

TREASURY DEPT; U.S. COAST GUARD
 DATA FOR PROPOSED DEVELOPMENT
 IN SEC'S. 12 & 13, T. 22 S; R. 13 W; W.M.
 DOUGLAS COUNTY, OREGON.
 MAR. 1937
 SCALE, 1" = 100 FT
 Field & Office Work by
 Dep. Co. Surveyor

23-80

N 7/8 W

30° SP N 3/4 E
5.2

60° S 56 1/2 W 10.7'

N. on N Line E² Sec & East

May 22

Mar 23

5B23

E 122.5

Hub B' = 459.8' E of 1/16th Cor

Hub B''

E. 459.8

1/16 Cor

Hub Δ = 90° R = 2" G.I. Pipe 37" long

NW Cor SW 4 SE 1/4 Sect 2

13+20

North

5+50.4 = Hub

Note: - set pipe 7" S. of Sta 5+50.4
2" x 3/8"

469.1

Hub A

N. 81.3'

410 = Cor N 1/4 Cor sec 13

1320
550.4
709.6

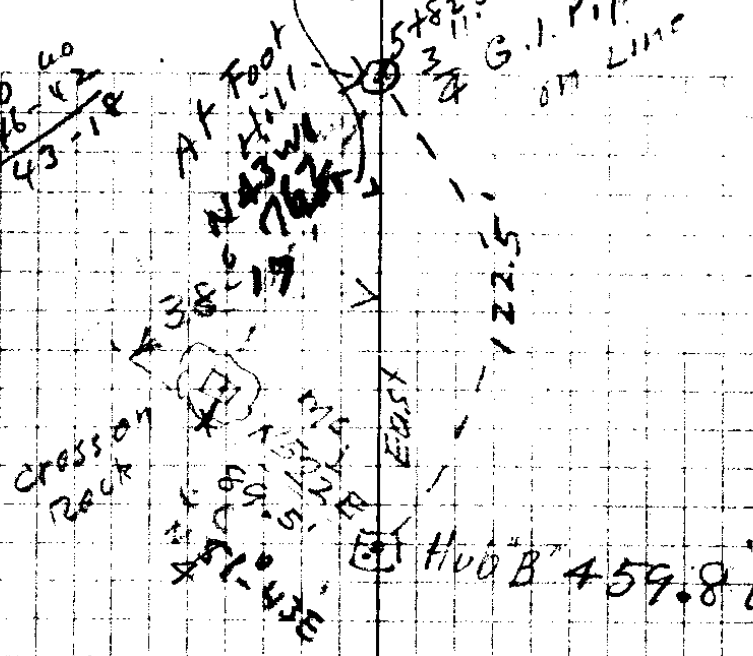
90
43-18

459.8
122.5
582

90 60
46-42
43-18

46° 42' - 76.2'
5x82.3
3
4 G.I. Pipe
on Line

90 60
38 17
41-43

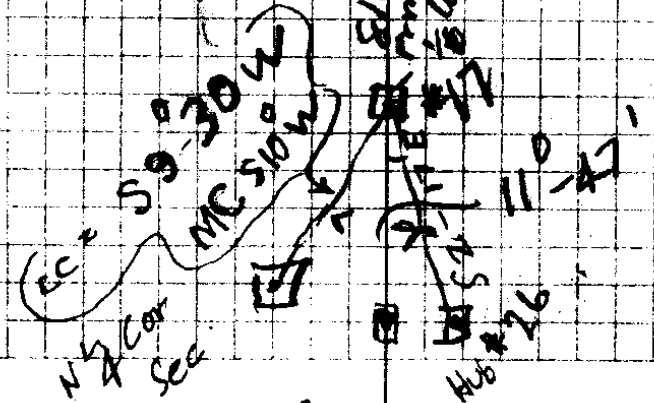
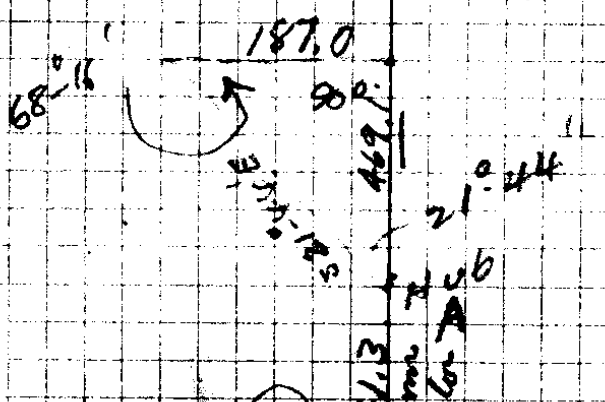


1320
552
769.6

469.1
550.4

39862 / 187.00000 (469.1)
159448
275520
239172
363420 (2)
358758
46620
39862
6928
70 60
68-16
21-114
T 21-114 = 39862

$$b = \frac{a}{\tan A}$$



11-47
2-17
18-00

11-47
2-17
90-30

23/80

Hub = E Line of 40
E 140.6

Hub $\Delta = 90^\circ L$

South 72.6 on $11^\circ 39' = 71.1$

Hub $\Delta = 90^\circ R$ on W. Side Trail on Fill

E 74.7 on $10^\circ 10' = 73.5$

1105.9 E + 371 N

} 167.6'

EAST $97.8 + 15^\circ 55' = 94.1$

Hub $\Delta = 90^\circ L$ 371.0' N of $\frac{1}{16}$ line

S 55.1' 56.1'

6th Spruce

Hub $\Delta = 90^\circ R$

E 170.6 ACROSS Lake (Pond)

