

31-23A

The image shows a page of graph paper with a grid pattern. A vertical line is drawn on the left side of the grid, creating a margin. The grid consists of small squares. There are some faint smudges and a small mark near the top center of the grid. The page is otherwise blank.

Sta	N. End +	of Pond H.I.	-	Rod	El.
	1.61	489.49	Out. Rod 3.5		487.88
0+00		cut +2.2	Fill -0.3	3.8	485.7
+50		+2.4	-2.6	6.1	483.4
+57			-5.2	8.7	482.8
+67		+2.6	-2.4	5.9	483.6
1+00		+3.5	-1.5	5.0	484.5
+50		+0.0		2.5	487.0
2+00		+6.1		2.4	487.1
+50		+3.6	-1.4	4.9	484.6
+92.0 = 36+61.3		+2.8	-3.2	6.7	482.8
T.P.			5.76		483.73
	4.76	488.49	Fill Rod 2.5		
3+32		+1.3	-3.8	6.3	482.2
4+32		+2.0	-3.0	5.5	483.0
5+32		+3.0	-2.0	4.5	484.0
6+10		+2.4	-1.6	4.1	484.4
+82		+4.6	-0.4	2.9	485.6
7+30		+5.2		2.2	486.3
T.P.			3.25		485.24

(Rusty Foster)

74.22
6.46

80.68

86.0

80.7

5.3

86.62

1.46

88.08

4.5

15

26.2

11.6

11.7

5.0

8

18.0

11.4

29.4

17.5

11.7

16.9

6.6

5.8

10.9

10.4

5.0

2

15.6

23.2

13.8

37.0

86.0

84.2

1.8

8.8

4.4

4.4

85.6

5.46

91.06

77.2

8.8

86.0

20.8

12.6

33.4

10.4

5.0

15.4

5

5

5.1

4.6

7.8

9.2

1.4

17.0

8.8

6.8

15.6

G.S. File No. 31/23A

East side Mill Pond. Inside

				cut Rod 4.6	
			490.62		
9+00				-0.5 ✓ 6.0	
8+00			(6.5) -1.9	-1.9 ✓ 8.8	
8+00 T.P.					485.16
	1.80	486.96		cut Rod. 2.0	
7+00			4.1 (2.1)	-2.1 ✓ 9.2	
6+00			5.3 (3.3)	-3.3 11.6	
5+00			6.3 (4.3)	-4.3 13.6	
T.P.					480.61
	0.83	481.44		Fill Rd 4.6	
4+00			(1.9) 6.5	-6.5 ✓ 18.0	
3+00				-7.9 ✓ 20.8	
2+00				-9.1 ✓ 23.2	
1+00				-10.6 ✓ 26.5	
SE Cor. Inside				-11.6 S.E. Cor inside	
			Rod. 3.55		T.F. 8+00 485.16
	439.0	489.55			

86.0
 79.8
 6.2
 5.6
 18.9
 5.0
 9
 17.8

14.1 22.2
 14.1 22.2
 5.0 5.0
 3.2 6.1
 36.0 45.5

20.2
 5.0
 5.1
 30.3

6.7
 9.4
 75.1
 37.0

19.7
 19.7
 5.0
 4.8
 29.2

15.9
 15.9
 5.0
 2.9
 34.7

17.2
 17.2
 5.0
 3.6
 42.0

19.5
 19.5
 5.0
 4.7
 38.7

18.8
 18.6
 5.0
 4.4
 47.0

12.9
 6.1
 6.7
 12.1
 17.1

15.5
 15.5
 5.0
 2.7
 38.7

16.8
 16.8
 5.0
 3.4
 42.0

19.5
 5.0
 4.7
 29.2

18.9
 15.9
 5.0
 4.4
 44.2

13.2

15.8
 15.8
 5.0
 1.9
 34.5

16.7
 16.7
 5.0
 3.5
 41.7

18.3
 18.3
 5.0
 4.1
 45.5

429.0
 6.5
 475.5

13.1
 13.1
 5.0
 1.5
 32.7

12.9
 12.9
 5.0
 1.4
 39.2

86.0
 76.6
 9.4

12.6
 12.6
 5.0
 1.3
 31.5

11.8
 11.8
 5.0
 0.9
 29.5

C. S. File No. 31/23A

East Side Mill Pond Levels

				outside
				7+00 T.P.
	6.46	480.68	Fill Rod 53	474.22
0+00			6.4	-11.7 ✓ 15.8
S.E. Cor. outside			6.6	-11.9 ✓
1+00			5.1	-10.4 ✓ 15.4
2+00			3.5	-8.8 ✓ 13.8
3+00			2.3	-7.6 ✓ 12.6
T.P. 4+00			0.07	480.61
	6.01	486.62	Cut. Rod 0.6	
4+00			(7.0) 6.4	-6.4 ✓ 11.4
5+00			(5.6) 5.0	-5.0 ✓ 10.9
6+00			(4.4) 3.8	-3.8 ✓ 8.8
7+00			(3.4) 2.8	-2.8 ✓ 7.8
T.P. 8+00			1.46	485.16
8+00				-1.8 ✓ 6.8
	5.46	490.62	Cut Rod 4.6	
9+00			5.9	-0.3 ✓ 5.3

17.2

17.0

$$\begin{array}{r}
 34.4 \\
 5.0 \\
 \hline
 39.4 \\
 \hline
 43.0
 \end{array}$$

$$\begin{array}{r}
 16.2 \\
 3.1 \\
 \hline
 19.3 \\
 \hline
 22.4
 \end{array}$$

-15.6

$$\begin{array}{r}
 3.1 \\
 3.2 \\
 \hline
 6.3 \\
 \hline
 11.2
 \end{array}$$

$$\begin{array}{r}
 31.0 \\
 35.0 \\
 \hline
 2.8 \\
 \hline
 38.8 \\
 14.8 \\
 \hline
 14.8 \\
 2.4 \\
 \hline
 5.0
 \end{array}$$

6.0

5.0

$$\begin{array}{r}
 29.4 \\
 2.4 \\
 \hline
 31.8 \\
 \hline
 36.8
 \end{array}$$

$$\begin{array}{r}
 12.8 \\
 24.8 \\
 \hline
 1.2 \\
 \hline
 5.0 \\
 \hline
 30.0
 \end{array}$$

11.2

$$\begin{array}{r}
 10.3 \\
 30.6 \\
 \hline
 4.0 \\
 \hline
 25.6 \\
 8.0 \\
 \hline
 21.0
 \end{array}$$

