

716

67⁶

792
1908

792

ELD BOOK

400

INDEX

6

<u>Page</u>	
1	Survey for T. P. Co.
5	Survey for Jeo Yeates
7	Survey at Hyrum
21	Survey for Telluride Power Co.
31	Additional Grade for Hyrum
35	Recheck Survey for Telluride Power Co.
37	Survey for Final Grade, Hyrum City
41	Rudin City Reservoir Levels
46	Notes on Hyrum Grade
57	Survey for James Quayle, ammended
61	Survey for I. Jorgensen
69	Survey for Alma Larsen of Millville
75	Survey for E. P. Baron
85	Survey for S.R. Seamons of Hyde Park
147	Survey for C.M. Frerony Smith

FACTORY SMITHFIELD

67

Eugene Schaub
CE

Logan Mah

No Smithfield
City notes in
near mine 1913

Surv for T. P. Co.

7/29/08

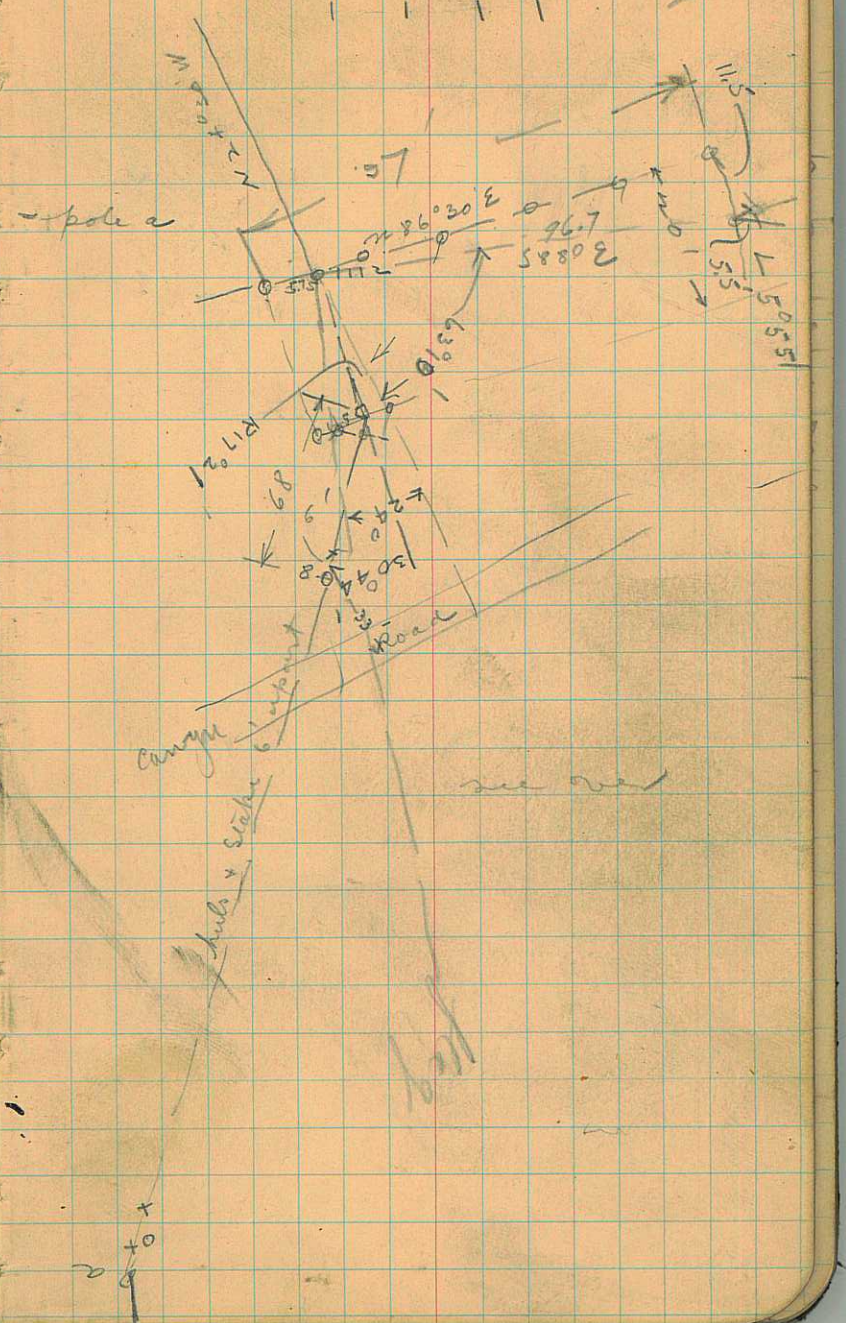
beg from L pole a

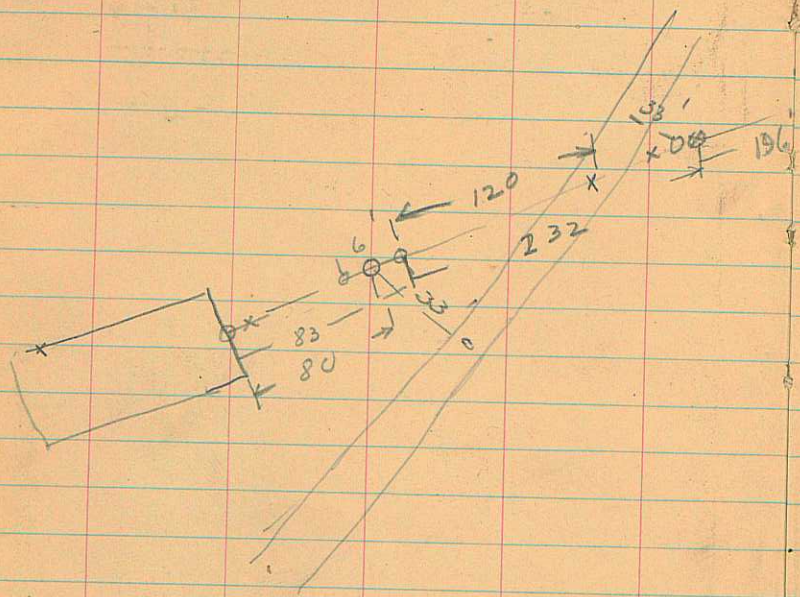
Point^s

- | | |
|---|-----------|
| 0 | 4' |
| 1 | 72' |
| 2 | 163 |
| 3 | 210 Slaps |
| 4 | 200 |
| 5 | 235 |
| 6 | 177 |
| 7 | 182.7 |
| 8 | 68 |

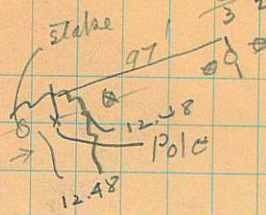
therefore 7' to pole

to Switch Sta.





42°45'



~~82~~
~~50~~
~~32~~
~~200~~
~~112.5~~
~~1875~~

4c

7343
 17
 51401
 7343
 124831

Sw for gmo Yates

.135
810
810
8.4 10

- 6 -

Begin SW cor lot 2, Blk 19

Millville west field Sw.

N 10 ch

to post at SW cor lot 3

Begin again at post SW cor 3

N 2.525

to end of Job Smith picket fence

N 10.135

to post (supposed to be NW cor lot 3)

Estimate of Concrete

in Richmond Res.

Wall $2 \times 15 \times 220 = 2200 = 244 \text{ yds}$

$$\begin{array}{r} 2200 \\ 11000 \\ \hline 3300 \end{array}$$

cor. $2 \times 2 \times 15 \times 4 = 80 = 9 \text{ yds}$

2,4	120	3000
340	240	3300
680	140	3000
040	355	96300
408.6		7030
0.7		

footing = $1 \times 4 \times 230 = 920 = 33 \text{ yds}$

floor $.7 \times 1000 = 700 = 77 \text{ yds}$

Roof $.4 \times 1000 = 400 = 44$

$.7 \times 1.2 \times 340 = 291$

$$\begin{array}{r} 11 \\ 3 \\ \hline 421 \\ \hline 2941 \end{array}$$

Res per dipper with plaster - 3760

Sun at Hyrum Utah
on Pav. list.

Begin at steel pin inter. 1st W
At main

E
760
786
1517.7

2 (1517.7
758.85
386
758.85
2715
8600

27.15
264
75

117.6
660
1320
198
1518

660
99
759
98
198

8 - 1400
117.6
1517.6

to approx. pt of moon. lost.
to pencil mark on new pole
to back monument into 1st E + main

120
7.5
4.5

49.5
7.5
42.0

12

49.5
12
37.5

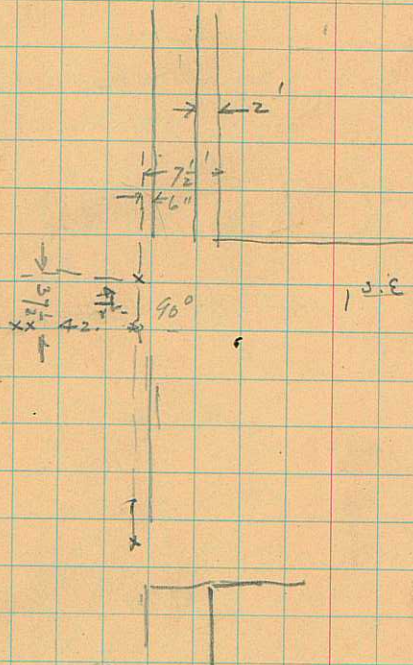
44.5
13.5

4.5
120

43.5
12

3

42.5
6



49.5
12
37.5

44.5
13.5

4.5
120

43.5
12

3

42.5
6

497.62
 502.15
 516
 496.99
 500.29

478
 472
 6.02

101 15.207
 279.3



Sta	BS	FS	an	Ele	HI
	453			497.62	502.15
				497.50	
				497.05	
				497.00	
		5.16		496.99	
	3.30			495.50	500.29
				495.	
				497.	
				496.75	
				493.1	

NE cor
 NW cor
 SE cor
 SW cor
 RR cut
 mark cut

Center of Main
 West of Main

See page for amended elevations

18					
18+25			3.39	492.75	496.14
18+50			3.78	492.36	
18+75			4.23	491.91	
19			4.72	491.42	
19+25			5.26	490.88	
19+50			5.94	490.2	
19+75			6.74	489.4	
20			7.64	488.5	
20+25			8.60	487.54	
20+50			9.64	486.5	
20+75			10.74	485.4	
21			11.94	484.2	
21+25			13.24	482.9	
21+50			14.64	481.5	
					496.14

2793 ft. west of cor.
 1.18 2.21
 1.28 2.58 2.9
 1.8 2.43 500.29
 1.56 4.93
 3.18 7.29
 4.73 .53
 5.26 .68 7.29
 5.70 1.04
 6.15 1.49
 7.32 1.28
 8.15 1.49
 8.23 2.51
 9.56 2.38
 10.92 2.32
 12.46 2.18

3.39
 1.18
 2.21
 1800
 2793
 1520.7
 526
 473
 .53
 1813
 15207
 2923

Profile shows
 SE cor Blk 496.75

6.05
 4.65
 1.40
 6.00
 1.4
 .64
 500.29
 6.05
 494.24
 1.9
 496.14
 492.75
 3.39

21+85			16.66	479.5	14.63	
18+13	1.90	6.055	7.29	493	500.29	6.055
						2.12
						Ele on Mark 494.24

497.14
496.86

497.00 - 12 = 498.25
8300

402
502.27
496.86
5.41

Sta BS FS LM El HT

402

498.25 502.27

on door way Allen Store

4.41 496.86

NW cor in inter 1st E + m ^{S edge} Wald

5.51

on curb

496.86
507.09

496.75

NW cor inter 1st W + m

497.62

4.90 497.00

NE cor " " " "