Hub 241.2' E of W Line of Forty⁹ by 426.1 N

E 258.9

Hub $\Delta = 90^\circ R$

North for offset 426.1

Hub B $\Delta = 90^\circ L$

57823 East

Note: set Hub 15' E of $\frac{1}{16}$ Line

426.1
 55.1
 370
 71

170.6
 258.9
 429.5

73.5
 94.1
 167.6

962
 97.8
 769.6
 6734
 8658

984.3
 74.7
 688.8
 3936
 6488

9994
 72.6
 58764
 19588
 68558

94.1
 73.5
 167.6

94.0836

73.5048

71.10448

459.8
 122.5
 258.9
 170.6
 1011.8
 94.1
 1105.9
 73.5
 1179.4

426.1
 52.1
 370.0

582.3
 258.9
 841.2
 170.6

1320
 1179.4
 140.6

320
 801
 478.8
 170.6
 308.2

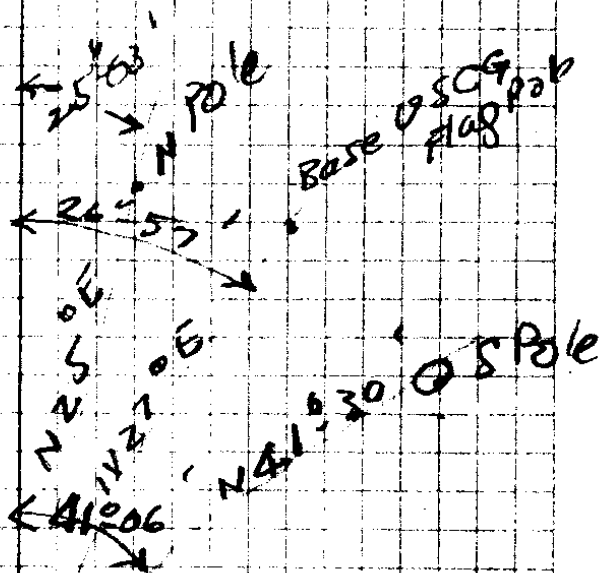
1536
 1406
 150

23/10

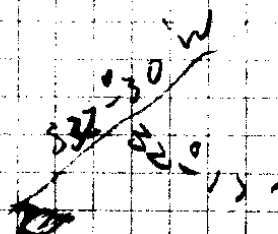
Mar 27 1937

AB - NER

Ties to $\frac{1}{16}$ Cor - 1320' N
of S $\frac{1}{4}$ Cor Sec 12



2" Gal. Pipe



Westerly
Cor (Top)
Cabin Roof
eaves

532/80

4.7
60.69
11.23
76.62

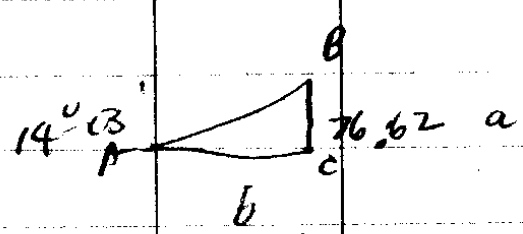
10.3
10.3
309
1030
106.09

6.1
61
61
366
37.21

106.09
3721
2 143.30 (11.9)
1
48
21
2230
2200
30

75.52
151.54

90
76
14



$$\tan A = \frac{a}{b}$$

$$b = \frac{a}{\tan A}$$

250.26 | 76.620 (306.1)
750.78
154400
150156
40440
25026
15414

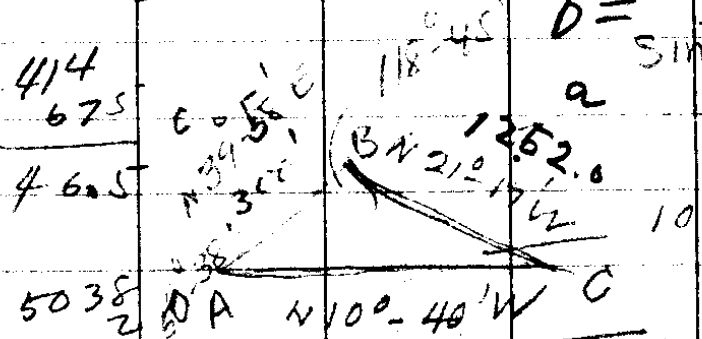
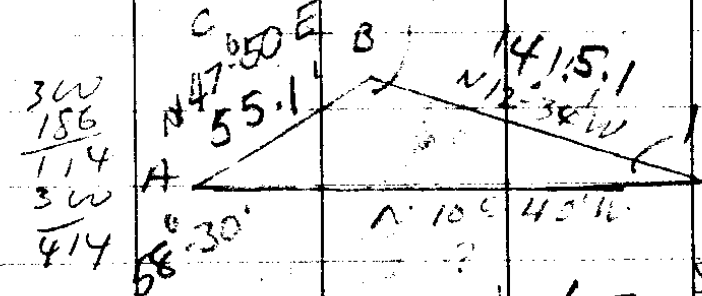
SIN A X C
SIN C

