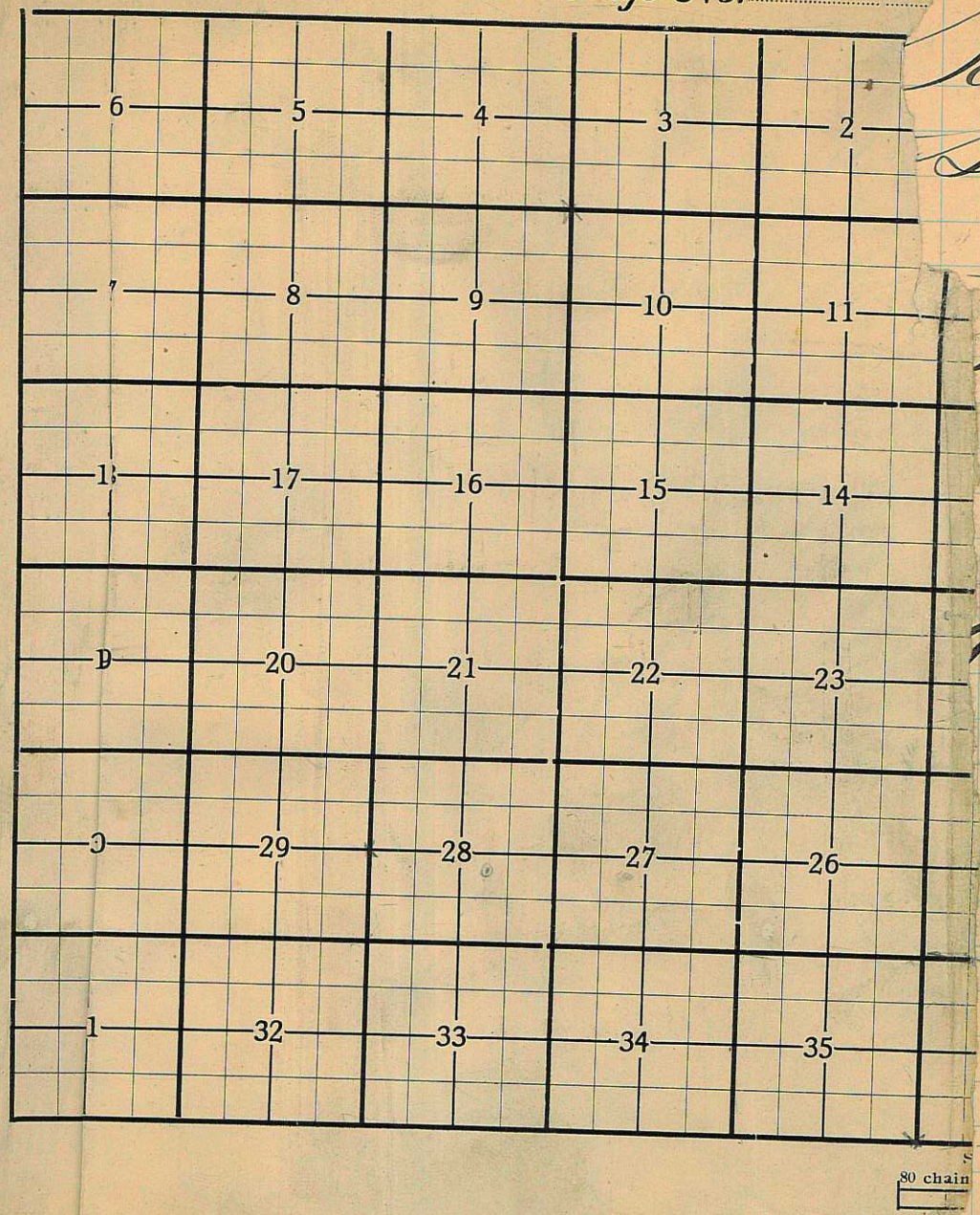
45

1789

Township No. ..... Range No. .....



Schaub
Surveyor
by
Logan

Eugene Schaub

County Surveyor

Cache County

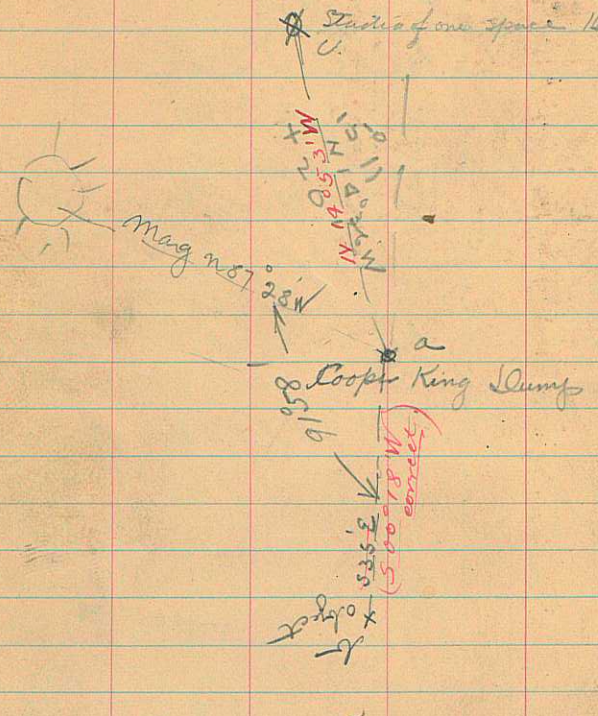
City Engineer Logan

City.

July 1907

Lx Co. for Lode Caramny

49 ch S. & 950' E of NW cor
Sec. 24 TP 9 N., R 2 E.
No. 1. h = 33°49 ∠L 91°58
Sun² h = 32°21. 5 PM
∠L - 93°13'.
July 1, 1907



Beg at a which is a cc ck
S 4° 950' E of NW cor Sec 20
which is pt a on Sk'd

Hor Dist	Slope	± Angle	L	R	Course	Dep E	Dep W	Lat S	Lat N
			61°19'						
8.523	9.00	+18°19'		9°32'	S60°30E	4.928			2709
19.432	1997	+12°46'		12°30		561°12			
				5°52'	S50°50E	1524			
2505	2,562.9	+12°12	111°15'			S51°40E	1205		
9 ch		+			S45°05E	1796			
676	7.00	-15°04'				S45°48E	1746		
4.24	4.55	-7°25			N22°57				
11 ch		Note			N22°57				

to W cor of gals from
S Mineral Pt Mine

1290 1896 0
129 0
17960
13422
4538

.9493 4-
8.5237

Stadia
enclosed

129
5 22
134 22

from b

20.50
26.25 134° 22 R
from n

S61°12E
6072
932
5 8100 15.76
5 32
45 48 4.24

.9656
3.8624
20.00
12.824
.9656
6.7592

4.24 00 .8876
37504 4.55
48960
44380
45800

45°48
5 52
5140

00. 17' 11"

.005

3698 97

Log cos 12°46 = T. 9891285
Log 1997 3 300 3907
3.2895192

Log cos 12°12 = T. 9960794
Log 3 4087395
3. 3988189

2505

Log ~ 61°12' = T. 94265
Log ~ 8.523 = 0. 93054
0.87319 7.467

cos 61°12 = T. 68288
8.523 = 0. 93054 4.105
0.61336

Log ~ 51°40 = T. 89454
1943.2 3.28852
3.18306 1524

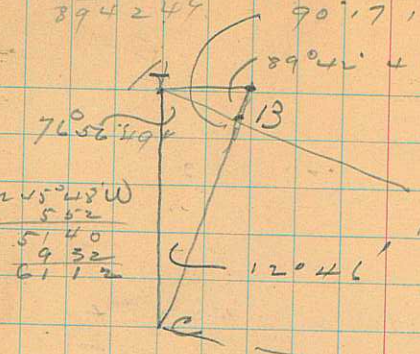
cos 51°40 = T. 79255
1943.2 3 28852
3.08107 1205

∠ 45°48 = T. 85546 T
Log 2505 3 39881
3.25427 1795.8

cos T. 84338
2505 3.39881
3.24219 1746

4408
532
4046

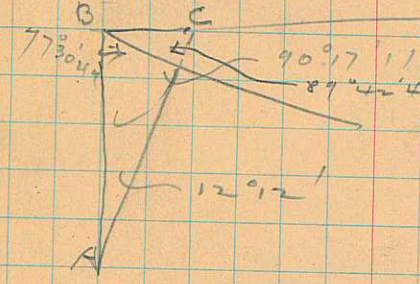
1795940
901711
894249



90°17' 11"
1246
10303 11
1795960
1030311
7656 49
90 17 11
1246
180 00 00"

Sin A : BC :: Sin B : AC

Log ~ 76°56' 49" = T. 9886314
Log 20.5 = 1. 3117539
1. 3003853
T. 9999946
1. 3003907
19.971

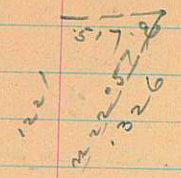


90°17' 11"
1212
10229 11
1795960
1022911
7730 49
12.12
90 17 11
180 00 00

Sin B : AC :: Sin C : AB.

Log ~ 77°30.49 = T. 9896048
Log 26.25 = 1. 4191293
1. 4087341
Log ~ 89°42'49 = T. 9999946
1. 4087395

2,562.9



log 517 2.71349

log 1221 3.08671

T.62678

log 1221 = 3.08671

T.94418

3.12253

1326

497
66
2982
2982
32802
7467
66
440802
440802 1
4408822
4.105
66
44130
44130
270.9

5280 -8-
4768
512

492.8
1524.0 8
1796.
950
4762.8

270.9
3280.
1205
1746
6501.9
5.280
1221.9

Sur for
James Packard

Sun ob. 7/25/17
h = 59°16
time 11 am
L.S.R. 57°44

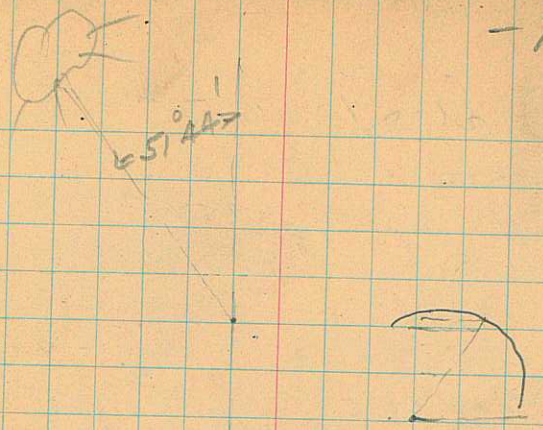
No. 2 ~~60°~~
60°35'

L.S. 48°13

on the SE cor sec 8 Tp 16S R 40 E

$$\cos A = \frac{\sin D \pm \sin h}{\cos h \times \cos L} + \tan h \tan L$$

Lat 42°2'34"
Long. 111°48'



69.8 ; 60 ; 3 ; ~

180 | 698 | 2,58
1596
1040
3490
5508

Tang 40°00 1.87085
3.60206
3.47291

1.82579
3.60206
1.42785

3.47291
2.24186
1.71477

51.85 ; 60 ; ;

5.00 51.85
2588 5.
926

√-8 6 0
3 √8 0

2971

51.85

D. at G. 1951.7

h change 31.57

1951.7
3.4
1948.3

Log 19° 48' 18" = 1.52997
Log cos 59° 15' 37 = T.70853
1.82144

42 2' 34 T.87081
T.95063

.89554

Cm 42° 2' 34 = T.95508
0.22556
0.18064

45158
.8925
.6233

15158
8925
5144
51°26
18

51°26

111.48
60
6648
6708
6300
4080
3600
4800
3000

6.453 = 0.80976
31.57 1.49927
2.30903
1.77815
0.53088

Log 60 3.39
60
23.40

59 15 60
23
59 15 37

T.70867
T.70853

.87085
.87081

T.95520
13
95533
.22153
3
225576

95495
13
.95508

Calculations for James Packard

see over for sketch

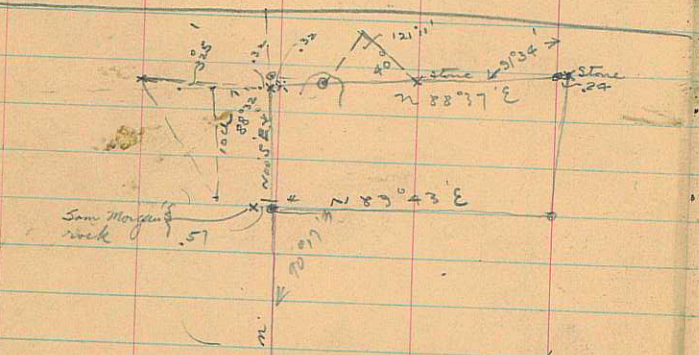
James Packard

I begon SE cor sec. 8 which is a pt 17.5' W of rock under the wire fence

Dist Course Angles

1 Mile N 00° 19' 07" E

N 00° 12' E



N 00° 5' E

8832

8837

N 88° 37' E

17

5

N 88° 41' E

8856

8839

17

N 00° 19' 07" E

1760

8823

901

.080 80

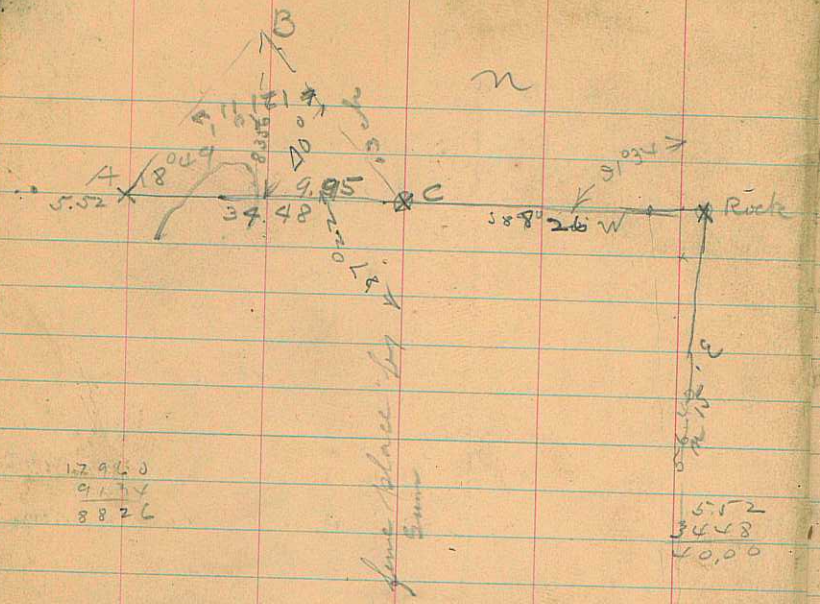
80.01

9° 10'

SE cor sec 8

S 89° 08' W 80.27

SE cor sec 8



Case for triangle x

Sin A : BC :: Sin 71° 50' : AC

T. 66586

20 1.30103

1.7150 T. 97779

1.27882

1.25661

1.61296 = 41.01

56.32

5.31

Sin 58°49' : AC :: Sin A : 13

Log Sin 58°49' = T. 93223

Log 13 = 1.11394

1.04617

Log Sin 18°49' = T. 50858

1.53759

34.48

Sin C : AB :: Sin B : AC

.0596

21.0

1.2810

1.28 : 40 : N 18 49

1.28

14792

3698

18 49

23.667 = 40.

.59.17

Post

Note from

N¼ cor of sec 4. BS to NE
of sec. 9. I con. same line
40 ch set d. rock. Thence
I continued. to top of hill
I then triangulated and find
that I am 3°25 to S. 2.15 ch
set N. 59 on to line bet Rock
set and N¼ cor of 5
Thence easterly 19.13 to new
Rock we therefore split differ
of .32 links
from Rock Mid way
BS along N line

feelly

S 89°56 W

1849
.64
19.13

a suppose cor. .66 ch N.

-18-

July 27

from the NE cor Sec 8.
T 016 S R 4 0 E. I turn an angle.

List	Course	Angles L	Angles R
			89°43
40 ch	N 89°43 E		

Thence set on same cor

39.75	S
40	
45.85	
79.65	
79.40	

Set on W 1/4 cor of 9.

89°50

N 89°50 E

set on N 1/4 cor of 9

90°17

N 89 43 E

S

from a B.S. to SE cor Sec 8. N + S line
{ Sec 0.09 N of pt which is on
{ salisfied line and .57 ch E of magn
{ line.

to N side St. E + W

Set temporary 1/4 cor a stake

to N bank Lewiston Canal

to cor

to N side St. E + W

to intersect line from N 1/4 cor of 9.

to intersit line from W 1/4 cor of 9

Set at a pt. 0.79 ch N 89°50' E of the center of sec.

from the center of sec 9

Dist	Course	Angle	R	E	Dep W	Lat N	S
0.79	N 89°50' E	120°		0.79			
14	N 30° 10 W				7.03	12.10	
.40	N					.40	
6.80	W				6.31		
6.31							
				0.79	7.03	12.10	
N	N 30° 10' W		120 10				
2.00	E						
6.24							
7.22	N 53°23 E		36°37				
3.47	E		W				

90
30 10
120 10

120 119 60
89 59
30 1 0

Location of sec. 9 located by intersection of two lines, as dis on left page.