502.8

4.28

497.62 501.90

501.90
4.97

4.92

on S edge cement

4.90

5.14

curb

4.92

3.93

on step S. entrance to Hall

5.14
2
5.12

501.90

5.15 496.75

5.19

5.15

5.19

4.60

9" below

46

5.20

Note change

5.29

on curb

59

5.96

4.96

on curb

12

4.7

5.20

3' above top

11.8

5.01

5.14

2.14

7.08

4.92

4.72

on pro. line

5.14

496

1.8

12

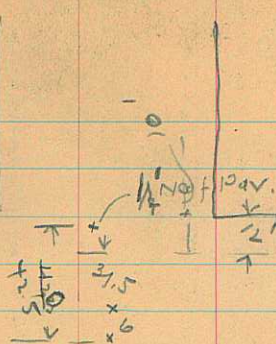
3.6

1.8

2.16

on masonry cement

see over

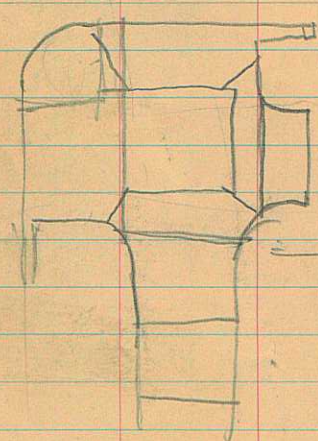


21.5
11
42.5
1
6

2185
1520
665

496.14
481.5
1464
1246
2118

1324
1092
232



495
330
379.5
42.5
3370

47.5
47
94.5
4

1074
523
2651

1074
1815
259

764
615
149

496.14
4885
7.64
10614

496.14
487.54
8.60

860
732
128

496.14
4795
16.66

49614
485.4
10.74

496.14
4842
11.94

496.14
490.2
5.94

5.94
5.26
.68

674
57
1.04

12.00
825
12
94.5
950
9

49614
4842
496.14
4829
1324

423
243
1.80

496.14
492.26
3.78

11.94
956
2.38
496.14
491.91
4.23

496.14
491.42
4.72

674
57
1.04
496.14
4894
6.74
496.54
490.88
5.26

496.14
4865
9.64
815
1.49
496.14
4829
13.24

Sta B S FS an El H
 change NE cov. Inter. 1st W + M.
 497.43 501.90
 4.71
 4.30
 4.51

NE cov 495.50
 495
 4.17 495.95 500.12
 4.76 495.36
 4.86
 499

NW cov
 5.12
 5.16
 5.36

501.9
 497.53
 4.47
 4.78

5.14
 .43
 4.71

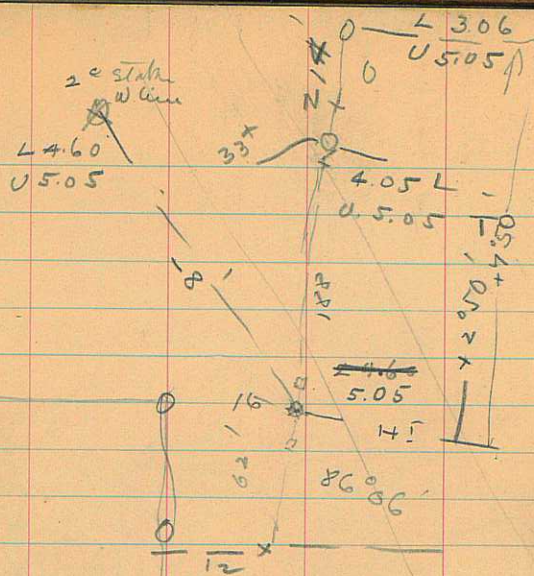
4.90
 4.43
 4.47
 .4.1
 1.2
 4.92

on curb
 4 7/8 beaver mark
 n edge cement

n cov clats center + main
 NW cov " " " "
 step to Hat Stone 500.12 495.95
 on S edge 5.12 500.12
 on curb 495.50 495.36
 499 4.78
 4.76
 .13

on side grade
 n edge
 on curb

4.78
 4.76
 1.3
 1.66



- 18 -

from 16 to 15 + 986

}	L 2.51
{	U 5.05

Sta BS FS on Ch HT
 3.90 498.25 502.15

496.76

4.91

5.01

3.88

3.51

#

4.90 496.86

498.25 501.76

5.2
 5.2

Hyman Mah 2.27
 - 20 - .42
 90.8
 .095 3 v

floor way allen store
 on curb

498.25

5.39

3.7

5.05

502.15

5.30

497.00

on grade 7 out with 9.5 feet inter

42.0

496.76

502.15

on grade send cross
 on side of 1 + Main

5.39

496.76

5.39

5.39

5.30

0.9

42

5.39

9.9

5.39

2.4

4.80

501.76

496.86

4.90

7.5

1.59

3.7

5.01

4.80

5

1.59

5.51

4.82

498.25

4.72

3.51

2.5

501.76

4.67

497.00

4.4

1.4

4.43

86

4.27

1.6

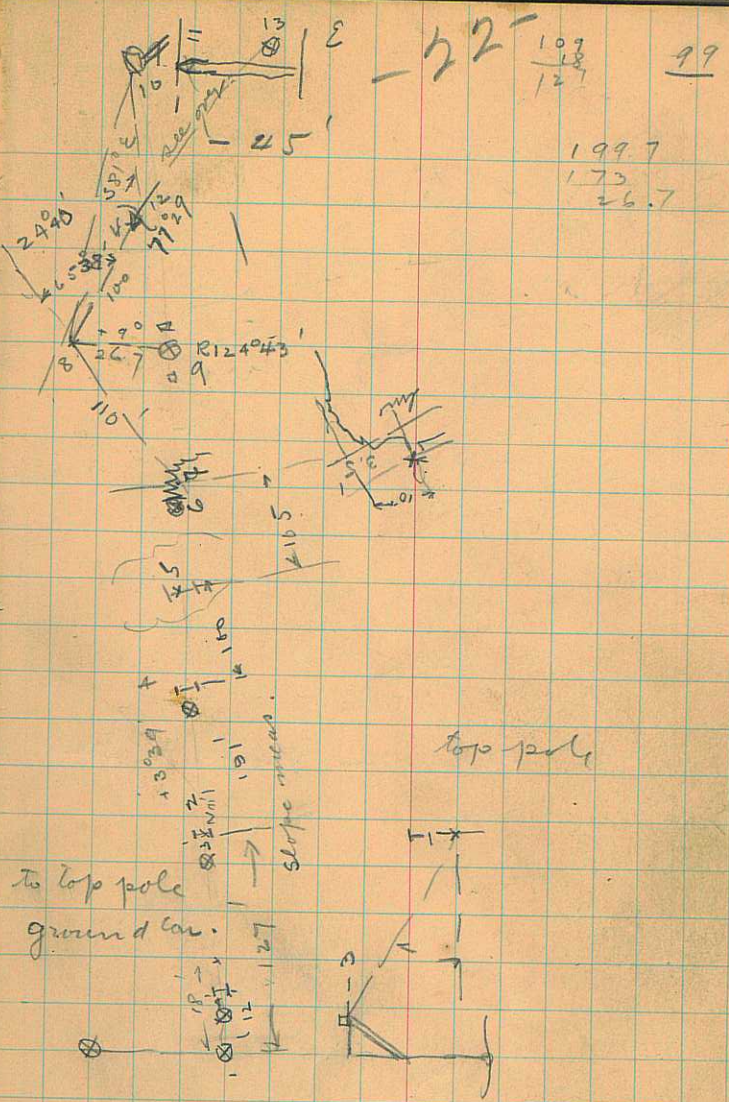
4.92

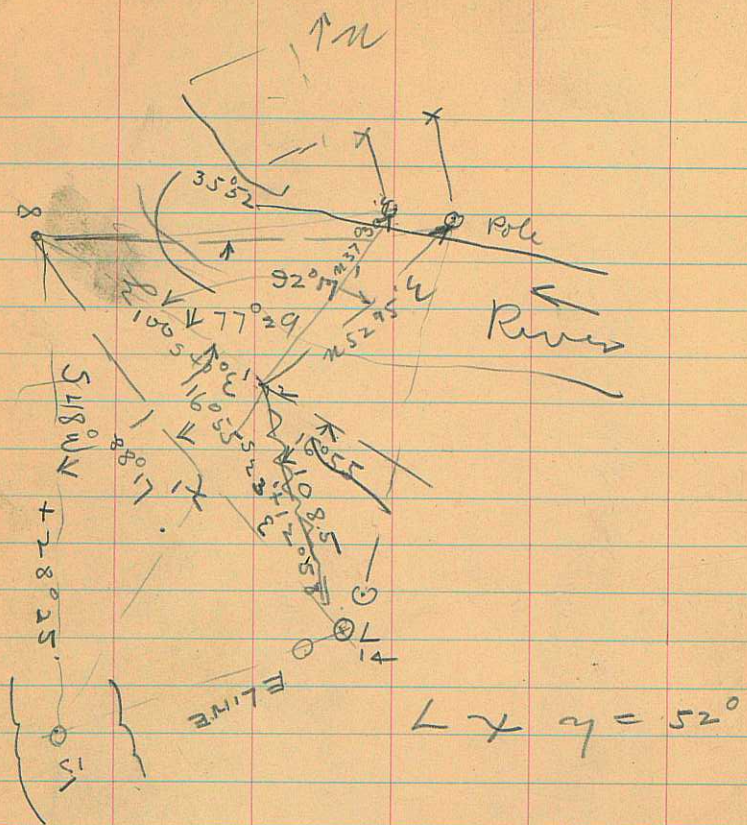
5

4.52

Sur for Tellurides
 Power Co.
 Grading E+W line from
 Switch Sta and E to Power
 Sta.

1	Dist	L	R	L ^o or R ^o	HI
2				- 45'	
3				+ 10° 34'	
4				+ 3° 39'	
5				+ 8° 29'	4.60
6	94.0			+ 3° 43'	
7	105.			+ 6° 40'	
8		124° 43'	- 14° 34'		4.74
9			+ 9°		
10			- 1° 24'		
11		65° 38'	+ 12° 40'		
12					
13					
14					
15					
16				+ 35° 16'	
17				+ 28° 25'	