90 60 1320
60-27 582.3
737.7
29-33 32.7
10-25 770.4
39-58

111-57
582.3
1.04
72-49
75

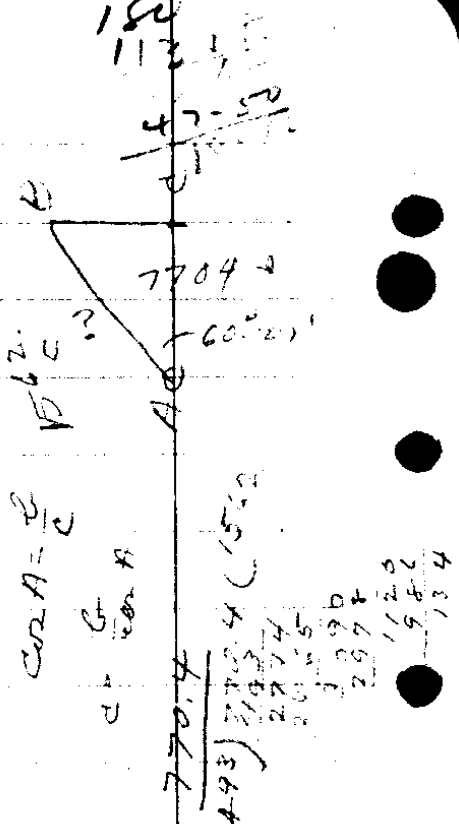
493) 737.70 11
493
2447

269.4
547
816.4
N 29° 33' E
18-17
N 47-50 E



414
675
346.5
5038
2
111-10
a SIN A X 300 = .7731 X 300 = 231.9
5038 SIN 18-37 = .3142
3958
c

N 10-40 W
119.36 a SIN A X 55.1 = .85264 X 55.1 = 46.98
239-12 SIN 10-37 = .1842



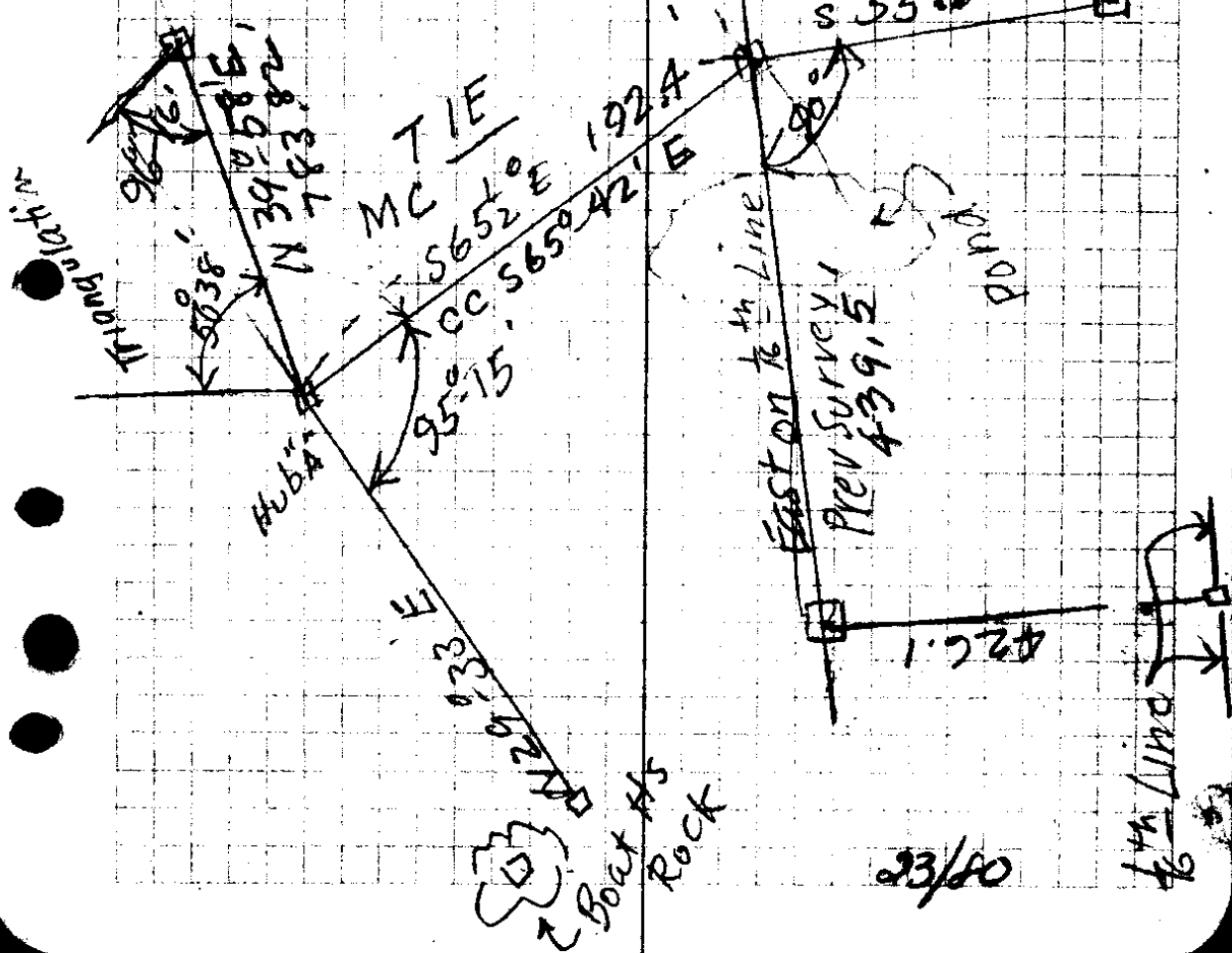
150
113.4
47-50
770.4
cos A = b/c
cos 60° = 770.4 / c
c = 770.4 / cos 60° = 1540.8
493) 770.4 (155.2
493 2193
2974
2015
3994
2674
1120
1982
134

$$\begin{array}{r} 90 \quad 60 \\ 49 - 38 \\ \hline 50 - 22 \end{array}$$

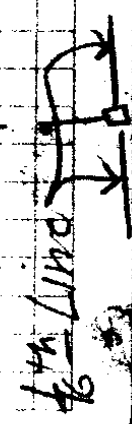
$$\begin{array}{r} 90 \quad 60 \\ 36 - 04 \\ \hline 53 - 56 \end{array}$$

5⁰⁰' Vert L to top tack
5.1' above ground at Hub

U.S. CGS			
⊙ B.M.	55.1	426.1	95+75
	71.1	126.2	29-33
	126.2	299.9	65-42



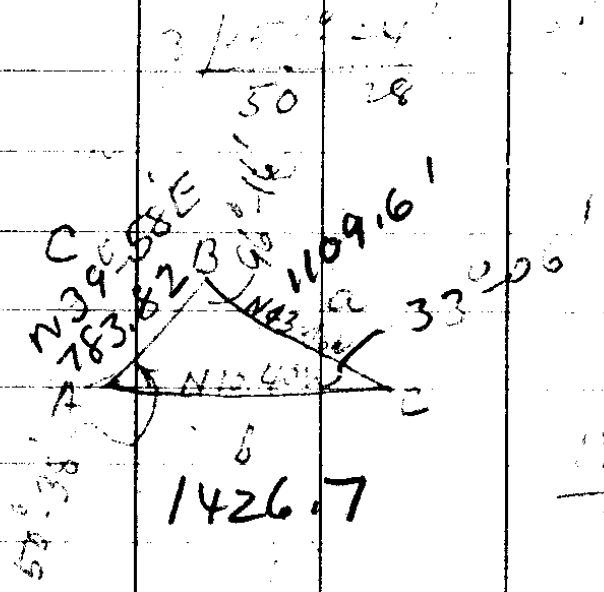
23/80



Check Levels - BM to Engls Data
on Jetty

3/26/37

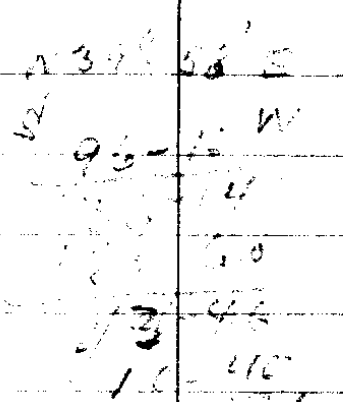
Sta	+ S	H.I.	- S	Elev	
	4.77	21.36 20.36		16.59 75.59	USC & GS BM 8-1933 on Winchester Head
Shot # 1			11.1		Checking Data used by US Engls on Jetty - for 10 April 1936
"			11.0	9.36	
AMI " use this →			11.2	10.16	
PM	2.67	17.26 18.26		15.59 15.59 2.67	USC & GS M011
BM small shelf cut in Rock - Nail set in Angle of cut B.M. is not on nail but on shelf Elev shelf 14.13			4.20 4.13	14.20 14.13	B.M. NW Cor Boat HS Rock Corrected Elev.
			4.13	15.13	
ERR!	1.48	15.61		14.13	B.M.
Bar Rock			2.90	12.70	after
V. Face Boat					
HS Rock					