N

89°50'

to slough

90° 10' from this go N 631 and 0.40ch

to Slough

set stake

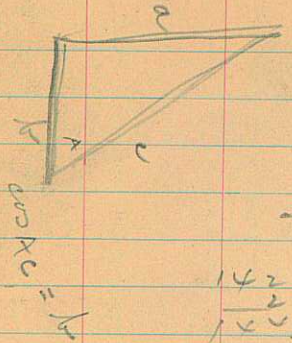
89°50'

Cor sec 9

W. edge of slough

53.23
44 02
97 25

53 23
36 37
19060



.58
58
464
290
3364
18.57
52.21 | 7.22
49
321
294
2700
2782

1422
2
1422

8960
5323
3637

703
79
6.24

24

Cos 30°10' = .8645
14
34580
8645
12103 0

12.10
.40

12.50

13.34
79
1255

W 6.31

5.800 | 6.00
5400 .9666
4000
4000
4000

69508 | 7.89
5
3.47540 | 3.9445

5.80
3.47
927

5.80
3.47
2.33

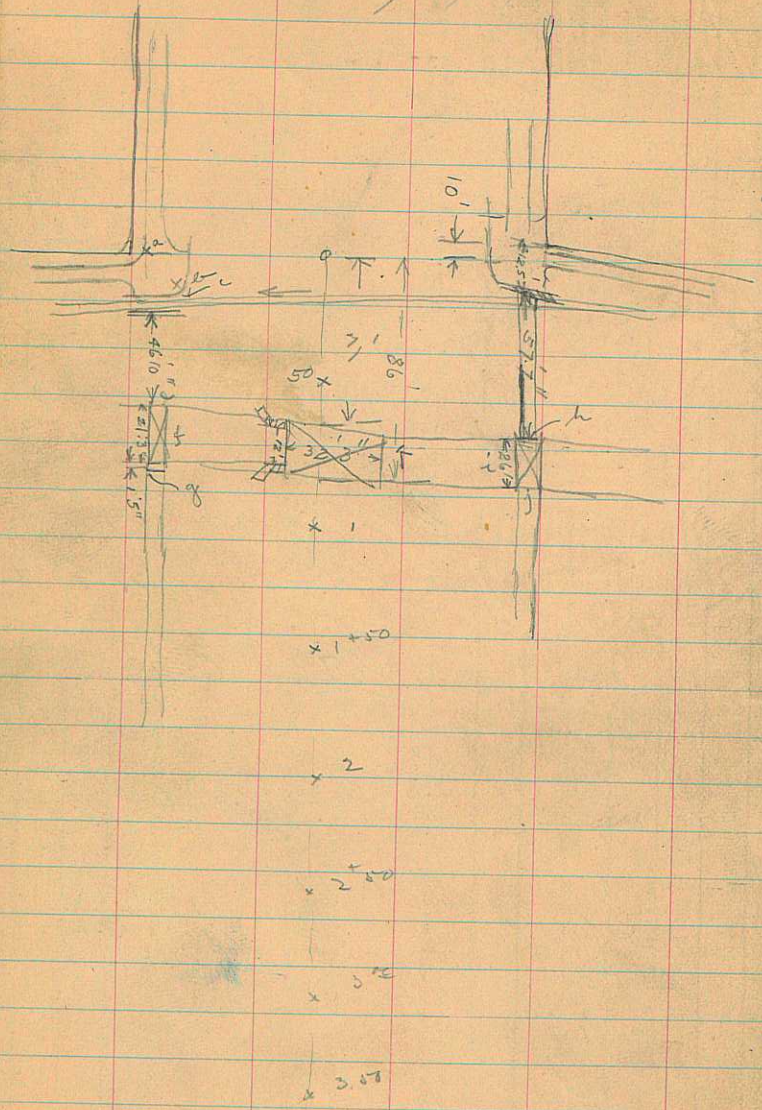
12.10
3.59
15.69

20.00
15.69
4.31

5.80 | 4.31
4.31 | 1.3457
1490
1293
1970
1724
2460
2155
3050
3017
33

4.3100 .5964
4 1748
13520
11928
15920
7.22

Sur. for Covering of the Thatcher Race on S. main st. 7/30/07



503.32

5.84
3.39

26

Sta	BS	FS	HI	Elv	
a	3.765			504.22	509.985
b					
c					
d					
e					
f					
g					
h					
0					
0+50					
0+71					
l					
k					
i					
i					
j					
K					
0+86					
1+00					
TP			11.078	498.907	
TP	1.03				499.937
1+50					
2					
2+50					
3					
3+50					

4.02	505.96	on cor. int. B K 3
4.80	505.18	in cutter on cor. int. B K 3
3.34	506.14	cen of St. W side main
5.70	504.28	N end foot bridge
10.28	499.70	bottom of Canal
6.15	503.83	mid cor of par. W side
7.55	502.43	top of H2O
2.60	507.38	"
4.28	505.70	
5.90	504.08	
3.03	506.96	N end of cross E side m.
3.23	506.75	on cor. int. SW cor B 2
4.10	505.88	in cutter SW cor B 2
2.35	507.53	in cen of crossing E side
4.08	505.90	S. end of "
10.20	499.68	in Bottom of Canal
7.50	502.48	on H2O
5.84	504.14	N end of par W side
10.22	499.76	bottom of Canal
6.82	503.16	
8.12	501.86	
2.40	497.53	
5.66	494.28	centre of St.
7.60	492.34	
8.60	491.34	
9.38	490.56	
9.75	490.19	(centre) cor on W side St.
9.45	490.49	" " " E " "

x 1

x 1+50

x 2

x 2+50

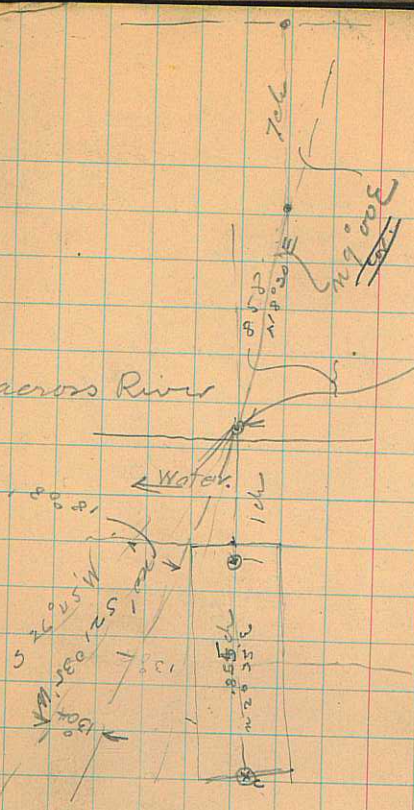
x 3

x 3.58

Surv for Logan City
aug 1/07

set on a pt. Mag. var
N 2°35 E 0.855 ch from S end
of bridge. at center

List	Course	∠ angles	R
			0°05'
1 ch	N 2°40 E		5°43'
8.58	N 8°30 E		7°02'
7.00	N 1°30 E		



ob
h = 65°05'
time 1:15 pm
R 13°04'

no 2.
h = 64°22
R = 18°08

Sur for Preston School District

Sta	BS	FS	Ele.	HI
20.50	11.866		100.00	111.866
10 00		3.824	108.042	
10.00	5.686			113.728
3		1.739	111.989	
3	2.758			114.747
6	20.310	7.700	107.047	
		9.850	~~104.897~~ Ele	
		15.413		

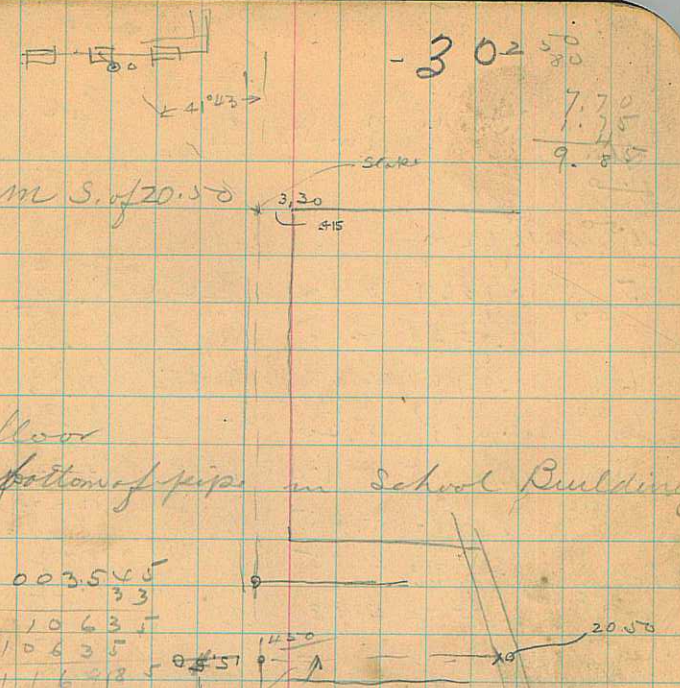
Grade falling ~~0.3545~~ 0/0.

on floor

on bottom of pipe in School Building

O.	Grade	RR on S.	Cut.	Calc.	on grd Ele
0	9.9500	1.470	8'6"	9.95 / 8.43	(113.277) 104.797
0+50	.1169 / 10.0669	1.82	8'3"	10.06 / 8.24	104.674
1	.1169 / 10.1838	2.54	7'8"	10.18 / 7.64	104551
1+50	.1169 / 10.3007	3.21	7'1"	10.30 / 7.09	104.428
2	.1169 / 10.4176	3.69	6'9"	10.42 / 6.73	104.305
2+50	.1169 / 10.5345	3.81	6'9"	10.53 / 6.73 / .00 / 3.81 / 6.73	104.182
3	.1169 / 10.6514	3.12	7'6"	10.65 / 7.50 / 3.12	104.059
3+50	.1169 / 10.7683	2.76	8'	12.70	103.936
TP 4	.1169 / 10.8852	~~3.059~~	~~7.826~~		103.813
4+50	.1169 / 11.0021	3.059	7.943		103.690
45°	2.677 / 9.943 / 10.6200	2.677			
4+00	.1169 / 10.5031	2.51	8'	10.50 / 2.51 / 7.99	103.813

over



HI	New Cut	Stake	Elev.
114.747	8.253	12.92	
	7.656	12.207	
	7.109	11.537	
	6.752	11.057	
	6.755	10.937	
	7.568	11.627	
	8.051	11.987	
	Rod was held by mistake on 4+50		
	7.998	11.688	
114.365			
	8.042	11.855	

Sta	Gear	Rw St.	Cut	Cut.	Ele on grade	HI	New Cut	Ele on Stake
~~4+00~~								
4 50	10.6200 / 1169				✓	114.365		
5	10.7369 / 1169	3.46	7' 3"	10.73 / 3.46 / 7.27	103.567		7.358	110.905
5 50	10.8538 / 1169	4.16	6' 8"	10.85 / 4.16 / 6.69	103.444		6.861	110.205
6	10.9707 / 1169	4.84	6' 1½"	10.97 / 4.84 / 6.13	103.321		6.204	109.525
6 50	11.0876 / 1169	5.30	5' 9½"	11.08 / 5.30 / 5.78	103.198		5.867	109.065 ✓
7	11.2045 / 1169	5.12	6' 1"	11.20 / 5.12 / 6.08	103.075		6.17	109.245 ✓
7 50	11.3214 / 1169	4.65	6' 8"	11.32 / 4.65 / 6.67	102.952		6.763	109.715 ✓
8	11.4383 / 1169	4.85	6' 7"	11.43 / 4.85 / 6.58	102.829		6.686	109.515 ✓
8 50	11.5552 / 1169	4.98	6' 7"	11.55 / 4.98 / 6.57	102.706		6.679	109.385 ✓
9	11.6721 / 1169	5.35	6' 4"	11.67 / 5.35 / 6.32	102.583		6.432	109.015 ✓
9 50	11.7890 / 1169	5.33	6' 5½"	11.78 / 5.33 / 6.45	102.460		6.575	109.035 ✓
10 00	11.9059 / 1169	6.37	5' 6½"	11.90 / 6.37 / 5.53	102.337		5.658	107.995 ✓
TP 10 50	12.0228	7.014	5.0088		102.214		5.137	107.351 ✓
10 ~~50~~	11.3668 / 1169	6.858				114.209 ✓		✓
11	11.9837 / 1169	6.40	5' 7"	11.98 / 6.40 / 5.53	102.091		5.718	107.809
11 50	12.1006	6.50	5' 7½"	12.10 / 6.50 / 5.60	101.968		5.741	107.909 ✓
12		5.62			101.845		6.744	108.589 ✓
12 50		5.02			101.722		7.467	109.189 ✓
13		4.72			101.599		7.890	109.189 ✓
13 50		4.70			101.476		8.033	109.509 ✓
14		4.95			101.353		7.906	109.259 ✓
14 50		4.62			101.230		8.359	109.589 ✓
15		5.00			101.107		8.102	109.209 ✓

1 ch cut

11 1/2
4 3 32
- 1 1 3 9 2
0.69

over

Sta	Grade	R. of Stake	BS	FS	Ele on Grade	HI	Neg cut	Ele on Stake
15 50		4.96			100.984	114.209	8.265	109.249
16		5.05			100.861		8.298	109.159
16 50		5.46			100.738		8.611	108.749
17		7.083		7.083	100.615		6.511	107.126
17		2.00	2.00		~~100.492~~ 109.126			
17 +50		3.16			100.492		5.474	105.968
18		3.33			100.369		5.427	105.796
18 50		4.79			100.246		4.090	104.336
19		6.17			100.123		2.833	102.956
19 50		8.843			100		0.283	100.283
Bom								

on Grade Sta 19+50

9.170
9.126
.044
Check
OK

19+50
56
1170
1170
1226

4707 1128 3 27
3861
9360
9609
3510
14

100.246
.123
100.123

21.34 to cor

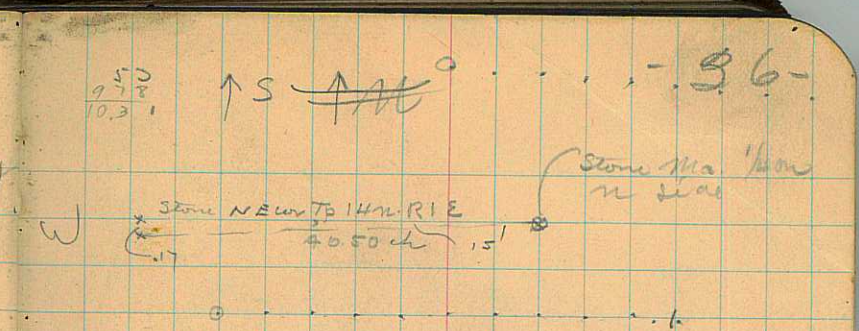
Surv for Mary Ann Gregory

Beg at N 1/4 cor sec 1 Tp 14 n R 1 E. Run easterly

dist	Course	angles	R
21.34			
40.50			

Thence setting on 1/4 cor of Sec 1 Tp 14 n R 1 E. B.S. to NE cor of Tp 14 n R 1 E which is 40.50 ch dist from a fore sd cor.

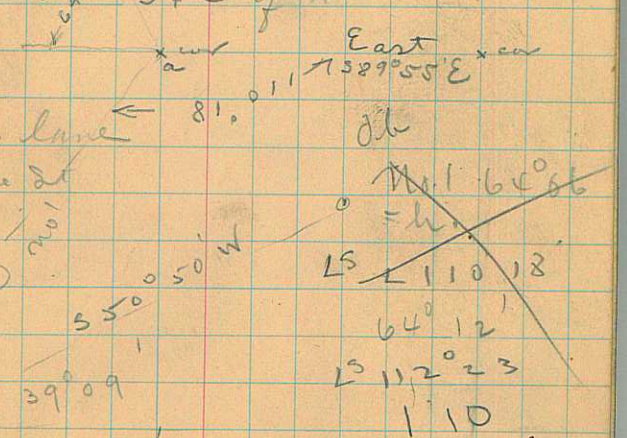
dist			
18.72	n 25°30' W	64°40'	
5.18	n 6°15' E	29°15'	
18.72	n 25°30' W	120°37'	
9.78	S 82°20' E		
9.81			
10.21			
9.78		91°17'	
5.20	n 3°20' E	88°55'	
9.785	n 86° W		



to a stone
to NE cor Tp 14 n R 1 E, and fce N .17 ch from a good cor

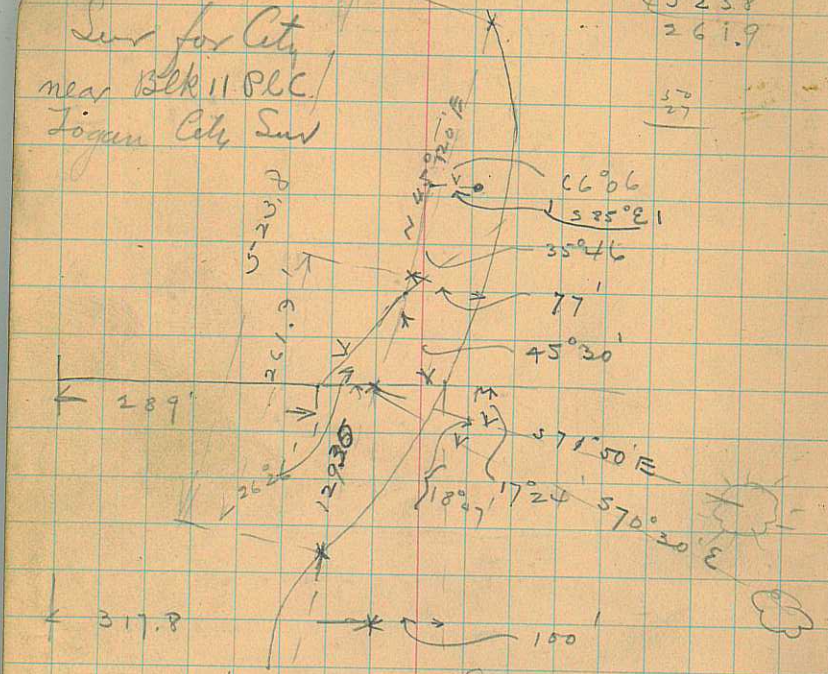


which pt is 2' E + n of fence cor
to peg " " 2' E + S of " " "



Aug. 3/07

Surv for City
near Blk 11 Plc.
Logan Cth Surv



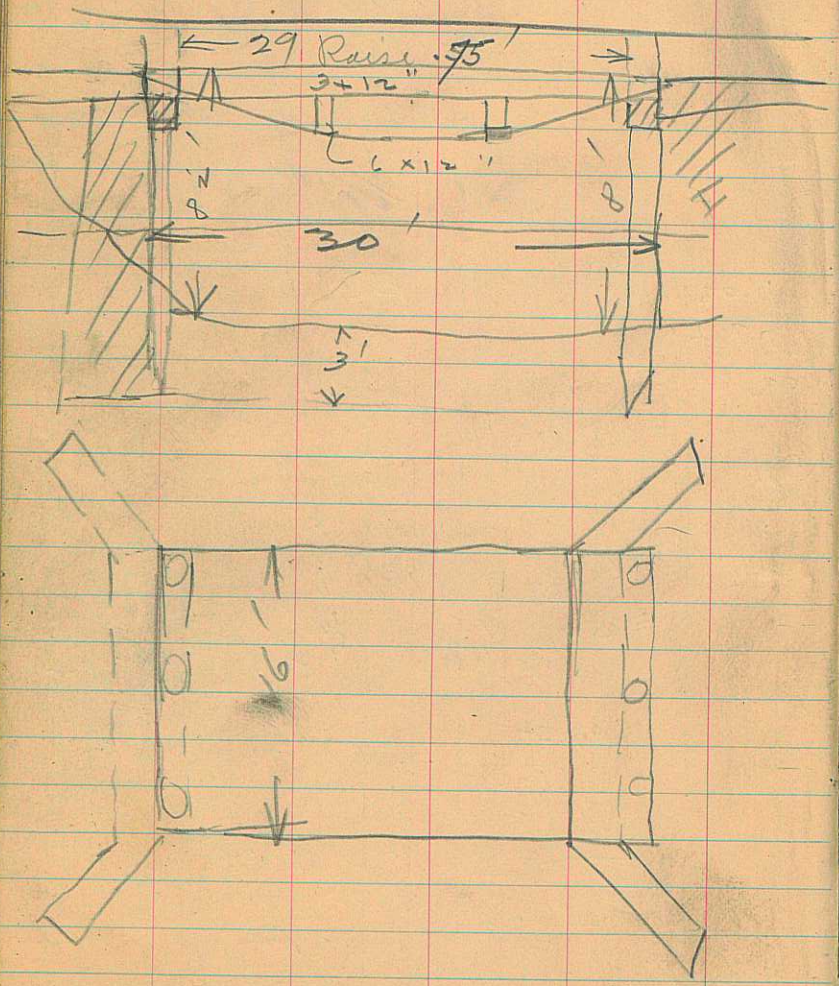
No 2. h = 44°26
L R 18°47'
time 9:35

No 1. h = 43°20'
L R = 17°24'
time 9:30.

