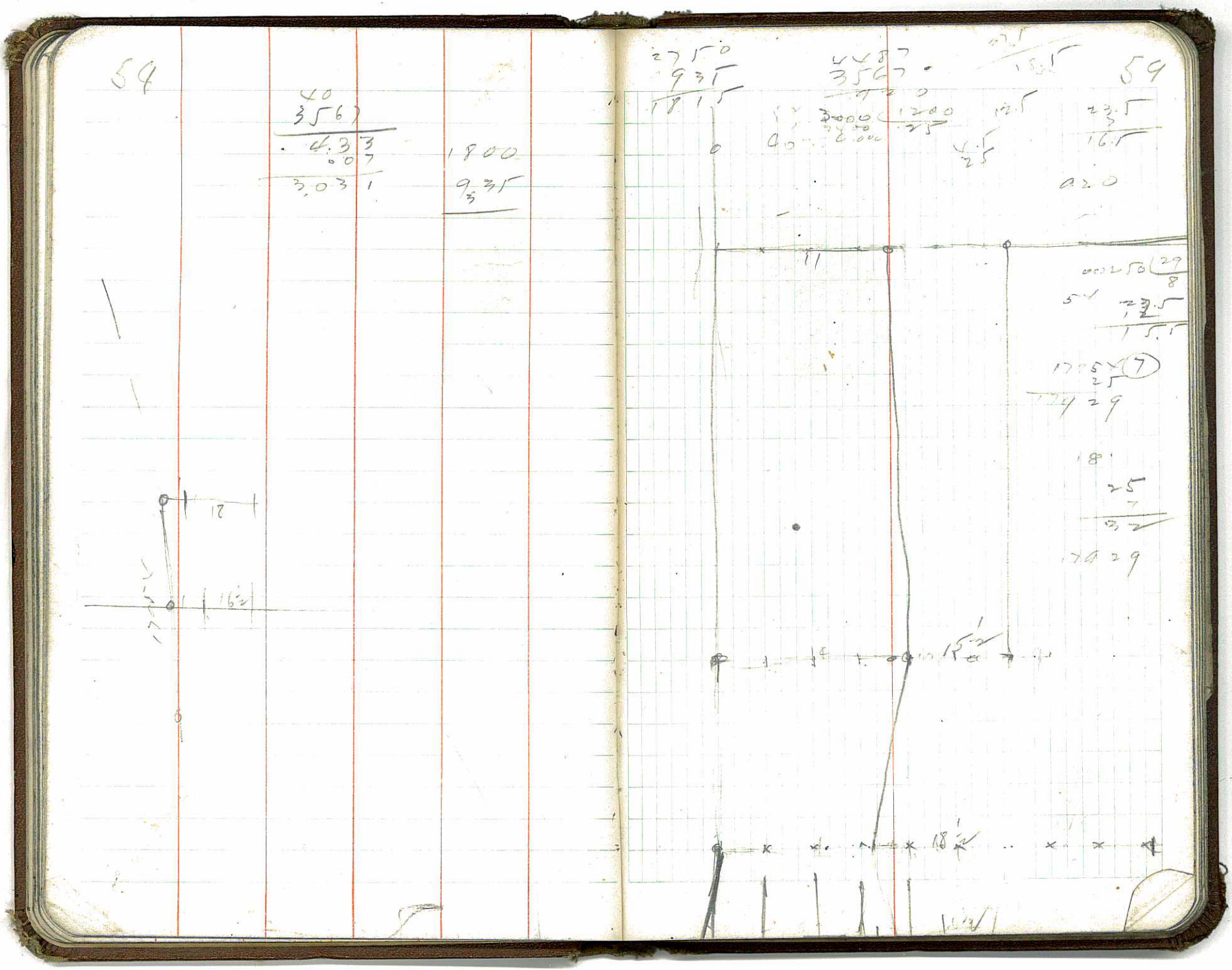
55

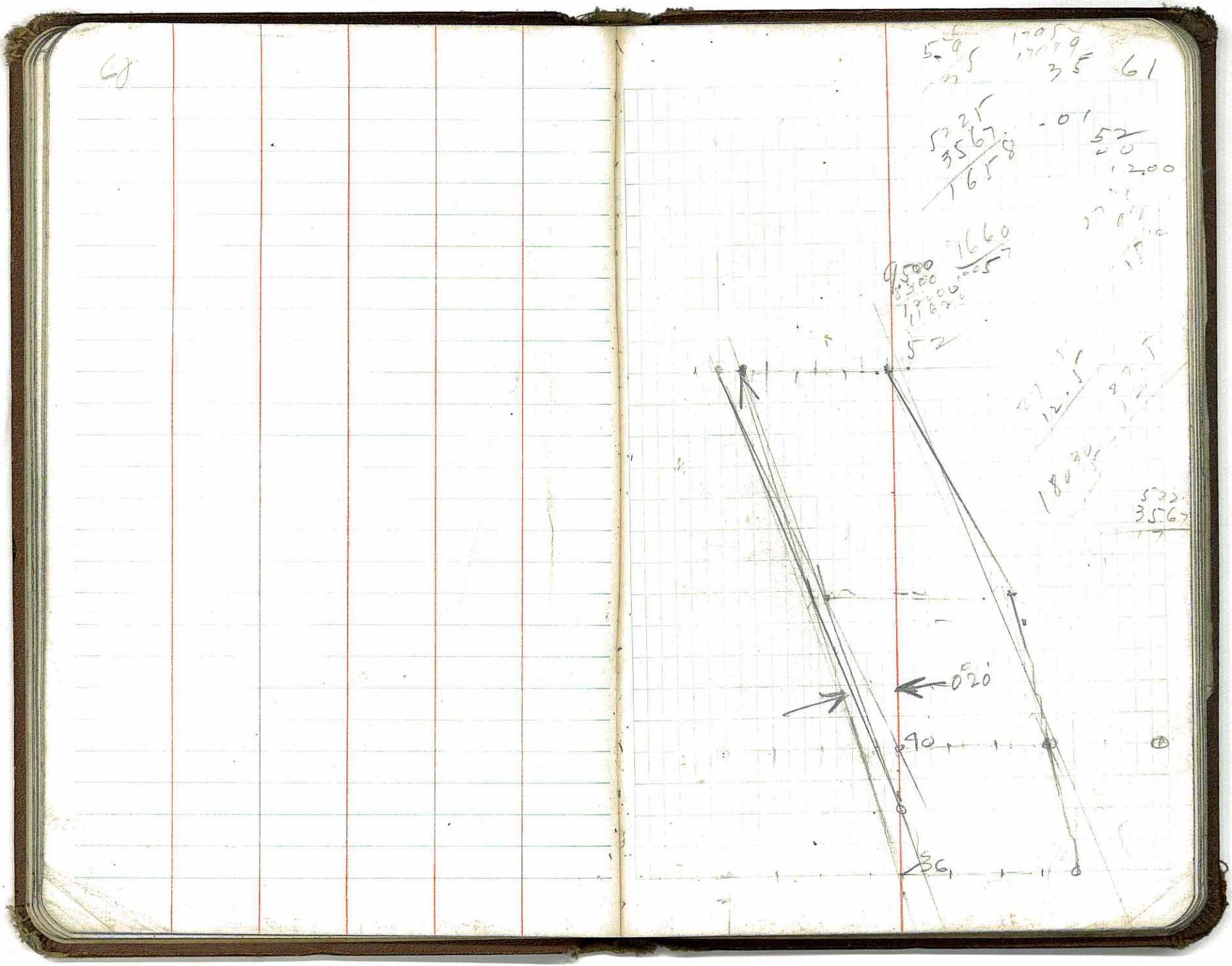
56	Bs	Fs	WM 6.8	86.68	
41			6.67 h	86.61	93.28
40 Ro			10.2	83.08	
40			8.85 h	84.43	
39 Ro WM	10.71	0.36		82.57	93.28
			2.70	80.23	
39			2.0	80.93	
			1.53 h	81.00	
38					
38 Ro WM			4.90	78.03	
38			4.70	78.23	
37 Ro WM			4.6 h	78.33	
			7.8	75.13	
37			7.00	75.93	
			6.2	76.73	
37			7.54 h	75.39	
Ro					
36					
35			10.5 h	72.43	
BM	12.00			70.93	82.93

Providence 4-7-1957

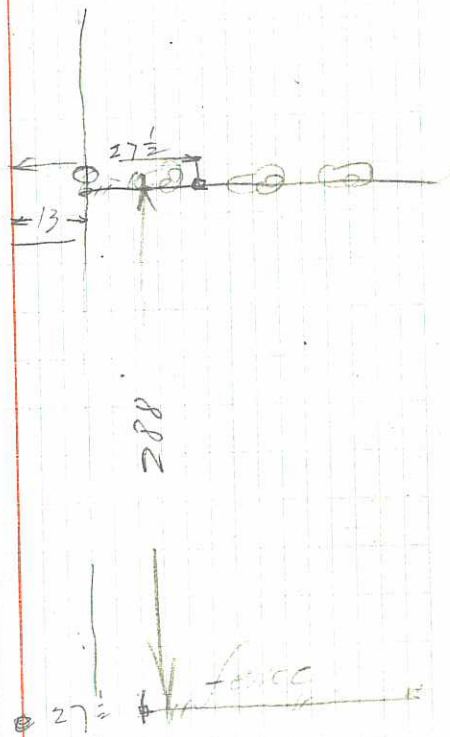
Hoo Cemetary Curve







	BS	FS	HI		
48					
+7 Ro			4.3	98.85	
wq			3.9	99.25	
47			3.1 bk	100.05	
46+09 Ro			6.3	96.85	
wq			4.9	95.25	
46			4.60 bk	98.55	
45+85 Ro			8.0	95.15	
wq	–		7.3	95.85	
45			7.48 bk	95.67	
44+85	10.40	0.53 bk		92.75	103.15
wq			0.7	93.58	
Ro			1.50	91.78	
44					
Ro			4.00	89.28	
wq			3.2	91.08	
43			2.85 bk	90.43	
42	no stake				
41+97 Ro			5.8	87.48	
wq			4.9	88.38	
41+97			4.6 bk	88.66	
Ro			8.00	85.28	93.28
41					



64	35	FS	MM		
BM3		2.53		118.61	
Ro			2.60	118.54	
WQ			2.60	118.74	
52+35			2.24 h	118.90	
+26 Ex Ro			3.50	117.64	
WQ			3.50	117.64	
+00 52			3.39 h	117.75	
51			6.30	114.84	
WQ			6.60	114.54	
51			6.86 h	114.28	
50 h	9.70	1.82 h		111.44	121.14
50 Ro			1.40	111.86	
WQ			1.30	111.96	
+00 50			1.82 h	111.44	
49 Ro			5.10	108.16	
WQ			4.7	108.56	
49			5.33 h	107.93	
48	10.47	0.36 h		102.79	113.26
48 WQ			0.6	107.55	
48 Ro			0.9	107.25	103.15

65

on face of Co cy S. with Brass tack

nail pounded

old ⊙ 9.61 ft — fence
> 10.8 ft

51+

87°13

179°24

obs'd with 51

Acc by
50

66

G

7.2

4.7

6.6

6.1

5.4

7.00

21+29

21+29

21+29

3 50

53.20

56.85

60.35

56.85

53.20

G

67

7.15

7.1

1.6

7.15

6.15

7.2

6.1

1.1

CZ-6" Conc

E of W

50' N

3

6

4

25'

Ditch

of 4

68

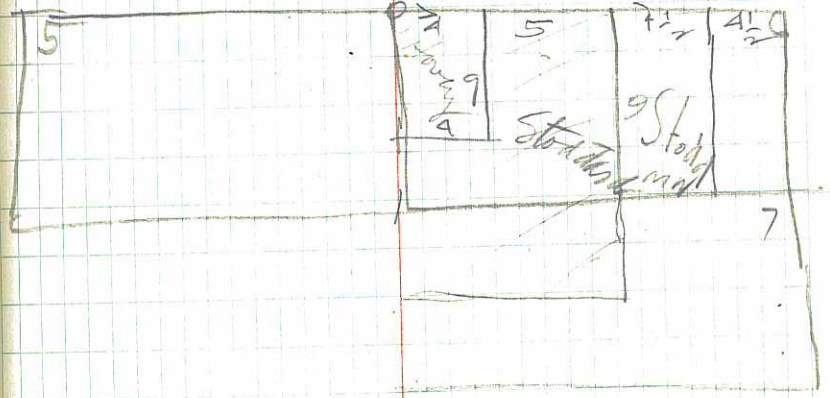
88 - 311

Com. at the NW cor Lot 6
Blk 7 - C Ct 5 rds
E 4 rds N 9 rds W 9 rds
S 6 cg

Albert G. Soddard

69

Survey for
L W & Hovey
4-11-49
mm Rock



(See over)

70

603.95
602.45 #

W ± 431.6

377.4

299.3

W ± 74.7

0

4/-14.-1949. 66.30 / 25 / 45

71

Les Hovey
Part of Lot 6 - Blk 7. E. City

2E → N

359 54

431.6

377.4

Garage about 2' E of line

Rockwall

Fence

64.5'±

90.0'