$$b = \frac{\sin B \times 783.82}{\sin C}$$

.99402 (6)
 783.82
 1988.04
 795216
 298206
 795216
 695814
 7791327564

5461) 7791327564 (1426.7)
 5461
 23303
 21844
 14592
 10922
 36708
 32766
 39445



180-60
 96-16
 83-44
 51-38
 2616
 146-54
 180
 146-84
 33-06

$$a = \frac{\sin A \times 783.82}{\sin 33^\circ 06' C}$$

783.82
 77.31
 78382
 235146
 548674
 548674
 60597242

5461) 605971242 (1109.6)
 5461
 5987
 5461
 52612
 49149
 34634
 32766
 15868

1426.7
 0.236
 14913

23/80

170250
710-31
31

113 50
10 21
724-26

669 3
66
4014
4014
441.5 4

63-07 1
36
62-31

90 60
63-07
26-58

89 8
6 0
6 0
C/A = $\frac{6}{c}$

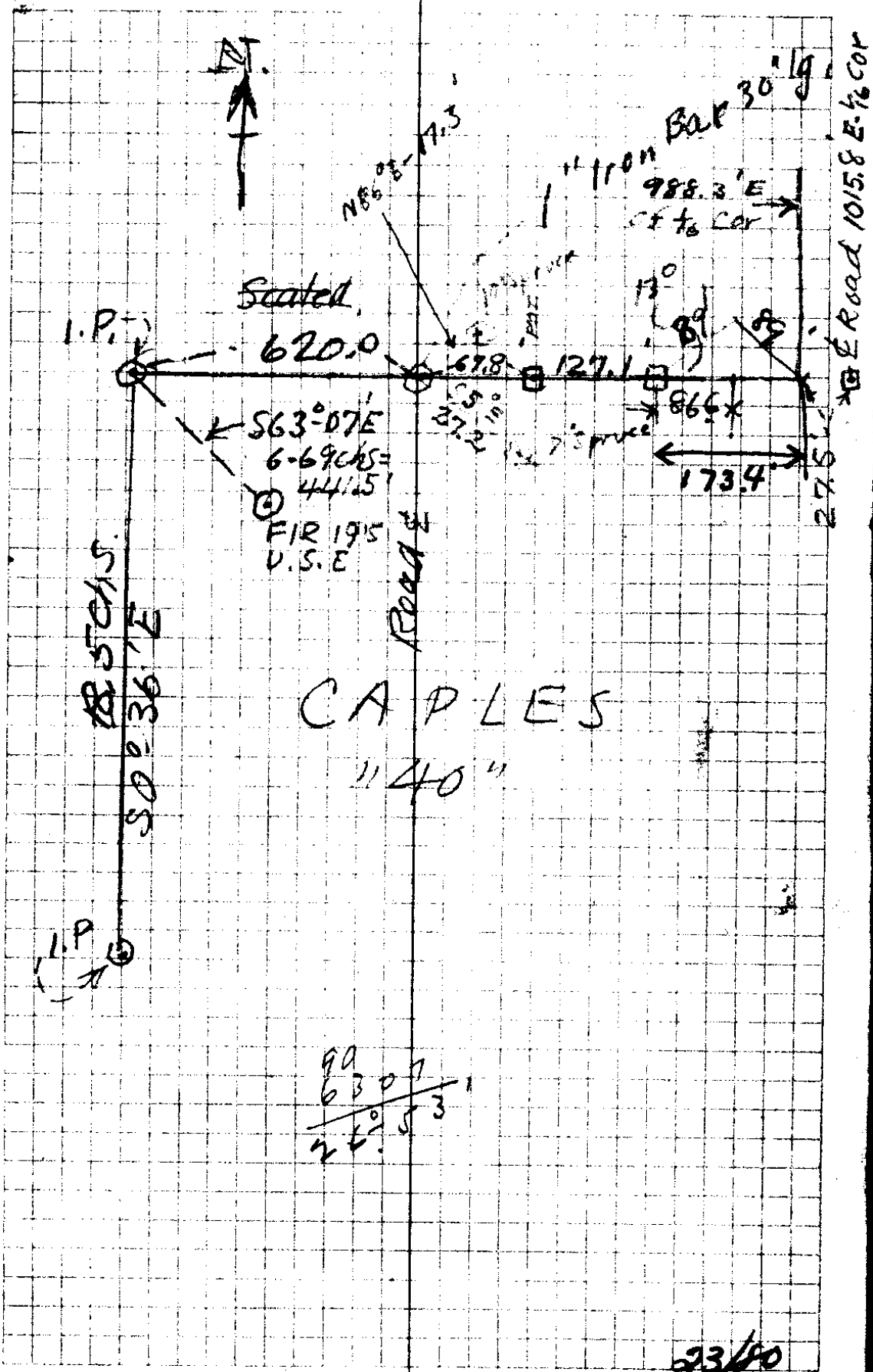
b = C/A x C 1713.43786 3

620.0
67.8 2
127.1 2
173.4 6
988.3
275
1815.8

988.3
32.3
1020.6

77437
89
76933
779496
8681893
2

MAR 27-1937



Road Alignment

CC MC

27+61.8

S 28°-38' W ✓

25+00

Δ = 13°-13' L

S 41°-51' W 286.1

Sec Line Xing s

22+19.9

S 41°-51' W ✓ 148.0

20+71.9

Δ 24°-59' RT

S 16°-52' W ✓

217.6

18+54.3

Δ = 8°-08' L

S 25° W 326.0 ✓

3/4" I. Bar
30" I. g.

15+28.7

2" I. Pipe on 1/16" Line Δ = 11°-34' L

S 36°-34' W ✓ 596.65

9+31.6

Δ = 7°-07' R - 3/4" I. Pipe

S 29°-27' W ✓

S 29°-32' W 373.9'

5+57.7

Δ = 7°-52' L 3/4" I. P.

557.7 S 37°-19' W

37°-14'
S 32°-14' W
203.27

0+0 = 2" I. P.

Road Survey.

27461.8

$$\begin{array}{r} 40-38 \\ 28-38 \\ \hline 12-00 \end{array}$$

$$\begin{array}{r} 60 + 30 \\ 58 + 16.3 \\ \hline 2 \quad 13.7 \end{array}$$

$$28 + 52.8$$

$$\begin{array}{r} 28 + 024 \\ 27 + 618 \\ \hline 406 \end{array}$$

$$\begin{array}{r} 28 + 024 \\ 534 \\ \hline 528 \end{array}$$

$$\begin{array}{r} 28^{\circ} - 88W \\ 149.34 \end{array}$$

$$S 14 - 024W$$

$$\begin{array}{r} 27 + 76.5 \\ 25.9 \\ \hline 28 + 024 \\ 50.4 \end{array}$$

$$\begin{array}{r} 28 + 024 \\ 27 + 618 \\ \hline 406 \end{array}$$

8

23/10

① Road Profile -

MAY 29
1937

Sta	+S	HI	-S	Elev	
	2.13	18.72		16.59	U.S.C. & G.S. BM
Top Pipe 0+0			3.09	15.63	Winchester Head Top 12" Pipe 0+0
	2.63	18.26			
0+0			3.80	14.5	Ground G.S.
+45			3.0	15.3	
1+00			5.6	12.7	
2+00			5.6	12.7	
3+00			5.0	13.3	
4+00			5.5	12.8	
+50			5.6	12.7	
+70			6.4	11.7	
5+00			4.6	13.7	
5+57.7 ^Δ			6.0	12.3	
" Top Pipe			5.58	12.68	
	4.76		3.09		

Bayer Δ Road Profile
Richardson Notes

①

L	Δ	R	
$-\frac{4.3}{20} = 14.0$		$-\frac{4.4}{20} = 13.9$	0+0
$-\frac{1.8}{20} = 16.5$		$-\frac{5.4}{20} = 12.9$	0+45
$-\frac{4.7}{20} = 13.6$		$-\frac{5.4}{20} = 12.9$	1+00
$-\frac{4.2}{20} = 14.1$	$-\frac{5.4}{12} = 12.9$	$-\frac{5.6}{20} = 12.7$	2+00
$-\frac{5.4}{20} = 12.9$		$-\frac{6.0}{20} = 12.3$	3+00
$-\frac{5.8}{20} = 12.5$		$-\frac{6.1}{20} = 12.2$	4+00
$-\frac{6.3}{20} = 12.0$	$-\frac{6.1}{15} = 12.2$	$-\frac{6.6}{20} = 11.7$	4+50
$-\frac{6.8}{20} = 11.5$	$-\frac{6.3 \text{ w.s.}}{40} = 12.0$	$-\frac{6.9}{20} = 11.4$	4+70
$-\frac{6.8}{20} = 11.5$	$-\frac{6.3 \text{ w.s.}}{10} = 12.0$	$-\frac{5.5}{5.0} = 12.8$	5+00
		$-\frac{6.3}{20} = 12.0$	
$-\frac{5.3}{20} = 13.0$		$-\frac{5.1}{10} = 13.2$	5+7.7
		$-\frac{5.6}{20} = 12.7$	

Very little drift

23/80

②

Road Prof.