Aug. 7/07

-38-

Sketch of Bridge to be repaired by New abutments at Grist Mill in Milbville



Sur. for James Packer

Aug. 12 '07

Set at a pt S 89° 50 W. 3.48 ch from centre of sec 19 F S to to flag on brow of hill on the west.

List Courses	Angles ∠	R
		57° 55'

10 ch N 38° 5' W

15.94 S 60° 11 W

3.48 N 89° 50' E

on which was a mound 0.175 ch

3.655 N 89° 50' E

Thence set on at pt. 1.79 ch N 89° 50' E of cen. sec 9.

5 ch	N	
1.79	S 89° 50 W	90° 10'
5 ch.	N	89° 50
1. ch	N 89° 50' E	
10 ch	N	89° 50
5.80	N 89° 50' E	

See notes on next pages

17960
4002
13958

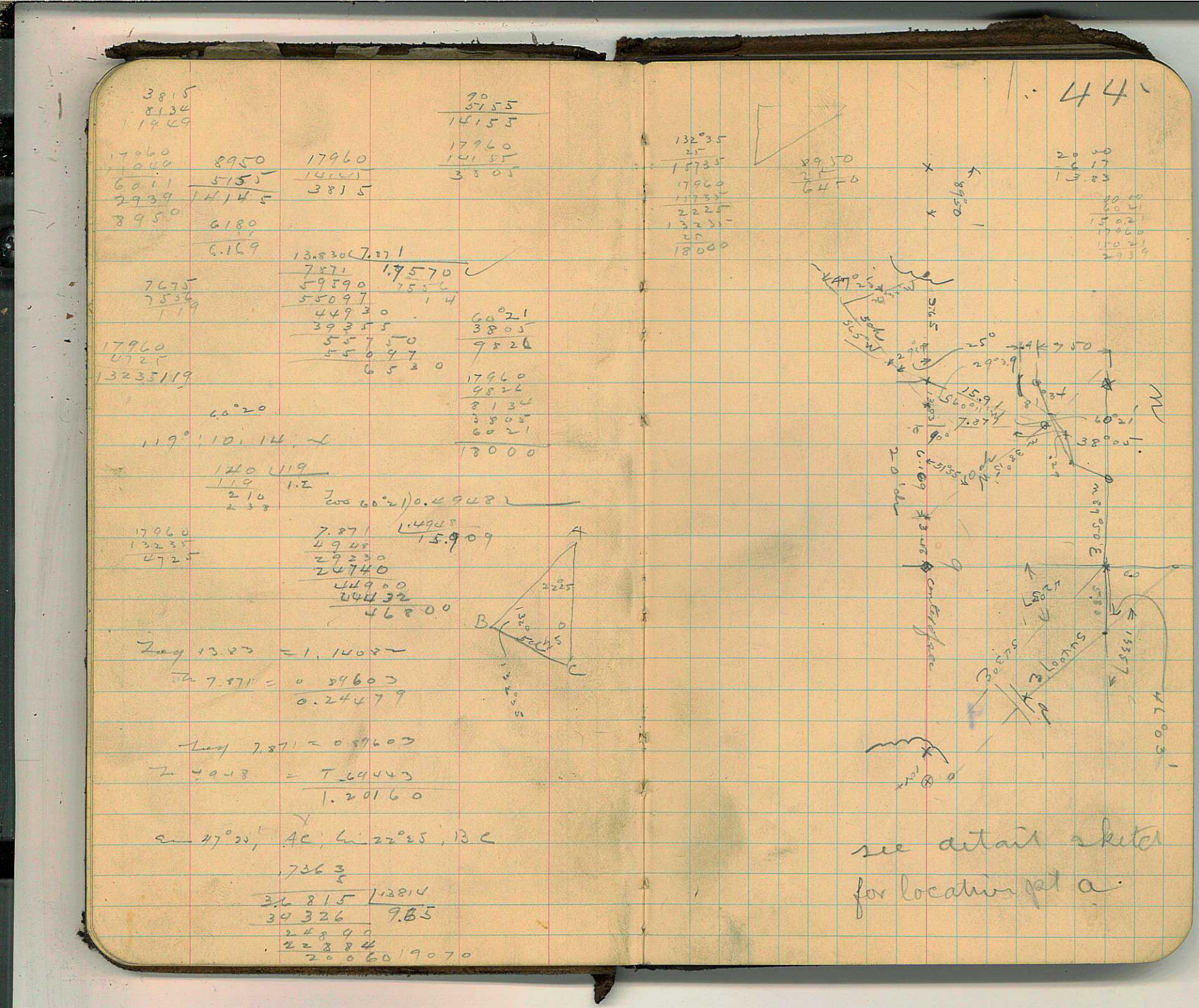
50.00
14.32
3.48

see sketch over

8,90,4
35.60

to 1/4 of 1/4 cor. S 1/4 cor of NW 1/4 sec. 9.

2830



see detail sketch for location pt a.

Sur con for
James Packer & Geo Gamble

Dist	Course	L and R

From NW. of SE¼ of NW¼ sec 9
Run
8.90 S
~~7.00~~ S
6.90 S
7.50 S 90°10'
2.305 N 89°50' E 31°01
3 N 58°45 E
11.672 N " " E 19°53
1.91 N 38°50 E 128°59
13.483 (S 89°50 W)

Beg at b (see sketch) on
N bank Cub River
FS to C which bears
S 44°07 E

Dist	No	Course	L	R	Δ	L	Angle	+	HI
	1		39°50'						4.60
	2	S 83° E		36°06	4.60	4.02		1°37	4.85
	3	S 47°30' E	117°30'		4.185	4.47			4.78
	4	N 40°50' E	39°45		5.21	4.78		50'	4.38
	5	N 25°15' W		32°35'	4.74	4.38		20'	4.35
	6	N 7°30' E		100°03	4.35	4.05			3.95
	7	S 71°30' E	54°39		3.95	3.02			4.57
	8	N 53°20' E			4.902	4.52			

L from E on field

7.50
6.00
.60

3.95
3.02
.93
1.86

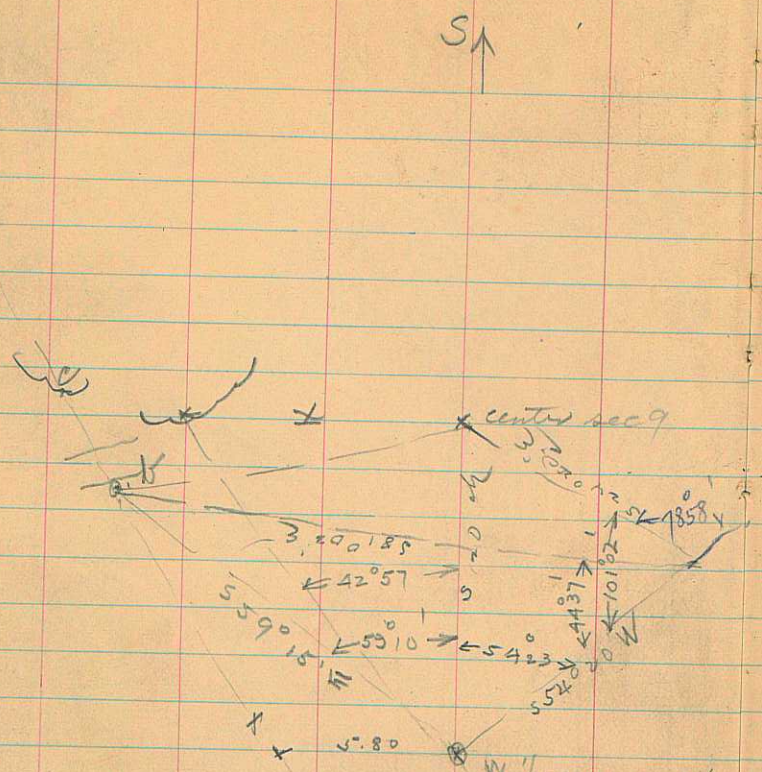
8.00 - 11.6
1.48
3.04 - 2.9

chain to N side Canyon Road

to NW cor Hawthorn land

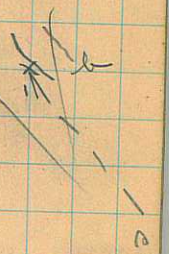
from this pt L 3.04 to L 1.29 ch to corner dead line

on slope of 6°10' -
to beg



5 20 | 17 60
20 17 | 48 57
98 57 | 81 03

54 20 | 17 60
10.1 0L | 15 22
155 22 | 24 38



No	Course	Angle L	Angle R	Stadia U	Stadia L
7	N53°20'E	54°34		~~4.962~~	~~4.52~~
8		76°00		4.902	4.520
9	N22°50W		31°36	4.32	4.08
10	N8°50'E		74°58'	4.15	3.98
11	N84°E	115°25		3.34	2.90
12	N31°50W		106°06	4.25	3.57
13	N16°50W	44°58		5.13	4.72
14	N61°20W	49°34		4.35	4.10
15	S89°15'W		89°17	~~4.85~~ 4.49	4.18
~~16~~	~~N 21°30W~~		57°	5.06	4.80
~~17~~	~~N36°E~~				

Sta	BS	FS	int	Elev
	1.51			
			5.05	
			4.90	~~B4~~
			4.11	27
			4.82	3'33"

Angle	HI
	4.08
	3.98
	2.90
	4.25
	4.72
	4.10
	4.18
	4.80

7.22 .84

4.11 2.60

5.00 1.51 3.49

4.90 4.51 3.39 1.28 7.8 30 1.68

4.82 1.51 3.31 1.2 6.2 3.1 3.7

.50

This sta on this

~~to infinity about~~ ~~300~~

to infinity 300' opp

Sur for Andrew Nyman Jr

Begin SE cor lot 4.

ch	Dist	course	Land	R
	10	N 2° E		
	10.10			
	9.96			
	10	N 2° E (88° 50' cor)	90° 34'	
	4	N 88° 30 W		
	4.05	" "		
	4	N 88° 30	80° 08'	
	1.75	S 11° 05' W		11°
	3	S 22° 10 W	9° 58'	
	5.48	S 17° 45 W		
	5.50	"	100° 57'	
	6.32	S 88° 45' E		

to SE cor
to fence
to Int pt.

to I pt
to Data Book

beg from fence

beg from fence

fence goes

" "

" "

" "

to fence
to Int.
to beg. fence

170 60
91 10
38.5 0

$\sqrt{2} = 5.66$

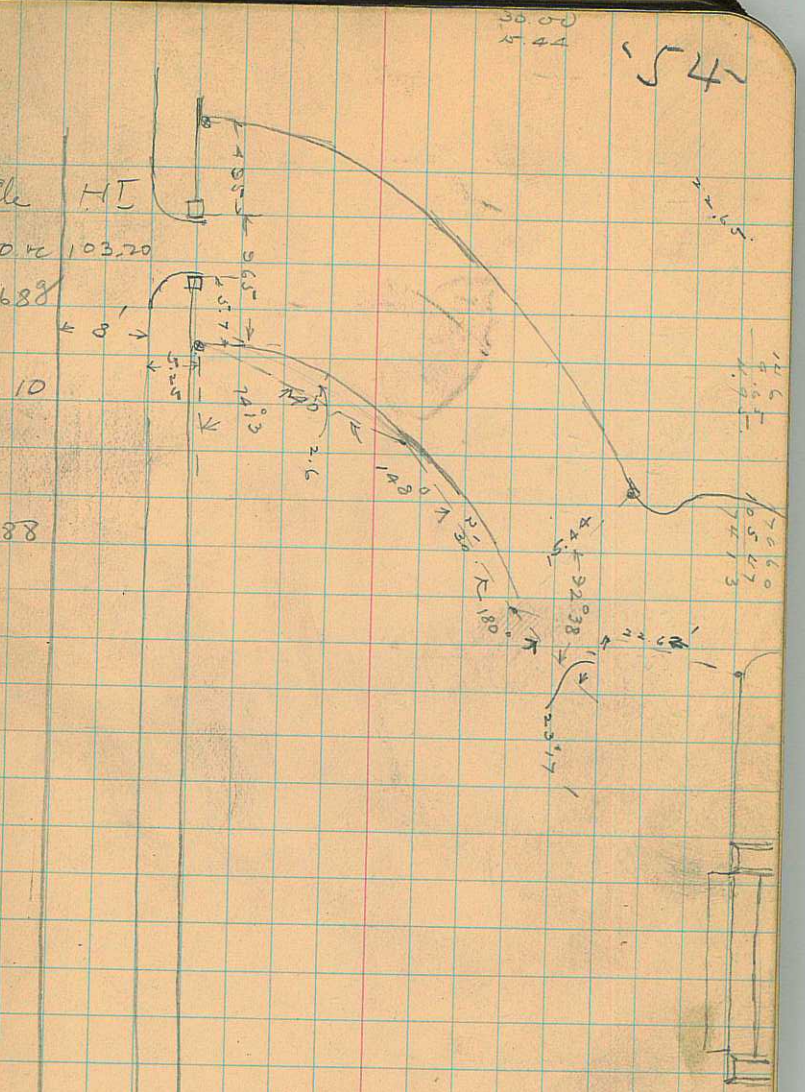
N 9° 10'

11 | 4.05 / S 28° 50' W | 4

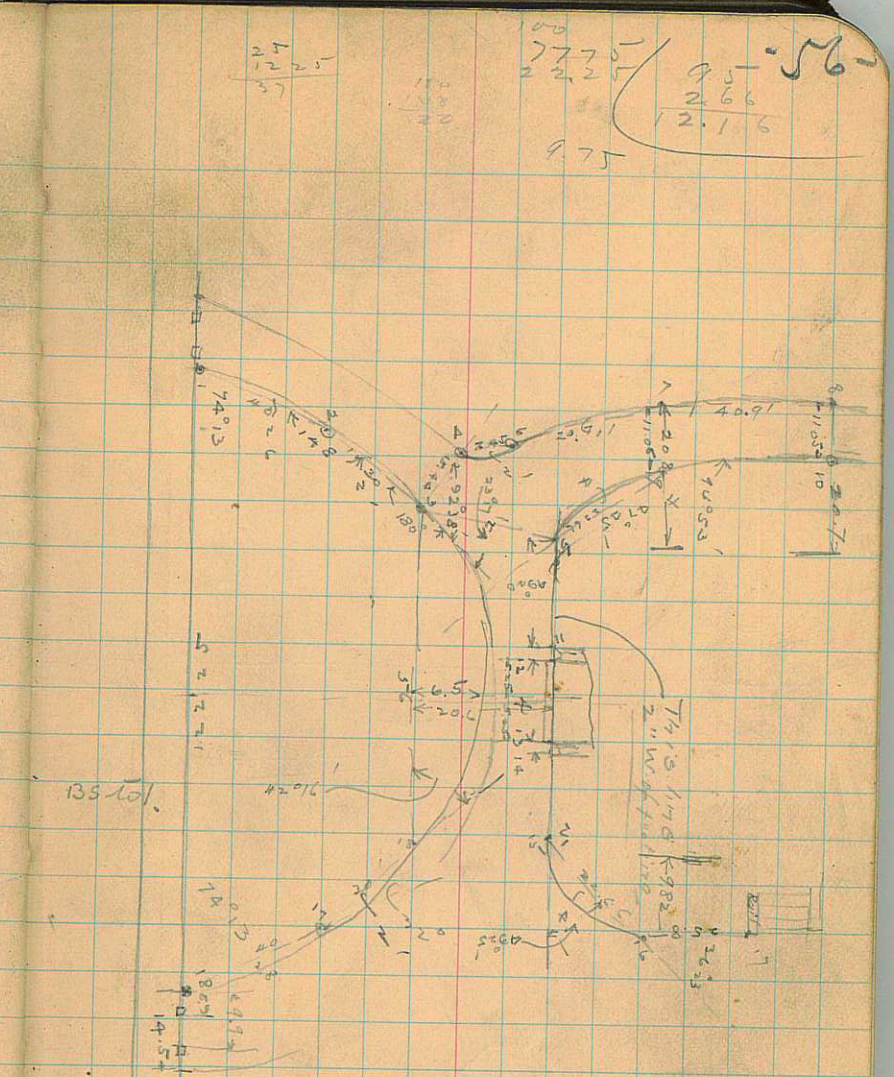
fence 100 ft. N 20° W

Sur for Cache County on walk by Court House

Sta	BS	FS	HI	Ele	
	3.20				on pow W side at 1.
		4.55		98.68	on ground opp. 10
		4.40			on ground opp 9
		4.10		99.10	abt ground at 4
		4.38			on ground opp 17
		3.61			on first step in cent of main ent.
		4.32		98.88	on ground opp. 18
		4.30			on W side walk at N gate.