C.S. No. 31/239

	South Line Mill + F.S.	H.L.	Pond Levels B.S.	outside B.M.
T.P. ⁰⁺⁰⁰ West line	8.54	469.88		461.34
			0.57	469.31
	2.76	472.64		469.88
0+00			0.4	1.1 2.5
1+00			8.4	-22.3 27.8
1+30	Fill 19.6 24.5			
2+00			5.6	-19.5 ✓ 24.5
T.P. 3+00			2.08	469.99 Top Stake
3+00			3.2	17.1 22.1 ✓
	6.65	476.64	Fill Rod	9.4
4+00 ✓			(6.8)	-16.2 ✓ 21.7
5+00 ✓			(5.3)	-14.7 ✓ 9.7
6+00 ✓			(4.1)	-13.5 ✓ 18.5
7+00 ✓			(3.4)	-12.2 ✓ 12.8
T.P. Top stake 7+00			2.42	12.8 474.20

469.99

6.65

476.64

.2

86.0

76.6

9.4

13.5

5.0

1.7

20.2

12.8

5.0

1.4

19.2

17.1

5.6

11.5

2.1

1.1

3.2

17.1

5.0

3.5

25.6

9.4

6.8

16.2

14.7

5.0

2.3

22.0

86.0

92.1

13.9

14.7

5.8

8.9

86.0

64.4

19.6

16.2

5.0

3.1

24.3

69.58

0.57

69.31

13.9

4.6

18.5

18.5

5.0

2.9

4.6

4.6

96.0

72.1

17.5

17.5

5.0

3.7

13.7

13.7

20.3

5.0

6.1

33.4

33.4

5.6

13.9

19.5

19.5

5.0

4.7

29.2

29.2

86.00

71.20

14.80

2.9

17.7

96.0

72.1

61.31

8.54

64.85

18.3

18.3

5.0

4.1

27.4

27.4

18.3

18.3

5.0

4.1

27.4

27.4

17.6

5.0

3.8

3.8

26.4

26.4

C.S. No. 31/23A

	South Line + F.S.	Mill Pond H.I.	Levels. B.S.	Inside Elev.
	2.51	471.82	Fill Rod 142	469.31
0+80			5.5	-19.5 482
1+00	→ $\frac{233}{51}$		4.0	-18.8 482.9 ✓
1+30				-17.2 484 ✓
2+00			2.9	-16.6 482 ✓
3+00			2.5	469.99
4+00	6.59	476.58	Fill Rod 94	-15.1 364 ✓
5+00	✓		6.1	-14.0 322 ✓
6+00	✓		4.4	-13.1 312 ✓
7+00	✓		3.5	-12.1 298 ✓
			Fill Rod 67	
	5.04	479.26		474.22
SW Inside Cor = 173				
SE Cor = 117				

461.34
8.78

860
87.9

$\sqrt{70.12}$ 0.76									
$\sqrt{69.36}$ 6.69									
$\sqrt{66.05}$ 0.95									
$\sqrt{65.12}$									
76.0									
10.0									
8.00									
85.9									
10.1									
26.0									
25.9									
16									
475.10									
8.56									
$\sqrt{83.66}$									
86.0									
83.7									
2.3									
1.7									
0.6									
23									
2.8									
5.1									
23									
4.8									
41.34									
8.78									
70.12									
86.0									
469.36									
16.6									
86.0									
469.4									
16.6									
17.6									
5.0									
3.8									
5.4									