Sta	+s	H1	± -s	Elev	
	4.75	18.26	3.09 3.55	14.71	
Not on Top Nail	5.20	19.91			B.M. Boat House Rock
6+00			8.1	11.8	
+60			7.0	12.9	
7+00			8.2	11.7	W.S.
+50			8.7	11.2	
8+00			7.7	12.2	
8+11			8.2	11.7	W.S.
+50			9.6	10.3	
+78			8.2	11.7	W.S.
Heavier Drift Deposit					
9+00	Starts Here		4.8	15.1	
9+31.6			4.4 ^{GS}	15.5	
33			3.1	16.8	Top 3/4" Pipe
	9.96		6.64		

3/29/37

(2)

L

R

EL = 14.0	12.0
- 5.9	- 7.9
<u>20</u>	<u>10</u>

EL = 12.5	13.9
- 7.4	- 6.0
<u>20</u>	<u>10</u>

Elev = 12.1
7.8
<u>20</u>

EL = 12.2	11.7
- 7.7	- 8.2
<u>20</u>	<u>16</u>

Elev = 12.9
- 7.0
<u>20</u>

EL = 13.7	11.7
- 6.2	- 8.2 WS
<u>20</u>	<u>13</u>

El. 12.3	11.7	10.8
- 7.6	- 8.2	- 9.1
<u>20</u>	<u>17</u>	<u>12</u>

Elev 14.2	12.6	11.7
- 5.7	- 7.3	- 9.2 WS
<u>20</u>	<u>15</u>	<u>5.0</u>

14.9
- 5.0
<u>20</u>

15.3
- 4.6
<u>20</u>

12.1	13.2
- 7.8	- 6.9
<u>15</u>	<u>20</u>

12.9
- 7.0
<u>20</u>

12.7
7.2
<u>20</u>

11.7 WS	12.4
- 8.2	- 7.5
<u>17</u>	<u>20</u>

11.7 WS	11.1
- 8.2 WS	- 8.8
<u>13.0</u>	<u>20</u>

11.2
8.7
<u>20</u>

10.7	11.7
- 9.2	- 8.2
<u>20</u>	<u>24</u>

11.7 WS	10.7
- 8.2 WS	- 9.2
<u>15.0</u>	<u>20</u>

11.7 WS	10.4
- 8.2 WS	- 9.5
<u>12</u>	<u>20</u>

11.7 WS	11.1
- 8.2 WS	- 8.8
<u>18</u>	<u>20</u>

23/20

Very Little Drift

Very Little Drift

V

③

Road Prof

Sta	+S	H.I	-S	Elev
10+00	9.93	19.91	6.64 5.3	14.6
+40			6.1	13.8
+60			7.9	12.0
11+00			7.7	12.2
+50	Very Heavy Drift Deposit Starts Here		5.1	14.8
			4.90	15.01
	4.43	19.44		
11+50			4.6	14.8
12+00			5.5	13.9
13+00			5.0	14.4
14+00			5.6	13.8
15+00			5.2	14.2
△ 15+28.25			4.6	14.8
	14.39		11.54	

3/29/37

(3)

L

±

R

$$\begin{array}{r} \text{Elev. 14.3} \\ - 5.6 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 13.6 \\ - 6.3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{Elev 16.5} \\ - 3.4 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 16.4 \\ - 3.5 \\ \hline 13. \end{array}$$

$$\begin{array}{r} 13.2 \\ - 6.7 \\ \hline 5.0 \end{array}$$

$$\begin{array}{r} 14.6 \\ - 5.3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El. 15.7} \\ - 4.2 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 12.1 \\ - 7.8 \\ \hline 5.0 \end{array}$$

$$\begin{array}{r} 12.1 \\ - 7.8 \\ \hline 7.0 \end{array}$$

$$\begin{array}{r} 14.8 \\ - 5.1 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{Elev. 14.2} \\ - 5.7 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 12.0 \\ - 7.9 \\ \hline 8.0 \end{array}$$

$$\begin{array}{r} 14.2 \\ - 5.7 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{Elev 15.4} \\ - 4.5 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.4 \\ - 5.5 \\ \hline 14. \end{array}$$

$$\begin{array}{r} 13.1 \\ - 6.8 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{Elev 14.5} \\ - 4.9 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 15.2 \\ - 4.2 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El. 13.5} \\ - 5.9 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.2 \\ - 5.2 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El 14.5} \\ - 4.9 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.3 \\ - 5.1 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{Elev 14.2} \\ - 5.2 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.0 \\ - 5.4 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El. 14.1} \\ - 5.3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.3 \\ - 5.1 \\ \hline 20 \end{array}$$

23/20

④ Road Prof

Sta	+S	HI	-S	Elev
16+00	14.39	19.44	5.2	14.2
17+00			6.6	12.8
17+30	17+39 See below			
17+50	End Heavy Drift (No Drift from here on)			
18+00			5.4	14.0
18+54.3			4.32	15.12
	4.27	19.39		
17+30			6.9	12.5
17+39			4.80	14.6
	2.16	17.28		15.12
18+00			3.2	14.1
+54.3			2.9	14.4
19+00			4.1	13.2
20+00			5.0	12.3
20+71.9	Top Stake			
	3.49	16.47	4.30	12.98
20+00			4.20	12.3
	20.04		40.16	

3/29/37

(4)

$$\begin{array}{r} \text{Elev } 14.9 \\ 4.5 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El} = 12.8 \\ 6.6 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El. } 14.1 \\ 5.3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{Elev} = 13.9 \\ 5.5 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El} = 14.6 \\ 4.8 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El. } 13.9 \\ 18 + 54.3 = 3.4 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El } 12.5 \\ 4.8 \\ \hline 20 \end{array}$$

$$\begin{array}{r} \text{El. } 12.2 \\ 5.1 \\ \hline 20 \end{array}$$

$$\begin{array}{r} R \\ 14.5 \\ 4.9 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 12.8 \\ 6.6 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.1 \\ 5.3 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 12.9 \\ 6.5 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.6 \\ 4.8 \\ \hline 5.0 \end{array}$$

$$\begin{array}{r} 12.4 \\ 7.0 \\ \hline 14.0 \end{array}$$

$$\begin{array}{r} 12.8 \\ 6.8 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 14.6 \\ 2.7 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 13.5 \\ 3.8 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 11.7 \\ 5.6 \\ \hline 20 \end{array}$$