1x2 stake

200

XXI

66.00

270°

Rock wall

Joint

Gate

3 E

72

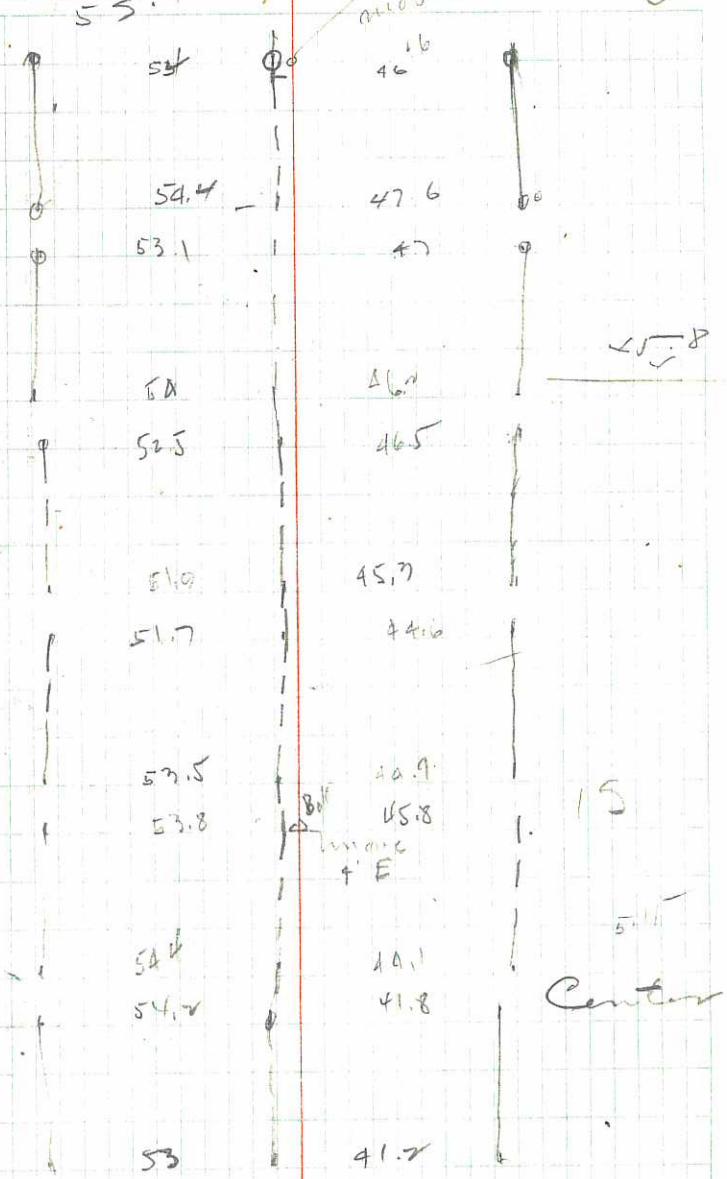
$\frac{35}{30}$ 49.5

$\frac{15}{70}$

73

apostolato · bolt at 55

move

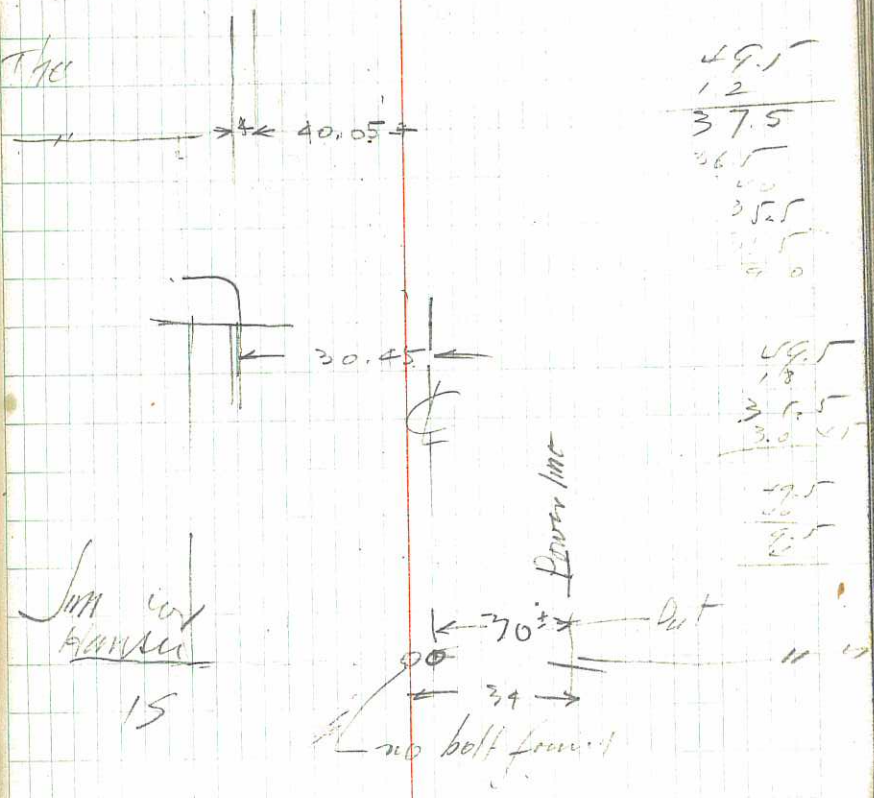


74

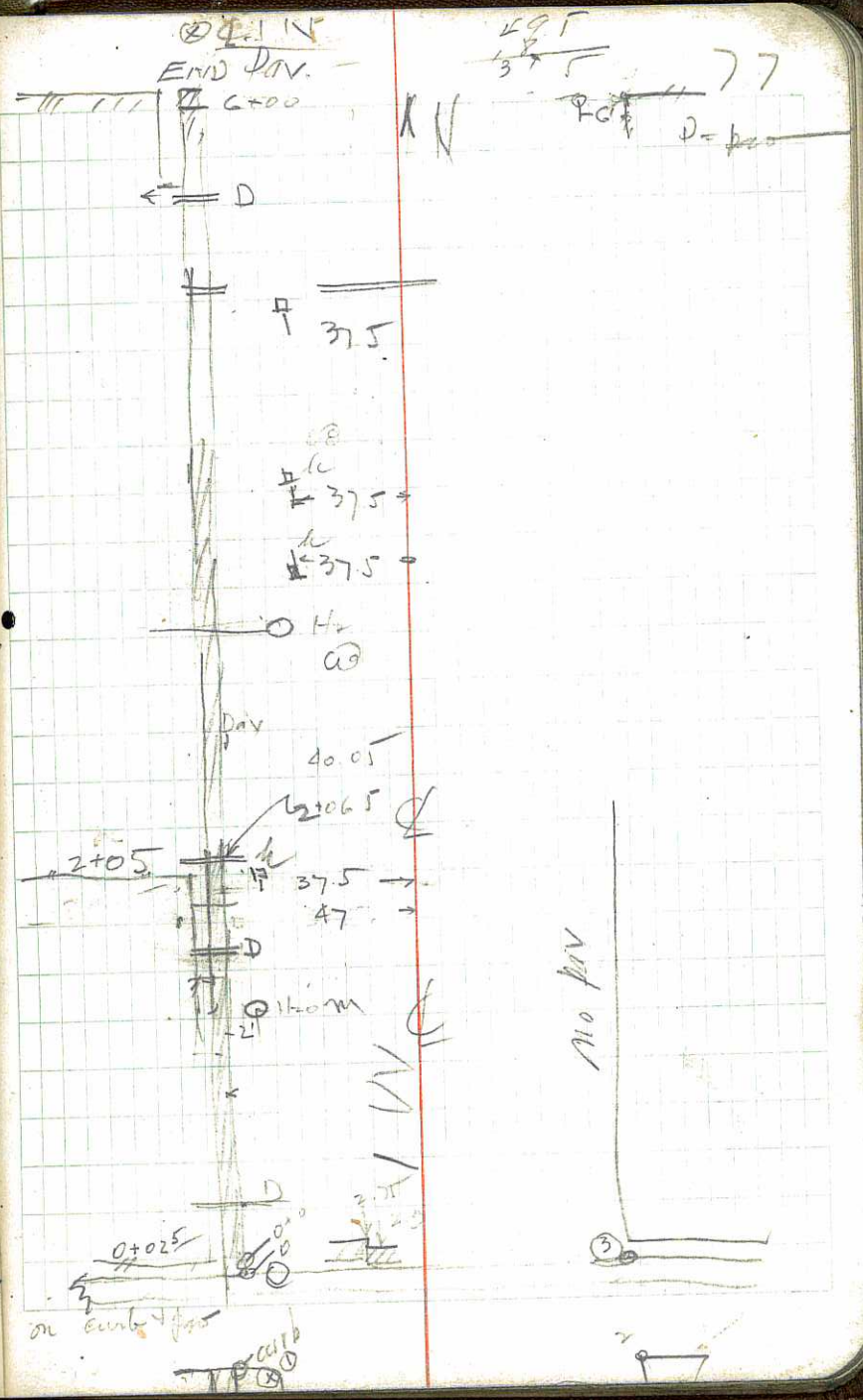
Providence 1st W 75

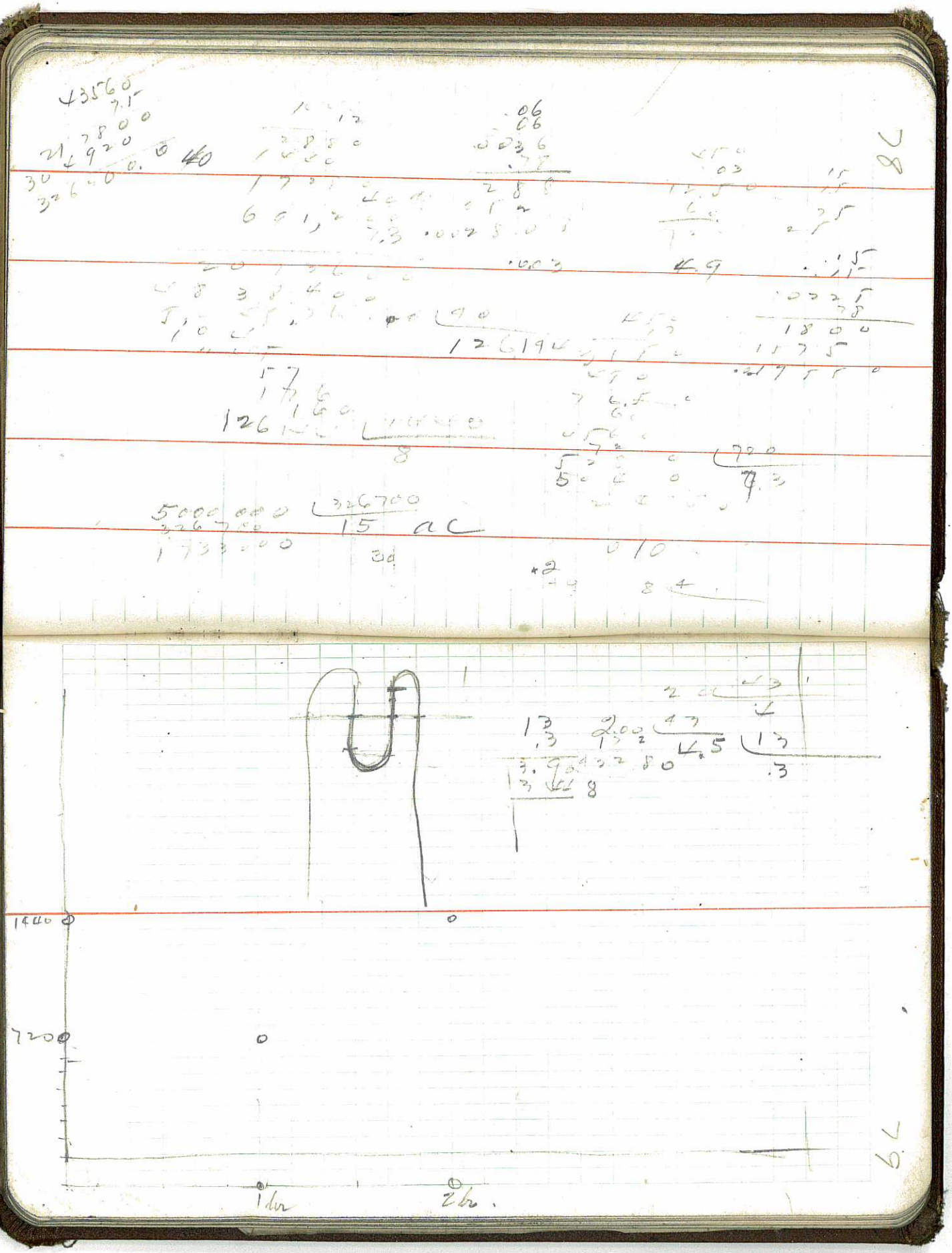
St. Survey

186

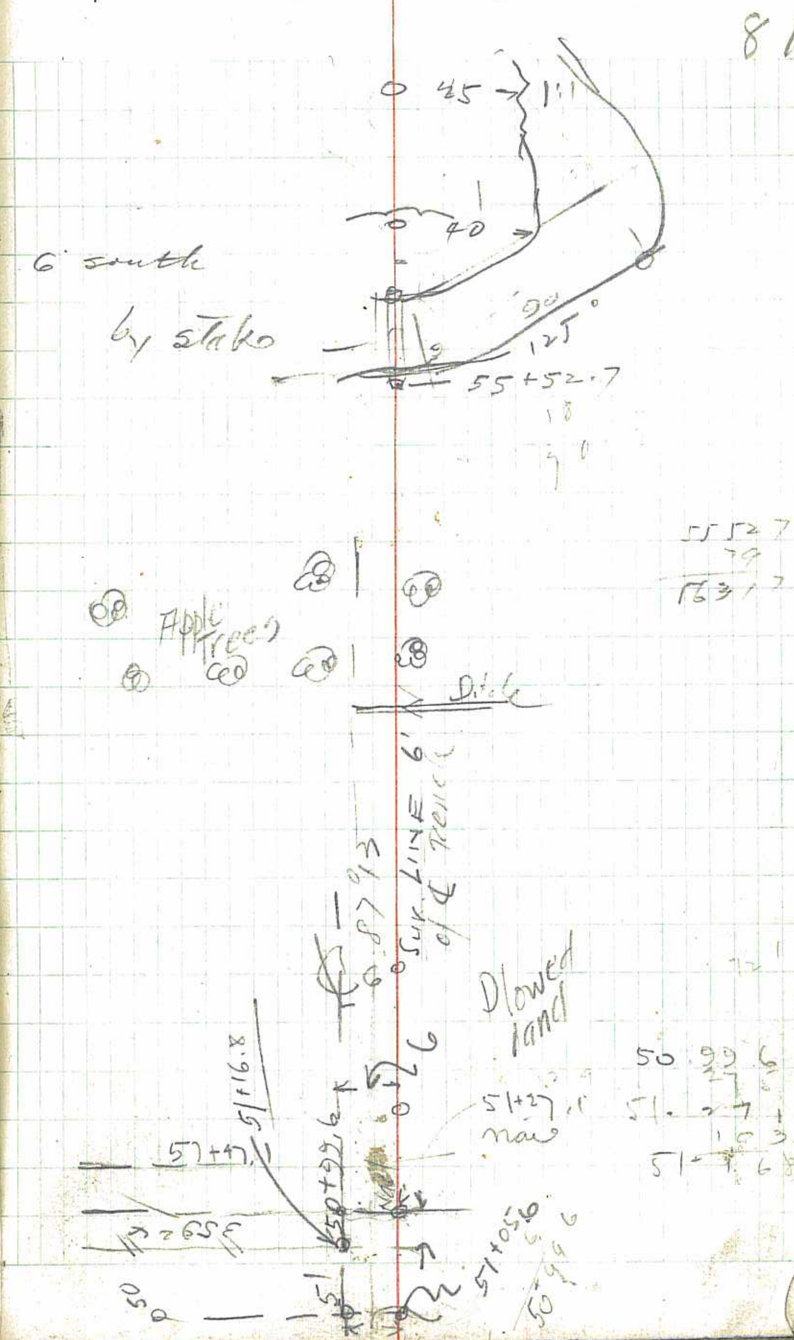


④	6.20	℄	R = Road	
6+04.1			6.60 R	106.15
6+04.1 ℄			8.20 P	106.55
5+00 R			5.3	107.45
5+00			6.60 P	106.15
+05 D			6.40 P	106.35
4+00 R			4.15	108.60
4+00			5.40 D	107.35
3+04 D			5.6 D	107.15
+03 ℄			4.50 ℄	107.45
3+00		Pass on Ends	2.00	110.75
3+00 R			3.40	109.35
3+00			4.80 P	107.95
+72			4.7 P	108.01
+72 ℄ over gr			4.67 ℄	108.08
+44			4.60 P	108.15
+44 ℄ over gr.			4.55 ℄	108.20
+16				
2+06.5 D			5.2 D ditch	107.55
2+05 ℄			3.97 ℄	108.78
2+05				
2+00 R			2.60	110.15
2			4.35 P	108.40
+73 D			5.2 P	107.55
+53 H2O				
1+00 R			2.10	110.65
1+00			3.60 P	109.15
0+00			2.90 P	109.85
-14			4.0 D	108.75
3			.50	112.25
3			0.55	112.20
0+00			2.75 P	110.00 112.75
1	2.90			109.85

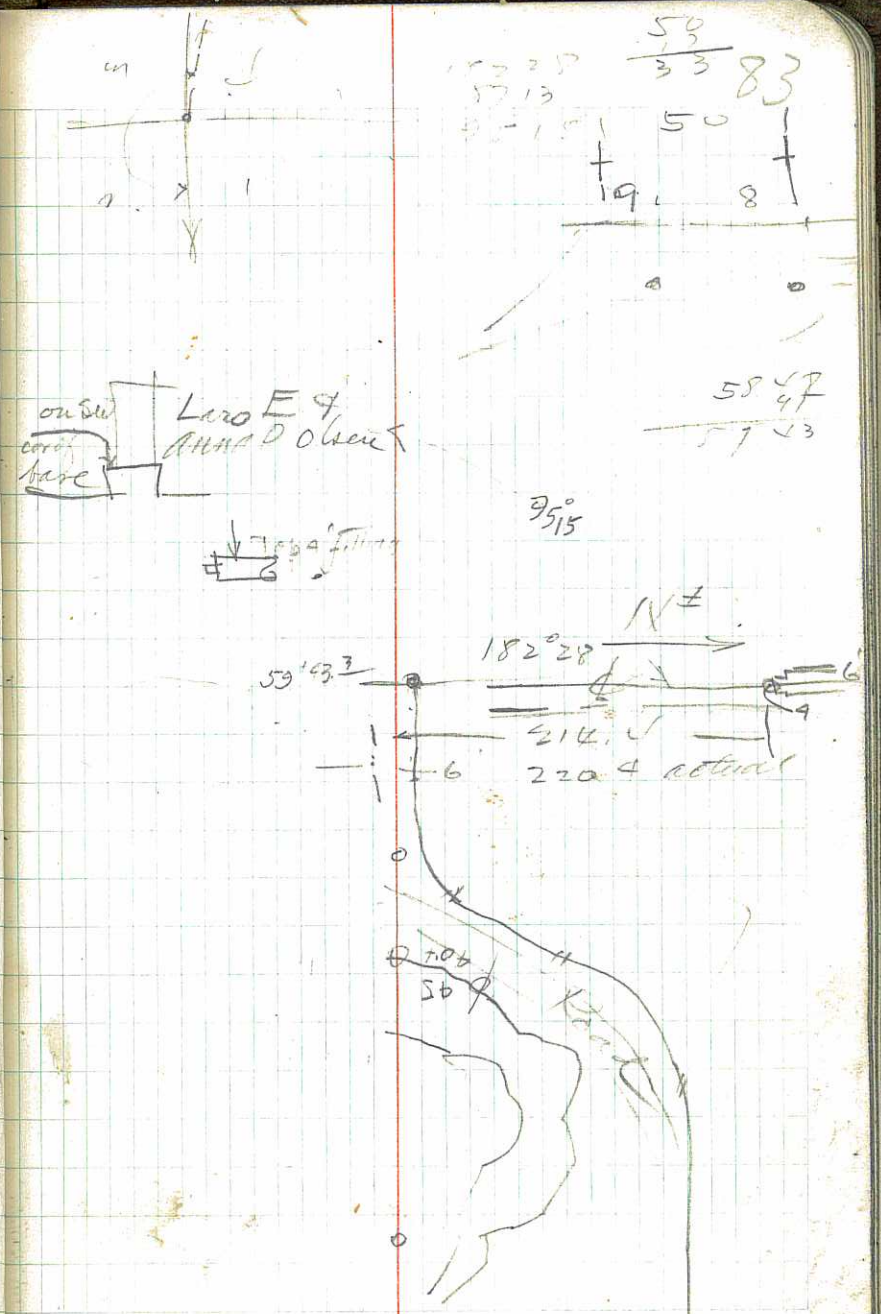



1440
720
1 hr
2 hr.

Sta.	B.S.	F.S.	Rod	Elev.	H.I.
56+87.7			17'±	117.71	
56'			7.6	122.11	
56+31.7			7.06 L	122.65	