30.00
5.44
'54'
103.20
5.65
5.57
5.24
74°13'
2.6
1.42
2.30
180°
22°38'
23.17
24.68
N 7.59
N 7.59
N 7.59

Dist	Sta	Angles L	Angles R	middle Ord R	middle Ord L
Set on 4 B.S. to 3					
7.45	4				
	6		51°39	2'	
20.7	6	25°06'			1'
	Stan				
40.9'	7		14°41		
	8			1'	1'
11.05	7		109°37		
	9				
41.5	9	94°53			1.2'
	10				
22.66	9		47°45'	4'	
	5				
12.25	5	49°20			
	11				
13.40	5				
	12				
23.8.0'	5				
	13				
25'	5				
	14				
37.25	5				
	15				
22.66	15	49 25'		4'	
	16				
45.8	16	36 25			
	17				
40	18	105 47			
	19				



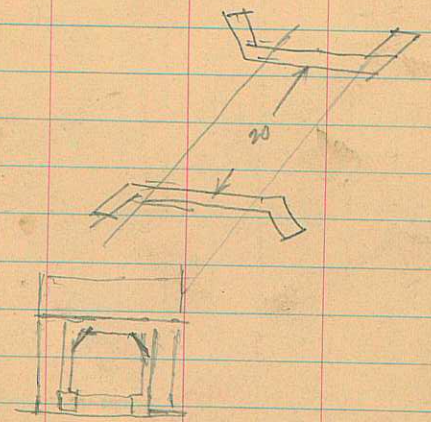
17960
8950
4607
13557

No. courses and ← R mag dec 21° E

Check for Levis Parker

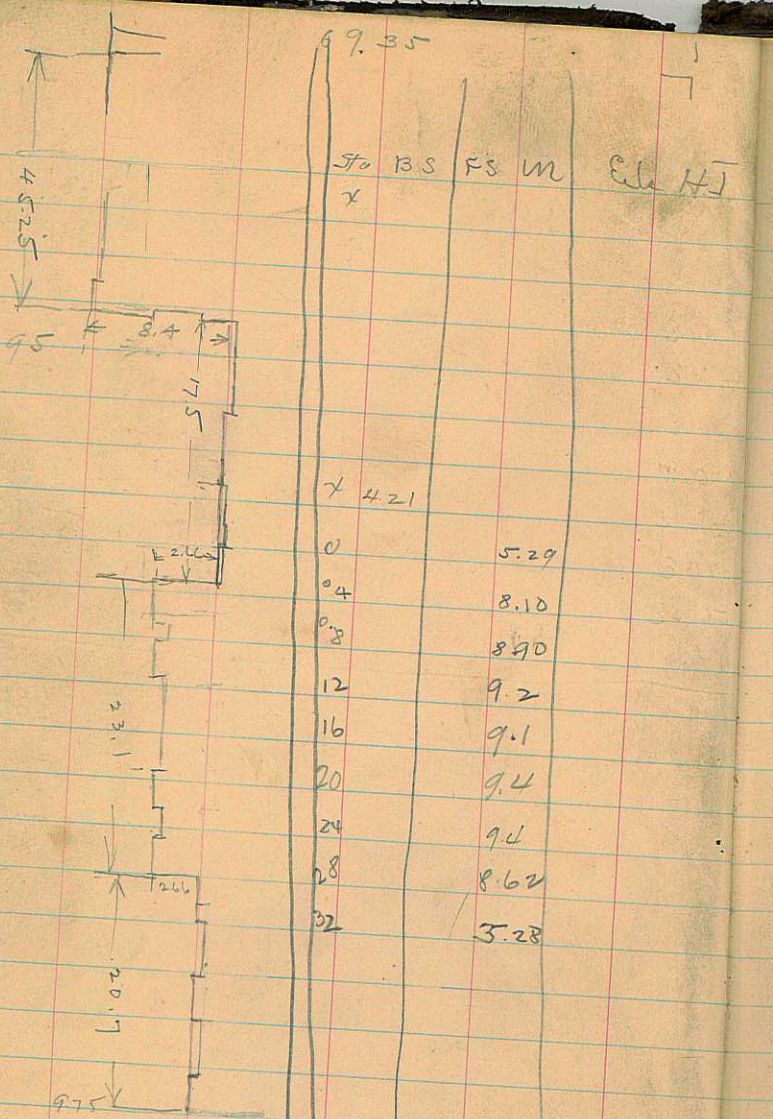
1		36°50'	
2	S80°57'E		2206
3	S45°30'E	117°30	
4	N16°45'E	39°45	
5	N23°W		32°35
6	N9°32'E		100°31'15"
7	S69°30'E	54°39	
8	N55°20'E		

87
72.7
60.



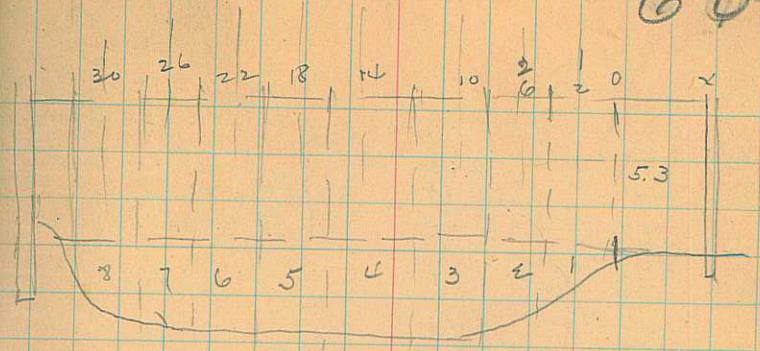
2206
11730
5521
V78
U72
8 0 57
3235
100 43'
4.35
4.05
130
39 45
4 38
36
S20°5'E
S80°57'E
S45°30'E
N16°45'E
N23°W
N9°32'E
S69°30'E
N55°20'E
S 21
V 78
U 72
8 0 57
3235
100 43'
4.35
4.05
130
39 45
4 38
36
V 39
U 07
36 50
80 57
32 06
44 51
11 7 30
16221
17960
16221
1739
39 45
17 39
2206
3235
2206
1029
9773





9.35

Sta	BS	FS	HI	Elev
x				
x 421				
0		5.29		
04		8.10		
08		8.90		
12		9.2		
16		9.1		
20		9.4		
24		9.4		
28		8.62		
32		5.28		



on nail in post
on water

per min.

	1/4	1/2	3/4
1.	5	2	
	7	58	
	6	57	
	5		

S edge of water

see over

Depth

Sec No.	Time			¼			½			¾		
1	60	60	60									
No. Rev	5	7	6									
2	60	60		60	60		31	30	30			
no Rev	58	57		58	52		27	25	24			
3	30	30	30	30	30	30	30	30	30			
no Rev	40	41	41	38	35	35	2	29	28			
4	30	30	30	30	30	30	30	30	30			
no Rev	41	41	42	38	36	34	33	33	30			
5	30	30	30	30	30	30	30	30				
no Rev	40	45	39	34	36	30	27	41				
6	30	30	30	30	30	30						
no Rev	41	42	45	43	46	36						
7	30	30	30	30	30	30	30	30				
Rev	28	29	30	28	32	32	22	32				
8	30	30	30	30	30							
Rev	19	19	21	30	22							
4		30	30	30	30	30						
Rev		42	41	38	38	32						
3	30	30	30									
Rev	40	38	38	32								

Prelim. Levels for Drain from Thatchers Bank to Canal Sept 11/07

Sta	BS	FS	HI	Ele	cm
	4.191		510411	506.22	
					3.52
Bm					5.43
					4.72
		6.621		503,79	
	3.97				
				507.76	
					5.27
					5.25

Remarks

on SW cor of pav. SE cor B. 3 Pl. a
in St. opp SE cor 3
on cor curb SE cor B.14
in St opp SE cor B.14
cen of ~~Alan~~ St. Bet C + 1½ N

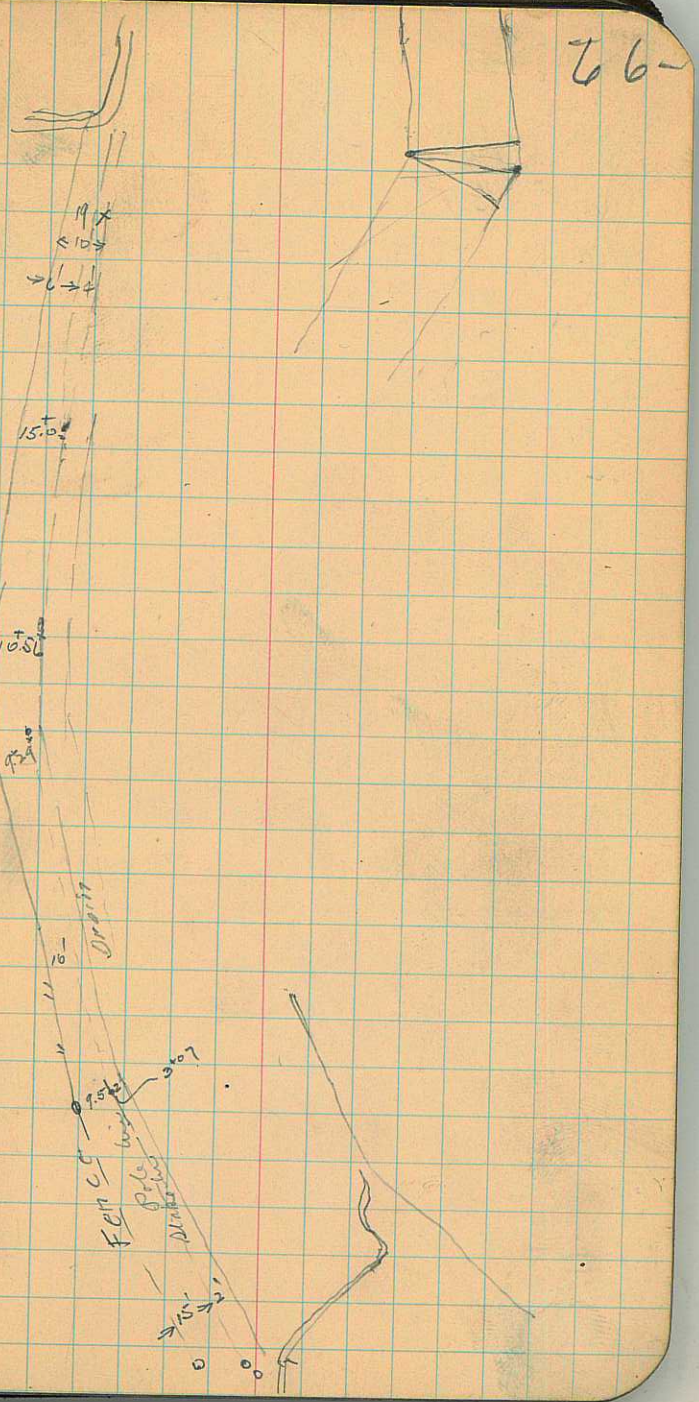
on cor curb. SE cor Bl. 19
on St. opp. " " "

Sta	BS.	FS	HI	Ele	Remarks
		7.495	507.76	500.265	cen of Bl. Bet 1st N + 2d N.
	2.308		50.2573		" " " " " " "
		~~4.71~~		497.86	Block NE cor B. 19
		6.957		495.616	on west side of cement walk in line with
	2.958		498.574		cents Bl. on 2 N Bet M + 1st W.
					" " " " " "
		5.60		492.97	on opp N.E. 20. in St.
		7.005		491.569	cent of Bl. on 2 N bet 1 + 2 W
	3.067		494.636		" " " " " "
Bm		5.17		489.46	on cor curb NE cor. B. 21.
		5.40		489.23	on St. opp. NE cor B. 21
		8.445		486.191	cent of B. bet 2 + 3 W L
	2.028		488.219		" " " " " "
		5.10		483.12	in St. opp NE cor B. 22
		7.093		481.126	cent of B 22 bet 3 + 4 W.
	4.34		485.46		" " " " " "
		5.30		480.16	about 8 d feet E of NW cor B 22 in St
		8.30		477.16	" 48 " E " " " " "
		~~8.30~~			in Bottom of Canal
Bm		3.30		482.166	on Nail in Tel post first one E
					of Canal

Drain for County
Beg. at West end of Providence lane intersectioning Co. Road to Weller
Sept 12/07

Sta	BS.	FS	HI	Elv	HT
307					
9+29					
10+56					
15+02					

to L=R



Levels

Sta.	B.S.	F.S.	H.I.	Elev.	
0	6.51			100.00	(106.5)
0			4.88	101.63	
0 + 41			6.79	99.72	
3 + 07		5.76		100.75	
	3.40				104.16
9 + 29		7.06		97.10	
9 + 29	3.41				(100.5)
10 + 56			4.04	96.47	
15 + 02		5.80		94.71	
" "	3.97				98.68
19 + 00	17.30		6.11	92.57	
		8.58	8.58	90.10	
		27.20			
			9.05	89.63	

Bottom of ditch east side on Hub. (cut 1.63)

in Bottom of Ditch W. side St.

Elev on Hub	cut	fill
98.47	2.28	
95.355	1.75	
94.72	1.75	
92.49	2.22	
9.50	2.07	

(Grade from 0 to 19 0.5% /0.)

on Hub

" "

on Hub in bot. of Creek that from a. Frederick

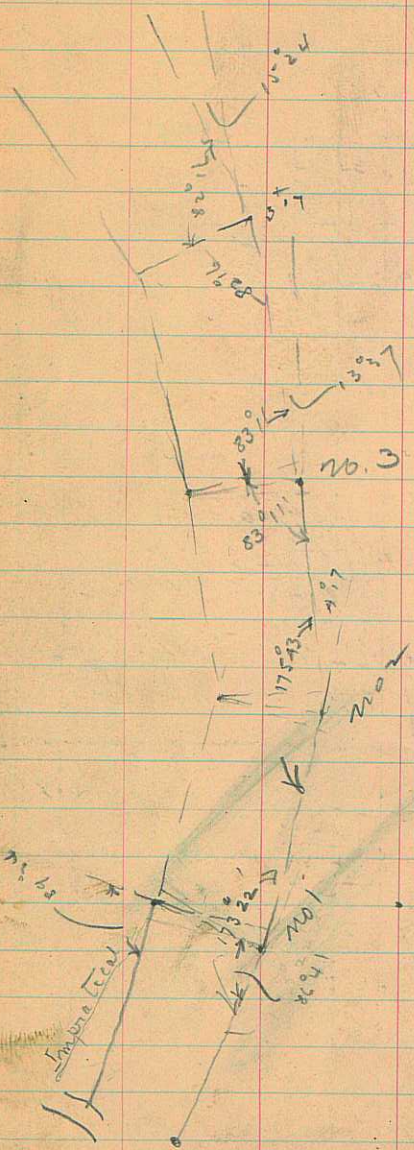
Bottom of Spring Creek opp Sta. 19

on N side st. dist. = 1776

99.72
89.63
10.09 | 1776
8 880 .568
1 2100
1 0636
14400
10208
392

o/o = 0.568

17960
4.17
17543



638
173 22
8060

No 1 | 6.38
319

99
20
79

2 | 173 60 22
86 41

Log .79 = 1.897627
Log cos 3°19 = T.999272
1.898355 = 79.13

No 2

Log 79 = 1.897627
Log cos 2°8 = T.999499
1.897928

2 | 417
28

79.06

2 | 173 60 43
87 56

No 3

17960
2 | 13437
2 | 1662.3
8311

6.48

13437
8311
9648

Log .79 = 1.897627
T.996934
1.900693 79.56

No 4

17960
1524
2 | 164.36
8218
1524

7°42

Log 79 = 1.897627
Log cos 7°42 T.996066
1.901561 79.72

Sta	HI	RR on grade	RR on Stake	Cut	fill
3+07 no3	4.97	7.25		2.28	
0 no 1	—	7.25	5.62	1.63	
1		7.25	5.70	1.55	
2		7.25	5.05	2.20	
9+29 no 4	4.72	6.47		1.75	
4			3.90	2.57	
5			4.12	2.35	
6			4.45	2.02	
7			4.78	1.69	
15+0 2.12 10+56 no 8	4.67	6.89			
8			5.14	1.75	
9			5.40	1.49	
10			5.30	1.59	
12			4.98	1.91	
13			4.87	2.02	
14			4.75	2.14	
15			4.82	2.07	

~~14.39~~ 19+00 1776'	BS.	FS	Ele	HI	Elev gw	cut
	4.09		92.57	99.66		
		6.05	93.61		90.63 ~~89.63~~	2.98

10.56
9.29
1.37

1776
572
7104
3552
8880
9.31624

7.25
5.70
1.55

7.25
1.75
5.50

6.47
4.78
1.69

6.89
4.87
2.02

6.89
4.88
1.91

6.89
4.75
2.14

99.72
9.21
90.51
89.63
0.78

4.97
2.28
7.25
1.63
5.62

4.72
1.11
6.47
2.28
4.19

6.47 6.47
4.45 4.12
2.02 2.35

4.67
2.22
6.89
1.75
5.14

6.89
2.07
4.82

9966
6.05
93.61
89.63
3.98

1776
1.495
8880
15984
7104
8.79120
9972
879
90.93
89.63
1.20

100.75
98.47
2.28
7.25

6.47
3.90
7.57

98.68
9.05
89.63

92.57
7.94
9.11
89.63

9361
90.63
2.98

92

Angle 17' up

No or Sta	HI	RR on Grade	RR on Stake	Cut	fill
1					
17+76 no1	4.46	7.44	4.46	2.98	
2			6.20	1.2	
3			6.00	1.44	
4 TP 14+39	5.03		5.23	2.21	
14+39		7.24	5.5		
5			5.90	1.34	
6			5.12	2.12	
7			5.40	1.84	
8 TP 10+06	5.02		6.00	1.24	
8		6.26			
9			5.95	0.21 .56 .26	
2+33	4.72	5.28			
9		4.97	3.90	.21	
10		5.28	4.10	1.38	
11		5.28	3.20	2.00	
12		5.28	2.8	2.50	
13		5.28	2.50	2.80	
14			4.00	1.30	
15		5.28	4.72	.56	
17			4.5	1.13	
116			4.60	.7	
18				2.2	

74-

Sta 8+25 | 8.27

Sta 2.83 5.02

6.02

Sta 0. 2.02 10.63 3.65 5.59 3.1 2.49

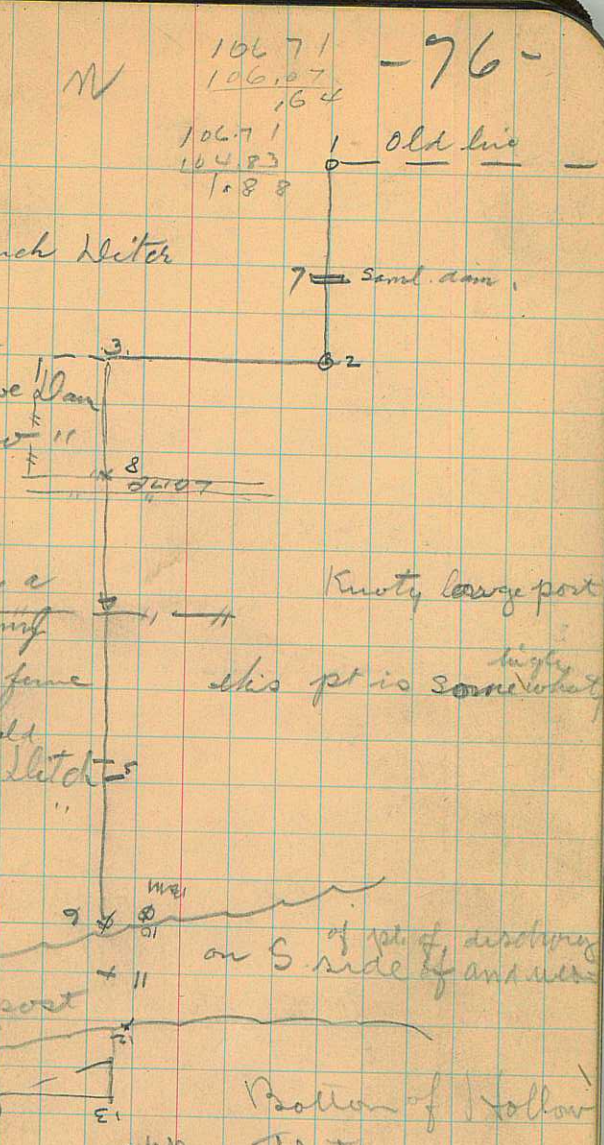
Sta 0' 2.0 4.23 2.2

Ditch Surv for N Mexican

Sept 14/07

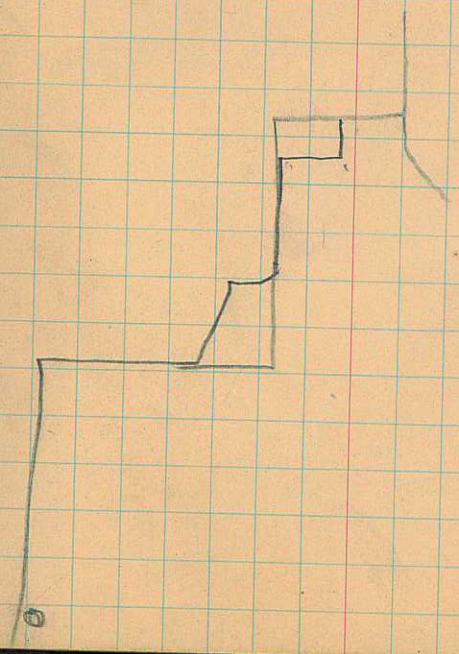
No.	Sta.	BS	FS	cm	Elv	HI	
1		7.280			106.07	113.35	in Bot of Bench Meter
1		6.22		6.22	107.13		on H2O
7		7.90		7.90	105.45		below Dam
7		6.23		6.23	107.12		on H2O above "
7		6.82		6.82	106.53		" " below "
3		7.65		7.65	105.70		bot of Ditch
3		6.83		6.83	106.52		on H2O
8			6.43		106.92		on ground near e
8		4.785				111.70	
4			4.88		106.82		by post at fence
4		4.300				111.12	
4				5.22	105.90		in bottom of Ditch
5				6.22	104.90		" " " "
5				5.10	106.02		on ground
6				H.I	106.71		" "
9			6.29	6.29	104.83		in ditch
10			4.22		106.90		on Natural post
10		0.78				107.68	on Stub
11				12.50	95.18		
12			2.08		105.60		

See over for Elev



1	
322	
373	
551	
834	
1505	
1800	
2072	
2189	
2284	
2400	
2536	

from 1 to 7 Small dam
" 1 to 2 where Latch turns W
" 1 to 3
" 1 to 8
" 1 to 4
" 1 to 5
" 1 to 6 about 10' further S pt of inlet can be seen
1 to 11 bottom of Hollow
1 to 12 pt of discharge
1 to 13 to Latch gang etc
1 to 9



Sur for a B allen

Sept 17/07

Beg at S E cor of Sec 13 which is a stone. I run

Dist	Course	L and R	Set Stake
20	N		
40	N		Set a Stake, intersect line on East to 1/4 of 1/4 stone on line to N E cor Sec 13. a Stone
.41.85			
61.84			
82.00			

Set on a line bet. N E cor of Sec 13 + S E cor 13.