23/80

⑤ Road Profile

Sta	+S (20.04)	HI	-S (20.76 w.s)	Elev.	
20+30		16.47	4.9	11.6	
+71.9			4.6	11.9	Ground Surf.
21+00			4.4	12.1	
22+00			4.8	11.7	
23+00			4.7	11.8	
24+00			4.6	11.9	
25+00			3.9	12.6	
③			3.25	13.22	
	5.30	18.52			
24+00			6.7	11.8	
25+57			5.5	13.0	
26+00			4.7	13.8	
+45			4.4	14.1	Water
+45			5.9	12.6	0.3' deep Bottom of
+47			5.9	12.6	Ditch
+47			4.3	14.2	

(25.34)

3/29/37

L

Elev 11.7

$$\begin{array}{r} 4.8 \\ \underline{2.0} \end{array}$$

EL=11.9

$$\begin{array}{r} 4.6 \\ \underline{2.0} \end{array}$$

Elev 12.1

$$\begin{array}{r} 4.4 \\ \underline{2.0} \end{array}$$

EL= 11.7

$$\begin{array}{r} 4.8 \\ \underline{2.0} \end{array}$$

EL= 11.8

$$\begin{array}{r} 4.7 \\ \underline{2.0} \end{array}$$

EL=11.9

$$\begin{array}{r} 4.6 \\ \underline{2.0} \end{array}$$

EL= 12.5

$$\begin{array}{r} 4.0 \\ \underline{2.0} \end{array}$$

EL 13.3

$$2.5 + 5.7 = \frac{5.2}{2.0}$$

EL 14.3

$$\begin{array}{r} 4.2 \\ \underline{2.0} \end{array}$$

E

R.

(5)

EL=11.6

$$\begin{array}{r} 4.9 \\ \underline{2.0} \end{array}$$

11.9

$$\begin{array}{r} 4.6 \\ \underline{2.0} \end{array}$$

12.5

$$\begin{array}{r} 4.0 \\ \underline{2.0} \end{array} \text{ Ditch Bank (East)}$$

EL=09.7

11.7

$$\begin{array}{r} 4.8 \\ \underline{2.0} \end{array}$$

11.7

$$\begin{array}{r} 4.8 \\ \underline{2.0} \end{array}$$

6.8 = Ditch

$$\begin{array}{r} 3.0 \\ \underline{2.0} \end{array} \text{ Ditch Bank}$$

11.8

$$\begin{array}{r} 4.7 \\ \underline{2.0} \end{array}$$

11.8

$$\begin{array}{r} 4.7 \\ \underline{3.0} \end{array} \text{ Ditch Bank}$$

11.9

$$\begin{array}{r} 4.6 \\ \underline{2.0} \end{array}$$

12.4

$$\begin{array}{r} 4.1 \\ \underline{2.0} \end{array}$$

13.4

$$\begin{array}{r} 5.1 \\ \underline{2.0} \end{array}$$

Angle in Ditch

$$\frac{5.0}{2.0}$$

13.2

$$\begin{array}{r} 5.3 \\ \underline{2.0} \end{array}$$

2 in Ditch

$$\frac{3.1}{2.0}$$

23/80

② Road Profile

Sta	+S 2534	HI	-S 2541	Elev
27+00		18.52	4.1	14.4

27+61.8			2.24	16.28	on
	4.10	20.38			

27+00			5.95	14.4
27+76.5			5.0	15.4

B.M.
Root 18 Spruce

			3.43	16.95	14' N 4' E } of SW Cor Parking Space
	29.44		29.08		

check → $\begin{array}{r} 16.95 \\ 16.59 \\ \hline 0.36 \end{array}$ $\begin{array}{r} 29.44 \\ 29.08 \\ \hline 0.36 \end{array}$

	4.20	21.15		16.95
28+02.4			4.8	16.4

28+42			4.8	16.4
-------	--	--	-----	------

+52.8			3.8	17.4	E Edge Co Road bed
-------	--	--	-----	------	-----------------------

+73			2.6	18.6	Co Road
-----	--	--	-----	------	---------

3/29/37

(6)

Ditch ± 15.5 L 15.5
 $\frac{3.0}{22}$ $\frac{3.0}{20}$

R
 13.9
 $\frac{4.6}{20}$

El = 15.8
 27 + 76.5 $\frac{4.6}{20}$

15.4
 $\frac{5.0}{20}$

El = 15.8
 28 + 24 $\frac{5.3}{20}$

16.0
 $\frac{5.1}{20}$

El = 16.6
 $\frac{4.6}{20}$

16.9
 $\frac{4.2}{13}$ & Co Rd.

Elev. 18.6
 $\frac{2.6}{20}$

18.6
 $\frac{2.6}{20}$

23/80

3/29/37

Elev. over S. into Station Site

Sta +S H.I. -S Elev.

O+O } 261 18.24 15.63

Road Survey

top 2" Pipe

5.68

~~2~~ 21.02

1.9

16.34

Top 1 1/2" Pipe

Top Pipe

4.63

~~7~~ 14.32

" Groove } Sta Site

17.62.75

5.50

~~6~~ 15.52

Low End of Culvert under old Road } 3' N.

1.5

20.5

20.1

2.7

~~17.1~~

~~7~~ 18.39

4.1

16.0

23/80

Peg Levels from Road Survey to Sta Site ^{Reservoir Site}
 Boyer & Richardson

Sta	+S	H1	-S	Elev	3/30/37
B.M.	2.14	17.77		15.63	0+0 Top Pipe Road Survey
⊕			1.43	16.34	2" Pipe
Top Pipe	5.98	22.32			
+62.75 Sta Site			4.92	17.40	
Top Ground			5.80	16.52	
LOW End			1.80	20.5	
Culvert under Old Road			0.93	21.49	
⊕	12.42	33.91			
⊕			0.50	33.41	
	12.42	45.83			
⊕			0.09	45.74	
	11.89	57.63			
on old wagon Rd. Grade			0.00	57.63	
	2.42	60.05			
⊕			8.24	51.81	
Bott. Ck.	5.50	57.31	checked to here		
Lower Res. Site (Dam)			13.2	44.1	
BM 35 N. Lower Dam Site	52.97	Res.	5.89	51.52	
⊕			2.27	55.04	✓
	12.88	67.92			
⊕			0.0	67.92	
	12.46	80.38			
⊕			0.42	79.96	
	25.34		2.68		

3763

5277
1189

4088

1.42
83
0.27
0.09
8.29
11.09

44.1
16.5

27.6

5731
1563

4168

5731
589

5142

5731
227

5504

5504
1286

6790

2534
769

2265

5514
2938

2576

5731
7946

735

5904
2492

3412

7996
5731

2265

23/80

Sta	+S	HI	-S	Elev.	
	25.34		2.69	79.96	
	12.48	9.244		12.48	
W.S - 72.1' above Elev. Sta. Site			5.80	86.64	End Peg Levels
	57.82		8.49		

3782
8.44
29.33

8664
5731
29.33

16.5
75
91

7244
58
86.6

8664
165
70.14

23/80

Tie to Res^{Dam} Site for Diversion
Water Supply System

End = DAM Site

S 33° 15' E 61.8 F.