+56'			9.80	119.91	
56			9.48 L	120.23	
55+52.7			0.5	129.21	
			0.4	129.31	
+52.7	0.10 L	0.02 L		129.61	129.71
56'			2.6	127.03	
55			2.17 L	127.46	
56'			7.00	122.63	
54			6.8 L	122.83	
	10.52	0.88		119.11	129.63
+27					
56			3.1	116.89	
53+00			2.73 L	117.26	
56			5.3	114.69	
52+00			5.05 L	114.94	
47.1					
51+27.1 nail					
51+16.8			4.67	115.32	
BM 3	1.38			118.61	119.99



82	BS	FS	HI		
		2.47		133.61	
			2.25	133.83	
59 +43.3					
59 +43.3			5.4	130.6	
59 +40.3			5.64	130.39	
56			4.30	131.28	
58 +92.3 +8.0			4.82	131.26	
56			5.80	130.28	
57 +75.3 +72.7			4.944	131.14	
	7.90	1.53		128.18	13608
56			12.0	117.71	
57 +55 17.7			11.76	117.95	
56 +30 87.7			17.±	112.71	



84

6"

4"

Robinson Pond

Jess

Blk

P

R

4"

PUR

Gauge

Drain

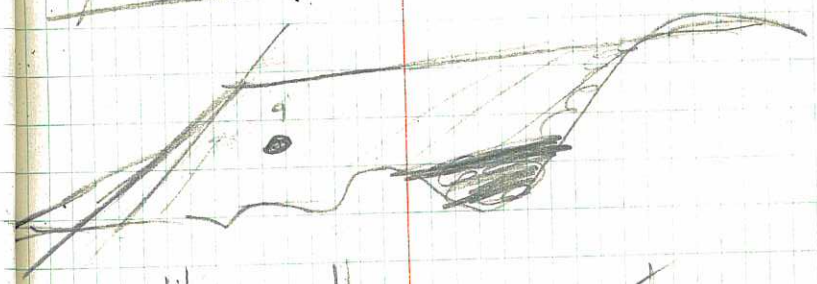
¾ drain

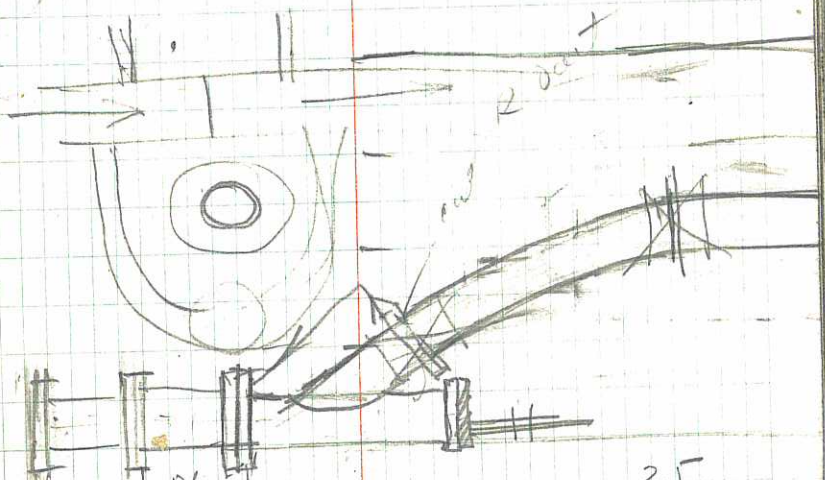
From

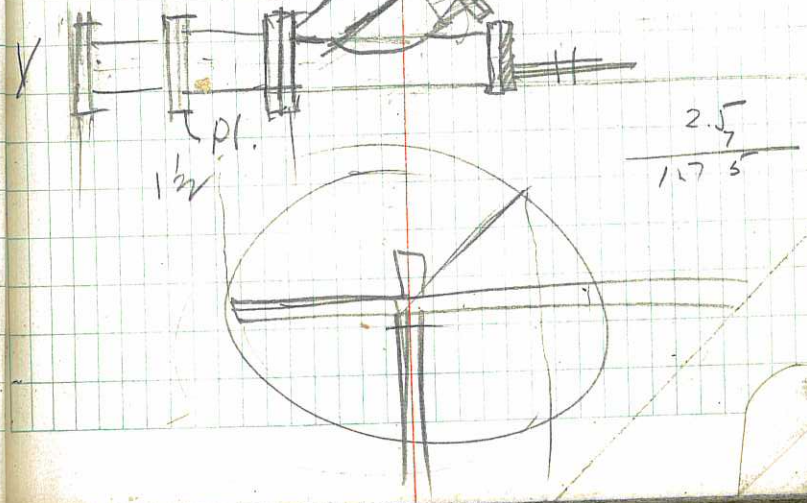
85

Study

Apr 18-19 '11



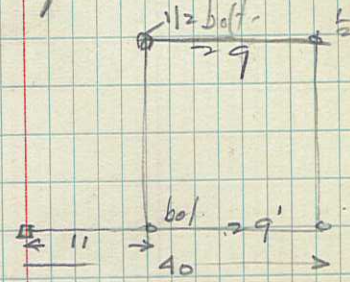


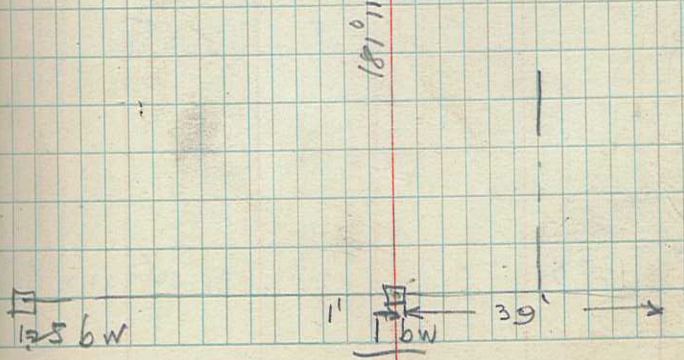


86

87

Survey for S. Wendenes "
Shoemaker
4-18-1949-m Block 18a
City limit E of P.O.





57		7.9	1+5.07	
56		10.5	12 2.47	
56'		4.8	1+8.17	
55+52.7				
57+72.7	1.83		131.14	132.97

Apr 18 1949 Levels at Fill
Profile Completion.

65

Time & memo Pvt.