F S to N E cor 89°51 to cen of Sec

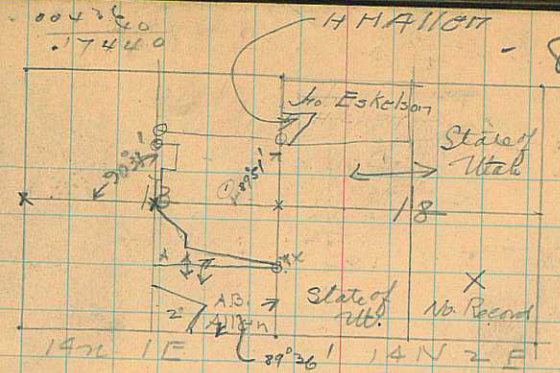
Said setting intersecting N & S line N of sd. S E cor

41.42ch

From a pt 20 ch N of S E cor sec 13.

No	Dist	Course		N	E	Stadia L	Stadia −	Stadia +
1			1°51'	4.78				
2		N 1°50 E	45°16'	5.20	6.795	4.78	3°35	
3		N 47°10 E			5.39	5.20	9°18'	
4		N 29° E	27°05		5.35	5.20		
5	2	N 45' E	1°03		5.43	5.20	7°10'	
6	2	N 15°10 W	15°08		5.70	5.20	4°00'	
7	2	N 8°50 W	10°50		5.20	4.26	3°00	

see over



x 10.21 S 4-12 E of N E ¼ of S E ¼ 13.

No 1. James & Allen to Henry H. Allen.

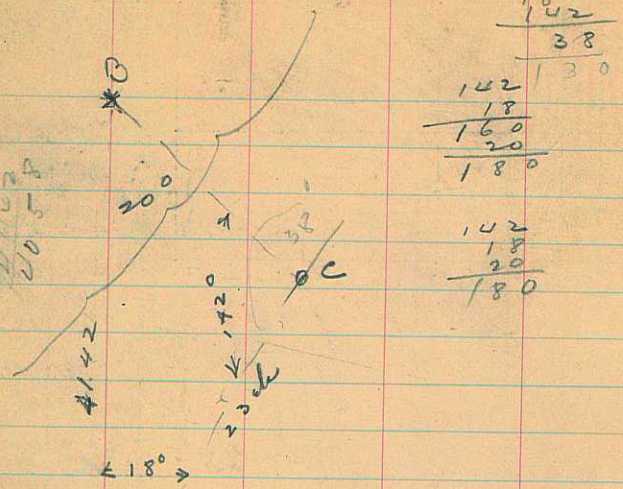
Beg at S E cor of N ½ of S E ¼ sec 13. N 160 rds, W 160 rds, S 7 rds, E 40 rds, S 20 rds, W 9 rds, S 6 rds W 5 rds 15 lks, S 17 rds, S E'ly 60 rds, S 16 rds S of E 120 rds to beg.

Jos. Christofferson cor at S W cor of S E ¼ sec 13 N 50 rds, E 20 rds S W 35 rds W 3-2 rds to beg. 9 93/160 acres

F.S. along range line

at spring

Beg of pipe



180°
142
38
130

142
18
160
20
180

142
18
20
180

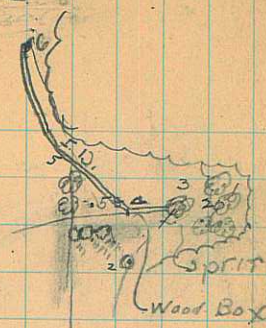
Sin 38° : AB : Sin 20° , 23

Log 23 = 1. 361728
Log sin 38° = T. 789342
1.151070
Log sin 20° = T. 534052
1.617018

41.40

$\frac{Sc}{AB} = \frac{Sin\ B}{AC}$

— 82 —

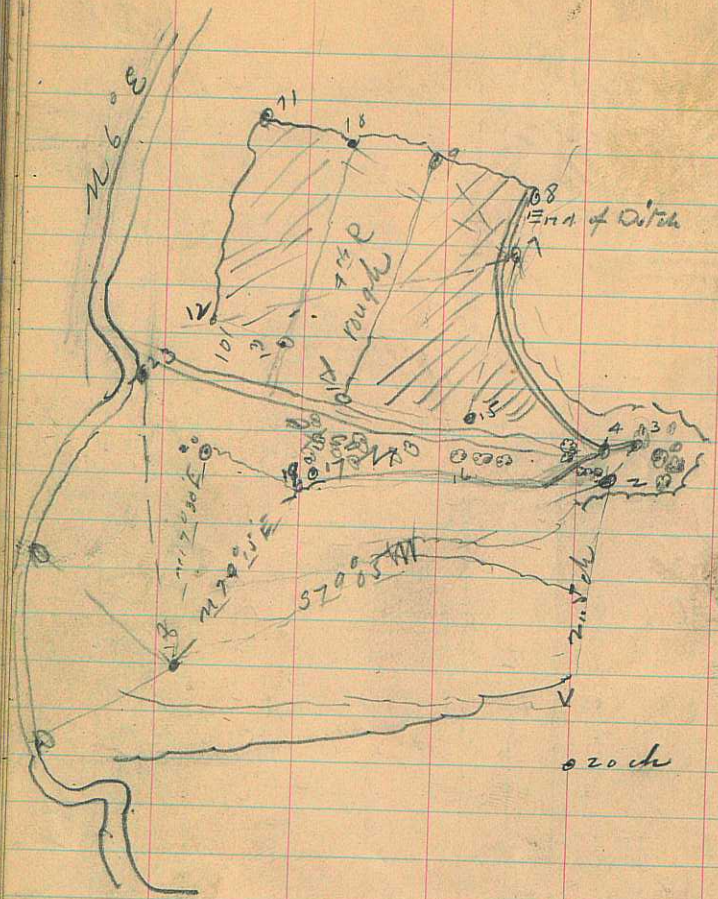


1.50'

Dr Wash

6' rock N of SE cor S 13

Note.
Allen Spring is 396 feet East of E. line sec 13. Tp 10 N. R 1 E


N 6° E
End of Ditch
1st Rough
Milk House
N 49° 50' W
Through
Gate
Fence
Well
House
S 20° E

A. B Sur. Cor.

No	Dist	Course	Angle L	Angle R	Stadia U	Stadia L	HT	Angle −	Angle +	Remarks
7				18°52			4.50			
8		N 10° E			4.78	4.50		3°10'		
9		N 46°20 W	37°20		4.91	4.50		9°30		
10		N 59°50 W	57°12		5.02	4.50		9°32		
11		N 63°40 W	54°49		5.33	4.50		16°37		
12		S 70°20 W	100°52		5.46	4.50		10°15		
13		S 56°20 W	114°45		5.23	4.50		8°45		
14		S 46° W	125°24		5.13	4.50		7°10'		
15		S 7°15 W	164°01'		5.10	4.50		2°35'		
16		N 60°10' W		128°04	5.14	4.93	4.93	12°45		B. S. to 7
17		N 89°32 W		99°19	5.32	4.93		8°30		
18		S 79°05 W		81°57	4.93	3.43	4.93	6°50		
19		N 74°15 E		175°24	5.79	4.93			5°45'	
20		N 17°30 E		118°38	5.45	4.93		4.32		cor. of Section
21		N 15° E'		116°06'	5.60	4.93		5°25'		" " "
22		N 20° E		121°08'	5.77	4.93		4°		at. W side chan from Sp.
23		N 11°50 E		113°00	5.75	5.00				E bank Canal
24		N 21° W		76°18	5.61	4.93				E. bank Can
25		S 77° W	1°55'		5.57	4.93		9°55'		" " "
26		S 78° W	58'		4.93	3.23	4.66	6°32		Angle point
27		N 69°50 W		32°	10.490	4.66	4.73	2°49		
28		S 63°50 W			4.91	4.73				End of "3" for one length
29		S 61° W	48°54		5.35	4.73	4.89	9°50'		End of 2 pages
30		N 54°35 W		64°52'	6.04	4.89		3°18'		

4.03	
3.33	
1.60	
4.66	
2.98	
1.68	
4.93	
1.68	
3.25	

6950'W
48 54
118 44

17460
11804
5656

Sept 18/07

Beg. again on cen of 2.c 13 a Stone.

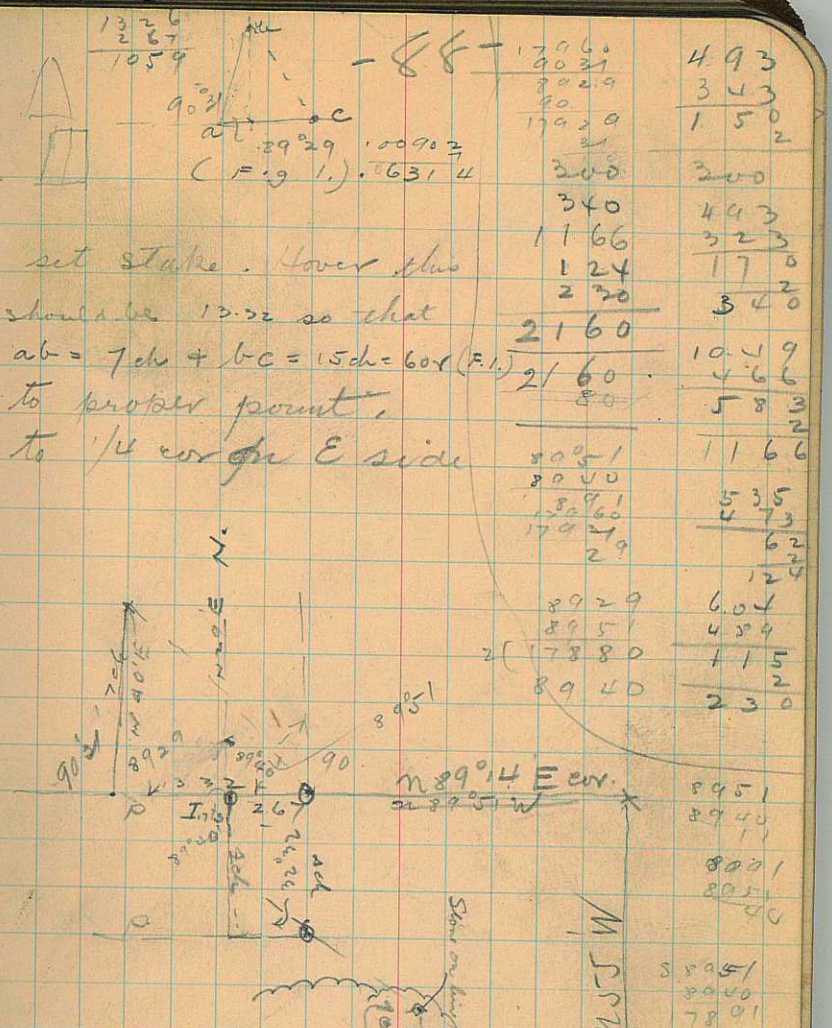
	angles	
Dist.	Course	L R
13.26	E	

13.32
39.64
13.32

Set. on a pt 10.59 ch E of cen of 13 Tp 14 N R 1E
Ob of Sept 18./07
No. 1.
h = 46°03'
Time = 11 a.m.
∠ L to 1/4 cor } 60°7'
on E side 13 }

No 2
h = 46°28'
Time 11.4 a.m.
∠ L to E 1/4 cor 13 = 61°40'

Lat 41 57 20 N
Long 111°48 E



Richmond Sur for C Z Harris
Utah.

Beg. at W 1/4 cor sec 21
To find N. R. E
mag
Dist Course L or R

40.45
40.75
80.00
115.00

Beg. at SE cor 28

40.12 S 89°46 W 90°00'
6.37 N
28 N 25°58 E Tan. Base
see sketch

Beg again on SE cor Sec 28

39.94 N to cor

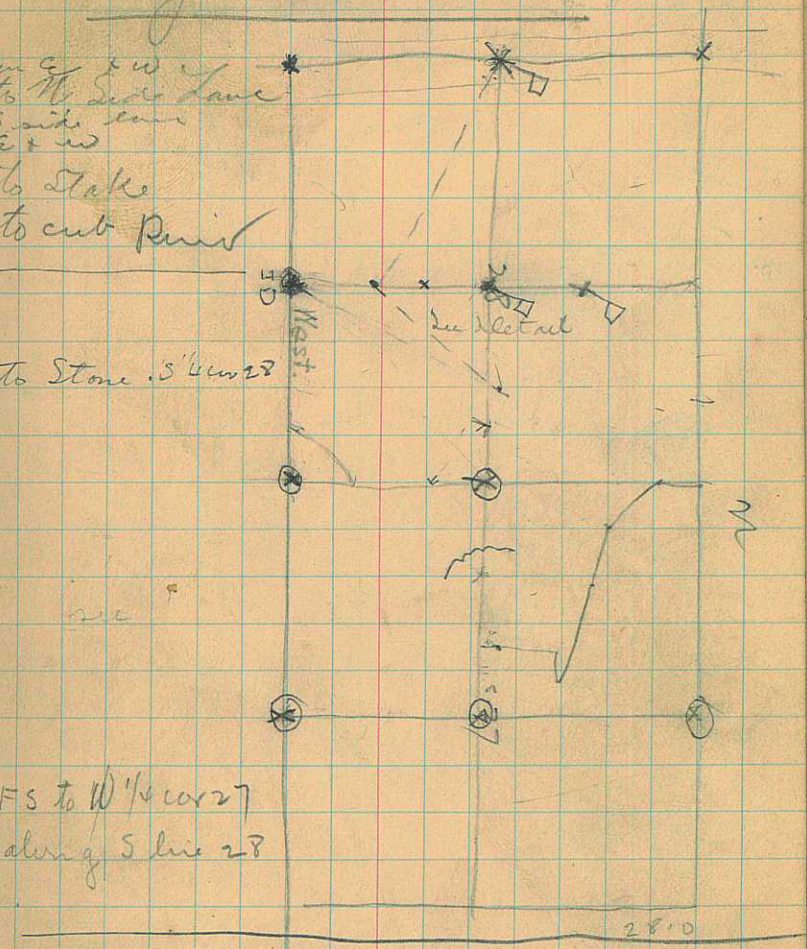
Set on said cor
89°46'

N 89°46 W

Set on W 1/4 cor 27
90°31 to pt
which is 30 ch
S of W 1/4 cor 21

see on 2nd page

Lat in cent of Sec 27 (90)
= 41°55'40" N.
Long = 111°49' E.