Pt 4 Δ 35° 10' R

Δ S 68° 25' E 86.0 on 6° 40' Vert 85.4

Pt 3 Δ 30° 42' L

S 37° 43' E 68.5 on 14° Vert = 66.4

Pt # 2 Δ 1° 56' L

S 35° 47' E 71.8

Pt. #1 Δ 13° 13' R

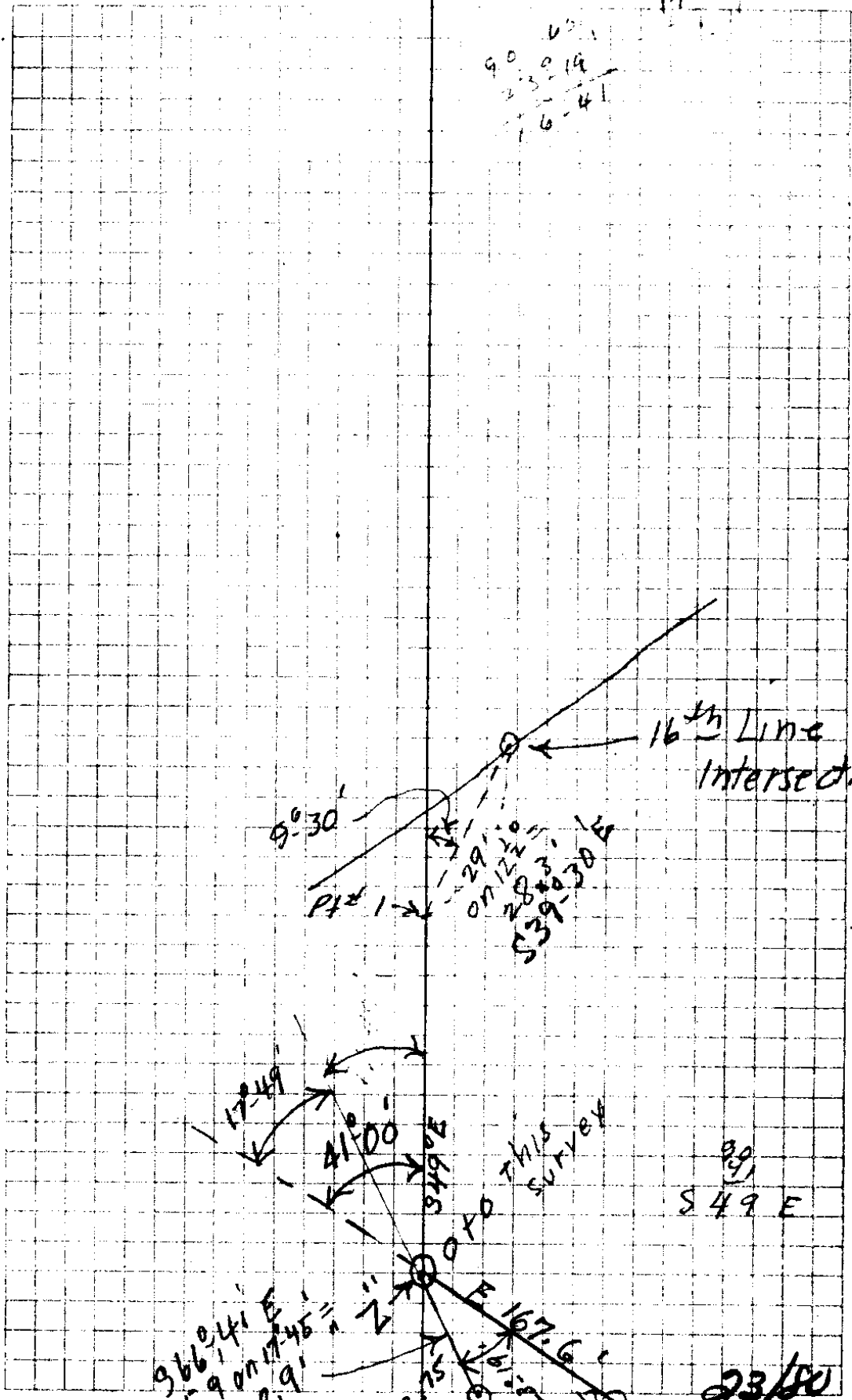
S 49° E 163.0

OTO Δ 41° 00' R

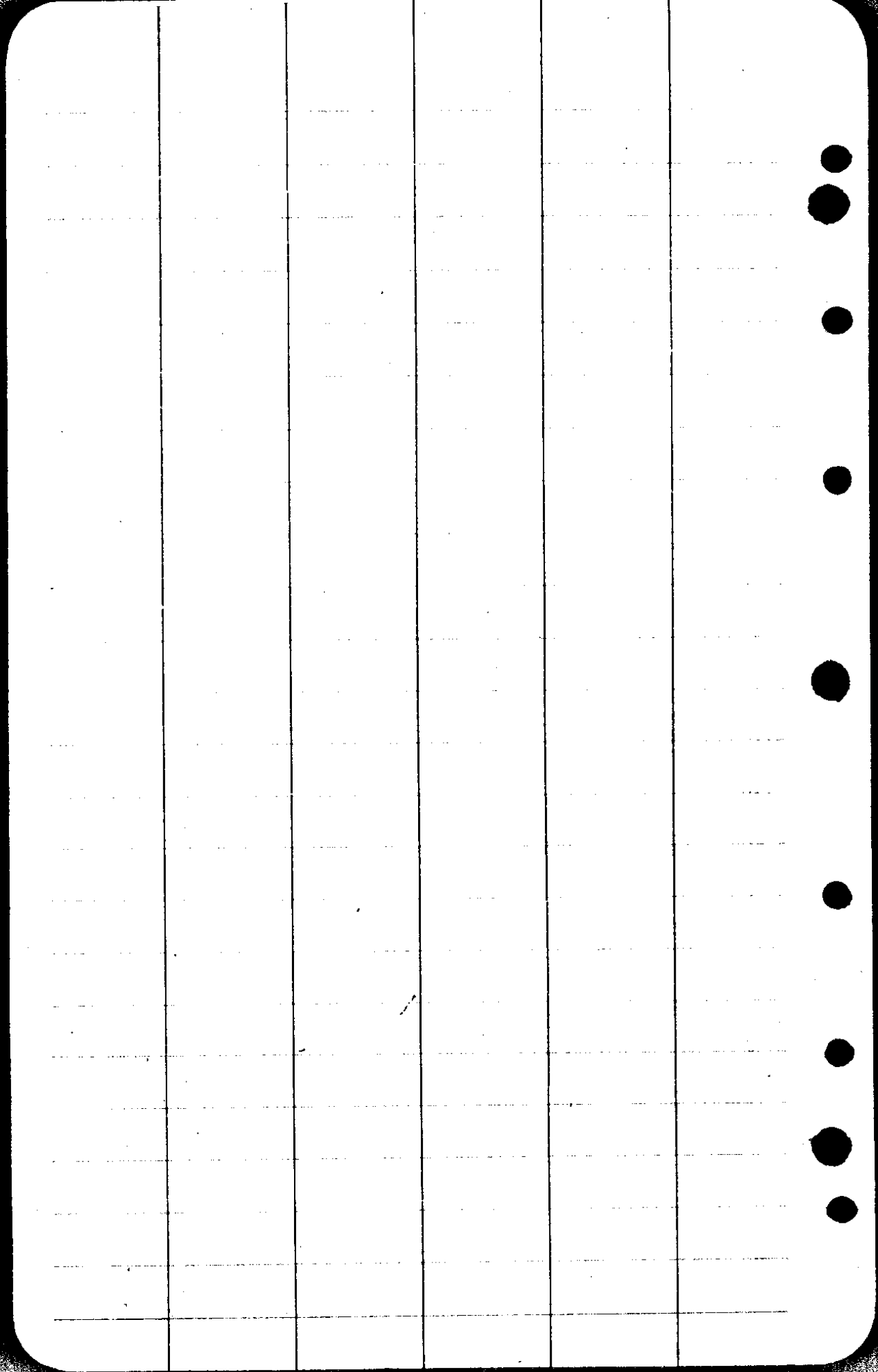
East

3/30/37

90
23.50
17.49
6.41



23/30



23/80

Sta. Site Topog for Grading 3/30/30

Sta.	+ S	H1	- S	Elev
Top Pipe				
1462.7	Sta Site			17.40 *

1.72 19.12

0+0 = End = 4.7 14.4

3.05 16.07

1+00 4.40 20.47 4.5 16.0 ✓

Top Pipe 17.40 *
1+62.7 Sta Site

2+00 4.23 21.63 5.3 16.3

5.62 16.01 ✓

4.10 20.11

3+00 4.4 16.7

TRAIL OR WALK

Prof. at 1st Angles (N) from Sta 2 (end of Sta Site)

Sta 2+00 on Sta Site 16.3
17.4

North 3.4 19.7

0+43.5 43.5 N 2+00 7.1 12.6 W.S.