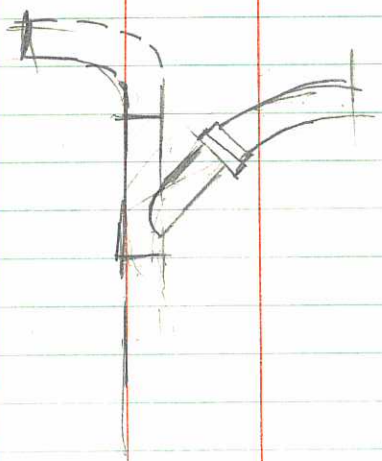
	14	15	16	18	19
Smith	1	8	8	8	
Smith dog	1				
Nelson dog				7	

Cemeter by Nielsen

Smith 25 hrs to 18

Nielsen 10 1/2 hrs on 18th

Logan Utah-



94

Locks down

			Elev	
55+43	9.90		126.17	
56+15		12.8±	123.27	
56+80		11.0	125.1	
57+50		9.5	127.57	
5				
58		4.9	131.17	
58+48		4.80	131.27	
	4.46	2.46	133.61	136.07

Prov. Centerline 95

6 1 3 5
8 7 3 9
6

Level on L branch

1 3 3.6 1
2 4 6
1 3 6 0 7
4 8
1 3 1 2

0

5+0

8

1

1

58+48

73-121

① C-Bennet.
Beg at a pt 91'4" S of NW cor Lot 5 - E 81; S 40' W 81 N 40' to beg x

79-46 ✓

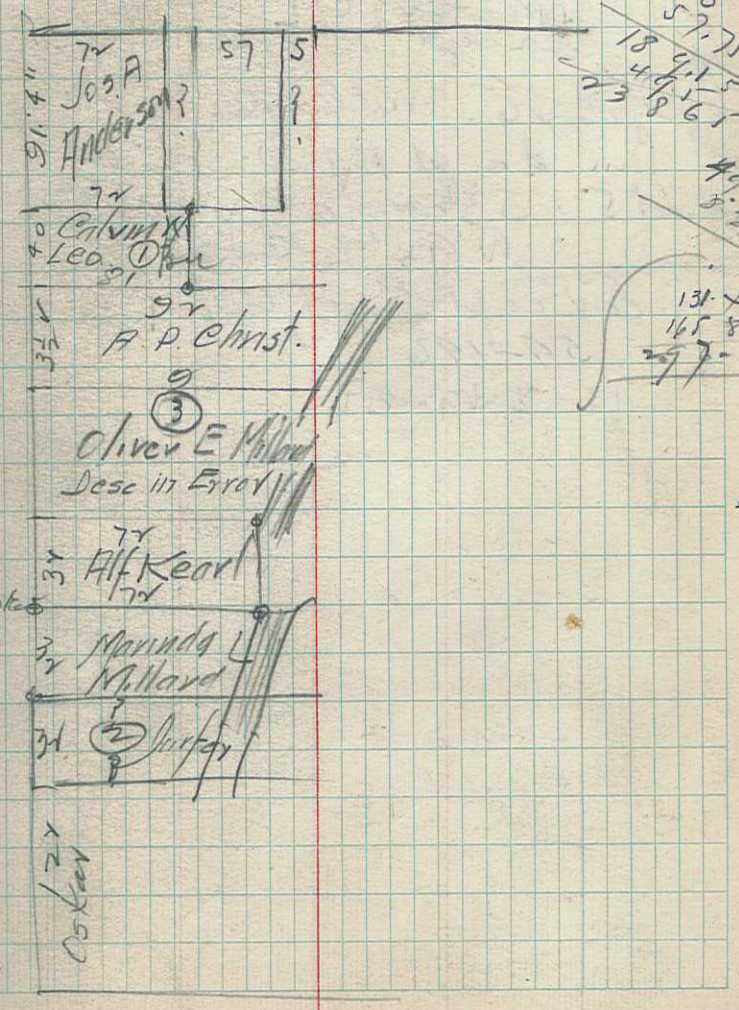
Aron Christenson
Com. 131'-4" S of NW cor Lot 5 - S 3½ r E 9 r N 3½ r W 9 r to beg
Except R of W for Canal

② Kearl
Beg at pt 3 r S of NW cor Lot 4; S 3 r. E to W bk Canal N & only W bank to pt due E of beg W to beg x

Kearl Beg 247.75' S of NW cor Lot 5 5½ r + to Center of Irrig-ation Canal E down C of D-Way 7 r N 3 rds to pt due E of beg W 7 r + to beg

(see over)

Study of Klose & Robert Chris. on E ½ Sect. 3-4 N-4-8-19E



Book 59-186

98 to Albert E Johnson &
Oliver E Miccard

Com 246.75 S of NW cor lot 5
S 3 rds -8" E 9 r N 3 r 8"
W 9 r to beg
B14-Page 7 L 25
Except R of W

to Oliver E. Millard

(3) Com 11 a 1/4 159 S of NW cor
lot 5, 53 1/2 r E 9 r N 3 1/2 r
W 9 r to beg
Except R of W
59-196
14-347-3 1/2

246.75
49.5
296.25

131 - 6" 99
49 6"
5 3"
18 8 13"
189.1"
189
91 3 3"
90
49 50
8 21
18 9.08

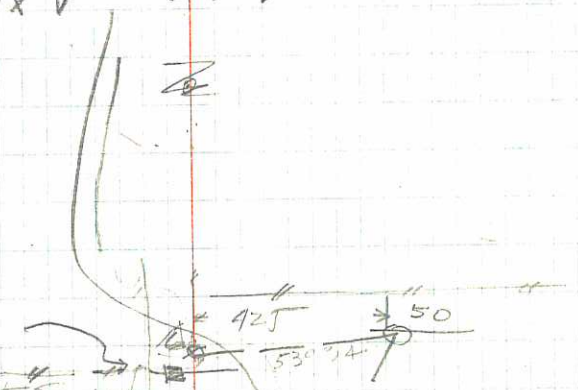
183°33'
217°16'
227°11'
5 53°34' West end

16
6 1600.00
14½ ± d road crossing
1365.3 ℄ cattle guard
1137
333° 1000 ft
316°42' E Triple Iron
5 1635
6 3°33' 1600
230°54' N ℄ W Tower KVNU
242°20' ℄ of KVNU Tower
183°33'

3

K. L. B
Apr. 30-1949

along Email
W KVNU Tower
E KVNU Tower



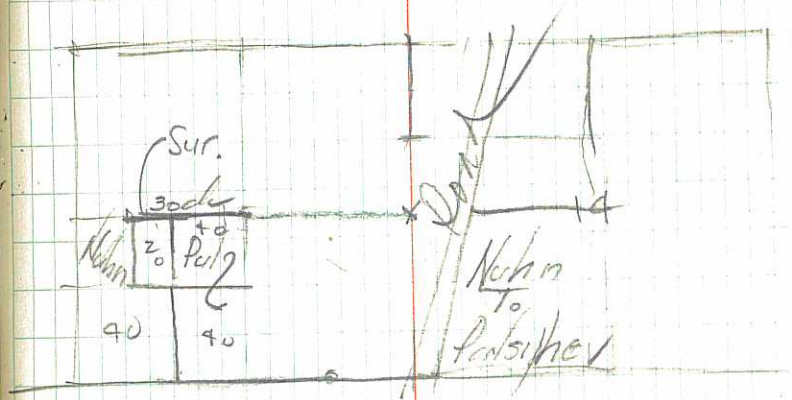
according to Sentinel
#1 peg En ℄ to Email ℄

W ℄ of KLB

Email 057

along rail
53 Benchmark on
on west flange
of 8 I beam

3 of I beam web


Sur.
Boden
Nahm
z₀
Pulz
40
40
Nahm
Pulsschlag

6.2

5.60

4.9

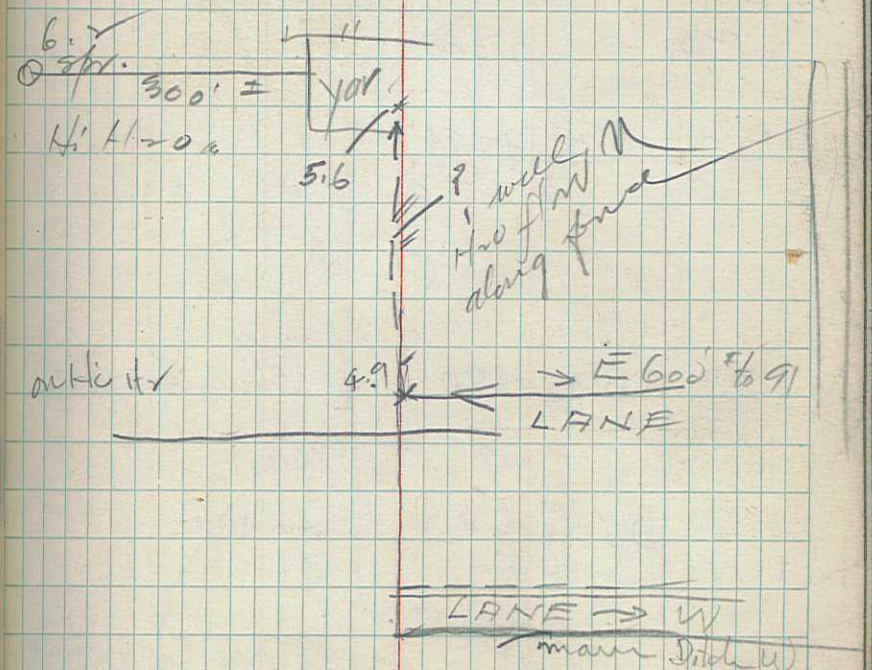
7.3

6.6±

Leads for Elkay

Robinson 5-13-1949

about 600' S of Barron Road on 91



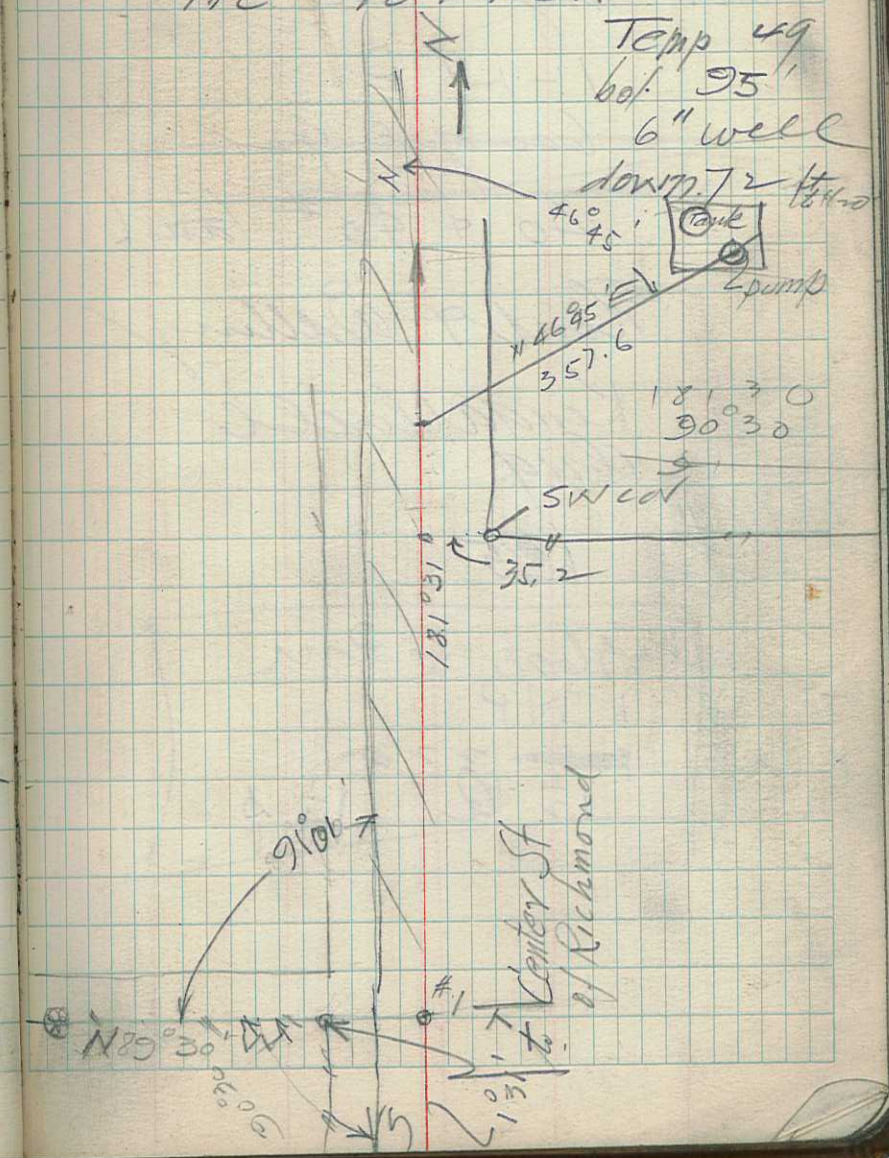
106

	226°45'	357.6	
		49	+ E. side St
23+00			
23		2300	
	181°31'	2294	
	181°31	880	℄ Chimney Creek
	90°30	64.7	Cor. Lot
1			

Dow R.A. Carstensen

107

Sur. for Wade Christenson
of Richmond 5-31-49
Tie to well.