200
91.5
108.5

24

5.47
 .07
 5.40

23
 20
 .0690

-26-

5.95
 5.47
 .48
 6.20
 5.40
 .90

461

5.61
 .14
 5.47
 HI

M² HI
 496

1

on slab cut .1'
 on grade

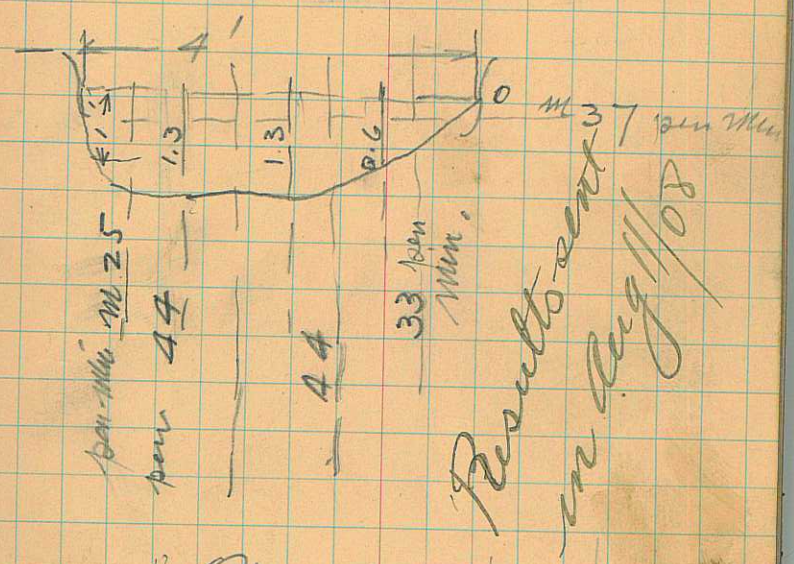
5.70

4.46 = 6" above grade

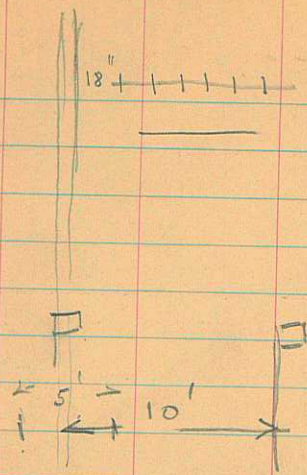
.3
 5.7

37

Water Meas. for Hyman
 City, Aug. 7 /08



Q = 5.55 sec.
 mean v = 1.50
 area cross section 3.7
 sq feet



500
4.67
.33

30 marks above ground

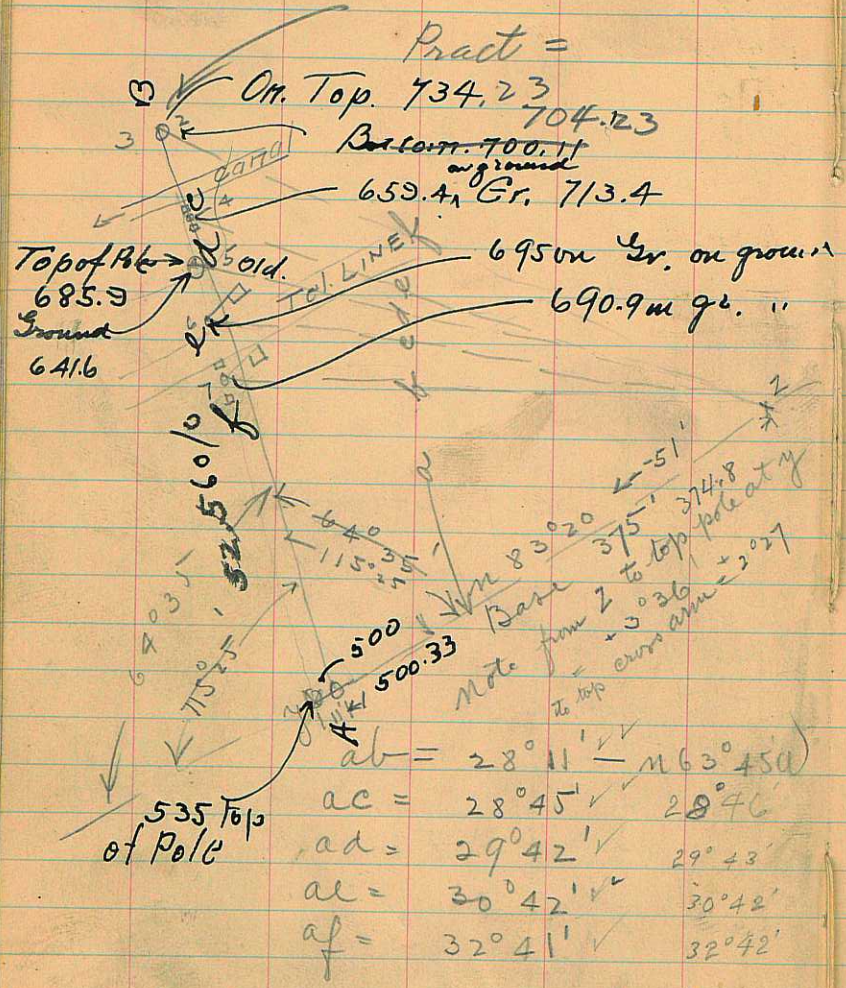
1.52 L

Sta No	Curve	L	L ^s	R	HI	L ^s + m	
1					4.8		
2							28° 01' ✓ to pt 5' above ground at upper pole
3							30° 57' ✓ to top of pole
4				4' ✓			5' above ground
5				10'			to pin top pole HI 4.8 which must be moved Vert L to top of pole
6							22° 43' ✓ bottom or on ground by pole " " "
7				17'			22° 55' ✓ to pt 5' above ground
				23'			22° 51' ✓ Note No 1 which is 11' NE of pole is 0.33 higher than ground at pole

30
 1208
 540 33
 621.13

AB = 383.2
 AC = 341
 Ad = 326.2
 Ae = 309
 Af = 301.2

3010



Additional grade
for Hyrum City 8/17/08

Sta BS FS in Ele HL
4.15 495.95 500.10

4.91
5.31
2
5.01
4.98

Grade at NE cor
inter. 1st West & main

4.29 497.62 501.91
4.66
4
4.70

final decision

4.21 497.62 501.83
4.43 497.4
4.47
4.67

Reset at NW cor
intersect. Center + M

5.16
5.26
3.46

495.95
24.5
500.10
4.91
495.19
5.65
4.91
4.74

302 4.98
5.18
4.98
5.18
5.21
5.18

on curb NE cor inter. Center + main
on " NW cor
at a pt 10' in from curb NW cor
on grade
on decided grade 10' in NW cor

on Nail in pole
on grade inside

on 5' inside grade

NE cor
in curb

on inside grade NE cor 4.21 NW
2' NW
on curb
4.22 on mark 5' 4" below

on grade 10' feet in from
on curb

83.6' across st on West Center end of road

497.62
4.29
501.91
5.24
2
5.00
5.24
2
5.04
4.84
497.07
4.84
497.25
497.05
501.91
497.05
4.86

$$\begin{array}{r} 5.24 \\ - .25 \\ \hline 4.99 \\ \hline 4.79 \end{array}$$

$$\begin{array}{r} 497.25 \\ - 25 \\ \hline 497.00 \end{array}$$

$$\begin{array}{r} 5.24 \\ - .25 \\ \hline 4.99 \\ \hline 4.79 \end{array}$$

5.13

$$\begin{array}{r} 501.91 \\ - 479 \\ \hline 497.12 \\ \hline 497.32 \end{array}$$

$$\begin{array}{r} 501.91 \\ - 479 \\ \hline 497.12 \end{array}$$

$$\begin{array}{r} 501.91 \\ - 513 \\ \hline 496.78 \end{array}$$

$$\begin{array}{r} 541 \\ - 514 \\ \hline 27 \end{array}$$

497.30

$$\begin{array}{r} 501.83 \\ - 59 \\ \hline 496.83 \end{array}$$

.24

$$\begin{array}{r} 467 \\ - 27 \\ \hline 440 \\ \hline 45 \\ \hline 70 \\ \hline 520 \end{array}$$

$$\begin{array}{r} 497.2 \\ - 501.83 \\ \hline 497.1 \\ - 4.4 \\ \hline 4.3 \end{array}$$

$$\begin{array}{r} 47 \\ - 12 \\ \hline 35 \\ \hline 47 \\ \hline 5.6 \end{array}$$

$$\begin{array}{r} 5.49 \\ - 5.16 \\ \hline 33 \end{array}$$

$$\begin{array}{r} 501.83 \\ - 5 \\ \hline 496.83 \\ - 24 \\ \hline 497.07 \\ - 10 \\ \hline 497.1 \end{array}$$

$$\begin{array}{r} 5.45 \\ - 5.16 \\ \hline 29 \end{array}$$

$$\begin{array}{r} 497.07 \\ - 2 \\ \hline 497.30 \end{array}$$

$$\begin{array}{r} 496.83 \\ - 13 \\ \hline 497.23 \end{array}$$

497.4

$$\begin{array}{r} 461 \\ - 437 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 5.52 \\ - 5.16 \\ \hline 36 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 5.38 \\ - 5.16 \\ \hline 22 \\ \hline 12 \\ \hline 22 \\ \hline 22 \\ \hline 4 \end{array}$$

Grading Block between
Center + 1st W,
stake 1 foot N of Cement
HI RR above

0	5.16
1	5.18 ✓
2	5.41 ✓
3	5.38 ✓
4	5.49 ✓
5	5.16 ✓
6	5.52 ✓
7	5.45 ✓

1/4 above
1/4" above hub
.3' above top Stake
on sill by or on air wall. Drug store
on top Stake
1" fence
4 1/2" above
3 1/2 above

Recheck Sur for
Telluride Power Co
8/17/08

Set at a pt on the edge
of chuff HI 4.3

Sea level
at
on slope
19 to
to
to
to
to
to
to
K

L^s+

+16°23

-39°13

-40°25

-34°57

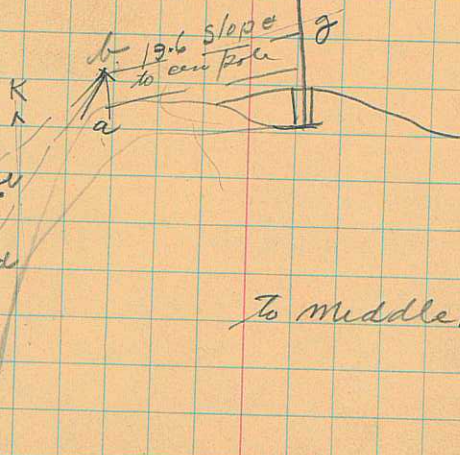
-32°46

-24°15

top of pole 50 feet long

39°17

-36-



To middle F.T. Wire

Sur for final grade
 Dymun City 9/2/08

Sta B S FS UM Ele HI
 401 497.62
 497.62 501.63

427 497.86

1+50

494.80
 reset HI on grade NE cor
 intersection 1st W + main.

5.11 502.47

0+40
 +86

on ground
 3-20

4.50

4.50

5.66

4.48

Strut Cross Exit

5.03

4.80

4.76

497.62
 2.01
 501.63
 497.36

497.36
 5.11
 502.47
 38-

NE cor inter 1st W + main

on finished cement work ^{NE cor} inter of problem

on grade 150' N of SW cor B11K19

L - to n - 58' tan P.I. 1+50
~~2nd curve D = 30' from 100'
 12' for 40'~~

10 10
 10 22' Note final from
 SW cor 19 - 1016' N on grade
 RR on grade 5.11 7 1/2" below
 7 1/2"
 1' 5 1/2"
 5.11
 6.5

5.03
 1st W + M
 on Curb SW 19
 on curb or cross NW cor p Sq
 on ground center of St

Sta BS FS in elev HT

0

2+423

493

2+80

123

2923

3043 = 18+25 in profile

2923 = 18+13

3043 = 18+25

3293 = 18+50

3543 = 18+75

3793 = 19

4043 = 19+25

4293 = 19+50

4543 = 19+75

4793 = 20

5043 = 20+25

5293 = 20+50

5543 = 20+75

5793 = 21

6043 = 21+25

6293 = 21+50

2703			
2803			
1993	3793	1813	40
	2923	15207	
	870	2923	

NW cor enter 1st of main on grade

PC

660
6793
307
25

21.25	23.32
660	9.45
600.3	
55.7	13.87
	33
	346.87

482
484.4
1.6

check levels
from a pt 26' higher
than Richm City Res.
Sept 14/08 course at a

pt E.

BS FS m

5.710

3.43

4.217

8.345 3.753

10.512 7.132

~~3.630~~ 5.992

3.824 6.190

9.850 5.250

1.747 10.538

5.705 1.385

~~49.323~~ 44.57

1.385 3.430

5.500 8.813

6.885 12.273

6.885

5.588

5.866

.722

50

1.58

5
6.38

6.885

3.43

3.455

16.62

46

36

1.02

96

60

-42-

12

1.385

at a pt E of Richm +26' higher
on Bm by post on S. side Main St.