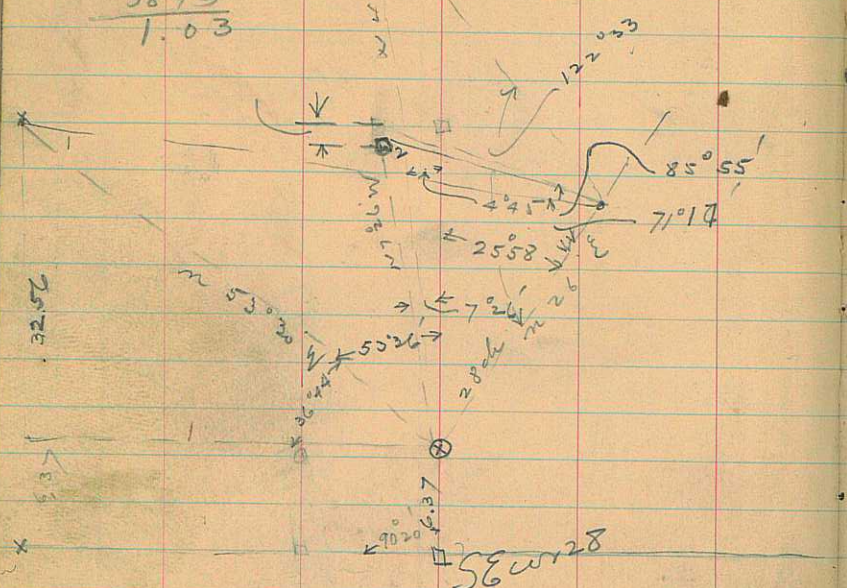


Obs on SE cor 28. Sept 1, 1907
h = 28°10
thru 3'50
Ls R to E line 28 = 115°12
mag brg of Sun 64°50' W

637
3256
3893

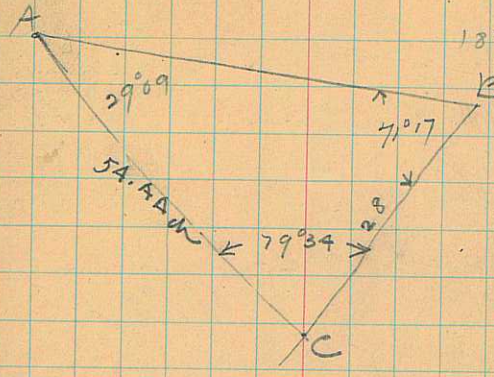
3996
3893
1.03

1.04



8960
5326
3634

No. 1



$\sin B : AC :: \sin A : BC.$

$\log 28 = 1.447158$

$\log 71.17' \quad \bar{1}.976404$

1.423562

$\log = 29°09 \quad \bar{1}.687616$

$1.735946 \quad 54.44$

$\log = 36°44 \quad \bar{1}.776768$

$1.512714 \quad 32.56$

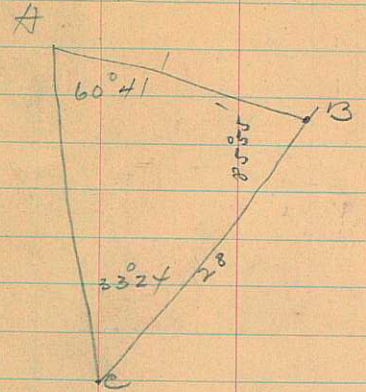
6.37

38.93

190 66 15 340 115 75 15 10225 1.000 0225 0976 81 1600 1309

187

5326
2568
2934
7117
15051
17960
15051
2909
7117
7934
18000



2558
726
3324
855
11919

17960
11919
6041
3324
855
8000

Sec A; CB; Sin B. AC

Log 28 = 1.447158
Log 85°5' = T. 998896
1.446054

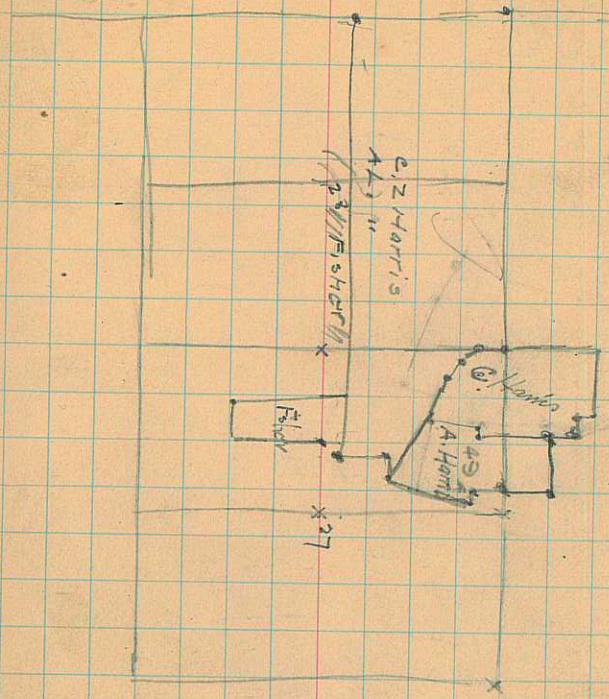
Log sin 60°41' T. 940480
1.505574
T. 996335
1.501909

3893
3813
80

31.76
6.37
38.13

Set on S ¼ cor Sec 28

Dist	L	R
20.12	N 89°46'	89°46
6.37	N	



1200
1200
0
1200
1200

to center Sec. 28 this line fell W. 0.06 ch. from first line which was turned R 90°20' R.

Set on cen 27. 1 W 1 E

h = 34°36

tan = 9°40

R = 143°47

35°27

tan 9 45

∠R = 142°24

Long 111° 44

60

6660

44

6704 | 900

6300 | 7.448

4040 | 2.250

3600 | 4005.198

4400

3600

8000

Log 2.504611

34°35 = T 915559

2.589052 =

.0388 2

tan 41°55'40 = T.953336

T. 838487

T. 791823

143 47

54°32

8915

.161917

.03882

.158035

Log 5.198 = 0.715836

Log 58.22" 1.765072

2.480908

Log 60 − 1.778151

0.702757

1°26'47.6

5 2.4

Lat 1°21'45 2

+1-1

Log 2 1°21'45 = 2.376177

Log cos 41°55'40 = T.871566

2.504611

log cos 35°26 = T.911046

2.593565

Mo2 = .03922

tan 41°55'40 = T.953336

tan 35°26 = T.854149

T.805535

67827

.63905

.03922

.59983

53°7'30" E

142 24

53 07

Mo 2 S 89 17 W

Mo 1 S 89 15 W

96

5990

5997.2

4.2

4.2

1695.6

88.8

4.5

4440

3562

406.60

372171

4006

376177

1.89

40

75.60

871641

.75

871566

953167

169

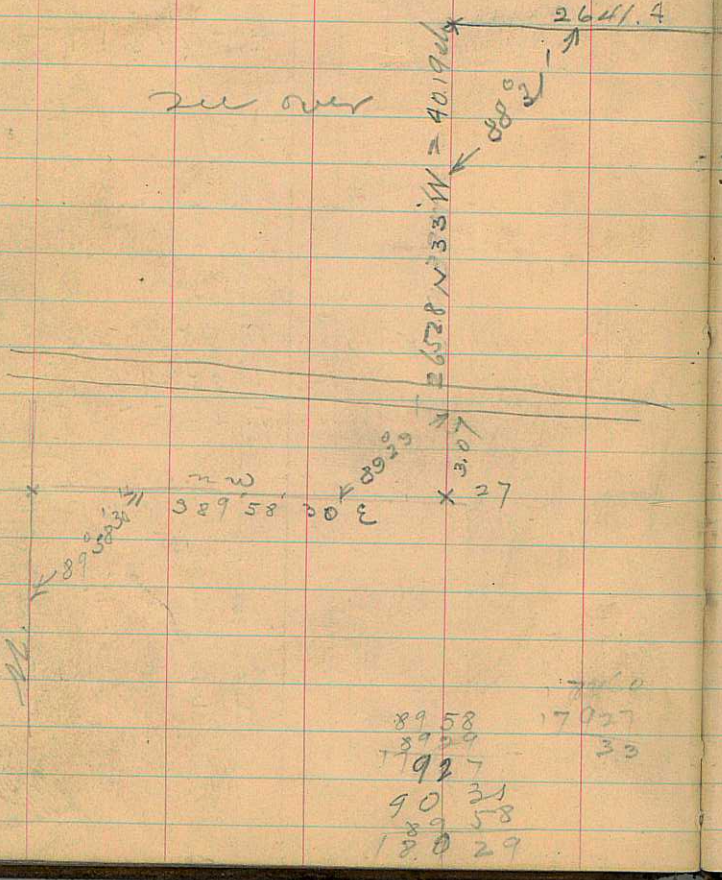
953336

No. 3

h = 40° 20

m 10.20

L^c R 13314



C. Z Harris

Beg at center sec 27

Dist	Course	L	R
11.50	W		90
3.40	N		
11.00	"		90°
5	E	158°30	
17.40	N68°30W		30'
12.50	N68W		
17.40	N68 30		73°45'
15.75	N5°15E		8445
1	E		
14.28	N		

Beg again on cen 27 89°29

39.78	N31W	
40.19	N31W	91°29
20.08	S89°01E	
40.02	" "	
5.50	N89°01W	89°01
9.50	N	89°01
14.50	W	
14.40	"	

8960
515
8445

90
67 30
158 30

(Enid Divy)

this Cor house bears S89°17W

20.08 S 31 E

8830
89 1

17960
8831
9129

40.19
.41
39.78

90 89
31
90 58

to fence run E+W
to N 1/4 cor sec 27
to 1/4 of 1/4 cor
to NE cor sec 27

state
to fence

Grade for
N S Andrews.

Gutter west side Main St.
Bet 1st + 2nd North.

Sta	BS	FS	HI	Ele
			4.96	
	5.13			
		5.68		
		5.40		
		6.46		
		4.52		

N S Andrews.

4.52
1.25
1.40
5.87

4.65

			Sta	
	5.89	RR	25	4.98
		5.48	50	5.05
1.00	5.20	5.20	50	6.15
1.00	1.37	5.45		
1.00		5.03		
75	5.063			
75	5.31			
75	5.063			
50	1.37			
25	4.936			
	1.37			
	4.789			
	1.37			
	4.652			

7.5 | 12
7 2 | 62
20

5.05 102

4.94
4.84
.10

5.68
5.58
10
5.40

4.92
5.57
4.92
.59

1.94 | 6.46
5.50
.96

66
30
19.30

20 | 30
66

100 | 27
81 | 3

on lower grade at S. cor curb Harris Blk.

4.95

5.50	4.52		6.46
.40	.35		4.52
5.90	1.40		1.94
5.87	5.87		.25
5.50	4		1.69
.37	6.25		.20
	4.77		1.49
	1.48		1.69
	4.72		1.60
	4.52		1.08
	.20		.52
			12
			16
			28
		5.20	.04
		21	.52
		5.45	2.24

on Cement Harris NE cor
Grade of Gutter

on Cement NW cor Harris Blk.

NW cor Harris Blk
Grade on brick
" " Gutter Curb
RR on Square

Levels for Logan City
in conjuction with Thatcher
Milling Co.
Sept 24/07

Sta	BS	FS	HI	Ele
	4.777		506.22	510.997
		5.02		505.96
		8.82		
		8.85		
		7.17		503.827

BM Grade for O. Smith on South side of 2nd South between 1st & 2 East.

3.270		100	103.27
	4.84	98.43	
		102.73	
	5.04		

Reset.

6.87		98.43	105.30
	~~2.677~~	102.73	
	2.677	102.623	
5.28			107.903
	5.373	102.53	

4.777 506.22 510.997
4.777 7.17
510.997 503.827
502.53
502.18
.25
8.82
502.177
893
08

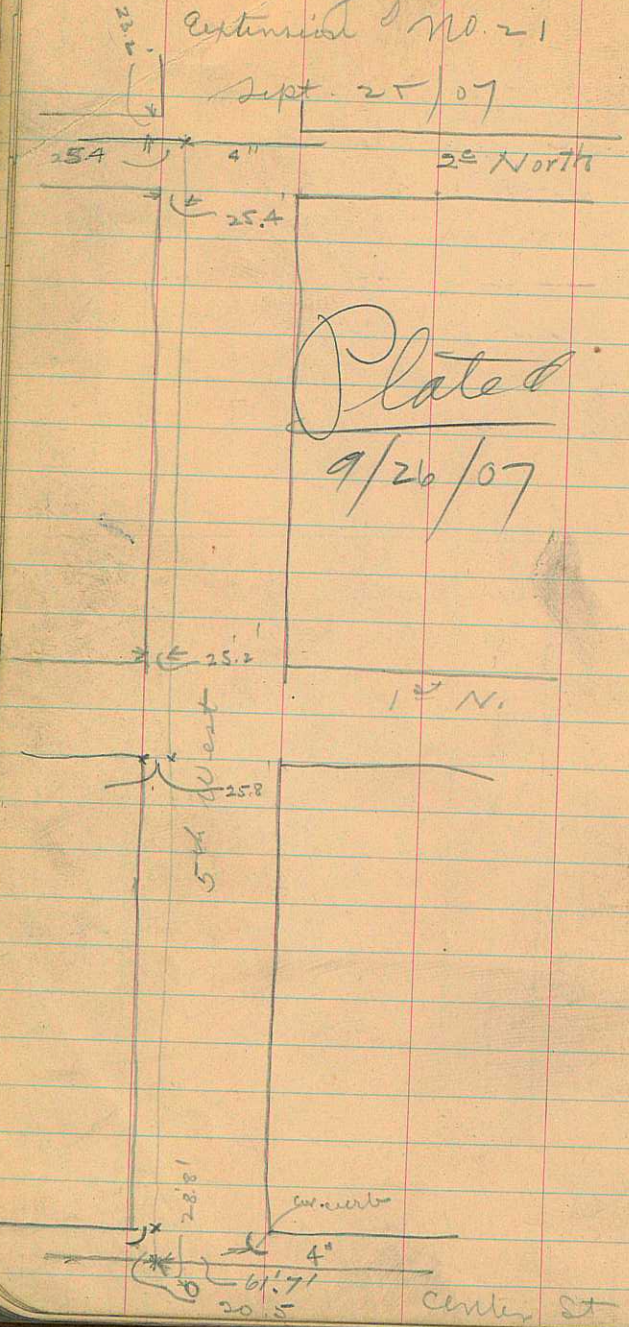
on cement walk on sketch
on cor curb of intersection
just above foot bridge on 420
" " below " " " "

5.00 5.66 6.33 4.84 103.27
5.24 5.95 4 4.82
.42 .40 5.24 98.45
9

on Hydrant " "
SW cor Blk 12. PLO
SE " " " " grade = 0.718
cor of Blk just South of SW cor 12

Survey of water mains
Extension No. 2-1

Sept. 25/07



Plated
9/26/07

(Stakes were placed 1.5 feet West of Center of trench)

N.

Beg at cross. N. to in line with N side of pav. 27.4'
And Th. West 12.15 to E side Curb
West 26.5 to E side Blk line.

Beg at SW cor of Blk intersection 2d N + 5th

S. 96.3 to S. side St.
S 379.7 to P. L.
S 696.2 to N Side 1st N.
S 796.2 to S " " "
S 946.2 to P. Line E side 5th W
S. 10+92.8 to N. side Lane E+W)
S 11+03.7 to S side " " "
S 12+49.6 to P. Line
S 13+98.6 to Blk cor at fence
S. 14+02.35 to N side pav.

99.2
99.0
1402
1398
1207
1402
OK

Beg at N line Pav SE cor Blk 9.

N 40.27 to Blk line
N 1+54 to P Line
N 2+83.4 to P. Line
N 4+55.8 to " "
N 5+02 to P. Line
N 6+05.8 to NE cor of Blk 9

N	7.05.4	to SE cor of Block
N	7+71.7	to P. line
N	8+54	to P line
N	9+26.3 ✓	to " "
N	10+045	to P line
N	11+57.1	to P line
N	13+06.9	to NE cor Block.
N	14.02.	to SE cor " .

some what ~~off~~ indefinite

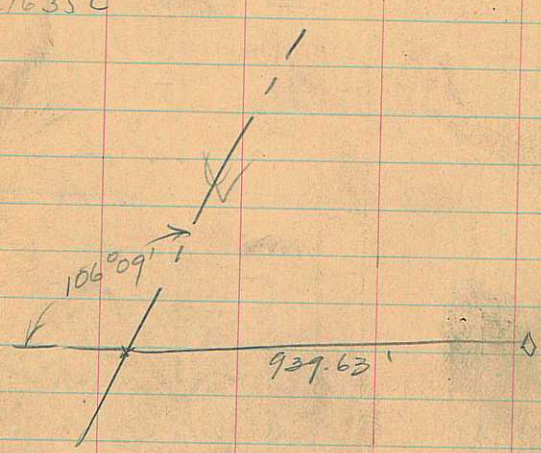
Sur for Geo R Rich

Sept 28/37

Beg at NE cor 27 T.S.

along N line

Dist	Course	∠	angle R
939.63	W mag.		106°09
11+34.3	N 16° 35 E		
11+47.7			
15+50.2			
15+95			
20+98			
25+53			
27+00			
~~30+00~~			
30+00			
40+0			
40+24.5			
40+28.5			
40+34			
41+33.8			
41+30			
41+42			
41+43.4			
40+79.2			



see sketch

40.285 507 40.792

2(101.5 50) 41.30 507 41.37

106.06 90 16.06

40.285 507 40.792

-110- 0 1.5

40.28.5 1.300

40.00 40.79.2 1 20.8

Dist bet inside of Rails = 4.71

along center of tract to S side Brs. (No. 1133) to N side Brs

To S side Brs

Cherry Creek to N " "

{ to Mile Post to Richmond (10" D)

Mark 11.4 R.P.

to white Post to Merrills span

10.6 mark (6" D)

To Mile post to Merrills span

12.4' mark (10" D)

change

To S edge of cattle Guard S side St,

to S side Co. Street. E + W

to N side Cattle Guard

to S side Cattle Guard.

to N side Co St E + W

to in line with Guard fence E + W

to N side Cattle Guard

to center of Co Road

house
Curb
Curb
Curb

Set on 1. which is Sta 40+79.2 from sec. iii and a

No	Dist	Course	L	R
	136 +1+19	× S 88°30 E		73°52
	371	" "		
	390			
	539			
	371		89°10'	
	—	N 1° E		

set at Sta 40+79.2

24.4	3	S 46°30 E		115°37
39'	4	S 28° E		134°16
19'	5	S 20°50 E		159°26
5-2'	6	S 4° W		166°03
73	7	N 51°45 E		34°
41+00			N 16°35' E	00 00
41+08			" "	
41+27				
43+00				
~~46+60~~				
46+60				
~~50~~				
50				
57+92				
52+66.5			11°22'	
		N 5° E		

41.00
+20
40+92

— 114 —

to pt 2 where team started to work BS along tree on Co. Road to Photographic pt.
point of vision to North
to pt of Photo
to west side to Road.
along right of first vision
to whistle post to Merrills going N

BS along track
to lookout cross mark. B M 45+31.93
Pole of H.C. E & L + Power
Photo pt. picture taken N.
to post where Price laid was coming
to Photo pt. taken N. when Moon train

to where Photo ~~was~~ taken Price said S to where
to Co. Sta. marked on E rail 1590
to pt where weeds were cut on E side of R of Dean
1592+30 on R.R. track when Photo
was taken S
to whistle Post on E to ~~Pine~~ cross. a
~~1/4 mi~~ 11'
change.
to pt ~~pip~~ pip. 3 x 10 marked 45 on S. side
P.I. old site of O.D.L.