0+50 8.5 11.2

0+95 7.6 12.1

0+75 8.8 10.9

1+10 7.1 12.6 W.S.

1+40 7.1 12.6

1+50 6.3 13.4

2+00 3.8 15.9

COP

South = Left



Right = North

0+0

$$\frac{1.1 = 18.0}{21.5}$$

~~14.4~~

$$\frac{6.1 = 13.0}{58.9}$$

1+00

$$\frac{2.0 = 18.5}{17.0}$$

16.0

$$\frac{7.3 = 13.2}{40.7}$$

2+00

$$\frac{4.2 = 17.4}{31.5}$$

16.3

$$\frac{8.9 = 12.7}{43.5}$$

3+00

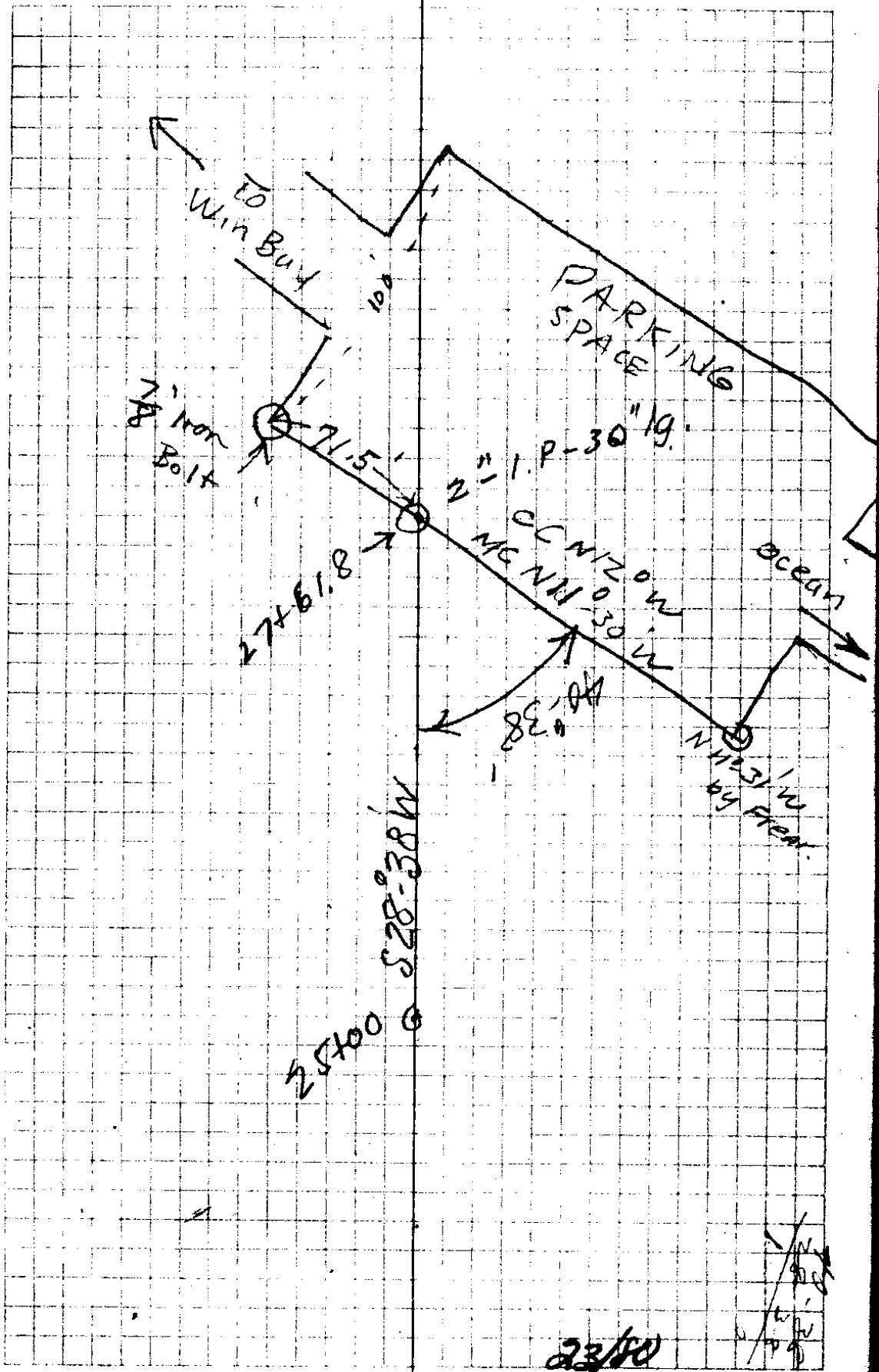
$$\frac{3.9 = 16.2}{15.5}$$

~~16.7~~
15.7

$$\frac{7.7 = 12.4}{30.5}$$

red

23/80



Road Survey

28+52.8 = END ROAD SURVEY at E Edge of Rd
S 14° 04' W. 50.4
as traveled

28+02.4 Δ = 14° 34' L

Set up S 28° 38' W 25.9' F/G +

27+76.5

S 28° 38' W

27+61.8

29+02.4
27+61.8
40.6

CS FILE FOLDER

CONTAINS

MORE

INFORMATION