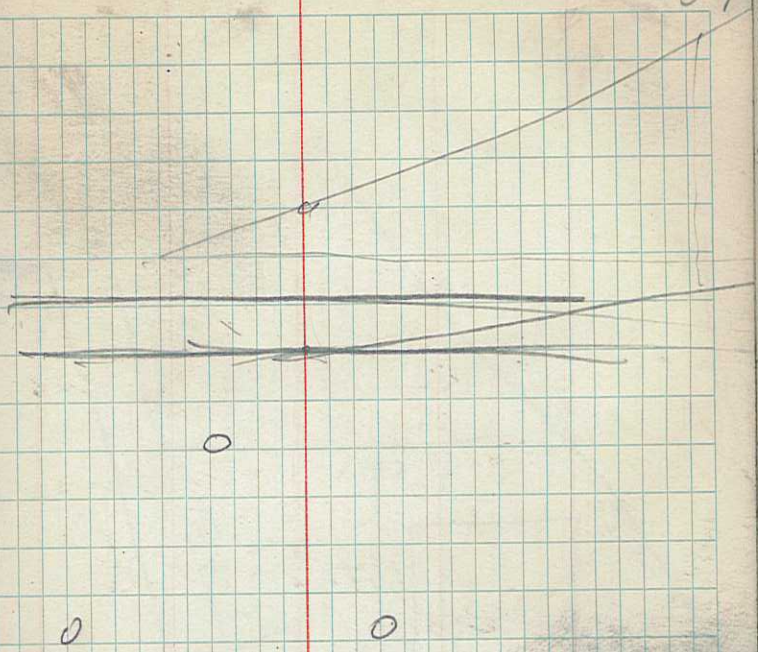
3 — impeller
air injection

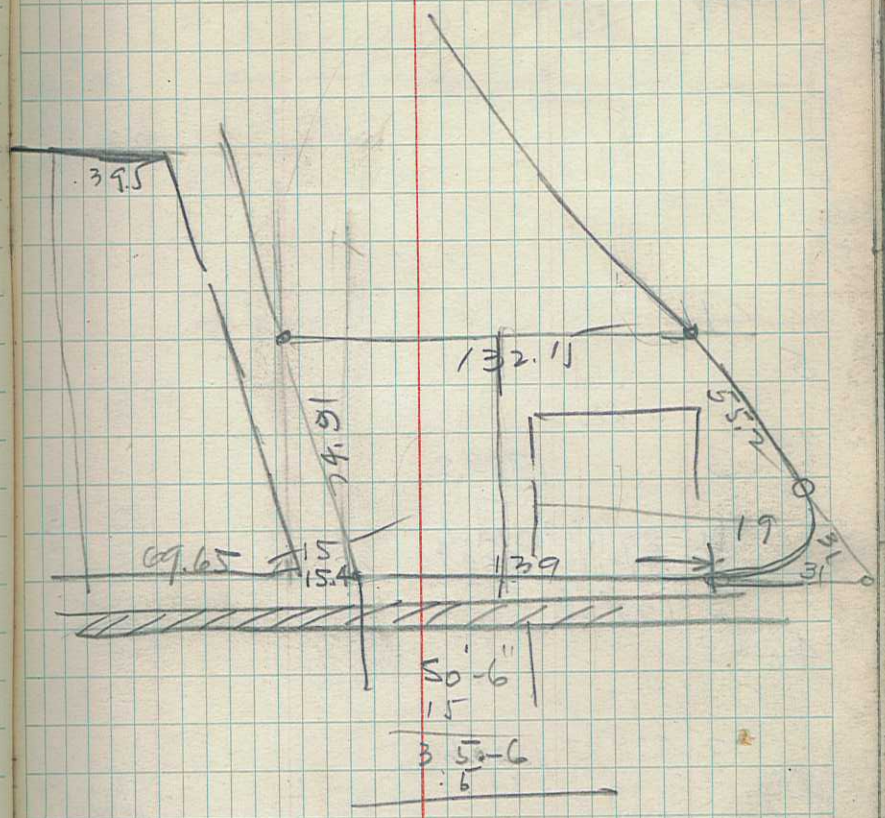
1 - H P.
600 gal per
40 + 40 # tank

Flint & Walling
Kendallville
Ind

605

3600 R P M
1 H P
~~10~~ 370
1½ Q 1¼ P




39.5
132.11
55.72
16.4
19
69.65
15
15.4
139
31
50'-6"
15
3 55-6
6

112

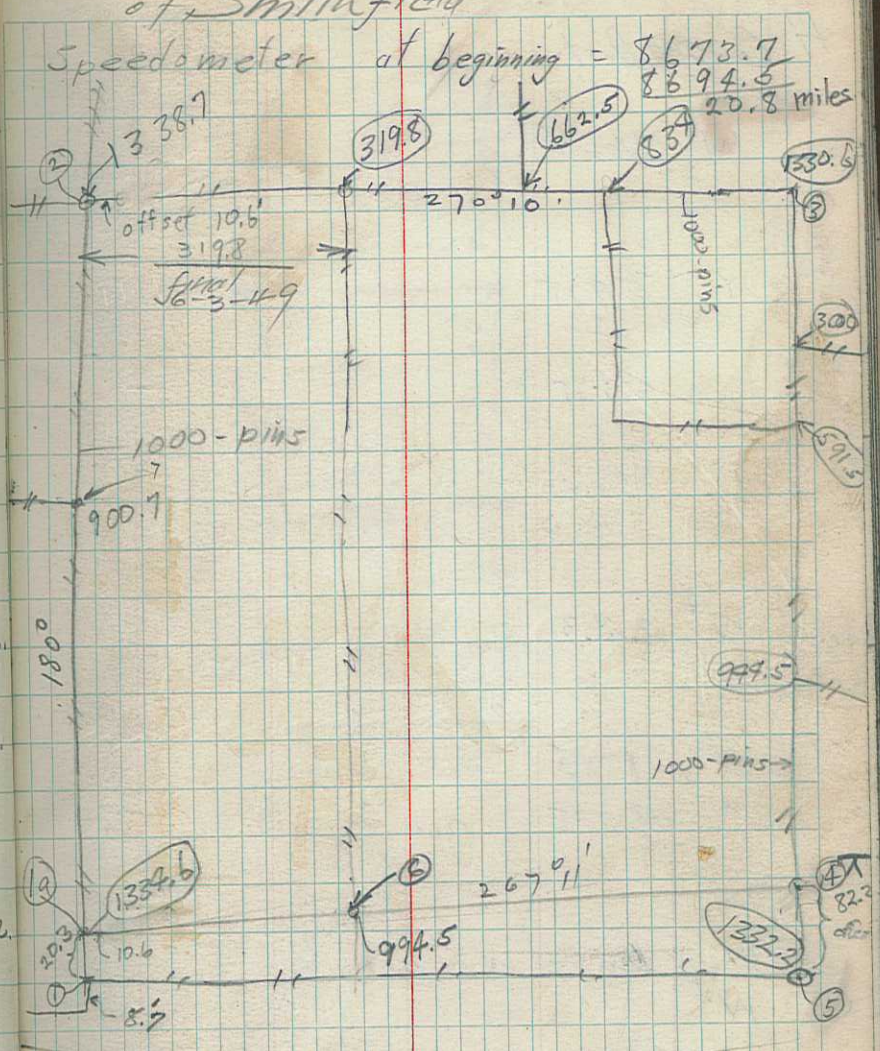
Field Notes for
6-2-1949

5	1			
	3		1332.2	
5	1a	87°11'	1334.6	SE cor.
	6	87°11'	994.5	
	3	179°53'		NE cor.
4 T				
	3	270°10'	1330.6	
2 T				NW cor.
	~~1~~	~~180°~~	~~900.7~~	
1a T	4	267°11'		
	2	180°0'	1338.7	
1 T	1	180°	900.7	SW cor.

113

Mrs. Joseph Petersen
of Smithfield

Speedometer at beginning = 8673.7
8694.5
20.8 miles



total mile 42.

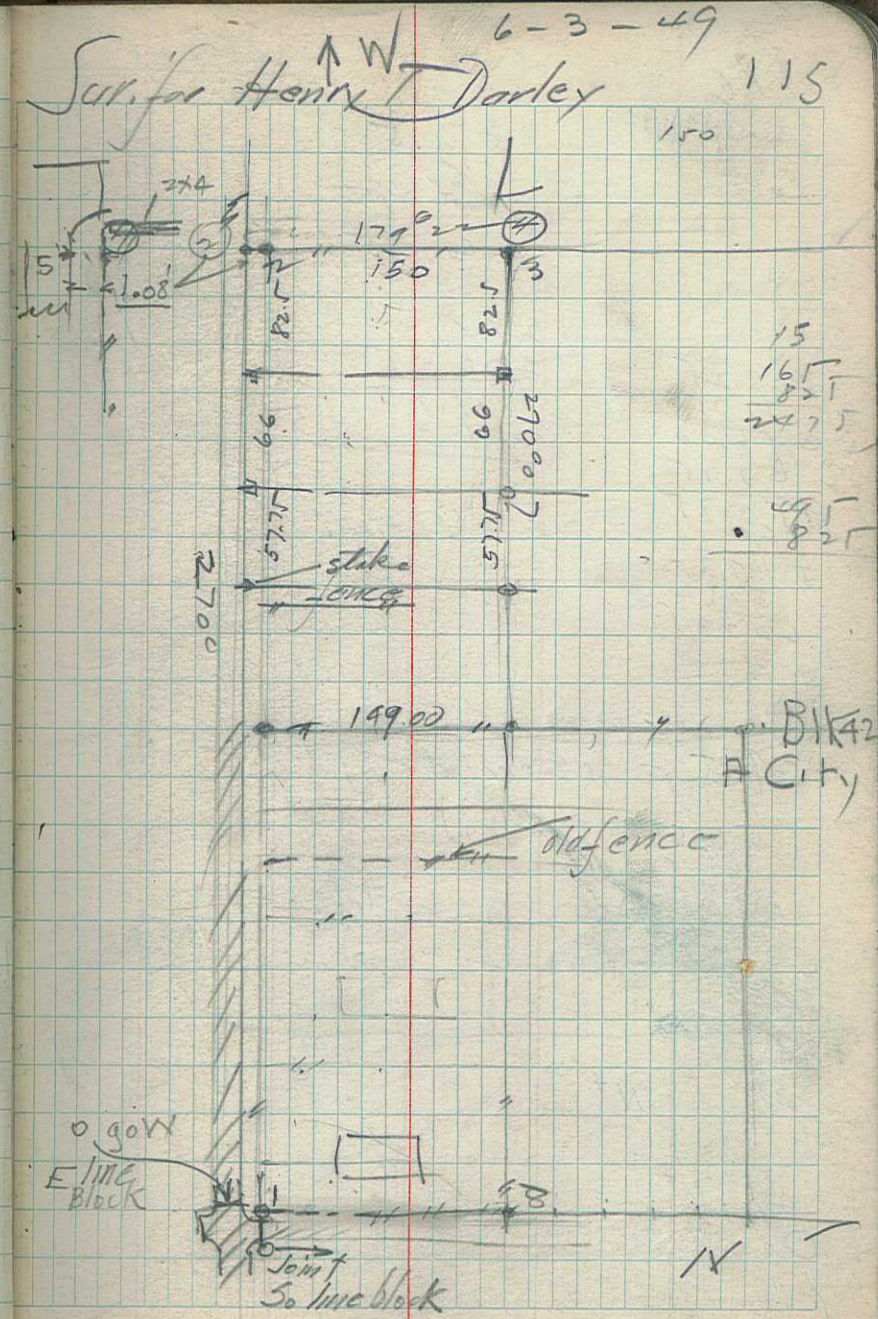
by Preston Olsen &
Wilford Ruf.

	Course	Dist.	
W		602.25	
		579.75	
		453.75	
		396.00	
		390.0	
W±		308.3	
W±		158.25	
W		90.75	no mark
W		60	no mark
W±			

6-3-49

Scr. for Henry T Darley

115



82.5
66
57.75
206.25

294
206.25
87.75
81.7

308.25
87.75
396.00
57.75
453.75
66
1975
825
60225

294.5 ± NE corner

NO6.25
57.75
148.5 270°07 stake
66
82.5 270°07 stake

4×

N±

0

49.5
82.5
577.5

12.5
16.5
6.25
49.5
20
3.0
1.25
6.25
20.3
0.75
66
60
0
297
1485.0
57.75
206.25
49.5
82.5
57.75
1000
82.5

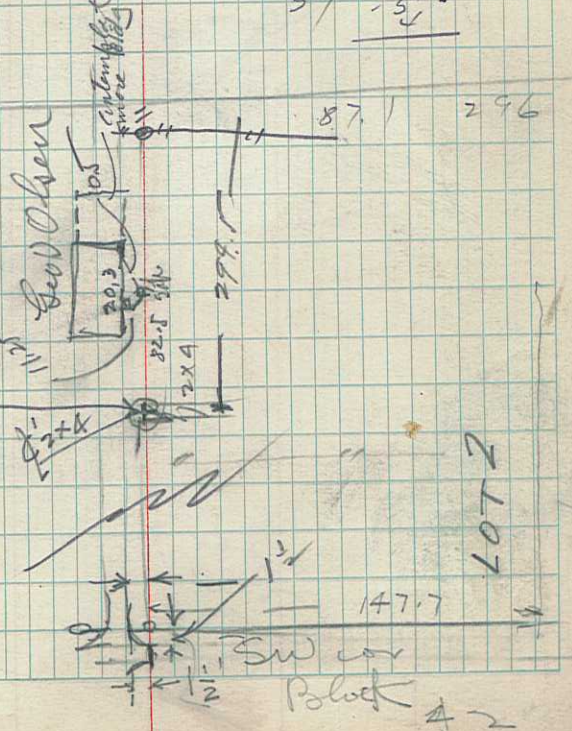
3390
3083
81.7
602.25
3083
294
81.7
3 | 212.3
0.8 | 212.3
53
81.7
602.25
308.2
294
60