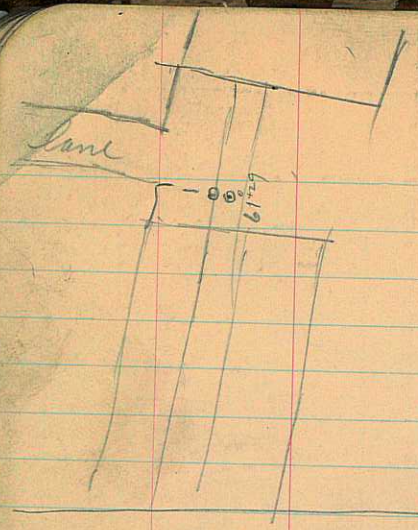
Sta	Course	angle L	angle R
52+65		95°41'	
28'	N 79°05 W		
5			
55+34			
59+65			
60+00			
61+01			
61+06			
61+09			
61+27			
61+29			
61+53			
61+68			
61+72			
61+76			

17960
16228
2 / 16838
8419
11221
9541

6.07
4.86
1221
246

PI

{on Eternal to middle of track
this PI is 4' west of E side R of way
" " " 246 N 7905 W 1 " W side Co. Highway
{on tan to pt at L 5 19' 1 E of W. Post ± Cross. RR Co. 19' West
from this pt. a house bears N 60° W 600' Dist
to W. P. for Cross near Mem.
change
to S. side iron cattle gd.
to S. " of fence of crossing
to N side of iron guard
this same ks 1610 on RR marks
see sketch / over
to N. side of Cane on the west
S side iron Cattle Gaurd
to N side Cross. White fence
to N " iron cattle Gaurd
mark. Ele on track = .32



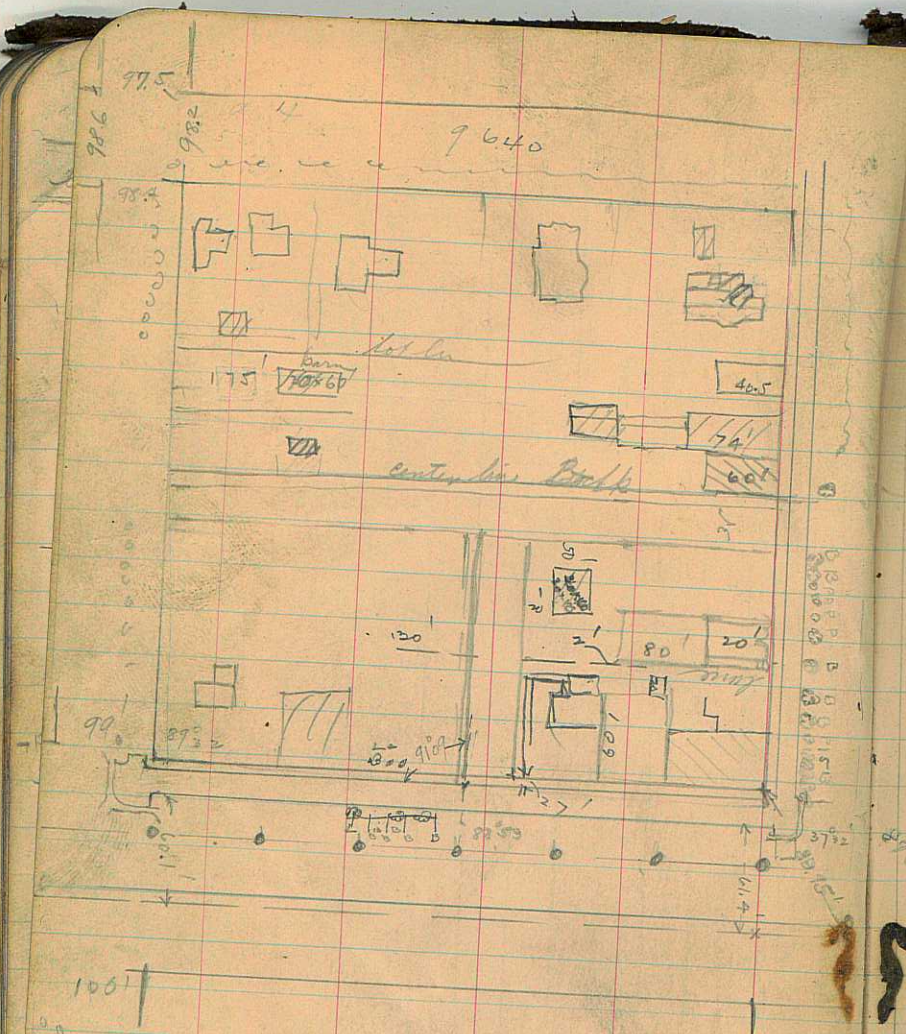
	BS.	FS	HI	Elv	
1610	1.50			4541.92	4543.42
1608			3.54	4539.88	V
1606			5.19	4538.23	V
1605		6.331		4537.09	✓
1604	2.80				4539.89
1602			4.05	4535.84	
1600			5.08	4534.81	
15+98		5.91		4533.98	
15+98	4.55				4538.53
+96			4.38	4534.15	
94			4.55	4533.98	V
15+92		5.27		4533.26	
15+92	2.65				4535.91
15 90+50			2.10	4533.81	
1590			3.81	4532.10	
Bm			3.98	4531.93	4535.91

(Mot. Crossing that goes down to Saul Hendrick + Co. 5+ N of Sta 1623

(All readings taken on east Rail.

on high ground E side R of Way

on Cross Road Look out Post



Center line of N Main.
facing N. 5 lie 4' West of center.

- 120 -

Pin on 2nd N.
L. 62.9. R 70.5. South side
L 63.2 R 70.3 North side

Pin 1st N.
L. 61.3. R 71.6. N side
R 61.3 R 71.6 S side
center

Loc. of grave 61.3 71.6 62.9
Beg at pt 8 ft. S. from SW cor lot 4. E 130 ft. N 120 ft. W 130 ft. S 120 ft to beg.

center
L 62.3 R — N side
L 62.6 R 70.8 S. side

1st S.
L 62.20 R 70.20 N. side

Ob. Set 7 on stone wall Main & 1st North.
h = + ~~37°06'~~ 37°07'
tm 10.30
1S L 54°41'
S 34°35' E

h = 37°37'
1S L 56°05'
time 10.40
S 33°30' E

	Course	Angles L	R
Beg at SW cor Blk 18. Plat a Logan City			
Dist	E		
60	E		
133.25	E		
181.4	E		
247.45	E		
296.95			
299.95			
300.85			
345.95			
337.50			
349.50			
387.95			
456			
490			
508			
551			
601.75			
Beg at SE cor Blk 18			
50'	N		
148.9			
194			
167			
298.3			

296.95
2.05
299.00

E side Bank Blk
to West rid 7th. Blk
to E side Clothing Block
to W side Federal st.
to E " "
to center of Block
to west lin Windsor Blk
to E " "
to E line Geo. Sorensen Blk
to W " Steiner Blk.
to E " " "
to W line Gov. Budge Home st. B. 18
" E " " " "
to W lin B.A. Nelson Home
to E " " " "
to SE cor. Blk 18.

to W line of B.A. Nelson Home
to lot lin
to n lin Home
to S lin
to lot lin Run E & W

3.97	N
427	N
452.4	N
471	N
496	N
531	N
603.1	

Beg N & cor Blk 18

993	W
114	W
152	N
2136	
301.75	

Beg NW cor Blk 18

34	S
68	S
169	
152.16	
309.8	

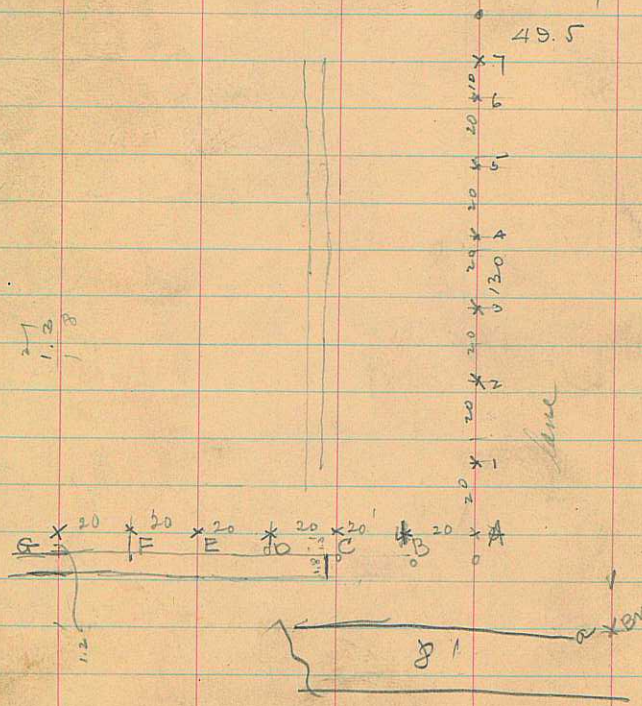
Beg at pt 8' S of SW cor Blk 4

to N line S. side House. House set B 40
To " N side " " " " —
to Lot line
to S. side of House. Waldsman } set B. 28'
to N " " " " " }
to S " " of House } set B. 30'
to N E cor Blk 18.

to tract line
to E line House set B 18'
to lot line Run N & S
to tract line
to cent of Blk. school pr in 30'
E of NW cor sd. Blk 18
to N line Mrs Robins House B. 40'
to S " " " " "
to N " " " " Block
to end of Rock Wall
to iron peg N side Glove E & W

Set on a pt on mon. line 4 west of center

Dist	Course	Angles L	R
68.73	S 88°59' E		88°59
73.8'	S 88°59' E		
~~68.73~~			~~91°09~~
68.73			91°09
68.73	S 88°59' E		00°23'
5'	S 89°22' E		90°38
	S 89°22' E		


49.5'
20
20
20

421

Sta	BS	FS	rm	Elv	HI	
BM						
a	4.21			501.203	505.413	
A			4.76	500.65		
1			5.61	499.80		on line A
2			5.37	500.04		
3			5.15	500.25		on " A.
4			4.83	500.58		
5			4.54	500.87		
6			4.20	501.21		
7			4.17	501.24		
TP						
B		5.00		500.413		
B	4.31				505.513	on ground
1			5.03	500.48		on "
2			5.26	500.15		
3			5.35	500.16		
4			5.03	500.18		
5			4.72	500.79		
6			4.16	501.35		
7			4.62	500.89		
C		4.79		500.723		
C	4.69					on stake
0			5.21	500.50		
B.st 0			5.00	500.51		
Cor 1			5.00	500.57		
2			5.37	500.14		on line C
3			4.96	500.61		
4			4.67	500.84		
5			4.90	500.61		
6			4.45	501.06		
C	3.87			500.723	504.593	on stake.
set on 0						
1			4.95	499.64		
2			4.82	499.77		
3			4.46	500.13		
4			4.40	500.19		
5			4.05	500.54		
6			3.95	500.64		
7			3.92	500.67		
D			4.95	499.64		

Sta	BS	FS	HI	Elev		
C	3.78			500.723	504.503	on stake
E			4.85	499.653		
1			4.95	499.55		on line E
2			4.76	499.74		
3			4.60	499.90		
4			4.35	500.15		
5			4.17	500.33		
6			3.95	500.55		
7			3.95	500.55		
C	3.73			500.723	504.453	
F			4.85	499.60		on or F
1			5.01	499.44		Cunningham line f.
2			4.79	499.76		
3			4.60	499.85		
4			4.35	500.10		
5			4.15	500.30		
6			4.02	500.43		
7			3.80	500.65		
C	3.79			500.723	504.513	on stake
G			5.10	499.41		
1			4.92	499.60		
2			4.76	499.75		
3			4.53	499.98		
4			4.53	499.98		
5			4.25	500.26		
6			4.02	500.50		
7			4.10	500.41		
	3.118			502.49	505.608	cor curb. SE cor B. 19
			2.58	503.028		on pav. SW cor 18
			4.405	501.203		on pav. E side. on S side 3rd lane
		7.174		498.434		on pav E " on NW cor B.18

Survey for Government Con.

Oct. 8/07

set 30' N of NE cor Blk 21.

Dist.	No	Mag. Course	BS	FS.	Angles L	Angles R	Stadia U	Stadia L	HI	Angles +	Angles −	Time	
		S 88°45 E					11.467	4.50	4.50				at pt 30' N of NE cor B. 21
		N 88°45 W					10.52	4.50		17'			} NE cor 13 Plat 9. 30' N
	7	S 88°45	0.02				1.41	0.02	(Ele 00.00)				at pt on E side equal
	8												on 13th in Tel post
	9	N 88°45' W					5.33	2.698	0.533				Ele. on ground 476.86
	9p						5.10	1.673		1°06'			" " " 466.76
	10	S 88°50 E							5.10	1°19'		(Ele 450.8)	31.6' W of West rail
	10				1	20°43			5.10				Not No 10 is 2.9 lower and
	11	N 68°10' W					5.10	4.20		1°25'			{10 is also in line with west
	10	N 68°10' W		2°39			11.00	2.00	5.18	43'			side RR Track.*
	12	N 70°31' W					5.18	3.49		23'			N side Co Road
	13						8.19	5.18		50'			Ls - for Stadia 5.0'
	12						10.69	5.18		31'			(428.84)
	12						11.25	3.00		25'			
	12						12.00	1.30		32'			← this angle is about 1' higher than actual H.I.
	17	(409.94)											

* from 10 contours of Ground to Gravel Bank is almost level

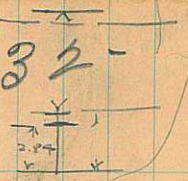
+17

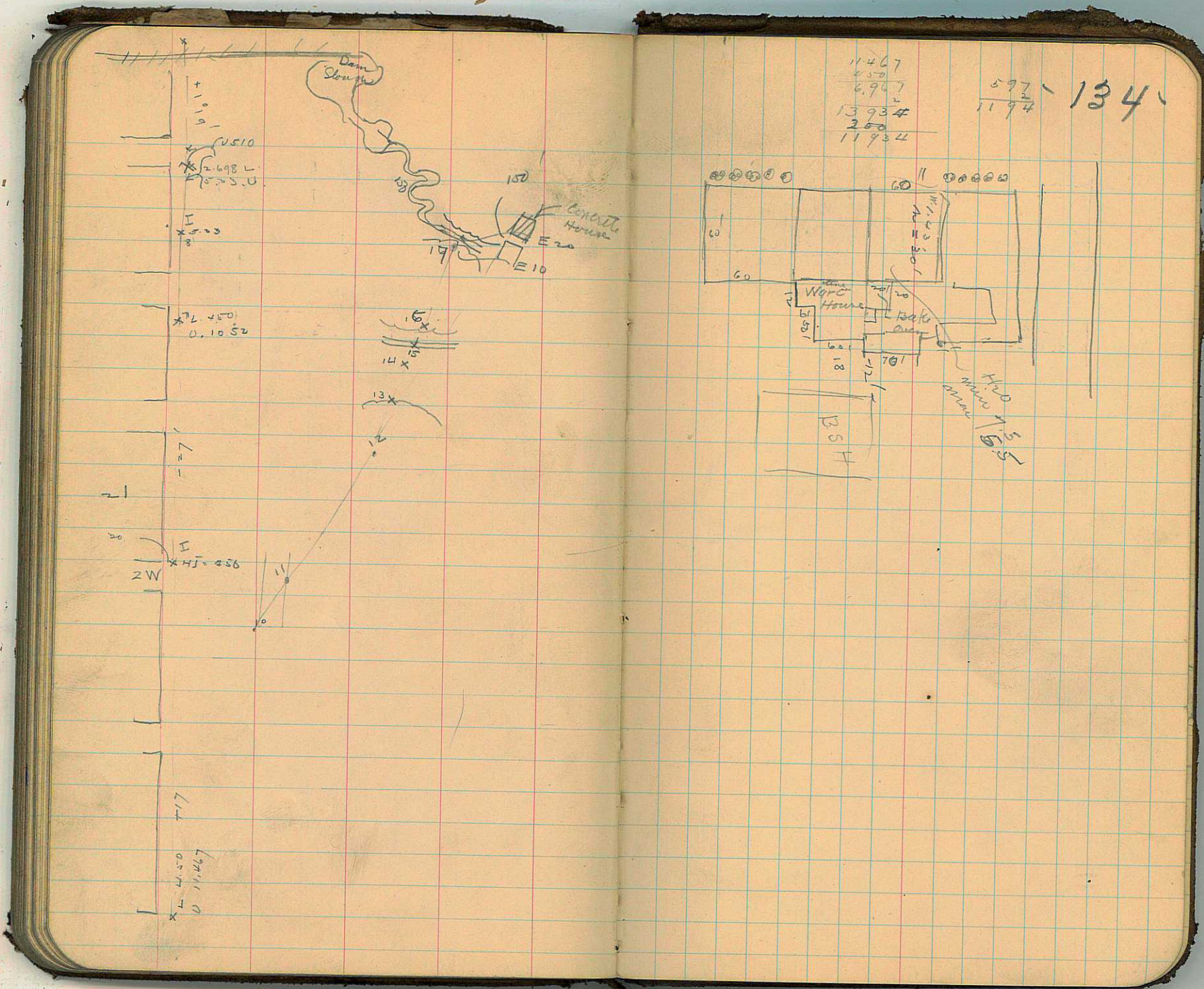
12 00
1 3
10.7°

5 1 0
2.2 0
2.9°

12
13
7

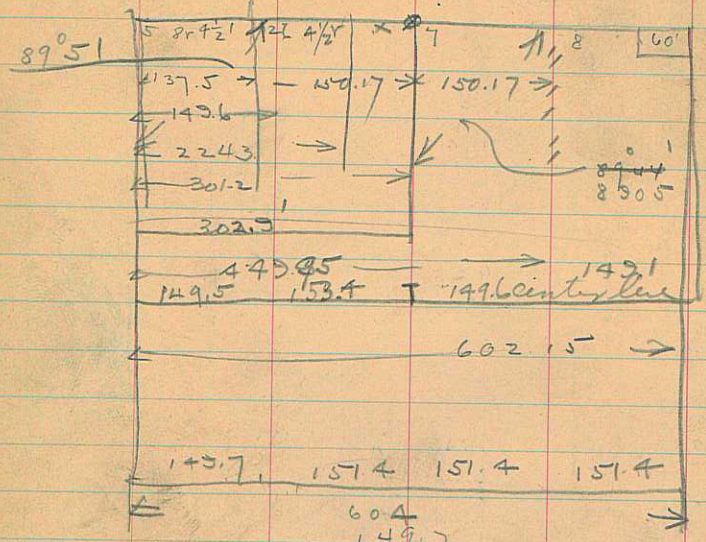
-132-




Dam
Slough
+ 1.0 9 1
US 10
2.698 L
0.25 S.U.
H 5.13
L 4.50
0.10 S2
15
14
13
12
11
10
H HJ = 4.56
2W
T 4.5.0
0 11.467
150
Concrete House
E 20
E 10
11.467
6.967
1393 ft²
200
1193 ft²
597
194
134
60
60
60
11
Water House
Bake Oven
Well
12
18
7 01
12
H20 main area
BSH
55

Sur. for a a Law

Oct 1907



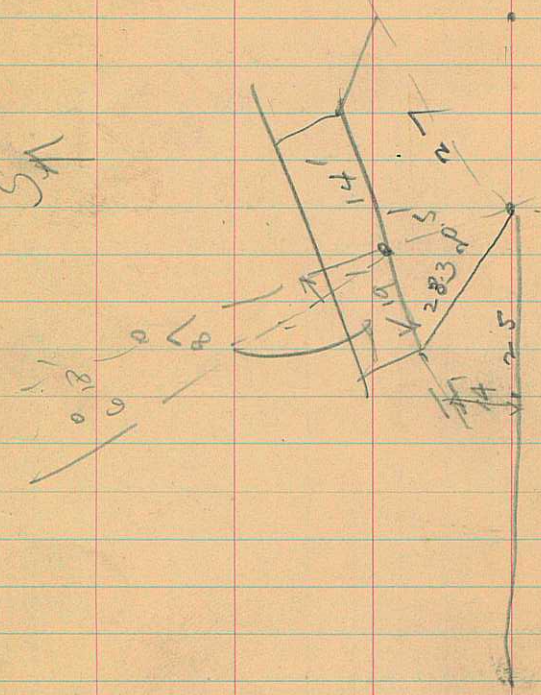
-136-

1111

17960
3416
2 14544
7252

104
52

34°16'



7252
6634
618
1832
1432

1832
858
2190

60 7212
120 307
22 6905

Survey set on center Cor

5 222
222

10 444 cc 3
222

15706
209.88
15706
125
18831

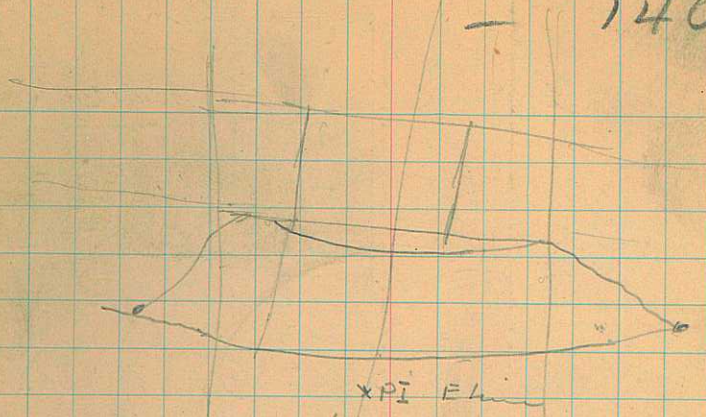
222.5' x
152.5' ~ 3
3
4276
855 60
60
25

444
121
609

95°06'

Levels.