49.323

4.457

4.866

500.00

486

495.14

Sta BS FS in Ele H₂O cut

74+63 9.71

495.78 504.89

495.78
9.71
504.89

-44-
4.89

9.1
4.89
4.21

a 463 ✓ 3. 501.89
501.89 506.52

on ground

9.71
7.70
2.01

7.70
3.89

A SW cut 8.1 ✓ 498.02
B NW cut 9.19 ✓ 497.33
C NE cut 1.11 ✓ 505.41
D 0.15 ✓ 506.37
74+63 11.35

10.42
9.06
16.91
18.15

actual cut

11.08

6.9

504.89
3.89
501.00

5.01
7.70
3.89
3.81
3

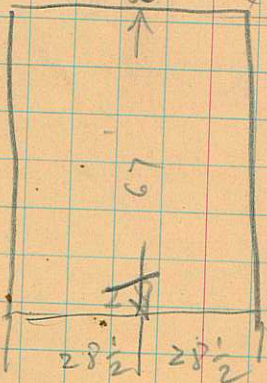
3.9

7
3
4

5 504.89 501.89

497.89

500
497.89
2.11



W

Notes on Hyrum
Grade amended

Sta	BS	FS	IM	Elev	HI	R. Reads on mark	Cut inches
18+13	1.90		on grade	493	496.14		1.24
19+50			5.89	490.25 ✓		5.26	.630 7 1/2" ✓
19+75	change		6.58	489.56 ✓		5.70	.89 10 5/8" ✓
20+00			7.34	488.8 ✓		6.15	1.19 1'-2 1/4" ✓
20+25			8.19	487.95 ✓		7.32	.87 10 3/8" ✓
20+50			9.06	487.08 ✓		8.15	.91 11" ✓
20+75			10.04	486.40 ✓		8.23	1.85 1'-9 3/4" ✓
21+00			11.06	485.08 ✓		9.56	1.50 1'-6" ✓
21+25			12.14	484.00 ✓		10.92	1.24 1'-2 5/8" ✓
21+50			13.44	482.70 ✓		12.46	.98 11 3/4" ✓
2+60				481.0			

660 - 4 660
6043 6293 660
55.7 30.7 33
33 50.7 627
22.7 2.7

Elev on mark 494.24
all the same between 18+13

19+50

Note: meas 22.7' west from Sta 21+25 on the part line meas 24.7 ft from end 21+25 and turn a angle of 45° R

33 on dia

Side 12 & 16'
Hops = 20'
or say turn R° 45 from 21+50
Not have end of part
1.7 for or 1'-8 1/2" lower.

leaving original grade have end cannot .6 lower

Sun at Spaw
for Greenville

Sept 22/08

Sta 13 S FS in Ele HI
1.80

3.1
2.4

4.64
5.04
4.88

0 5.82

6.22 in grade

0+50 5.996

0+00 5.772

1+09 5.597

2 5.324

2+60 5.042

5.772
4.48
5.324
00448
6

00448
39
4032
1344
017472

48

6.22
5.04
1.184

5.82

at 72 E of track

6.22
1.224
5.996

on tie
on grade Sand
on top post Sand New Grade
on tie

13 L

1.180 263
1052.448
1280
11052

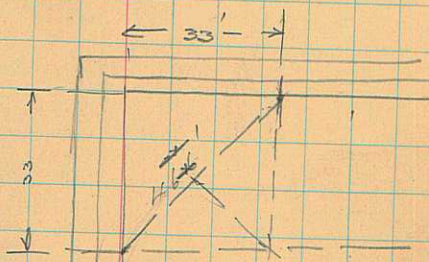
Grade = 0.4481/271.04
up to S.

00448
63
1344
2688
128224

Sta	BS	FS	in	Ele	HT	RR on mark	cut	inches
21				484.26	496.11			
21+25				483.2		9.56	2.32	2-3 1/2"
						10.92	2.02	2-1/4"

50 - 496.11
 483.2
 13.04
 496.14
 484.26
 11.88
 483.24
 483.2
 1.294
 10.92
 2.02

From 483.2 at Sta 21+25
 to Sta 0+60 going N
 from S. New Bldg 18
 (Ele 0+60 = 477.92) Stop 21+25
 Grade =



Raise 0+60 N of cor
 .2 feet
 First telephone pole
 S of N. New Bldg 18

462.671

Sta	BS	FS	LM	Ele	HL
21+25	2.59	483.00		485.22	487.81
21+25			5.3	482.51	
21+25=17.7		483.00	3.84	483.97	
21+39.2=B		482.23	3.22	484.59	
21+51.2=C		481.697	3.46	484.35	
=C		481.164	6.5	481.35	
21+61.2=D		481.164	4.75	483.06	
21+71.2=E		480.637	6.03	481.78	
21+81.2=F		480.098	6.28	481.53	
=F			7.3	480.51	
21+91.2 G		479.565	7.39	480.42	
22+01.2 H		479.032	7.34	480.47	
22+11.2=I		478.499	9.10	478.71	
=T			9.72	478.09	
J		477.81	9.89	477.92	
K		476.520	10.81	477.00	
			10.23	477.58	
1+65		474.60	2.69	475.12	
1+65			13.2	474.61	
T.P. (K)		10.81		477.00	
(K)	0.7			477.7	
		8.40		469.3	
	0.7			470.00	
		7.30		462.7	

see over

12.69 96
25.7
1.7.3

1+65 L = 1+65
K = 1+60
60 OK cor
y = 0+60

8 F 5 2
5 5
2 3

25.32 237 1/2
13.0
40.87
47.00
75.53

on top stake 2.22
bottom stake 2.33
top stake 2.26
" " 2.11
" " 2.66
" " 2.18
" " 1.1
" " 1.9
" " 1.15
" " 1.13
" " 1.43
" " 1.5
" " 2 1/2 below
" " 4 1/2 feet from NW cor
" " 60 feet from SW cor B. 1.8
top stake 5 1/2
OK cement West center entrance to church
" " top stake 6 1/4
" " in ground
" " mail tel P. NW cor 1318

Diagram showing a survey line with points 1+65, K, and 60 OK cor. Distances between points are marked as 2.22, 2.33, 2.26, 2.11, 2.66, 2.18, 1.1, 1.9, 1.15, 1.13, 1.43, 1.5, 2 1/2, 4 1/2, and 60. A north arrow is present.

see over

(check)

5.5.6

see over

Sta	B.S	F.S	Inv	Ele	HI
21+25 147	7.01			485.22	492.23
21+073			8.25	483.98	on top steps
21+00			7.93	484.30	on end pier 9/25/68
20+75			6.77	485.46	on pier
20+50			5.75	486.48	" "
20+25			4.79	487.44	" "
20+00			3.79	488.44	" "
19+75			2.83	489.40	

Sta	grade	Ele on State	Cut in.	tooth
21+073	483.920			
21+25	483.070	485.22	2'-2 3/8"	2.2'
= B	482.31	484.59	2'-3 3/8"	2.28
= C	481.811	484.35	2'-6 1/2"	2.54
= D	481.312	483.06	1'-8 1/2"	1.70
= E	480.813	481.78	11 5/8"	.97
= F	480.314	481.53	1'-2 5/8"	1.22
= G	479.815	480.42	7 1/4"	.61
= H	479.316	480.47	1'-1 3/4"	1.15
= I	478.817	478.91	1 1/4"	
J	478.168	477.92	3"	
K	476.52	477	5 1/2"	
L	474.6	475.12	6 1/4"	

4.990/o. down

485.22

above top
above top
below
below

n° 1

Sept 28 / 08

Sur for James Quigley

h = 41° 58'

tm 10:55

L^s L to pole 25° 45'

Mag dlex of 2 = 530° 00' E

Mo

h 42° 31'

tm 11 am

L^s L to pole 27° 38'

Mag dlex Su 528° 10' E

Levels.

Sta	B.S.	F.S.	um
0	2.2		

3.842	on H ₂ O 1'
4.055	

7.10

NE of crest of weir
on crest head = 4.055 - 3.842
end of ditch at

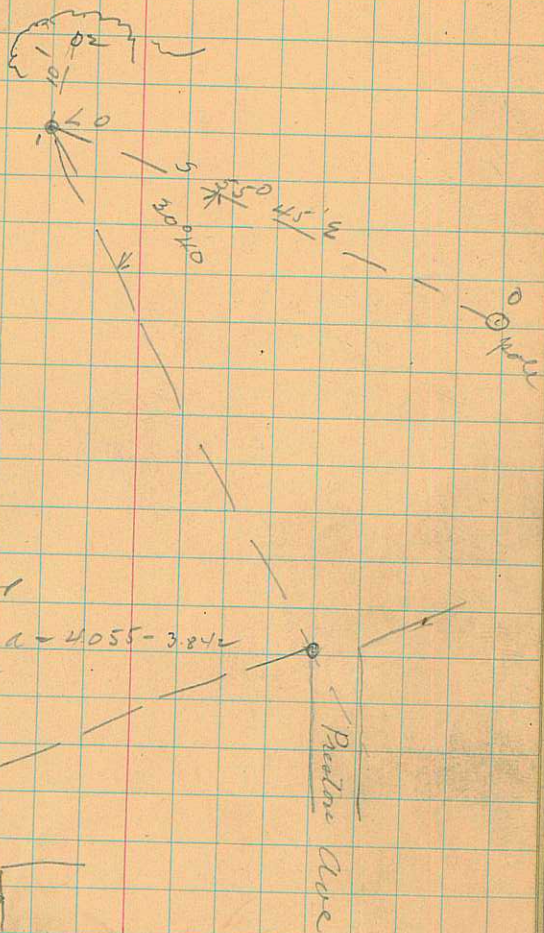
← .76' →

actual discharge

= 0.2468 sec feet

n ↑

√ 6



Surv for James Quayle

69.

58-

Set on N ₂ F5 to pole 0					
feet	Course	L	R	H I	$\frac{P}{+ or -}$
			30°40.		
10		110°			
0			98°16'	4.92	
0					
454.3					
0	89	542°30'W			
3	200'	562°05'E 6°32'			
5	200'	558°30'E	3°43	4.182	-1°18'
6	157'	n 88°50'E 32°37		3.76	-17'
7	134	n 88°50'E 32°37		5.24	-1°12'
7	134	578°50'E	12°14'		-10'
7	150 slope	562°30'E	28°46'		-6°5'
7	200' - 6°12	560°20'W	151°33		
10	143.5 hor				
9	X	n 76°35'E 163°33			
10	263.5	574°28'W	14°16'		
10		n 4°30'E	124°38		
10	400' hor	n 41°55'W	77°47'		
10	69	53°05'W 59°			