483.66
1.81
481.85
7.07
488.92

18.1
4.
5
27.1
86.0
69.4
16.6
3.3

10.1
1.7
86.0
38.4
17.6 38.4

10
8
18

16.6
3.3
5.0
24.9
16.6
33.2
5.0
3.3
41.5
16.6
24.9
2.8

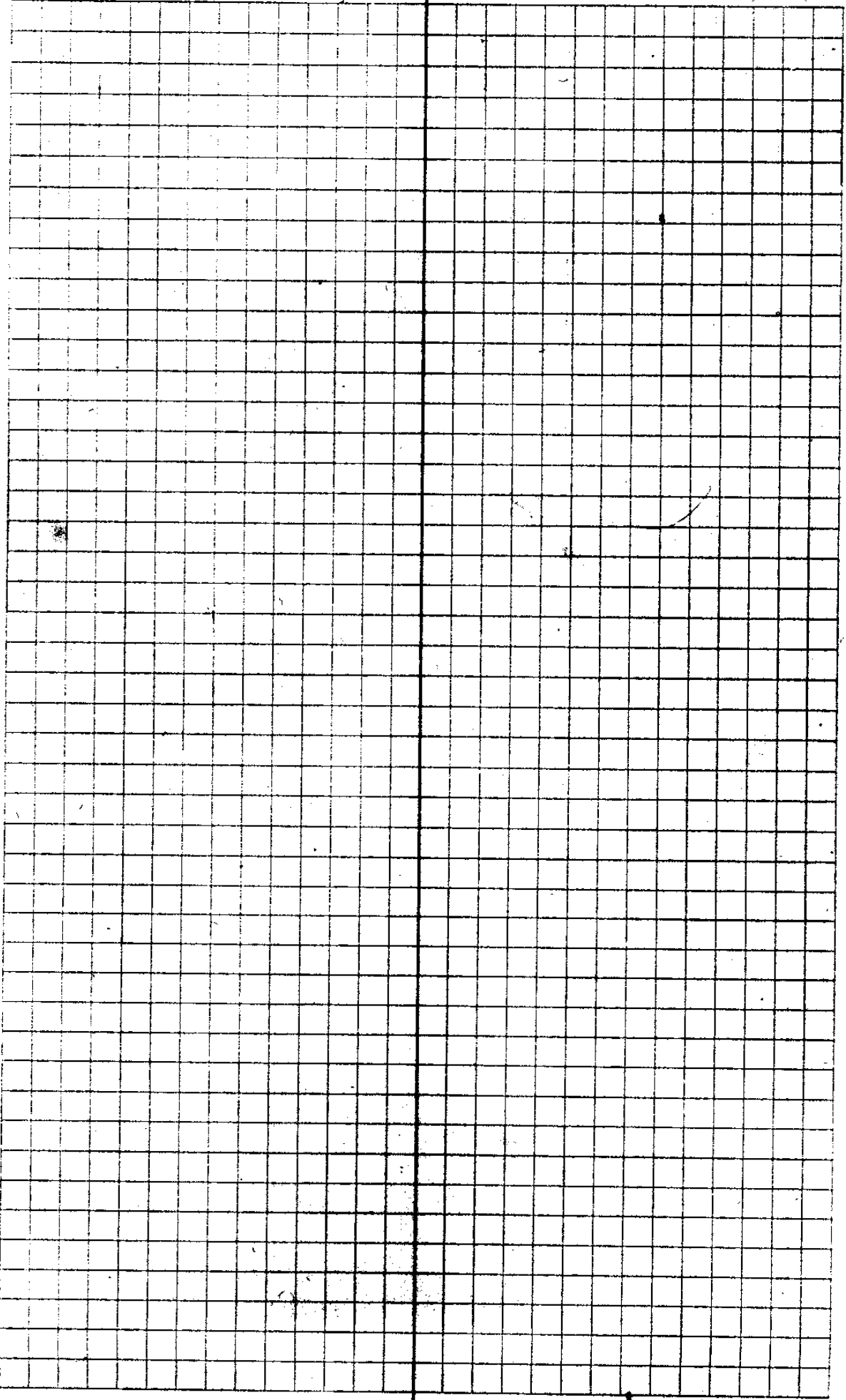
800

249

C.S. No. 3103A

~~Topography~~
 Mt. Evelyn
 Inside West Dike

0+00				F. 16.6	
	5.3	11.3	Full Rod		
0+00				17.2	
1+00				<u>16.5</u>	✓
				38.0	
	6.1	8.2	Full Rod	F 14.3	2+00
2+00				<u>-14.8</u>	✓
				34.6	
3+00				<u>-12.5</u>	✓
				30.0	
4+00				<u>-10.3</u>	✓
				25.6	
	7.1	0.0	Full Rod	7.1	5+00
5+00				<u>-8.0</u>	✓
				21.0	
6+00				<u>-5.6</u>	✓
				16.7	
7+00				<u>-3.0</u>	✓
				11.9	



C.S. File No. 31/22A

Sta.	+ B.S.	Mill Pond - elev H.I.	F.S.	Outside (West)
	6.54	472.34		12+00 465.8
30° 12+50			6.7	65.2
300 13+00			6.6	65.7
Too Slope End Dam SW Cor.			4.4	467.9
				B.M. 461.34
	8.78	470.12		Fill
T.P. 0+00			0.76	469.36 468.6
	6.69	476.05		Fill Rod 100 17.6 22.6 ✓
1+00			Rod 6.1	16.1 ✓ 21.1
2+00			4.3	14.3 ✓ 19.3
3+00			2.0	12.0 ✓ 17.0
0 T.P. 3+00			0.95	475.10
	8.56	483.66		Fill Rod 2.3
4+00			7.4	-9.7 ✓ 14.7
5+00			4.8	7.1 ✓ 12.1
6+00			2.8	-5.1 ✓ 10.1
T.P. 6+00			1.81	481.85
	7.07	488.92		cut 42.92
7+00			5.7	-2.8 ✓ 7.2
8+00			2.9	0.0

28°58

28°35
543

33+60.5

2-85.8

36+46.3

253'

14-17.4

2-92.5

1-58.2

2-30

21-28

2-30

6-55.8

6-58

2-30

9-28

2-30

11-58.5

2-18.9

4-8.1

39.5

118.5

60

58.3

33-11.4

141

33+60.5

17

140.9

17

134

134

26.3

3

138.9

60

120.9

255

317

317

55

94

57

39

30

30

30

39

39

39

17

140.9

17

134

134

241

230

271

5011

230

701

230

91

230

110

12

1037

1378

15058

20

20

20

20

20

20

20

58

605350

200

500

285.8

605857.4

60

257

240

17

33+46.3

285.8

365.2

32.2

42.8

32.2

32.2

32.2

32.2

32.2

32.2

32.2

32.2

32.2

32.2

32.2

C.S. File No. 31/23A

(4)

Revised R.R. Spot Levels.

				472.88
	10.27	483.15 ^v		T.P. Int. East 3rd + E 1st Aves.
BC. 12+30			3.0	480.2
+50			3.7	479.5
13+00			1.7	481.5
+50			4.9	478.3
14+00			6.5	476.7
+50			5.4	477.8
T.P.			4.43	478.72
	3.67	482.39		
15+00			6.1	476.3
+50			5.5	476.9
16+00			5.6	476.8
+50			6.3	476.1
EC. 17+00			4.4	478.0
18+00			3.3	479.1
T.P.			2.05	480.34
	5.73	486.07		
19+00			6.2	479.9
BC. +03 ^{II}			6.1	480.0
+20			5.6	480.5
+50			10.2	475.9
20+00				
+50			10.5	475.6

42.88

10.27

32.61

4.43

28.18

3.67

24.51

2.05

22.46

5.73

16.73

C. S. File No. 31/230

⑤

Revised RR. Spur Levels.

			486.07		
21+00			10.6	475.5	
+50			10.5	475.6	
22+00			11.3	474.8	
T.P.			10.71	475.36	
	1.85		477.21		
22+50			3.0	474.2	
EC. 22+95 ⁶			3.9	473.3	
23+19			4.95	472.26	
23+39 ⁰	4 ⁺ 6 ⁺ 8 ⁺ +2.0	Loc. Line.	4.63	472.58	Sub. Gr. E1 470.6
23+39	+1.4		4.96	472.25	470.6
T.P. E ⁶ + Commercial			5.12	472.09	T.P.
B.C. 23+6	Cut. +2.0 ✓	Fill	4.6	472.6	470.6
24+00	+2.0 ✓		4.5	472.7	470.7
+50	+1.6 ✓		4.7	472.5	470.9 y.c.
25+00	+2.7 ✓		3.1	474.1	471.4
+50	+3.9 ✓		1.4	475.8	471.9
T.P.			0.33	476.88	
	8.25		485.13		
26+00	+4.3 ✓		8.1	477.0	472.7
+50	+4.3		7.1	478.0	473.7
27+00	+4.2 ✓		6.2	478.9	2% 474.7
27+50	+2.9 ✓		6.5	478.6	475.2

486.07 ✓

10.71

✓ 475.36

1.85

✓ 477.21

4.63

✓ 472.58

477.21

0.93

✓ 476.88

9.25

✓ 485.13

77.21

5.12

72.09

C. S. File No. 311239

⑥

Revised R.R. Spur Levels.