Station	BS	FS	HI	Elev
Bm	5.45		505.96	511.41
		5.54		5
40.2		5.78		505.63
35		5.98		
30		5.94		
25		5.70		
20		5.92		
15		6.00		
8.2		5.83		
0		5.85		
0		6.89		
32		~~7.00~~		
29		7.15		



on cor curb stone
on P.T. N Curve which is 6' N of C.
one notch on S
pin on curve west bw Cab.

on pin Marked 2 ~~Notch~~ S

on pin Mark 3 South
PC, which pt is 14 N of Canal
on S. curve. N E cor old brick
on ~~pin~~ ground ~~Notch on S~~. NW cor B.
2 Nail & Tag for 15' from Director W on curve

Descs. for Surv. down near Avon for

Theodore Petersen

Beg. at a pt. 10 ch. N of SE cor of NW¼ of sec. 8 T 9 N. R 1 E W 19°50' N 23.38 ch; S 4 ch, W 4°50' S 18.35 ch, to the west line sd. ¼ sec. N 8.80 ch, E 4°10' N 21.42 ch, N 1°30' E. 6.40 ch, E 24°45' S 19.29 ch. to E line sd. ¼ sec. S 11.36 ch to beg 40 acc.

64°50'

G.9 = 10/.9

58°40'

5 58.666 | 9 = 64.81

43

73

13

65

7100 / 82 = 7182

400.00 | 21600 | 7182 | 3

21600

00

203.06

202106

13124

7182 gr.

7182 / 21600 / 43092.00 | 4

7182

14364

4 | 15 | 33.12 | 00 | 4

3878.28

360 | 400 | 9

3600

3878.2 | 60 = 64

360

278

240

38

71.82 / .9 = 64.638

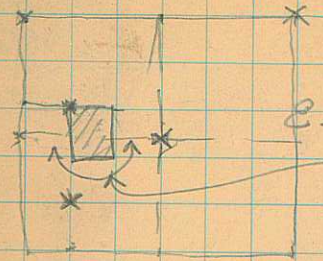
64°38'

Levels
Oct 31/07
Culvert on Mu

Sta	BS	FS	HI	Elev
	4.125		505.96	510.085
		4.50		
		10.675		499.41

4.50
6.17
10.67

505.96
4.125
510.085
505.58
4.50



510.085
499.41
10.675
1008.5

3.778
.25
4.028

4.37
.25
4.587

6.25 5.48 .31 6.73

5.50 5.50 5

6.84 .35 5.49 4.65 .840 .250 750 .336 900 750 1500 1500

5.49 .50 4.99 5.00 5.10

5.10 .35 4.75

6.25 .250 .50

4.65 .25 1.10 6.00

6.84 6.000 .840 .250 750 .336 900 750 1500 1500

5.20 4.65 1.35 .1350 .1548

.336 1.5 1680 336 .5040

1.10 .25 1.35

6.84 6.33 .51

6.0 7.35 6.84 .51

6.84 504 6.336 1.35 4.986 .38 5.286

.97 1.35 4.85 .97 1.052

5.20 1.35 6.55

6.25

7.10 1.45 5.65 5.20 1.85 5.42

5.95

6.00 5.75 1.25 7.00 6.25

6.25 5.75 1.35 7.10 .97

7.10 4.65 2.4500 .250 2250 .97 2000 1750

5.50 1.35 6.85

5.20

4.65
25
1.10
6.00

6.84
6.00
.840
750
900
750
1500
1500
00

.336
1.5
1680
336
.5040

5.20
4.65
1.5 | 24.100
.137
.548

6.84
6.33
.51

1.10
.25
1.35

3.778
25
4.028

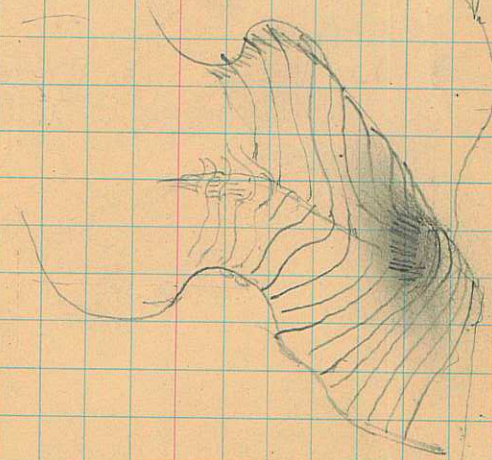
4.337
.25
4.587

5.89
4.65
1.240 | 150
1200 826
04000
3000
1000

3 | 1.240
.413

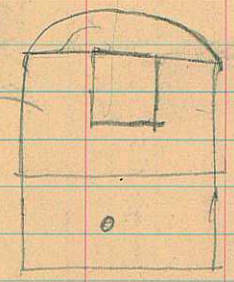
5.89
.413
5.483

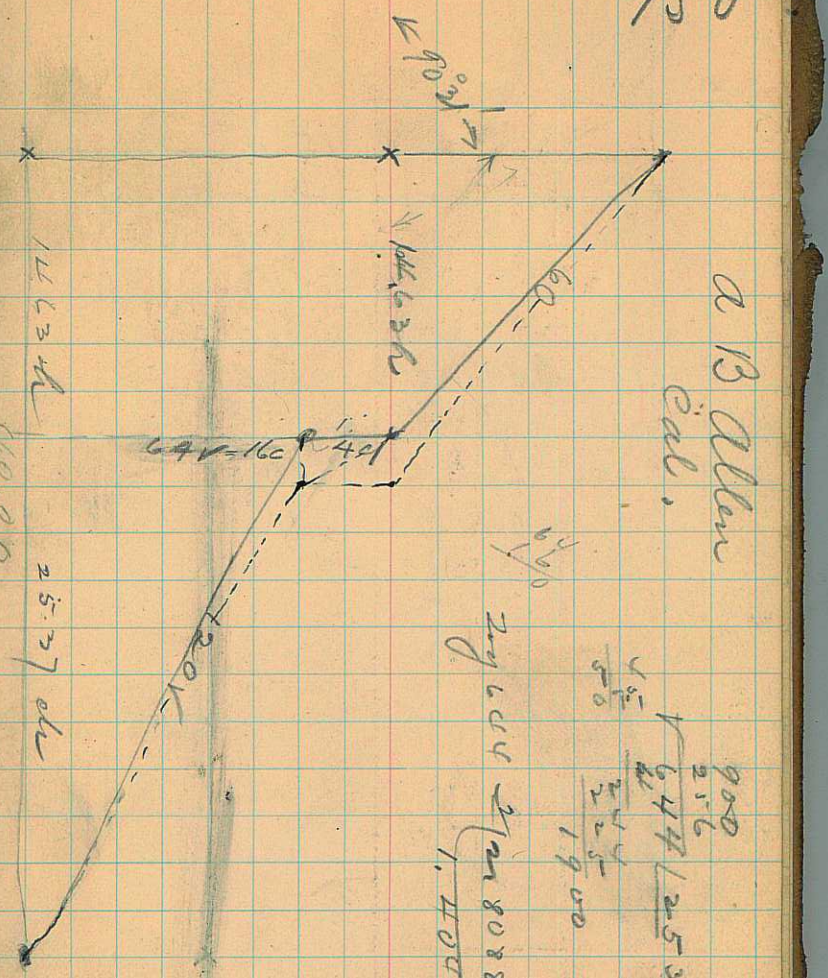
5.48
25
1.08
6.81

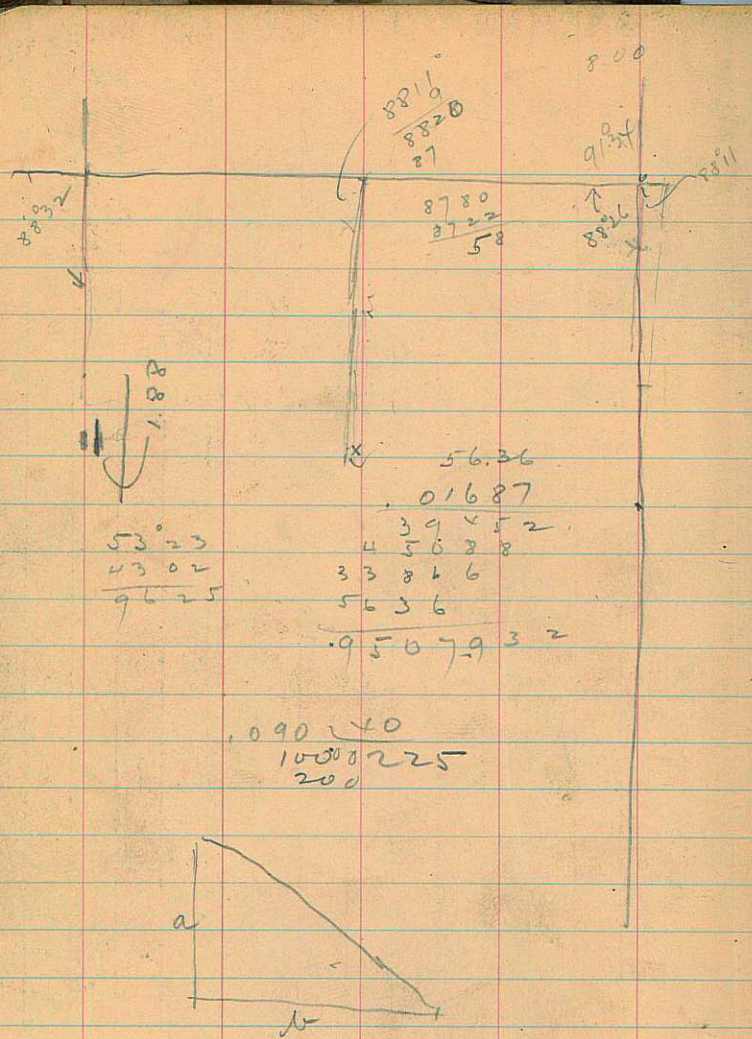


15

a 13 Allen
Cal.







53°23
43 02
9625

56.36
.01687
39452
45688
33816
5636
.950793 2

.090 40
10000225
200

$c = \sqrt{a^2+b^2} = c$

$c^2 = a^2+b^2$

$b^+ = \sqrt{a^2-c^2}$

350
14,00
500
90

9134
8826
1000

152

56.40
56.32
5 11272
56.36

.15000 56.36
1137200 26
36280
33816
2464

106.07
7.28
11335

11335 6.22
790 107.13

113.35 10545
683
106.52

113.35
6.23
107.12

113.35
6.82
106.53

13
.08
1.04

5

113.35
7.45
105.76

113.35
6.43
106.92
4.78

10652

111.12
6.22
104.90

111.70
4.88
106.82
4.30

106.00

1.71
105.00

111.12
5.10
106.02

111.12
5.22
105.90

111.12
4.01
106.71

111.12
6.29
104.83

13.12 ½
2625.0

1.5 ⟌ 12
30.125
6

5.06
.28
5.34

8.95
7.5
16.45

.45 ⟌ 12
36 395
90
84
60

18
6
12

16.375 ½
3275.0

49
66
294
294
3234

12 0000 ⟌ .9848
9848 12.18
21520
19696
18240
9848
83920
78784

12.18 ½
24.36.

2436.
.92
19488
21924
22387.28

.57
66
342
342
37.62

200 b cos Z
cos Z

56.36
.57
39452
28180
3.2125
1.60

79,40
75
80.15
965
50

35
21

fa =
200 cos Z

.0.05

1795960
901711
894249

1795960
894249
901711

90°17'11" ½ c ⟌ 89°42'49"

90°

17'11"

$\left(\left(\frac{b}{\cos Z} - b\right) + b\right) Z$

a = c

c cos Z = b

$c = \frac{b}{\cos Z}$

$200\left(\frac{b}{\cos Z} - c\cos Z + b\right)$

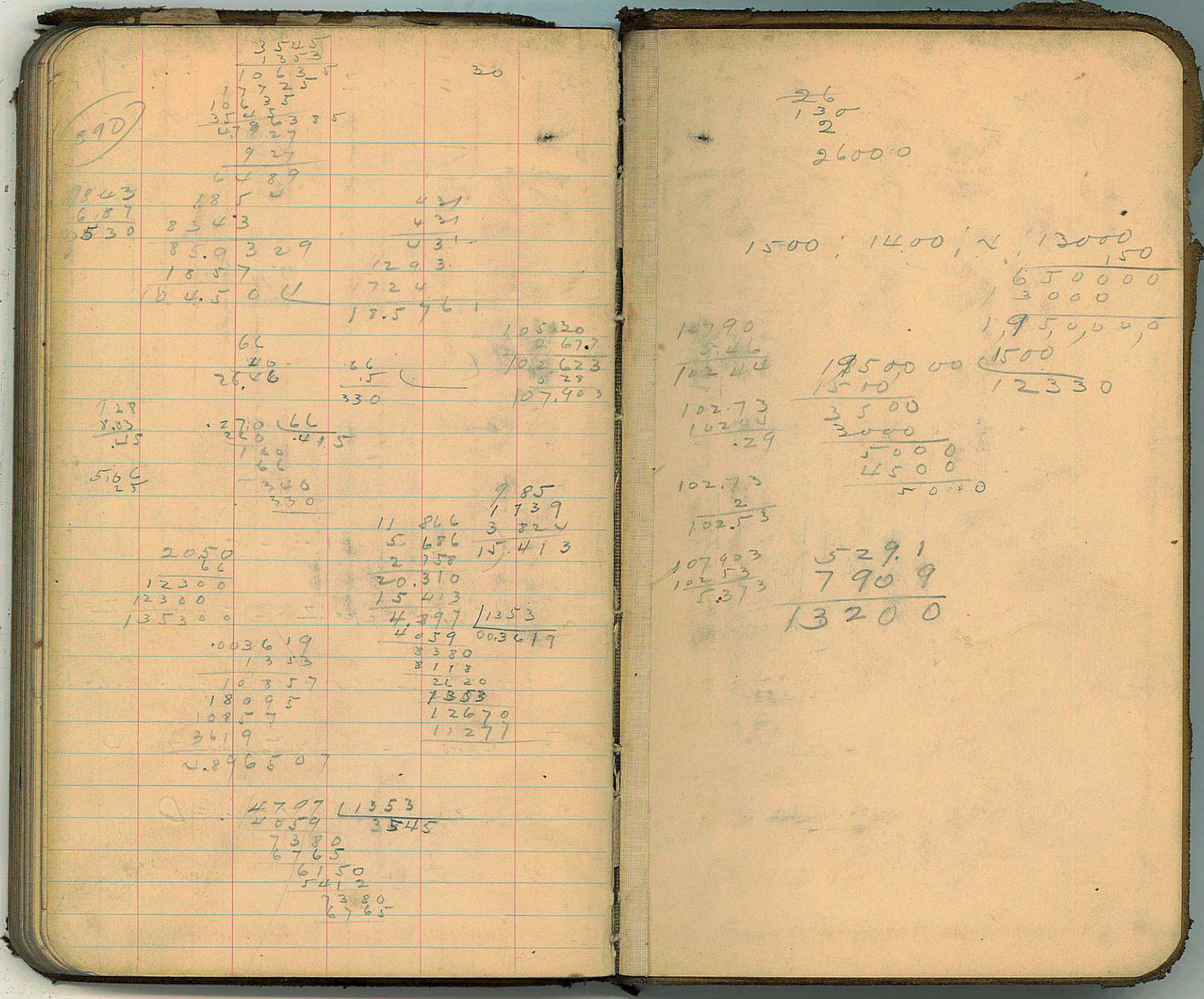
$\left(\frac{2b}{\cos Z} - 2c\cos Z + b\right) 1.10.\cos Z = D$

$200 b\cos Z = 200 c\cos^2 Z - 200 b\cos Z = D$

$200(b\cos Z - c\cos^2 Z) = b\cos Z = D$

$200\cos Z\left(1 - c\cos Z - \frac{1}{2}\right) = D$

$200\cos Z\,(-c\cos Z) = D$



146.6
29
149.5

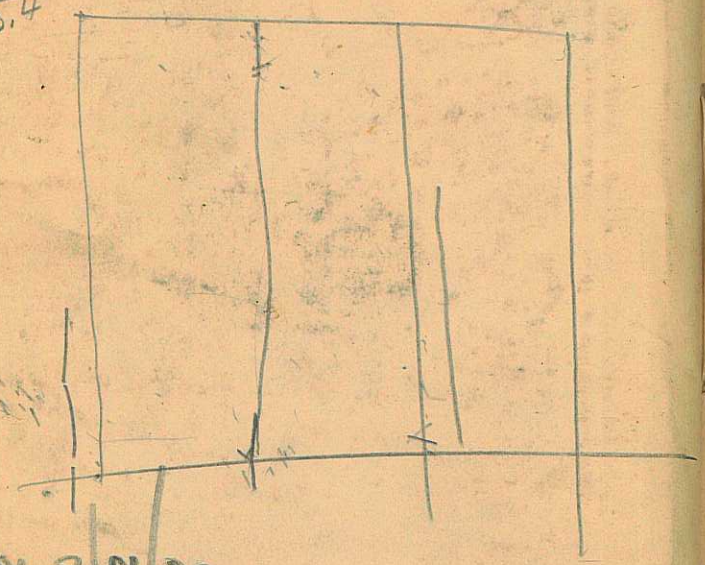
4.92
.25
5.17

479.
.25
5.04
137
4903

5.31
137
5.173

4.65
.25
4.90

302.9
149
153.4



4079.2
5534.0
4079.2
1454.8

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