to NE cor. at entrance Preston Ave to Camp St
to average spring source

To

to pt. 1' NE of corner

from pole line

to opp. desk a 200 + 1.43.5

along fence

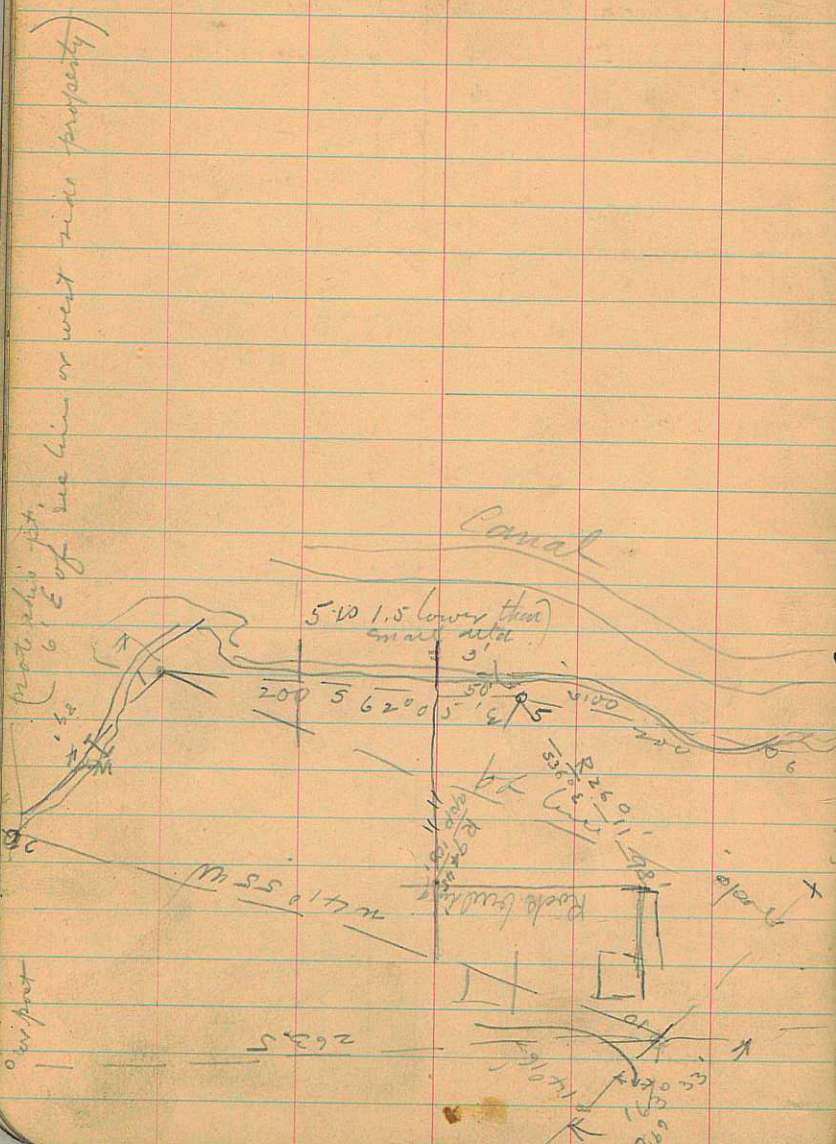
" "

along fence 95' feet building

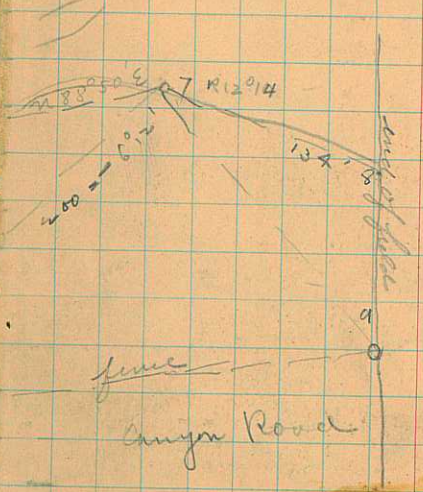
(BS to 7) to NE cor Johnson field

650

↑m



-60-



Survey for I Jorgensen

-62-

Ob. on SW cor sec 1.

$h = 28^{\circ}55'$

time 10.10

L R to L $123^{\circ}51'$

mag elev of sun $534^{\circ}50' E$

$h = 29^{\circ}23'$

time 10.15

L R to L $122^{\circ}40'$

elev of line $589^{\circ}10' W$

Set on SW cor Sec 1 which
is also NE cor sec 11

Dist	Course	L R
20.09	$589^{\circ}10' W$	$89^{\circ}24'$
X	$515' E$	
1202	$515' E$	$71^{\circ}50' A$
1207	" "	$71^{\circ}50' B$
11.02	" "	$71^{\circ}50' C$
5.57	$571^{\circ}20' W$	
5.68	" "	
5.57		$86^{\circ}15'$
5.47	$n 22^{\circ}05' W$	$12^{\circ}06'$
2.485	$n 34^{\circ}10' W$	$62^{\circ}41'$
16.272	$583^{\circ}15' W$	$90^{\circ}55'$
1.90	$n 6^{\circ}5' W$	

m Tp 12 n R 1 E

Oct 26, 1908

Lat $41^{\circ}47'$ North

Long $111^{\circ}47'15'' E$

20.09 time 7.452 hr.

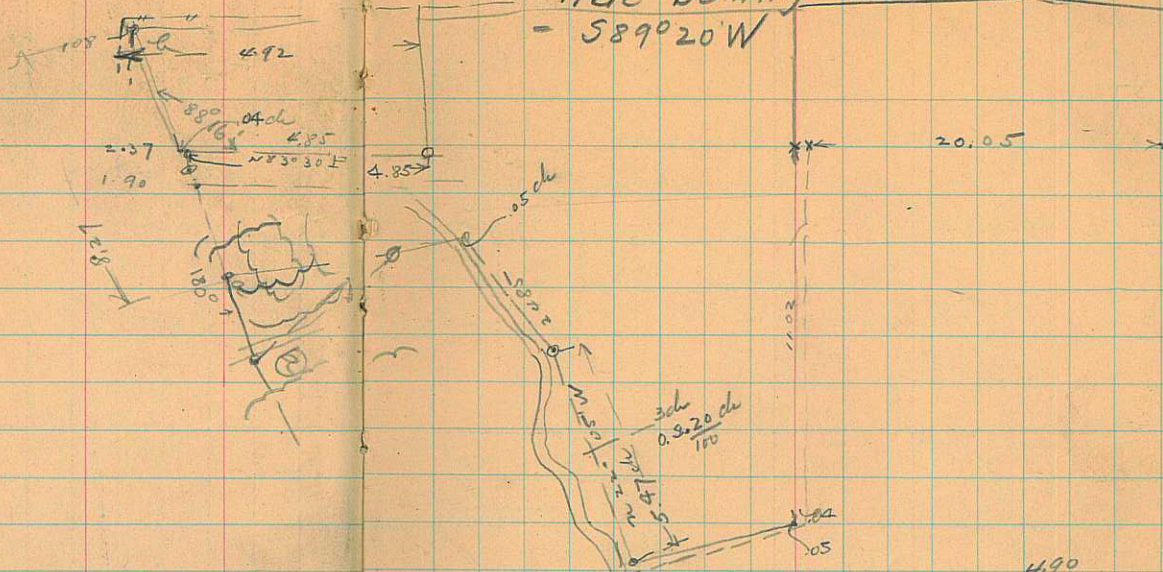
20.09 = $120^{\circ}28'58''$

{ to point in line with W line of NE² of NE² sec 11
(or to N¹⁴ cor of NE² sec 11
to int. 4 links West of fence
to fence Bear SW only

to int. 3' N of fence
to E edge of Logan & Hyde Park Canal
Beg to measure at int.

to pt just under brow of hill E red ^{pit} frame
to in line with S side field Str.

3.20
Tree bearing
= 589020W



@ = 121.48

4.90
 8.32
 + 3.22

 4.90
 8.32
 5.0
 7.82
 5.32

 16.44
 8.32
 2.37

 5.95
 5.0

 5.45
 5.95

 11.40
 5.70

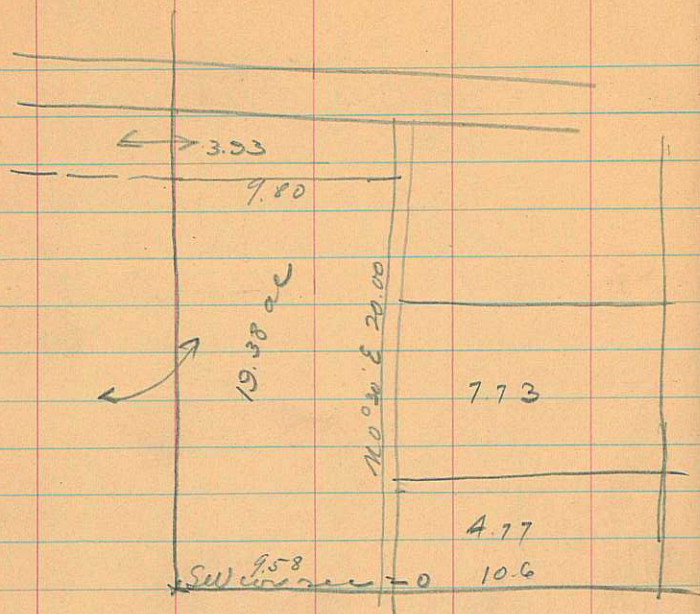
 4.90
 51.30
 22.90

 2.7930

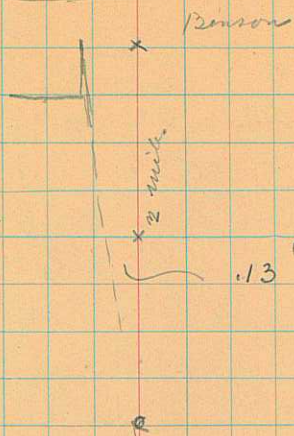
Dist	Curve	L	R
2.37			
8.27			95° 11'
25.76	N 89° 15' E		
		Set on a	
1.83	56° 5' E	121° 48'	
	N 52° 15' E		

$$\begin{array}{r} 9471 \\ 8716 \\ \hline 655 \end{array} \quad 66 - \begin{array}{r} .12 \\ 4.8 \\ \hline 4.9 \\ .576 \end{array}$$

near full Road
 { to pt. .05 ch S of fence (on section)
 { also 8 links E of fence N + S
 to beg
 BS to B



- 68 -



Survey for Alma Larsen of
Middvale Oct. 27/08

No	Dist	Course	L	R
1				
2	7.04 ch	S 00° 15' E	90° 15'	
3	9.68	S 89° 15' E	90° 13'	
4	14.57			
5	30.37		89° 28'	
6	15.68	N 88° 50' W	91° 04'	
7	2.80	S 1° 20' E		
8	3.65			
9	23.51			
10				
11	5.57			

-70-
all dist measured to instrument
points and not actual line

see 20. T1011 N-1 E.

By to mass S at a pt. 02 E of Post. See cor

parallel .02 ch N of fence E + W

to ^N division fence of tract on Esire field

this pt is .07 W + .04 ch S of cor

this pt is .02 ch E + .03 ch S of new cor

^{posture} to fence bear S E only

to N bank running straight

9.68
5.17
15.25

set on 1. BS to 2. L 91° 04' to 10

Oct 27/08

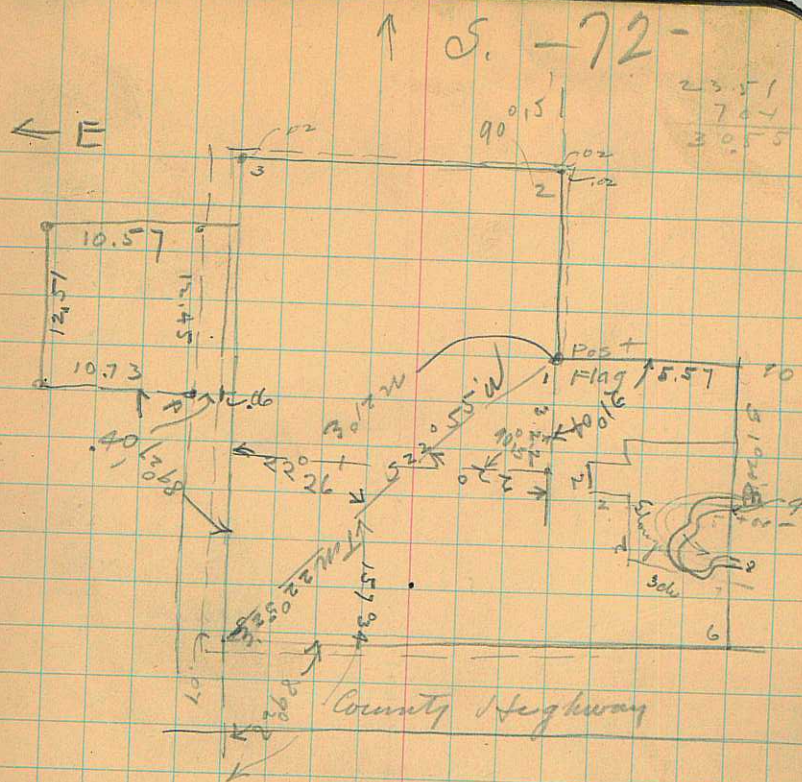
Ob on M² 1 SW cor Sec 20

No 1 h = 29° 53'

L⁵L from N² 2 149° 36'
Mag dir sun S 29° 20' W
time 2:5 p.m.

h 29° 36'

L⁵L from N² 2 148° 52'
Mag dir Sun S 30° 10' W
time 2:8 p.m.