		485.13			sub. Gr E1
	cut.	Fill			
27+90			7.8	477.3	
EL 28+00	+1.0 ✓		7.4	477.7	476 ⁷
+10			5.0	480.1	
29+00	+4.9 ✓		1.3	483.8	478 ⁷
T.P.			0.27	484.86	
	7.08 ✓	491.94			
	cut.	Fill			
30+00	+3.9 ✓		7.3	484.6	480 ²
30+60				485.4	-481.9
31+00	+3.2 ✓		6.0	485.9	482.7
31+50				486.4	483.5
32+00	+2.2 ✓		5.5	486.4	484.2
+50				486.4	484.6
33+00	+1.5 ✓		5.5	486.4	484.9
EL 33+34			5.2	486.7	
+50			5.5	486.4	
+90			7.4	484.8	
34+00			10.2	481.7	
+15			7.3	484.6	
+50			5.7	486.2	
T.P.			4.65	487.29	
	3.92	491.21			
35+00			2.6	488.6	
+50			0.9	490.3	
36+00			1.8	489.4	
EL 36+60			7.5	483.7	

V.U.

The image shows a page of graph paper with a grid of small squares. A vertical line runs down the center of the page, dividing the grid into two equal halves. The grid is mostly empty, with only a few faint marks or smudges visible. On the left side of the page, there are four circular punch holes. At the bottom right corner, there is handwritten text: "G.S. File No. 34/229".

G.S. File No. 34/229

⑦

Sta	+	H.I	-	Rd	El.
33+60				486.0	485.0
	5.17	493.05	Sub. Gr		487.88
BC. 33+34'	+1.8 ✓	Fill	485.00	6.3	486.8
+50	+1.5	stake out		6.6	486.5
+90		-0.5		8.6	484.5
34+00		-3.6		11.7	481.4
+16		-0.1 ✓		8.2	484.9
+50	+1.5 ✓			6.7	486.5
35+00	+3.8 ✓			4.4	488.8
+50	+5.2 ✓			2.7	490.2
36+00	+4.5 ✓			3.7	489.5
+50	0.0 ✓			8.1	485.0
EC. +61 1/2		-1.2 ✓		9.4	483.8
T.P.			8.33		484.72
	4.09	488.81	Sub. Gr		
37+00	out. ✓	Fill	485.0	5.9	482.9
		-2.1			
38+00	out	-1.0		4.8	484.0
39+00	stake out	-0.8		4.6	484.2
BC. +80	+0.1 ✓			3.7	485.1
40+00	+0.4 ✓			3.4	485.4
+50	+1.1 ✓			2.7	486.1
41+00	+1.5 ✓			2.3	486.5

Top. 1+50

$$\begin{array}{r} 487.88 \\ 5.17+ \\ \hline 493.05 \\ 8.33+ \\ \hline 484.72 \\ 4.09+ \\ \hline 488.81 \end{array}$$
$$\begin{array}{r} 493.06 \\ 6.2 \\ \hline 486.8 \end{array}$$

3.0

36+613

C.S. No. 31/23A

⑧

Sta + H.I. - Rd. El.

488.81

T.P. 1.28 475.43

5.39 492.92
cut. Fill sub. Gr
El.