212.3
57.75
15 | 1.5
5 | .5

END 2×4
NW corner lot 2

Lot 1

Block 42

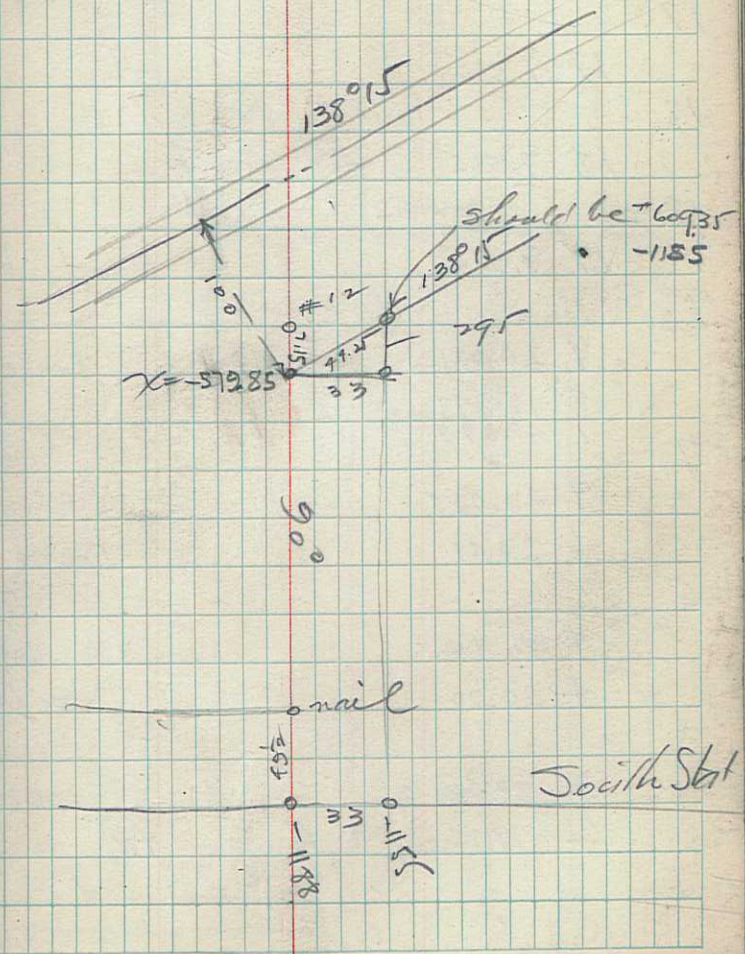


Quagle 150K

4-0 mdw. at Swan Lake

06752 mowers

Preston Lumber Co



120

Station	Dist.	
15	5.01	
16		
16	7.515	
17		
17	7.515	
18		
18	7.515	
19		
19	7.515	property dividing lin
1		
9	20.021	Fence South
8	19.978	
7 - 1	40.098	SW cor post post
7	40.025	SE cor post
6	20.41	Fence East
5		
5	40.014	NE cor post
4	20.00	sec line North
3		
3	39.964	cor. post
2	19.22 ch	NW cor post
1		

6-13-1949

121

Clark Est.

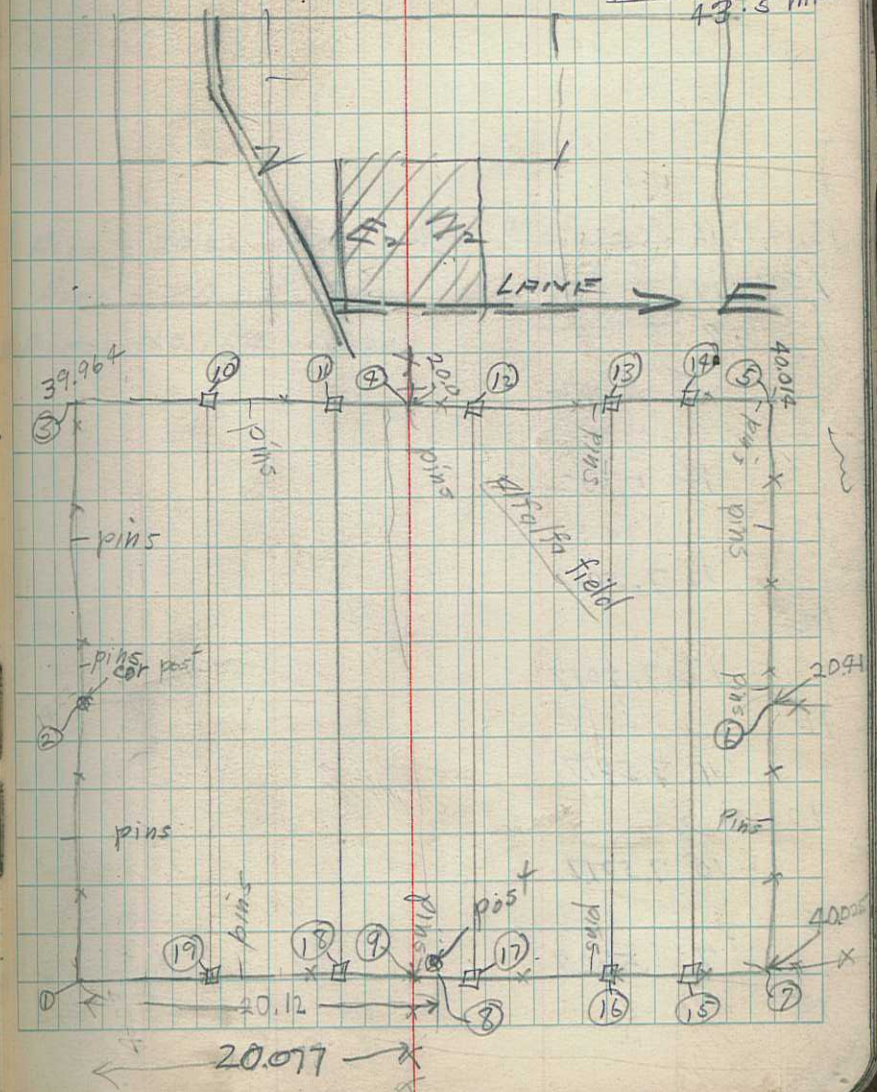
Clarkston Utah

Sec. 1 and 2 - 13N-2W

9071.3

9027.8

43.5 miles



13,14,15,16
1,3,10,19
1,3,5,7

5	5.002	
14		
14	5.002	
13		
13	7.5017	
12		
12	7.5017	
11		
11	7.5017	
10		
10	7.5017	
3		
7	5.028	property dividing
15		

And June 15 - 1940

Area = 20.02 acres - Also 14,5,7,15
Area = 30.03 Acres - Also 10,11,19,18, 11,12,17,18
12,13,16,17
Area = 160.164 Acres

Survey for 176

Plumsock Park

6-25-1949

On Riverside Drive 33'

11 19°00 65.82 87.65 not meas. ag but 1"N

10 216°44'20 55.37

9 126°44'20 87.65 11-16-49 87.50

8 91°08 80 to N+S fence

7 180°51 124.25

6 126°44'20

5 216°44'20 134.65

6 91°08 34.00 2"x2" stake

4 216°49'20 173.1

8 216°44'20 79.37 F. field 11-16-49

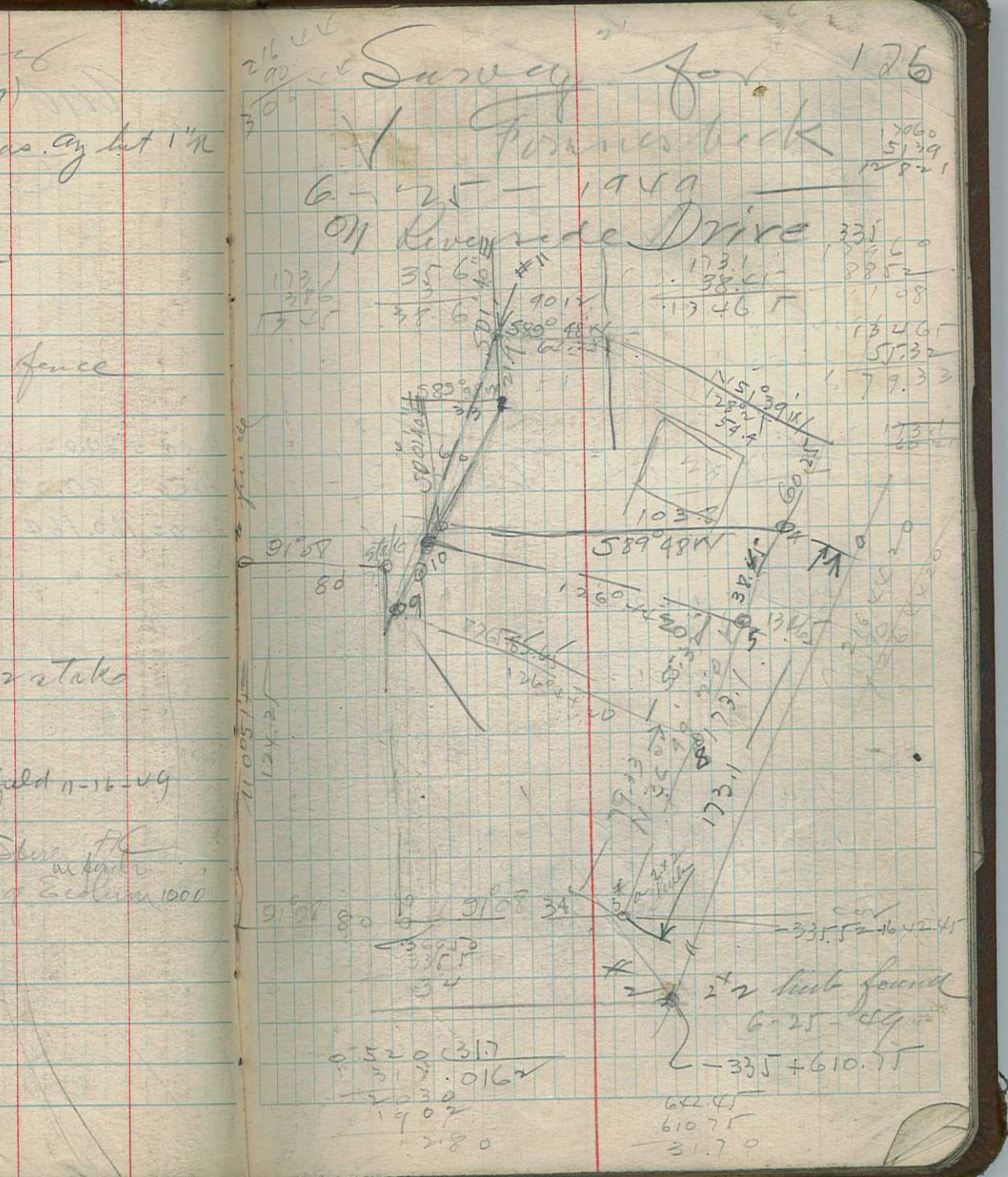
3 183°48 Main Stem Rt. at Wood Ecclesia 1000

223°50

3 179°0C 31.70

2

1



15 216°44' 208.4' To St 26' 5" apart

14 216°44' 123.42'

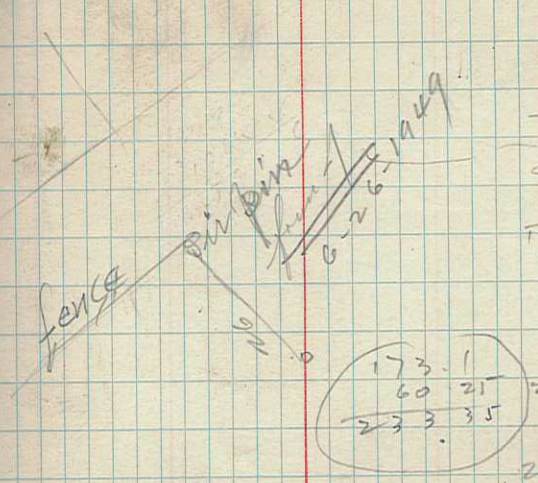
13 216°44' 121.4'

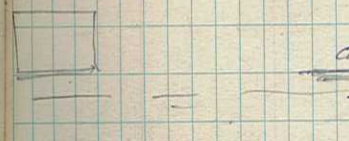
1 216°44' 57.2'

1a 216°44' 60.25'

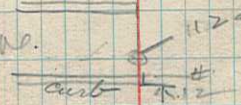
4

6-5 6-4 9





S. side to curb
mark on gate door.



60.12

60.25
60 12
8 7 8
208.4

3 4 3 3
1 5 3 2
1 7 3 1
3 3 5

173.1
60 21
233 35

208.4
123 0
85

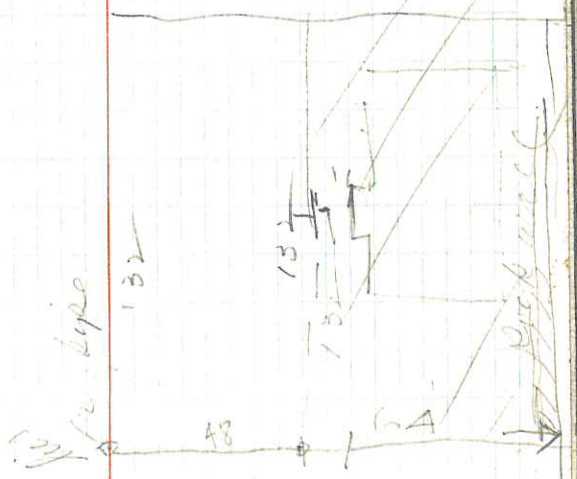
208.4
121 2
87

121.25
60 9
6 0

121.2
57
63

128

129



130

	20		62.50	62.60
18				
	19	89° 48'	64.28	
	18	36	2.50	
17				
	17	128° 21'	54.4	
16				
	16		23055	
		216° 20'	nuclin	
(corona)		183° 51'	H.C Spire	
3x	3	271° 08'	34'	
		91° 08'		
6x				
	5	36° 11' 20"	as marked 38.35	
4				