9.68
9.72
1000 9.72
9.72 10.28
2800
1944
8560
7776
784

~~1028~~
~~1.06~~
~~2.28~~
~~7.00~~
9.12
10.28
7.06
3.22

10.28
9.72
2056
7196
9252
999216

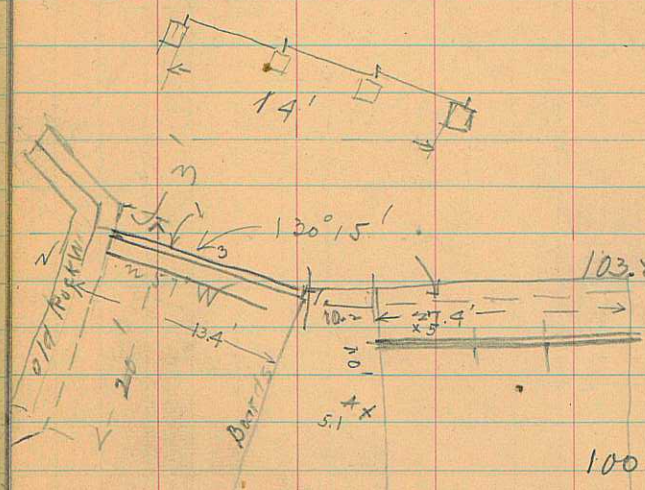
98°

980
388
592
593
1185

P. 18-74-
1298
181
113

Levels

HI	Ele	Sta. No.	in	BS	FS	
	94.08	1	9.80			floor level on sill old intake
103.88	100.00	2	3.88			on rock wall marked x
	95.12	3	8.76			on H ₂ O
	98.78	4	5.1			on ground
	94.51	5	9.37			on floor of main sluice a 6x4 tie nail on the this floor which is just below gate
		6	5.3			
	98.58	6	5.0			on bank & side of river
	94.38	7	9.50			on H ₂ O about 70' S of intake (road mat.)
				3.82		on rock wall marked x
	96.16		7.66			on mean H ₂ O marked
	98.52		5.20			on top of one intake gate slot above
	98.07		5.75			on High H ₂ O marked
100.78	96.73			0.78		on rock wall x
	96.73				4.05	on over flow up the river
105.93	+			5.93		on Rock marked x
	92.95				12.98	on H ₂ O by fish wheel 680 feet from intake to fish wheel



check levels

5.75	on rock
7.22	on intake gate
11.63	on floor intake
11.22	on " main sluice
7.76	on high H ₂ O mark

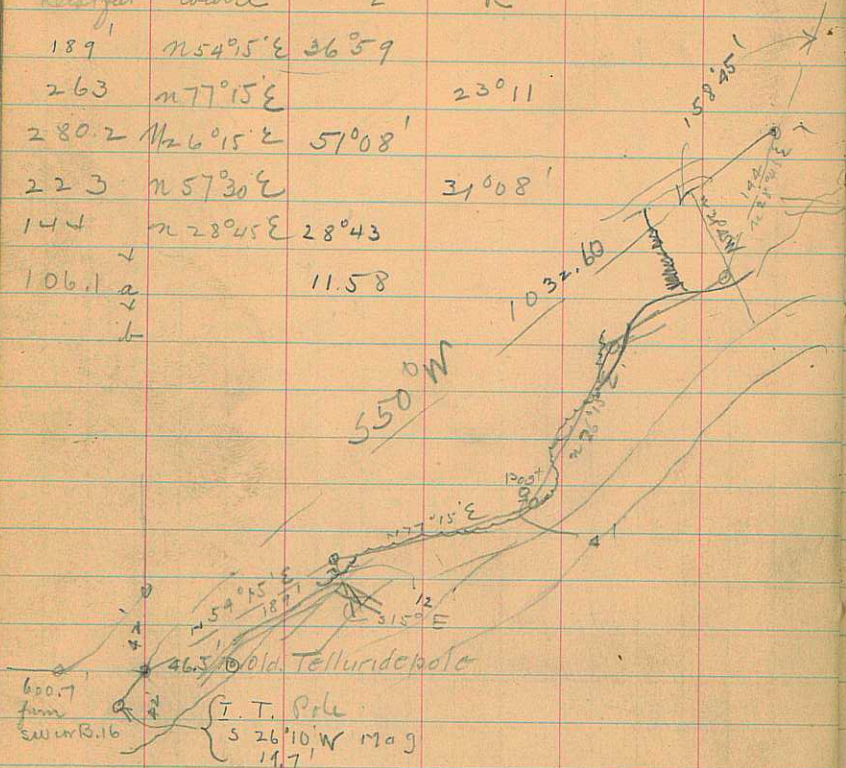
Elev of New intake to be at
93.28
Elev Crest of dam should be
95.68

Sun for E.P. Bacon
11/10/08

31.59

Mag. N
Beg. at a pt 600.7 $589^{\circ}E$ from SW cor B16

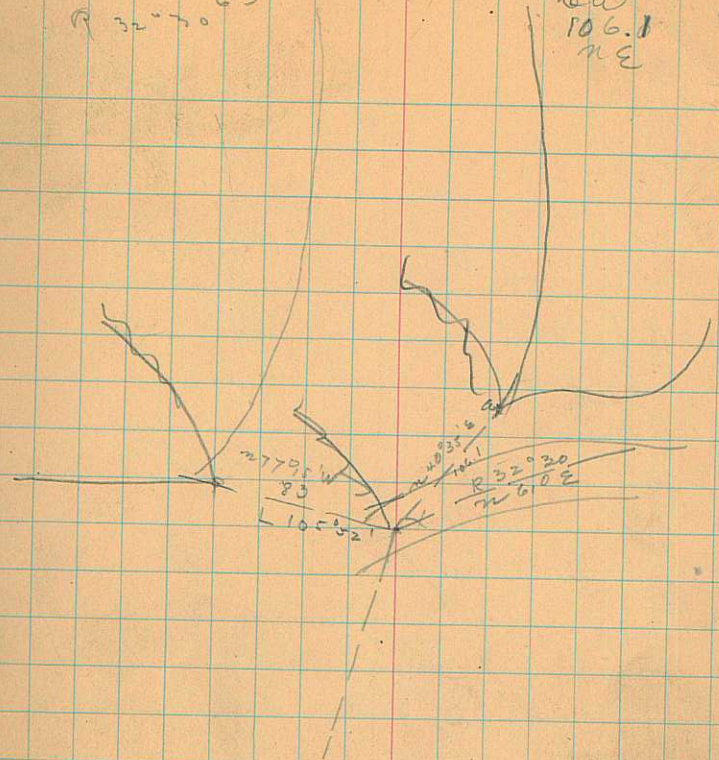
Dist feet	Course	L	R
189	N $54^{\circ}55'E$		$36^{\circ}59'$
263	N $77^{\circ}15'E$		$23^{\circ}11'$
280.2	N $26^{\circ}15'E$		$57^{\circ}08'$
223	N $57^{\circ}30'E$		$31^{\circ}08'$
144	N $28^{\circ}45'E$		$28^{\circ}43'$
106.1	a		11.58
	b		



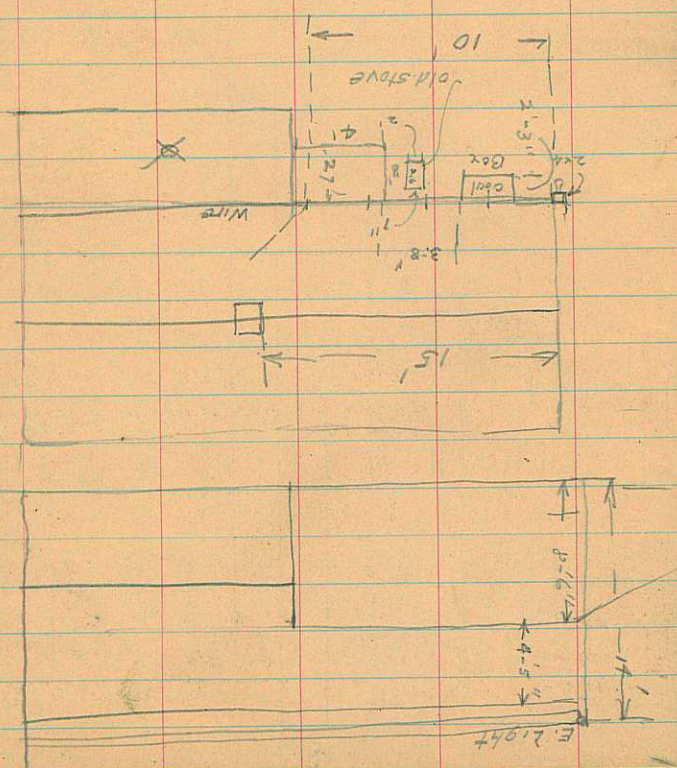
200
137
63

85.0
16.4
106.1
71

-76-



Coal Box 2x3' wide height 2-7'



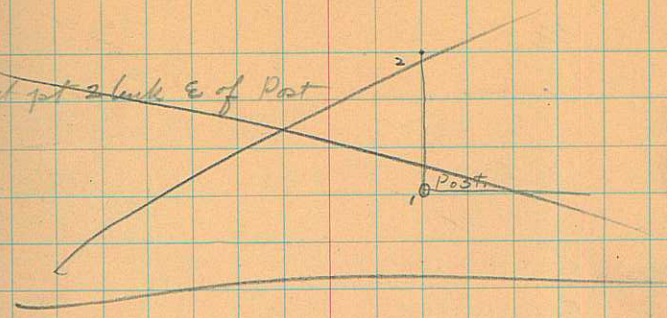
Begin SW cor sec 20 in T¹¹
N 10 E. ^{Ande}

No.	Dist.	Course	L	R
1		mag		
2		300 15 E		

Oct 27/08

- 82 -

Begin pt 2 back E of Post



Oct 31, 1934

My

- ① 9:41:20
- ② 9:37'
- ③ 9:41:00
- ④ 9:37
- 9:36

$$\begin{array}{r} 45 \ 192.20 \\ \underline{42.20} \\ 45 \ 150.00 \\ \quad 5 \\ \quad 38.4 \\ \hline 45 \ 188.8 \end{array}$$