41+50 +2.0 (stake out) 5.9 487.0

42+00 +2.8 5.1 487.8

+50 +3.0 4.9 488.0

43+00 +3.5 4.4 488.5

+50 +4.7 3.2 489.7

44+00 +4.8 3.1 489.8

+50 +5.1 2.8 490.1

45+00 +4.7 3.2 489.7

+50 +4.9 3.0 489.9

T.P. 1.90 491.02

2.41 493.43

On B.M. 6.00 487.43

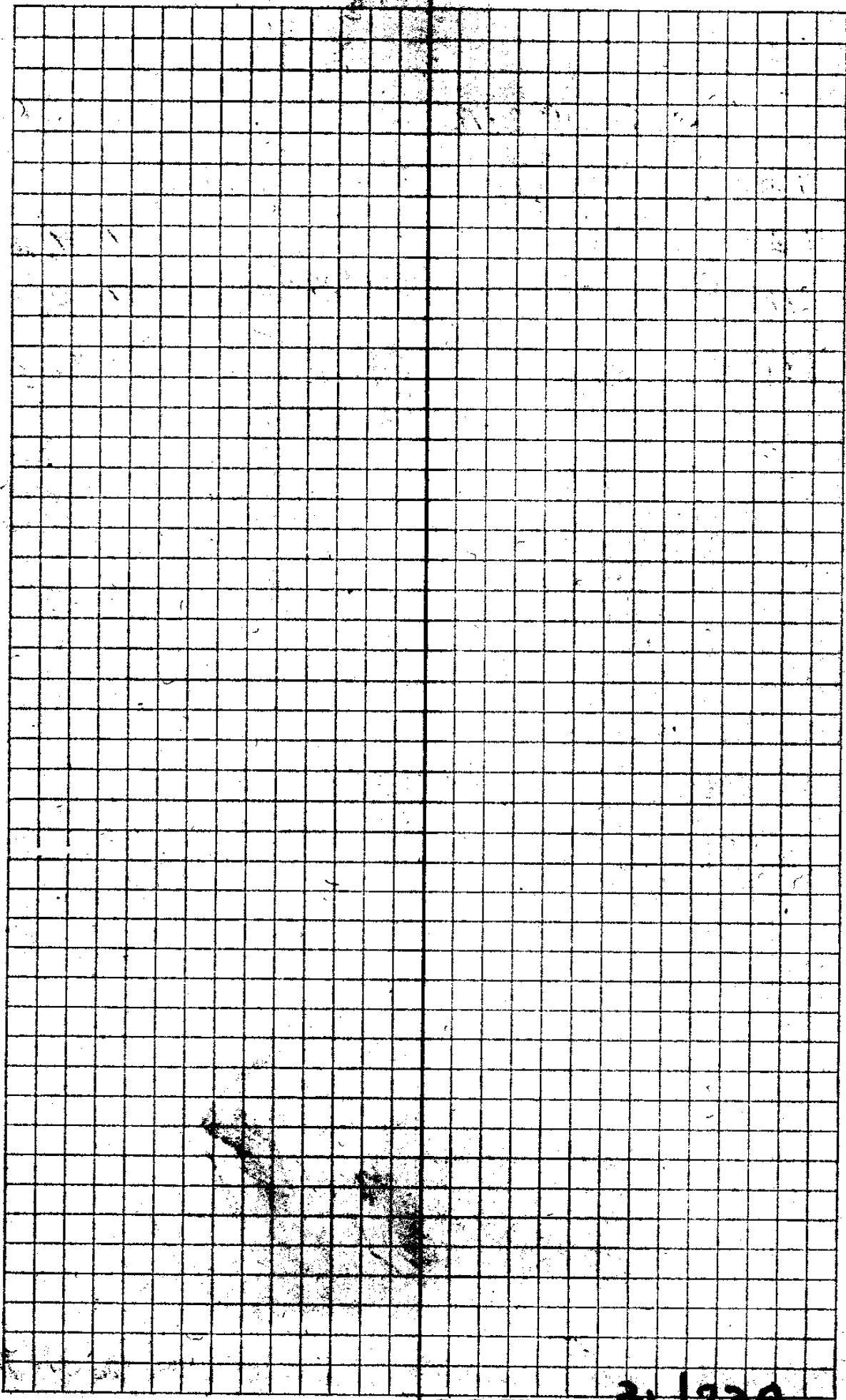
Spur Levels

Sta. 44+00 To Sta 49+53.2

G.S. No. 31/22A

44	+0.9
+13 ³	+0.9
+50	+1.0
45	+1.1
+50	
46	+1.7
+50	+1.1
47	+1.2
+50	+1.0
48	+0.9
+50	+1.0
49	+1.0
+53 ³	+0.8

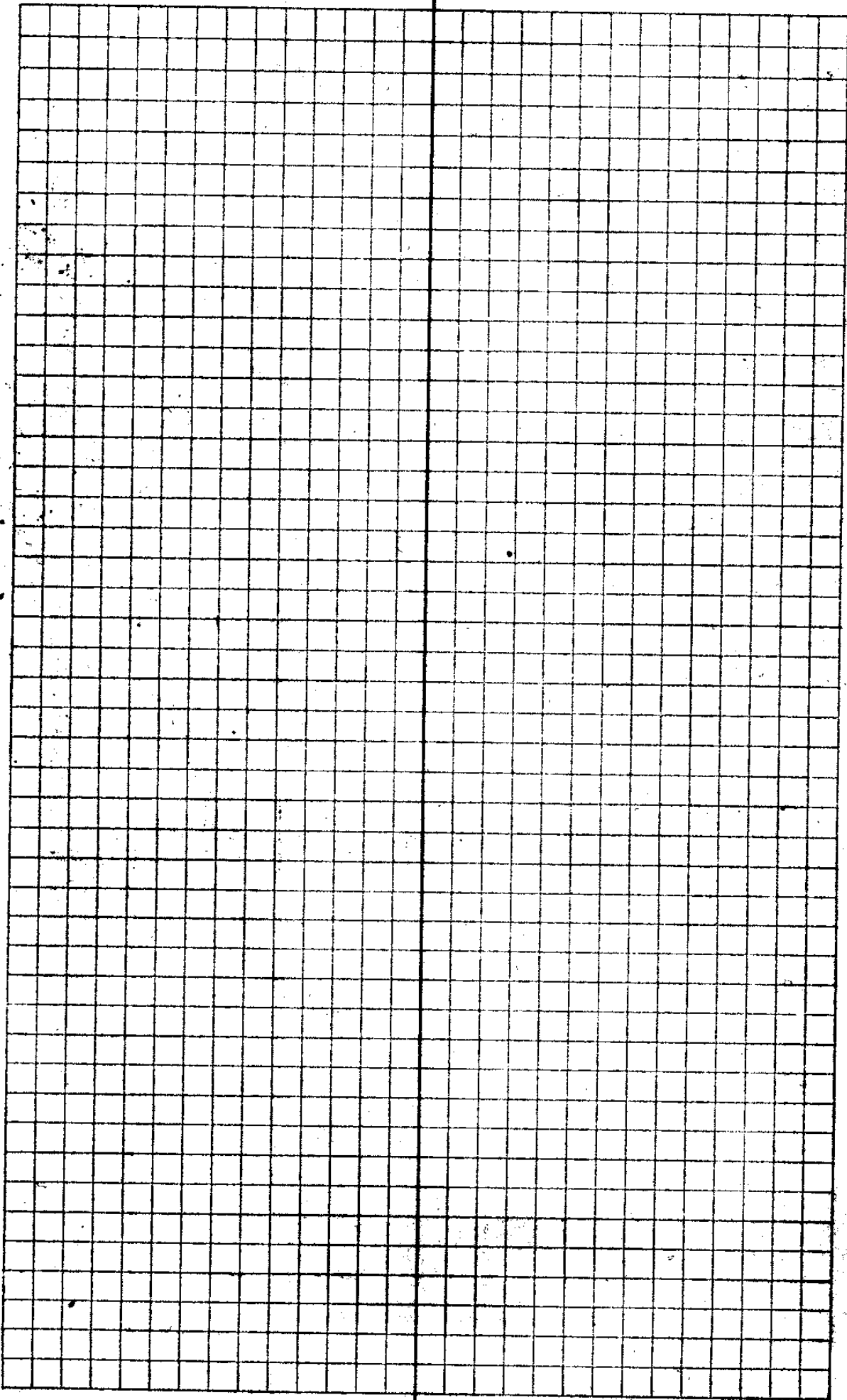
G. E. No. 31/23A



G.S. No. 31 / 220

Grade

	3.96	492.46		488.50
42400		485.	7.46	495.00
11			stake 2.25	489.25
11			grey rd. 1.51	484.95
43100			6.19	486.27



C.S. No. 31/23A

⑨
Sta + H.I. - Rod Elev.