July 9 - 1949 PM 131

Survey at Reversed Curve

N 56° 20' E

38.35

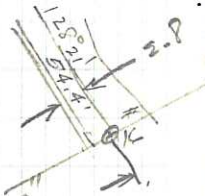
1347.5

173.1

60.25

25 3 8

old fd. not found but 60' S 8° 40' E of fd. (Recovered)



brace extreme E end

216° 20'
233.35

#

a 2×2 substantial

152.32 + x = y

6 × 3

25 11.7 2

128. 2

6 × 3 6

385.8

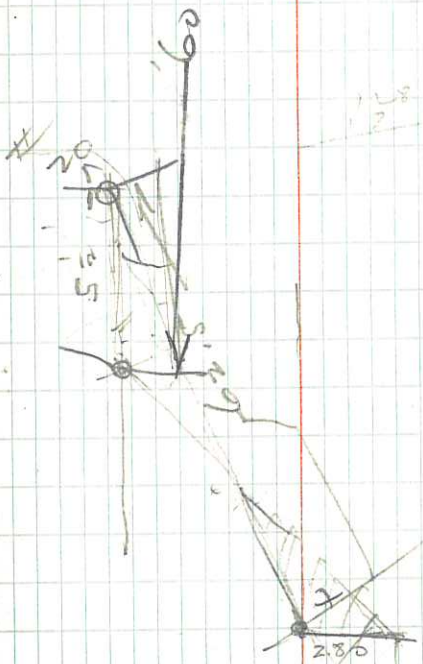
192.9

1 93

60 3

321.5

160



544 × 2.7 =

2.8

4352

10 8 8

1523 2

720

1472

8-47

① Donald W Vaughan
Beg at pt 9 r W of ¼ Cor
lot 1. N 9 r E 46 ; S 9 r
W 46 to beg

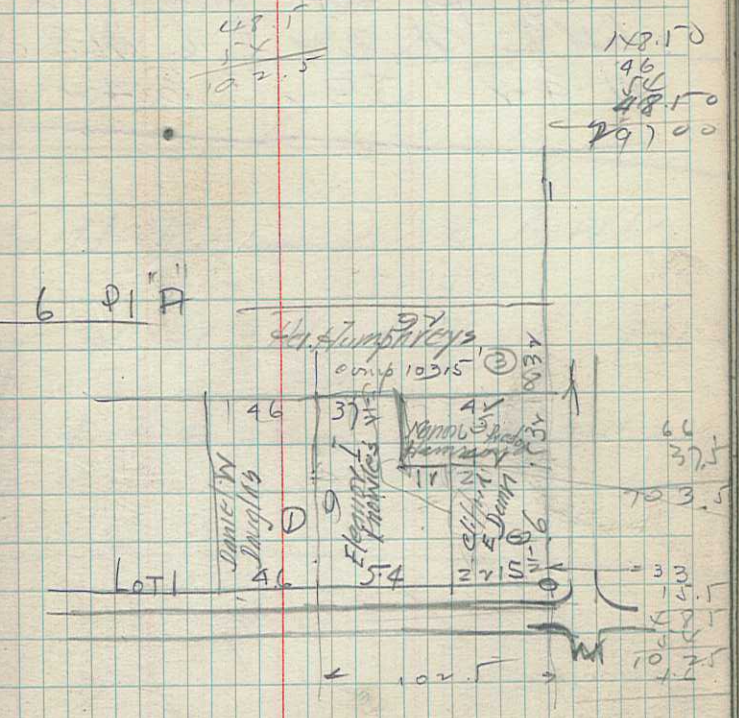
Clifford E Dunn
Beg ¼ Cor lot 1 —
② W 2 r 15½ along S l sd
lot ; N 6 r E 2 r 15½ to
E l sd lot S 6 r to beg

Humphreys —
Beg at pt 6 r S of N E cor
③ lot 8 — S 3 r 6 along E l
sd lot W 9 r to W l E ½
of sd lot N 3 r ; E 9 r to beg

Same as line 5 Page
Knowles Records —
Beg on E l Blk C at pt 6 r
N of ¼ Cor of Blk. N along
E l 3 r 6 pt 9 r 15 of
NE cor of lot 8 — in Blk
W 102.5' to pt 46 E of W
l of E ½ of lot 1-8. S 9 r 6
S l of Blk. E on S l sd Blk
46 to pt 37.7' W of ¼ Cor
of sd Blk N 6 r E 3 r 7' to beg

7-13-49

Survey for Mr Knowles
Block 5 - Pl. B City


6 Pl "A"
St. Humphreys
Lot 1
46
37
54
2 r 15
Vernon
Lumber
Co.
Yard
Office
Lumber
Shed
Planing
Mill
Shed
D
Lumber
Shed
Lumber
Shed
Lumber
Shed

136

Book 54-D 320 Deeds

Marion S Pinelow

Beg pt 6 rds N of SE cor Lot 1 N 3 rds ± to NE cor W 4 rds ; S 3 rds ± E 4 rds ± to beg

Oscar W Osborn & 137

Beg pt 5 rds N of pt 36 rds W of SE cor Blk 5 N 4 rds E 8 rds S 4 rds W 8 rds to beg

John H. Mor— to Paul Blk

Beg at pt 9 rds N of pt 36 rds W of SE cor Blk 5 N 4.44 rds ; E 12 rds S 4.44 rds ; W 12 rds

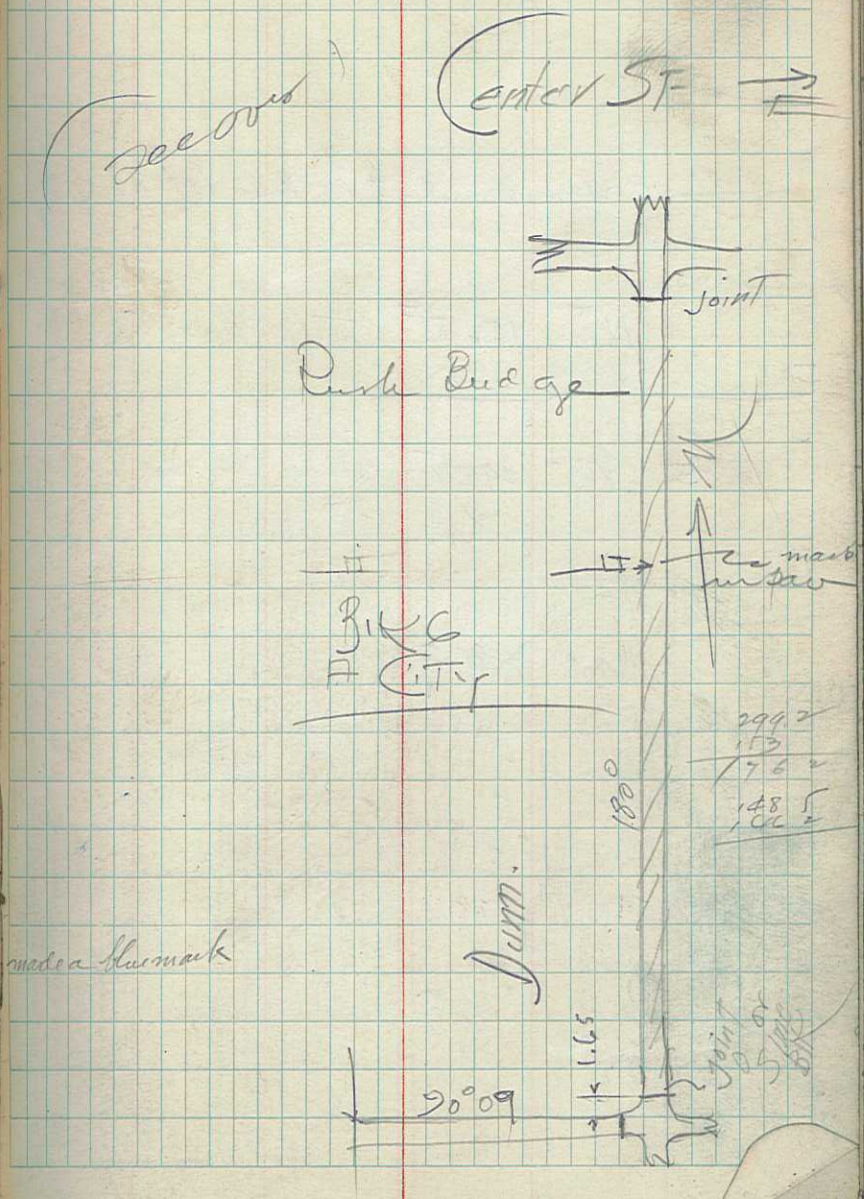
N	601.4	
N	444.95	
N	400.6	mark
N¼	299.2	old mark in bar.
	153	probable location
N½	99	no mark

⊙ on joint

7-14-1949

Survey for Mrs Knobloch

299.2
153
146.6



140

N 30 x.8 to N line lot 8 a fence

N+ 152.5± to lot line

5.

5 W± 299.9

W 149.35

W± 107.1

4 90°09 70
66

W±

3 to 6

299.2
149.6

153
149.6
3.4

149.6

302.8
153.4
149.6

1.6
3.00
1.5000
.0053
3.3
1.1.1

.0053 ÷ 10 = .0029

.0053
.0029
.0082
20
1.6 (200
.0053
70
37 1 0
153.00
37
152.63

Joint 299.9

N fence 149.35

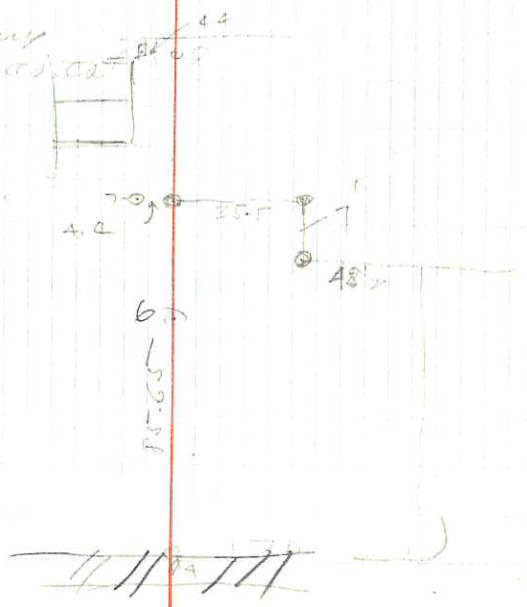
fence 107.1

090 West

142

10		0°	7.35	to
	10	270°00'	25.9	
		150	45.5	
9	9	90°00'	4.4	corr
8		[illegible]	[illegible]	corr
		270°00'	7.3	corr
	8	90	153.5	corr
	7	180°	108.00	
	6	180°	85.65	

143



		FS	RR	Dist		HI
	N50°W		7.50	118		
	E	4.40		10'		
9	349°				2.58 + 6° 42'	3.0
8	189°30		5.6	31	Above ore slue flow Clean out valve	
	195°20		5.6	36	valve	
4	331°9	4.52		66'± 5		
5	45°5		2.9	27'		
3	130°		8.48	21 ±	on the	
10	71°30		10.25	8	9.9	
			8.3)			
6	54°		4.88	26'		
1	80°20	4.40		16'		5324
	241°30					

2 green, Dry 2 Dry pines

Richmond — 7-15-49 145

Head works — Study of

on creek at 10

2.25 to H>O

1.5' above coal

coal

grade flume

on horizontal slope

July 15 - 1949

Study at junction of Pine Spring x

Pressure = 14 #

July 15 - 1949

July 19 - 1949

Pitot tube meas in branch from Boulder Canyon

Approx 4" 6"

14" press

v = 5.6

7-19-49

pressure = 14

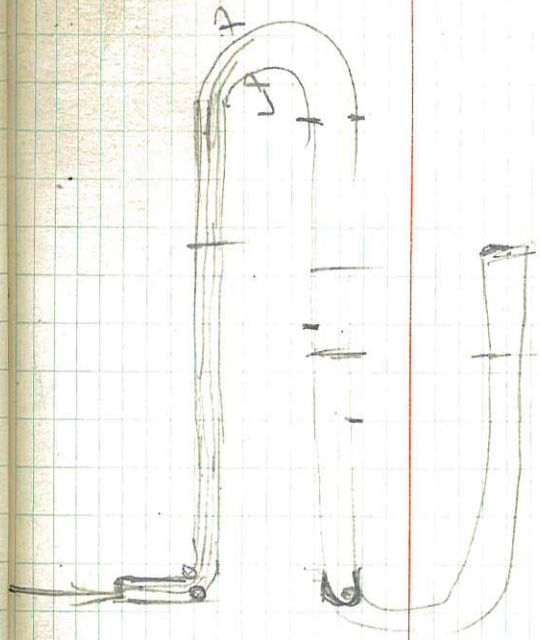
v = 6.6

Q = 0.25 × 6.6

= 1.65 CFS

Flow Line

h =



148

July 19-69

at Richmond

+

4675

Road

350

Silver poplars

40 gal

5525

290'

1 CFS±

Ditch

creek

5650

100'