9:39

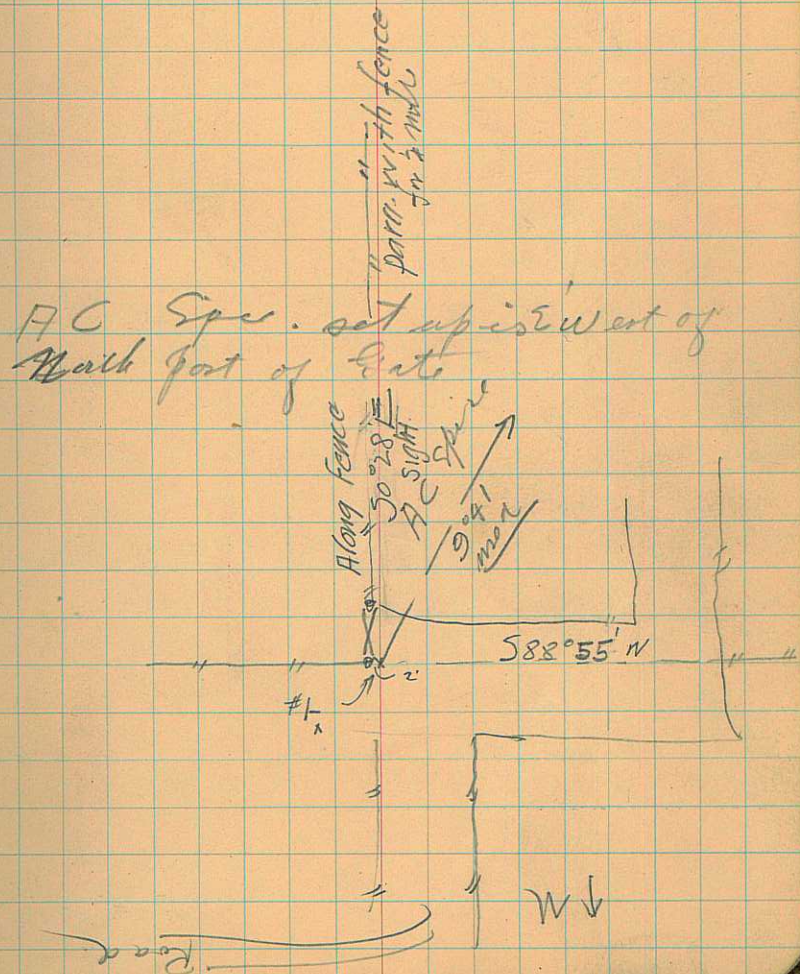
Use 9:39 ay to

Use 9:41 ay to

10 am $\angle = -1001$
 Co $\angle = 48^{\circ}19'12''$

-84-

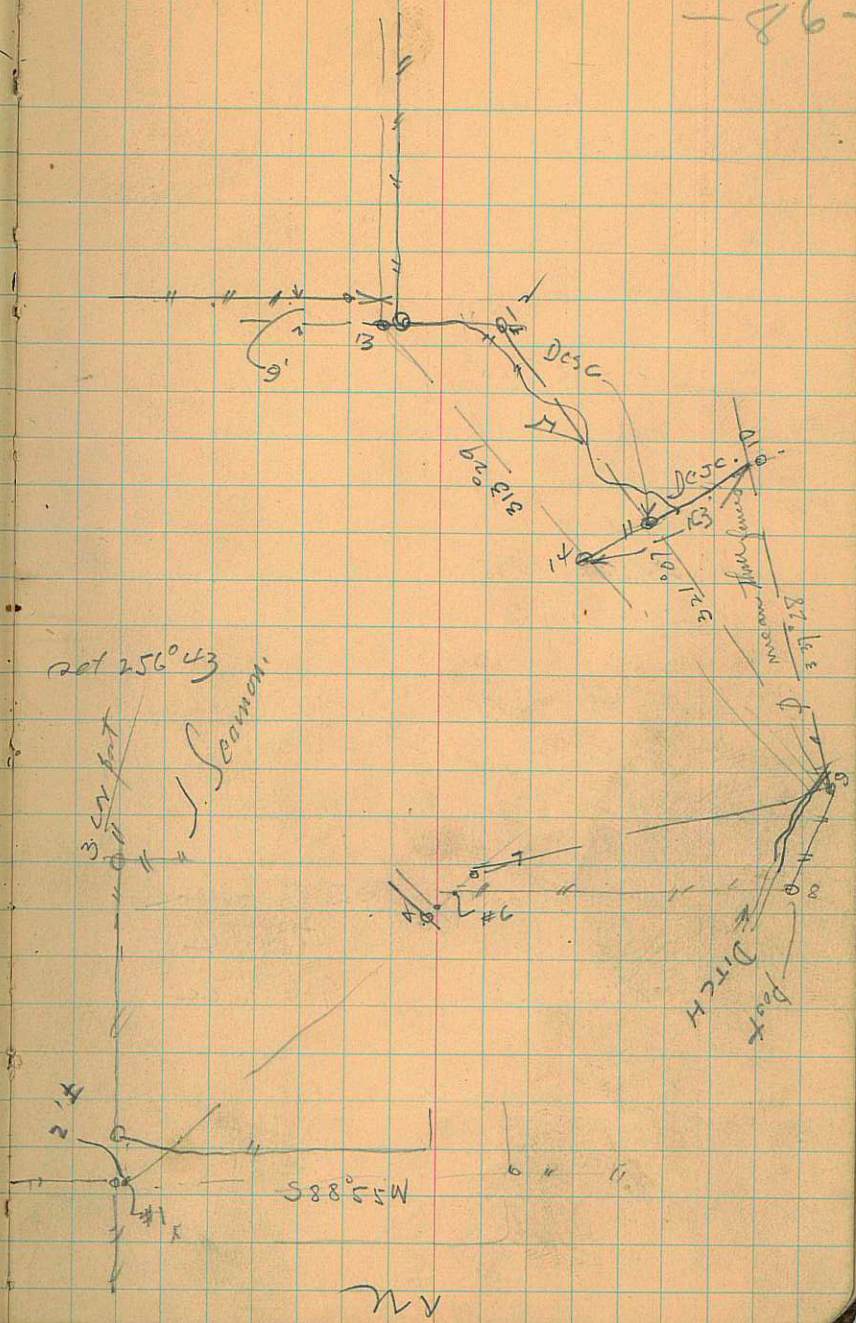
10:00 to
 to main spine of AC. 10:30
 rather late



Oct 31 - 1934
 S. R. Seamon of Hyac Park

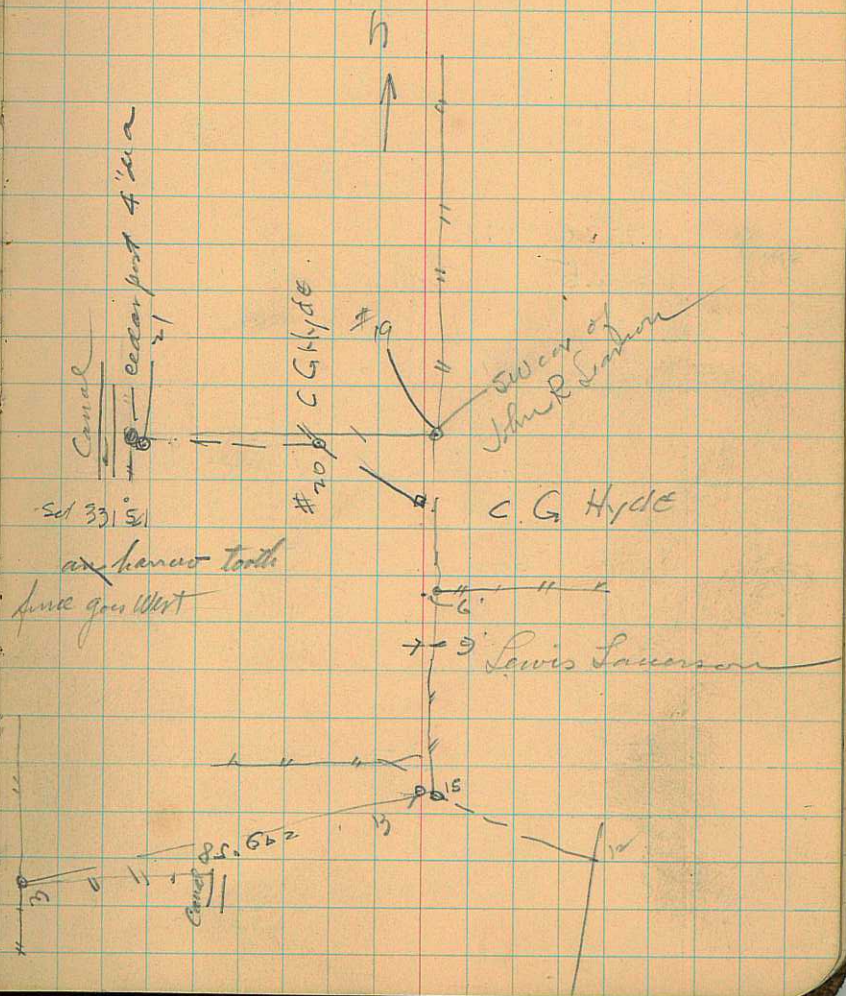
15	98°33'	1 ft to cor post
✓ 13	98°33'	X
10	66°03'	163
14		
✓ 14	313°29'	400.00
13	313°29'	723.0
✓ 11	321°07'	
11	321°07'	
10	337°30'	X
8	208°30'	114.6
9 _K		
9	76°43'	X
8	82°33'	838.0' cor post
7 _K		
7	53°55'	764.0
6		761.5 intersect ^{mline property} E-W fence
5	"	741 L H Canal
4	53°55'	726. R bank L-H Canal
3	359°20'	
	53°55'	

1_N



86-

21	252° 58'	478	
7	173° 42'		
20			
20	272° 32'	215.00	2' N of fence
3	218° 20'		
19	332° 35'	71.0	
18			
18	331° 54'	600.00	R 5' to fence
17	331° 50'	570'	R 6' to fence partition
16	331° 54'	300	R 9' to fence
3	249° 58'		



251° 5 1/2' to cur post
 20 353 42 30

① 53° 55' + 180° closes.

7x

7 1 53 45 56 1.00 to
 500 R 4' to Ditch
 500 R 20' to F
 400 R 29' to F
 300 R 8' to F
 200 R 7' to fence

24 195 30 31.5
 153 45 on Tan

23x

23 150 10 69x
 600 R 16.00 to fence on land bk
 500 R 24' to fence
 400 R 18' to F
 300 R 15' to fence
 " 200 R 12' to fence

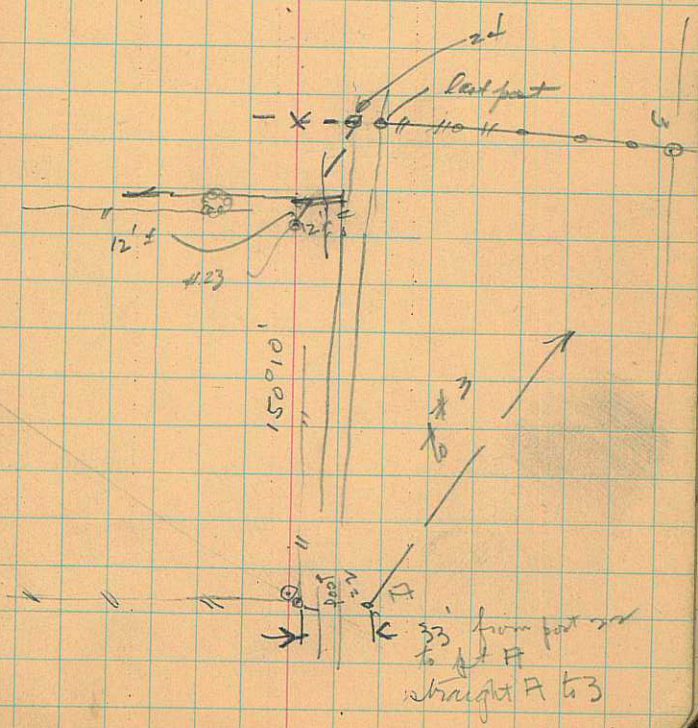
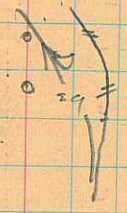
150 10'

21x

253° 12' to L BK Cand
 281 30 3'

21x

3.3008 90
 18



Nov 6 - 1934

Re-observation on
pt 1 of J.R. Seamans Sun
F56 A.C. Spire.