Con. E. 279 St

7+77.2 3.84 463.25 459.41

7+50 4.2 459.1

7+00 5.5 457.8

6+50 6.1 457.2

6+05.2 5.11 458.14

Cross Sections

C.S. No. 31/23A

Sta	Left	Center Fill	Right
23+60	$\frac{+2.4}{10.4}$	+20	$\frac{+1.9}{9.9}$
24+00	$\frac{+3.0}{11.0}$	+20	$\frac{+1.7}{9.7}$
24+50	$\frac{+1.9}{9.9}$	+16	$\frac{+1.1}{9.1}$
25+00	$\frac{+3.4}{11.4}$	+27	$\frac{+2.5}{10.5}$
+50	$\frac{+1.5}{12.5}$	+39	$\frac{+3.4}{11.4}$
26+00	$\frac{+5.0}{13.0}$	+43	$\frac{+4.1}{12.1}$
+50			
27+00	$\frac{+4.6}{12.6}$	+42	$\frac{+3.9}{11.9}$
+50	$\frac{+3.8}{11.8}$	+29	
28+00	$\frac{+1.3}{9.3}$	+10	$\frac{+2.7}{10.7}$
29+00	$\frac{+5.4}{13.4}$	+49	$\frac{+4.0}{12.0}$
			12
30+00	$\frac{+4.2}{12.2}$	+39	$\frac{+3.7}{11.7}$
31+00	$\frac{+3.6}{11.6}$	+32	$\frac{+2.6}{10.6}$
Passing Tr.			
32+00	$\frac{+2.8}{14.8}$	+20	$\frac{+2.0}{10.0}$
32+133	$\frac{+3.0}{11.0}$	+23	$\frac{+1.9}{9.9}$
0+80			
1+00	$\frac{+2.8}{10.8}$	+25	
1+42	$\frac{+2.7}{10.7}$	+24	
1+50	$\frac{+2.7}{10.7}$	+20	
33+00		+15	$\frac{+1.4}{9.4}$
Bl. 33+34		+13	$\frac{+1.5}{9.5}$
2+50	$\frac{-0.1}{9.1}$	+0	

R.B Cuts
 1/4 to 1/2 Fills
 1 to 1 cuts
 1 1/2 to 1 Fills

465.1
45
460.6

6.0
10.7

461.30 ✓
3.72

457.06
4.77

458.29
1.42

459.71
6.83

452.88
3.62

456.50

486
19
467

486.0
440
46

129
116

25
25
150

17
5
22

130.00

11
5
16

18
50
90

150
75

28
900
2520

144
62.5
576
490

24
550
2520
2700

48
2.3
1.00
86
140

1500

75 H.P.

C.S. No. 31/23A

Cross-Sections (R.R. Spur)

1:1 - 16 Roadbed

<u>22+95[±]</u>	$\frac{+2.7}{10.7}$	$+ \frac{2.5}{C}$	$\frac{+2.2}{10.2}$
--------------------------	---------------------	-------------------	---------------------

<u>22+50</u>	$\frac{+4.5}{12.5}$	$+ \frac{3.6}{C}$	$\frac{+3.2}{11.2}$
--------------	---------------------	-------------------	---------------------

<u>22+00</u>		$\frac{+4.2}{C}$	
--------------	--	------------------	--

<u>21+50</u>	$\frac{+5.9}{13.9}$	$\frac{+5.0}{C}$	$\frac{+4.7}{12.7}$
--------------	---------------------	------------------	---------------------

<u>21+00</u>	$\frac{+5.5}{13.5}$	$\frac{+4.8}{C}$	
--------------	---------------------	------------------	--

<u>20+50</u>		$\frac{+5.0}{C}$	
--------------	--	------------------	--

<u>20+00</u>		$\frac{+5.2}{C}$	
--------------	--	------------------	--

<u>19+50</u>	$\frac{+13.1}{21.1}$	$\frac{+10.5}{8.0}$	$\frac{+5.0}{2.0}$
--------------	----------------------	---------------------	--------------------

<u>19+00</u>	$\frac{+15.1}{23.1}$	$\frac{+12.2}{C}$	$\frac{+7.8}{5.0}$	$\frac{+8.8}{10.0}$	$\frac{+8.6}{13.8}$
--------------	----------------------	-------------------	--------------------	---------------------	---------------------

<u>18+00</u>	$\frac{+15.5}{23.5}$	$\frac{+8.5}{C}$	$\frac{+4.6}{8.0}$	$\frac{+4.6}{12.6}$
--------------	----------------------	------------------	--------------------	---------------------

<u>17+00</u>	$\frac{+13.3}{21.3}$	$\frac{+6.4}{C}$	$\frac{+4.7}{8.0}$	$\frac{+4.6}{12.6}$
--------------	----------------------	------------------	--------------------	---------------------

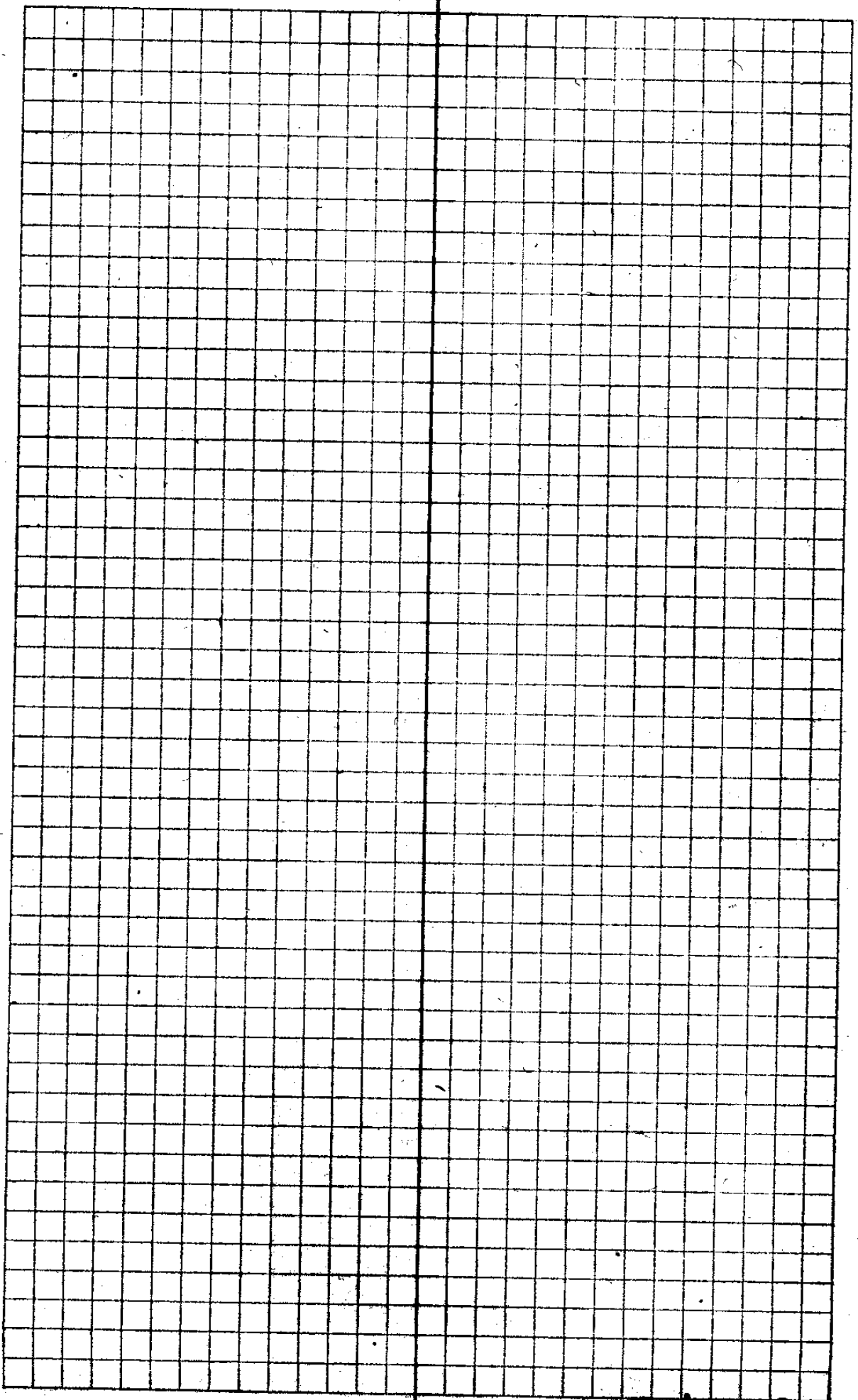
<u>16+50</u>	$\frac{+12.5}{20.5}$	$\frac{+9.5}{5.0}$	$\frac{+5.5}{C}$	$\frac{+6.3}{14.3}$
--------------	----------------------	--------------------	------------------	---------------------