1 CFP

5525

Spring

Brigantine

Bar 5650

Spruce 9.0 10 11.7

A

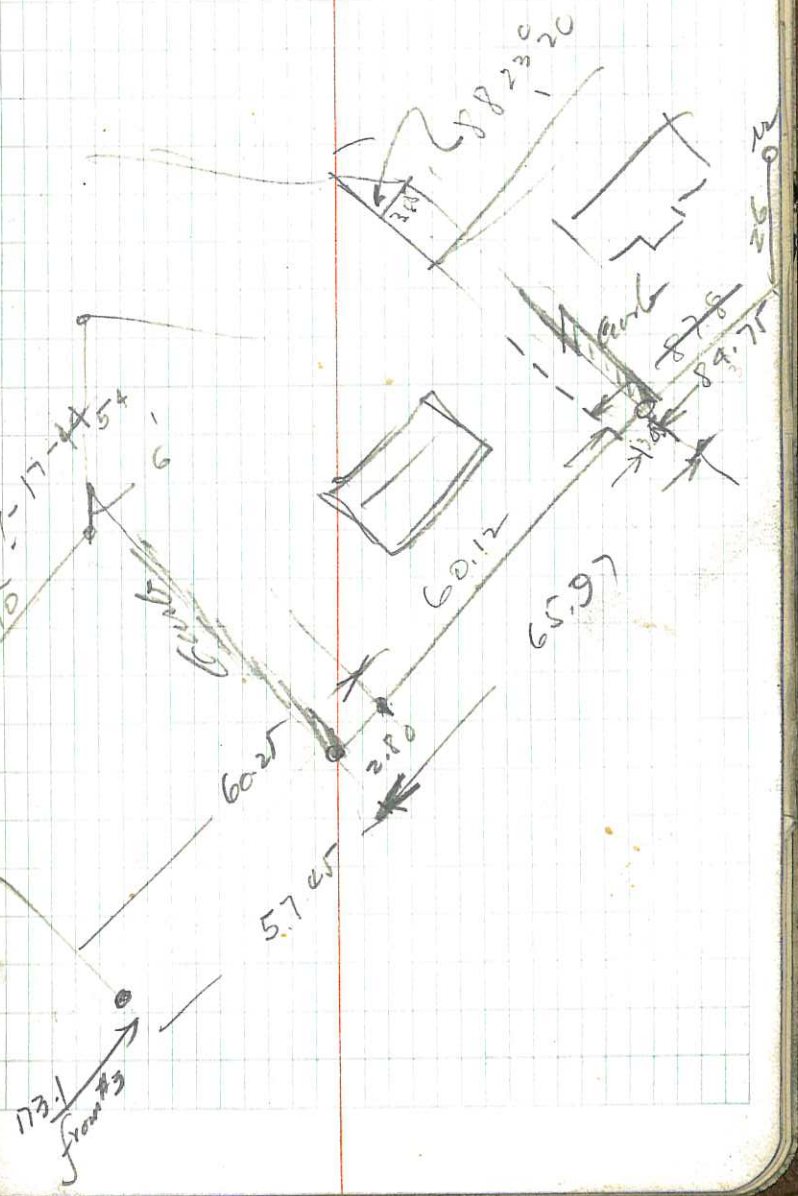
1 mile Railroad House

4675
+30
4705

149

150

Study at Revision 151



For Cache Co. study
water table soundings

8-24-1949

Two Tubes	#	Length		
None	2	7.2		5.12
S or	2	14.0		5.06
S	1	9.2		3.50
N	1	14.0		3.35
4N	4	14		4.70
S	4	7		4.70

	BS	FS	HI	Elev	+H
	0.43			4704.31	
		11.91			
	0.28				
		11.86			
	2.95				
		8.55		4695.65	

4+70 X on pole W. side → S

4+70 } Ends

Sta 7+44

8-25-49

Levels from BM City
971 4 8 81 - Elev. from
Mueller 4704.31

asphalt Schaub ave

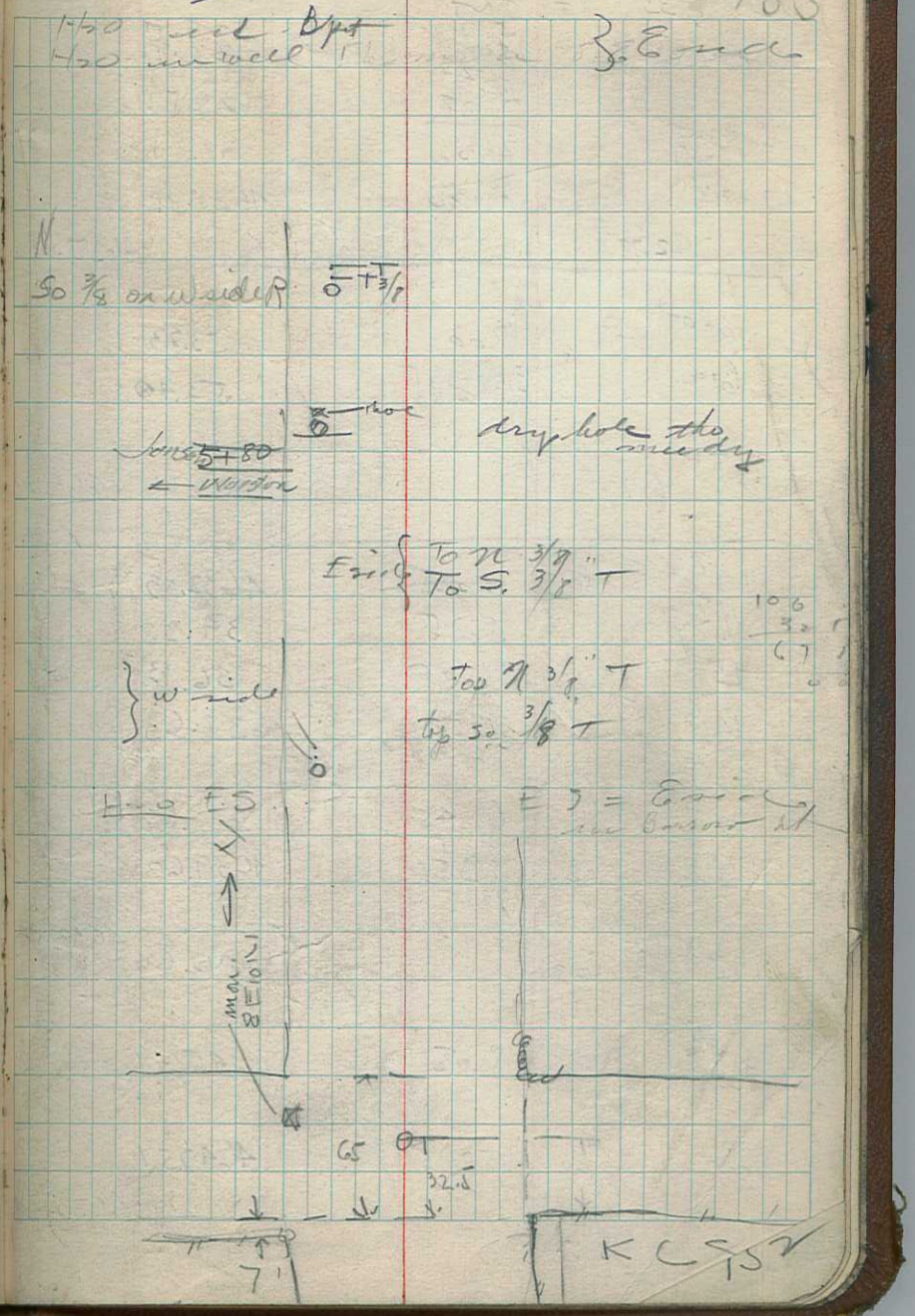
Top St. mon SE-10N

154

Sta	BS	FS	HI	Elev	
9+54			8.16	4645.30	
℄			8.10	45.36	
9 +00			4.75	48.71	
8+00			3.35	50.11	
7+℄		Rod	2.70	4651.26	
7+44			2.37	4651.13	
				51.20	
7+44			2.26		
7+00			0.95	52.51	
6+80	0.20		11.97	4653.26	4653.46
6±			14.12	4650.98	
Rod					
6			8.80	4656.38	
5			7.50	57.68	
4+70			2.85	62.33	
Ro			2.79	62.39	
5+00			4.95	4660.23	
				56.63	H₂O
4+70			3.43	61.75	
				56.6	
4+70			3.41	61.73	
			Ro		
4+70			3.80	61.38	
4	240		2.00	4663.18	
4	Ro	1.07	11.76	4664.11	4665.18
3	Ro		8.08	47.79	
2	Ro		5.25	70.62	
1+00			2.90	73.95	
Ro-4					
0			0.0	75.87	
☒ Pam			0.22	4675.65	4675.87

9.3
6.9

155



18+	BS	4.88		30.73 Elev	HI
		IM		29.91	
		5.7 bot		30.91	
17+56		4.7		4622.41	
		7.62		4628.53	
		7.08			
½" Rebar on ℄ 17+89		2.30		33.31	
17+84		4.30		4631.31	
17+	2.78				4635.61
6+07		7.00 mk		53.23	
6+00		3.58+3.25 = 6.83		53.40	
6+80 TP	6.97			4653.26	4660.23
17+	10.30	~~10.31~~		4632.83	
16+		5.75		34.38	
15+		7.00		36.13	
14+		5.50		4637.63	
+40					
13+½ E		6.45		36.68	
13+00		3.50		4639.63	
12+00	0.47 10.80			4642.66	4643.13
11+00		8.05		45.41	
10+		5.95		4647.51	
					4653.46

Program

NC Road "Gosline" 8-25-59

Bottom of pipe cut through wall and temporary earthfill bed

H₂S Canal lower side

+89 Bm on ½" rod +84 also ℄ panel

-17+62 Drive Benchmark

17+56

Gasline Canal

See Page (1) previous Book 017

Bar 17

See Page (-1-)

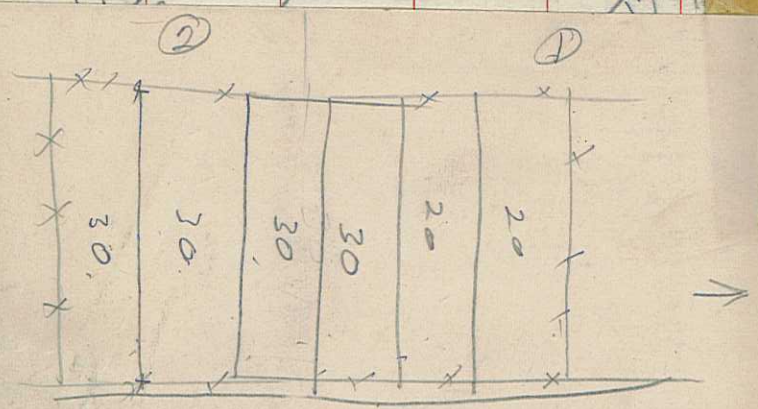
0+08 Elev = 8.24.4 cross marked on rail

Hubbell ℄ 4+10

See detail Book to City mon. 5 E 9 N 15

CURVE TABLES.

Published by KEUFFEL & ESSER CO.



CURVE TABLES.

Published by KEUFFEL & ESSER CO.

HOW TO USE CURVE TABLES.

Table I. contains Tangents and Externals to a 1° curve. Tan. and Ext. to any other radius may be found nearly enough, by dividing the Tan. or Ext. opposite the given Central Angle by the given degree of curve.

To find Deg. of Curve, having the Central Angle and Tangent: Divide Tan. opposite the given Central Angle by the given Tangent.

To find Deg. of Curve, having the Central Angle and External: Divide Ext. opposite the given Central Angle by the given External.

To find Nat. Tan. and Nat. Ex. Sec. for any angle by Table I.: Tan. or Ext. of twice the given angle divided by the radius of a 1° curve will be the Nat. Tan. or Nat. Ex. Sec.

EXAMPLE.

Wanted a Curve with an Ext. of about 12 ft. Angle of Intersection or I. P. = 23° 20′ to the R. at Station 542+72.

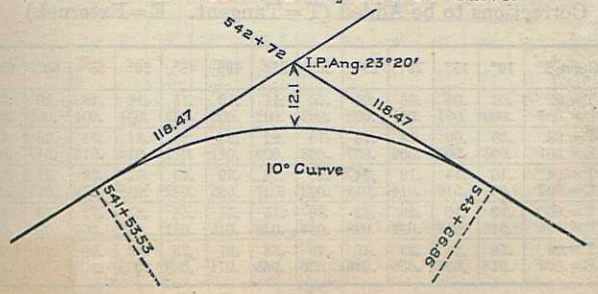
Ext. in Tab. I opposite 23° 20′ = 120.87
120.87 ÷ 12 = 10.07. Say a 10° Curve.

Tan. in Tab. I opp. 23° 20′ = 1183.1
1183.1 ÷ 10 = 118.31.

Correction for A. 23° 20′ for a 10° Cur. = 0.16
118.31 + 0.16 = 118.47 = corrected Tangent.

(If corrected Ext. is required find in same way)
Ang. 23° 20′ = 23.33° ÷ 10 = 2.3333 = L. C.

2° 19½′ = def. for sta.	542	I. P. = sta.	542+72
4° 49½′ = " " "	+50	Tan. =	1 .18.47
7° 19½′ = " " "	543	B. C. = sta.	541+53.53
9° 49½′ = " " "	+50	L. C. =	2 .33.33
11° 40′ = " " "	543+	E. C. = Sta.	543+86.86
	86.86		

100 − 53.53 = 46.47 × 3′ (def. for 1 ft. of 10° Cur.) = 139.41′ =
2° 19½′ = def. for sta. 542.

Def. for 50 ft. = 2° 30′ for a 10° Curve.
Def. for 36.86 ft. = 1° 50½′ for a 10° Curve.