9° 53'

~~9 56~~

9 53

9 55

~~9 54~~

~~185~~

19 53 45

9 54 near

9 53 45

S

92-

half clearing

15 51.7

3.37

15 55 07

1.95

15 53 12

.75

4.5

37 5

300

3.375

.75

15

3.75

9:30

15° 53'

10 am

15 54

15 51.7

375

15 55.45

15

15 53.75

F5 to A.C. Spire

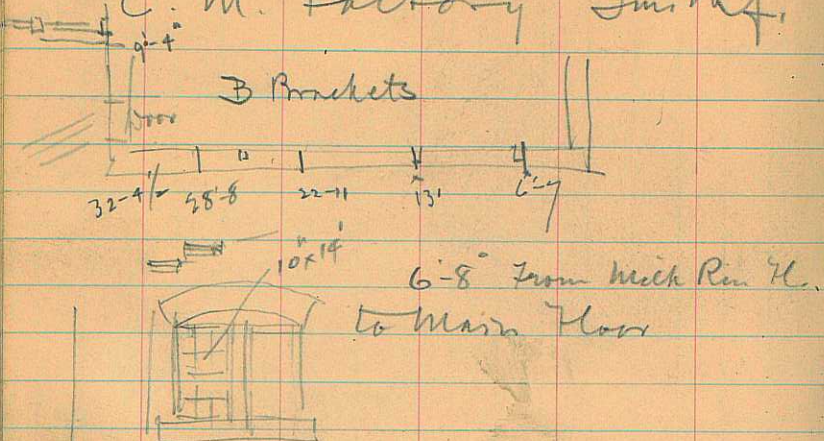
COO 48° 19' 12"

~~Add
13 monuments~~

Aug 26 - 1914

C. M. Factory Smith.

148

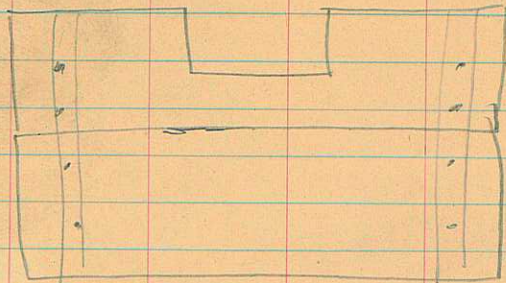


Wall of Pan-Room ins. 28'-9 1/2"

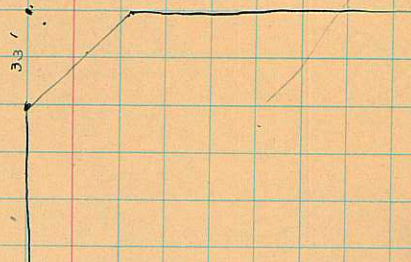
300

493

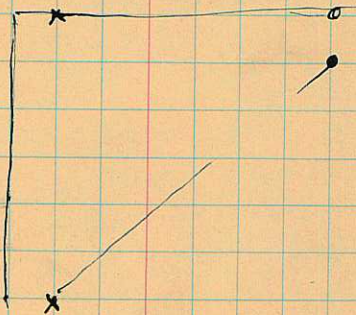
100	200
30	01.3
1000	5
900	065



150



L



5.03

$$\begin{array}{r} 511 \\ 453 \\ \hline .58 \end{array}$$

$$\frac{R}{\cos \frac{I}{2}} - R = F$$

$$\begin{array}{r} 6.00 \\ 5.91 \\ 5.34 \\ \hline .57 \end{array}$$

$$\frac{R_2}{\cos I} - R = F$$

$$\begin{array}{r} 2,477,124 \\ 2,726,528 \\ \hline 3,750,533 \\ 0,301,020 \\ \hline 4,051,563 \\ 7,999,384 \\ \hline 4,152,179 \end{array}$$

$$\begin{array}{r} 3,750,533 \\ 7,999,851 \\ \hline 3,750,682 \end{array} \quad 56.32.0$$

152

$$\begin{array}{r} 20950 = 1.698970 \\ 4049503 \\ \hline 3.649467 \end{array}$$

15+20

$$\text{Aug } R = 4.049503$$

$$\text{Aug } = \frac{0.301020}{4.350533}$$

$$\text{Aug } 20950 = \frac{7,999,384}{4.351149}$$

$$\begin{array}{r} 1.698970 \\ 3,750,533 \\ \hline 3,948,437 \end{array}$$

$$\begin{array}{r} 12 \\ 1.2 \\ \hline 13.7 \end{array}$$

$$\begin{array}{r} 94 \\ 25 \\ \hline 75 \\ 94 \\ 12 \\ \hline 87 \\ 14 \\ \hline 73 \end{array}$$

$$\begin{array}{r} 4.61 \\ \hline 4.51 \\ 2 \\ \hline 4.71 \\ 2 \\ \hline 4.91 \\ 2 \\ \hline 4.66 \\ 2 \\ \hline 4.46 \end{array}$$

$$\begin{array}{r} 5.26 \\ .25 \\ \hline 5.01 \end{array}$$

$$\begin{array}{r} 5.26 \\ 3.46 \\ \hline 1.80 \\ 2.86 \\ \hline 3.50 \end{array}$$

$$\begin{array}{r} 2.46 \\ 3.46 \\ 3.26 \\ 3.86 \\ \hline 4.0 \end{array}$$

$$\begin{array}{r} 3.16 \\ 2.86 \\ \hline .30 \end{array}$$

$$\begin{array}{r} 361 \\ 58 \\ \hline 303 \end{array}$$

$$T = 1 \frac{1}{2} \tan$$

$$T = \tan \frac{1}{2} R$$

$$T = \frac{\tan \phi R}{2}$$

$$\tan \phi R = \frac{T \cdot 2}{\tan \phi}$$

$$\begin{array}{r} 5.01 \\ 3.88 \\ \hline 1.13 \end{array}$$

154

$$\begin{array}{r} 4.61 \\ 2 \\ \hline 4.81 \end{array}$$

on oval

$$\begin{array}{r} 4.22 \\ 5.9 - 1'' \end{array}$$

$$\begin{array}{r} 4.61 \\ 4.26 \\ \hline .35 \end{array}$$

$$\begin{array}{r} 4.81 \\ 4.66 \\ \hline .15 \\ 1.2 \\ \hline 3.0 \\ 1.5 \end{array}$$

$$\begin{array}{r} 4.66 \\ 4.26 \\ \hline .4 \end{array}$$

$$\begin{array}{r} 4.61 \\ .3 \\ \hline 4.91 \end{array}$$

$$\begin{array}{r} 4.61 \\ 4.3 \\ \hline 5.00 \end{array}$$

$$\begin{array}{r} 4.61 \\ 4.3 \\ \hline 5.00 \end{array}$$

$$\begin{array}{r} 4.81 \\ 2 \\ \hline 5.01 \end{array}$$

$$\begin{array}{r} 49736 \\ 44480 \\ \hline 4256 \end{array}$$

$$\begin{array}{r} 150 \\ 190 \\ \hline 1060 \\ 1080 \\ \hline 16000 \\ 13500 \\ \hline 2500 \end{array}$$

$$\begin{array}{r} 256 \\ 150 \\ \hline 1060 \\ 1080 \\ \hline 1000 \\ 900 \\ \hline 1000 \end{array}$$

$$\begin{array}{r} 200 \times 2 = 477121 \\ 200 \times \tan 10^\circ 32' = 427618 \\ 4.049503 \end{array}$$

$$\sin D = \frac{50}{R}$$

$$.01706$$

$$58''$$

Sta	RHI	R.R.	dist below	dist	
at	on grade		mark	above top	
1	4.79	4.39	.4		□
2	4.79	4.24	.55		✕
3	4.79	4.02	.77		
4	4.79	3.76	1.03		
5	4.79	3.98	.81		
6	4.79	4.01	.78		
7	4.79	4.79	—		
8	4.79	4.79	—		
9	4.79	4.08	.71		
10	4.79	4.79	—		
11	4.79	4.79	—		
12	4.79	4.01	.78		
13	4.79	4.79	—		
1st corner	4.81	4.81	.0		
2	4.81	4.25	.56	✓	✓ 4.28
3	4.81	3.82	.99	" ✓	" ✓
4	4.81	3.89	.92	" ✓	" ✓
5	4.81	3.86	.95	" ✓	" ✓
6	4.81	4.18	.63	7 1/2" ✓	
7	4.81	4.11	.7	8 3/8" ✓	
8	4.81	4.33	.48	4 3/4" ✓	
9	4.81	4.65	.76	9" ✓	
	4.81	4.01	.8	9 1/2" ✓	

156-

3.68
3.48

3.68
4.51
3.68
.83

4.51
.42
4.09
4

3.68
2
3.88

3.69
12
2

30' ÷ 100 = .3

12.00

4.81
4.05
.76

4.81
4.53
.28

4.81
4.25
.56

1.92
1.2
1.8
9.2
11.04

4.81
3.82
.99

4.81
4.81

4.81
1.17
6.3
1.2
5.1

4.81
4.81
1.2
1.2

3.14	3.14
3.7	3.4
<u>2198</u>	<u>1256</u>
942	942
11.518	10.676
<u>460</u>	

42.
7
8.6

5.03	
<u>4.93</u>	471
4.53	<u>453</u>
	123

4.96	
<u>4.72</u>	501.90
	4.72
	<u>497.18</u>
	496.75
	.43

495	
<u>12</u>	37.50
	71
	<u>36.75</u>

4.
5.
5.
5.
4.7

158

18.10) 49226 - 49191 = .45

19) 491.91 - 491.42 = .49

18) 491.42 - 490.88 = .54

490.88 - 490.2 = .68

490.2 - 489.4 = .8

489.4 - 488.5 = .9

488.5 - 487.5 = 1.1

487.5 - 486.5 = 1.1

486.5 - 485.4 = 1.1

485.4 - 484.2 = 1.2

484.2 - 482.9 = 1.3

482.9 - 481.5 = 1.4

492.36
491.91
491.42
491.05
490.88
54

490.2
489.5
.8

12
1.5
14.2

98
14.2
83.6

5.33

3500	400
<u>3500</u>	<u>400</u>
1750000	160000
<u>10500</u>	
12250000	
<u>160</u>	
12410000	
	<u>7.093772</u>
	3.546886
	5523

$$2.96 = 0.778157$$

$$2.91518 = 3.181272$$

$$\underline{3.596879}$$

$$78151$$

42.

7

$$696879$$

$$694173$$

$$\underline{2706}$$

$$718997$$

$$\underline{694173}$$

$$24824$$

$$596828$$

$$\underline{577668}$$

$$19210$$

8.6

$$824$$

$$17'$$

$$\underline{19211536}$$

3

$$\begin{array}{r} 6 \\ \underline{12} \end{array}$$

$$495$$

$$18$$

$$\underline{315}$$

$$36$$

$$\underline{1.25}$$

$$31.5$$

$$12.33$$

$$\underline{.56}$$

$$99$$

$$31.5$$

$$\underline{115}$$

$$\underline{430}$$

$$99$$

$$\underline{14}$$

$$85$$

$$\underline{7.5}$$

$$77.5$$

$$14.00$$

$$\underline{7.5}$$

$$21.50$$

$$99$$

$$21.50$$

$$\underline{77.50}$$

$$12.5$$

Schaub

$\frac{1517.7}{758.85}$

$\frac{786}{758.85}$
27.15

$\frac{660}{98}$
759

$\frac{786}{27.15}$
758.85

$\frac{138.2}{2760}$