<u>16+00</u>	$\frac{+11.5}{19.5}$	$\frac{+9.5}{8.0}$	$\frac{+6.3}{C}$	$\frac{+6.8}{14.8}$
--------------	----------------------	--------------------	------------------	---------------------

<u>15+50</u>	$\frac{+10.7}{18.7}$	$\frac{+10.0}{10.4}$	$\frac{+6.3}{C}$	$\frac{+6.8}{14.8}$
--------------	----------------------	----------------------	------------------	---------------------

<u>15+00</u>	$\frac{+10.5}{18.5}$	$\frac{+8.6}{7.0}$	$\frac{+5.8}{C}$	$\frac{+5.8}{13.8}$
--------------	----------------------	--------------------	------------------	---------------------

<u>14+50</u>		$\frac{+9.6}{7.6}$	$\frac{+7.2}{C}$	
--------------	--	--------------------	------------------	--



C.S. File No. 3173A

4566
~~47~~
 19

	Grade	Elev.	±
1+00	448.5	450.5	+2.0
1+50	449.1	449.7	+0.6
2+00	449.7	451.2	+1.5
2+50	450.3	450.9	+0.6
2+80	450.6	451.3	+0.7
3+00	450.8	451.9	
3+50	451.4		
3+67.2	451.7	453.6	+1.9
4+00	452.2	454.2	+2.0
4+50	452.9	455.0	+2.1
5+00	453.8	455.1	+1.3
5+30	454.4		
5+50	454.8	456.7	+1.9
6+05.2	455.9	458.1	+2.2
6+50	456.8	457.2	+0.4
7+00	457.8	457.8	0/0
7+50	458.8	459.1	+0.3
7+77.2	459.4	459.4	0/0

Left



Right

1+50			+ 2.2		
1+50			+ 0.6		
2+00			+ 1.5		
2+50			+ 0.6		
2+80	$\frac{+1.2}{9.2}$	$\frac{+1.2}{8}$	+ 0.7	$\frac{7.8}{8}$	$\frac{+1.8}{8.8}$
3+00	$\frac{+1.5}{9.5}$	$\frac{+1.5}{8}$	+ 1.2	$\frac{+0.7}{8}$	$\frac{+0.7}{8.7}$
3+50					
3+672	$\frac{+2.2}{10.2}$	$\frac{+2.2}{8}$	+ 1.9	$\frac{+1.8}{8}$	$\frac{+1.8}{9.8}$
4+00			+ 2.0		
4+50			+ 2.1		
5+00	$\frac{+2.1}{10}$	$\frac{+2.1}{8}$	+ 1.3	$\frac{+1.3}{8}$	$\frac{+1.2}{9.3}$
5+30					
5+50	$\frac{+2.4}{10.4}$	$\frac{+2.4}{8}$	+ 1.9	$\frac{+1.9}{8}$	$\frac{+1.8}{9.8}$
6+033	$\frac{+3.9}{11.9}$	$\frac{+3.9}{8}$	+ 2.2	$\frac{+1.5}{8}$	$\frac{+1.4}{9.4}$
6+50	$\frac{+1.1}{9.1}$	$\frac{+1.1}{8}$	+ 0.4	$\frac{+0.4}{8}$	$\frac{+0.4}{9.4}$
7+00	$\frac{+0.9}{8.9}$	$\frac{+0.9}{8}$	0%	$\frac{-0.6}{8}$	$\frac{-0.4}{8.4}$
7+50	$\frac{+0.6}{8.6}$	$\frac{+0.6}{8}$	+ 0.3	$\frac{+0.3}{8}$	$\frac{+0.3}{8.3}$
7+772			0%		

G.S. File No. 31122B

Levels & Cross Sections

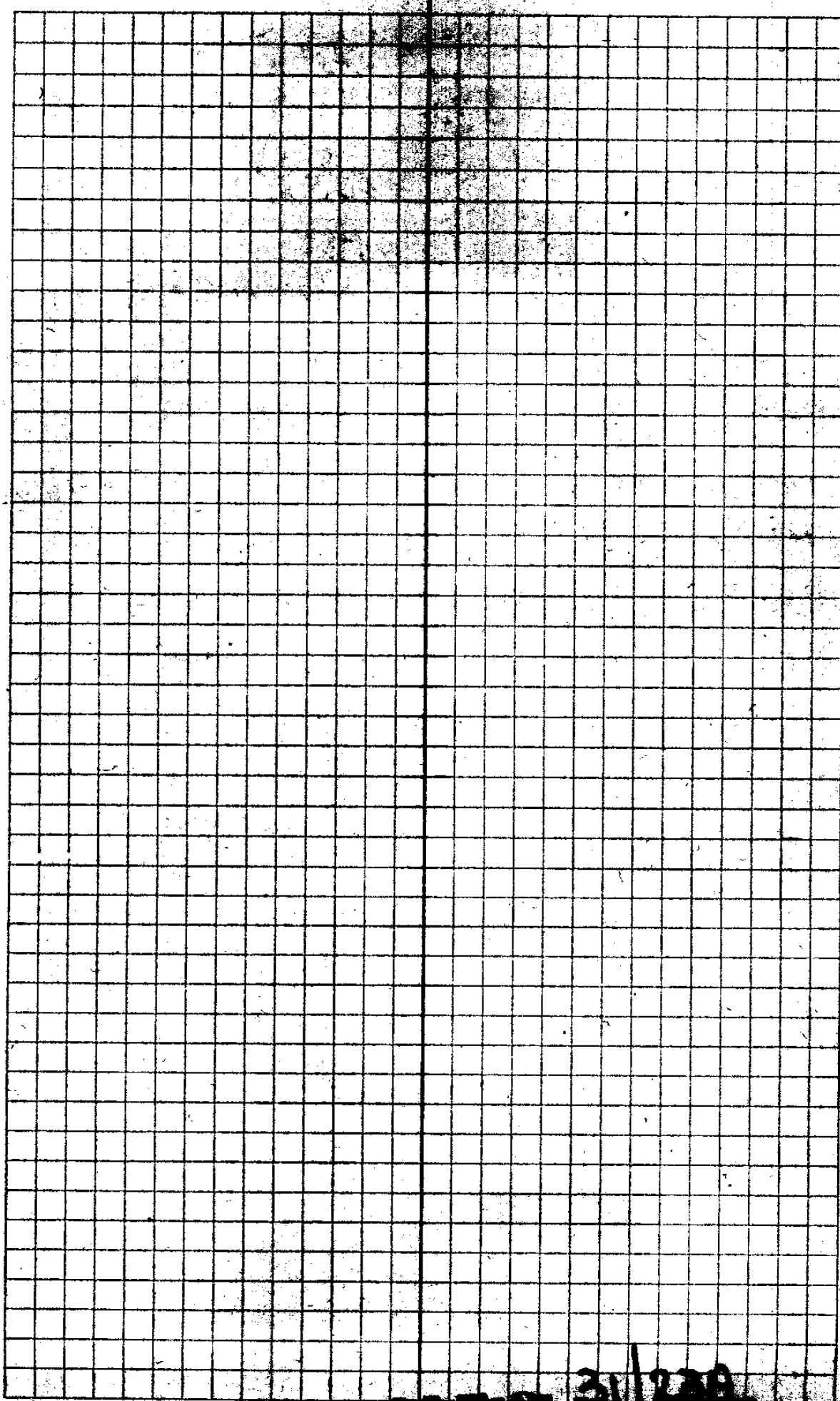
Sta. 8+00 To Sta. 11+24

C.S. No. 31/23A

Sta	+	HI	Grade		
	1254	471.95			459.41
8			459.8	11.4	460.6
+50			450.8	11.2	460.8
9			461.8	11.4	460.6
+50			462.8	10.1	461.9
10			463.8	6.2	465.8
+50			464.8	4.1	467.9
11			465.8	2.1	469.9
T.P.				0.99	470.96
	468	475.64			
11+24			466.28	3.3	472.3
N.W. Cor. E. 3rd & E 1st Ave. S				3.12	472.52
11+50			466.8		
+80			467.4	BYC	

8+00	$\frac{+1.2}{8}$	$\frac{+2}{8}$	$+0.8$	$\frac{+1.9}{8}$	—
8+50	$\frac{+1.5}{8.5}$	$\frac{+1.5}{8}$	0/10	$\frac{-0.3}{8}$	$\frac{-0.3}{9.5}$
9+00	$\frac{+2.0}{9.3}$	$\frac{+2}{8}$	-1.0	$\frac{+1.8}{8}$	$\frac{+1.8}{10.2}$
9+50	$\frac{+1.9}{8.9}$	$\frac{+2}{8}$	0/15.6	$\frac{-0.9}{8}$	$\frac{-1.4}{10}$
10+00	$\frac{+2.9}{10.9}$	$\frac{+2.9}{8}$	+2.0	$\frac{0.0}{8}$	—
10+50	$\frac{+3.5}{11.3}$	$\frac{+3.5}{8}$	+3.1	$\frac{+2.7}{8}$	$\frac{+2.7}{9.4}$
11+00	$\frac{+5.9}{13}$	$\frac{+4.8}{8}$	+4.1	$\frac{+2.9}{8}$	$\frac{+2.5}{9.8}$
11+24	$\frac{+5.9}{13.9}$	$\frac{+5.7}{8}$	+6.0	$\frac{+6.0}{8}$	$\frac{+5.7}{10.8}$

C.S. File No. 31/23A



CS. B. 1. 3/1/28

137

$\frac{102}{182}$	$\frac{105}{8}$	$\frac{102}{8}$	$\frac{102}{8}$	$\frac{120}{202}$
$\frac{129}{202}$	$\frac{112}{8}$	$\frac{112}{8}$	$\frac{112}{8}$	$\frac{112}{192}$
$\frac{116}{192}$	$\frac{105}{8}$	$+ 109$	$\frac{116}{8}$	$\frac{121}{201}$
$\frac{102}{182}$	$\frac{102}{8}$	$+ 99$	$\frac{99}{8}$	$\frac{96}{190}$
$\frac{52}{102}$	$\frac{12}{8}$	$+ 62$	$\frac{56}{8}$	$\frac{52}{132}$
		$+ 64$		
		$+ 71$		
		$+ 47$		

G. P. No. 31/23A

31/23A

Youngs Bay Lbr. Co.
Water Tank

G.S. No. 31/23A

Sta	+	H.I.	-	Elev
	7.09	495.59		488.50
			0.21	495.38
	16.30	511.68		
			0.00	511.68
	15.44	527.12		
			0.00	527.12
	14.83	541.95		
			0.00	541.95
	16.02	557.97		
			0.00	557.97
	16.04	574.01		
			0.00	574.01
	15.07	589.08		
			0.00	589.08
	15.26	604.34		
			0.00	604.34
	15.04	619.38		
			0.00	619.38
	13.64	633.02		
			0.00	633.02
	13.58	646.60		
			1.22	645.38

488.50	646.60
7.09 +	488.50
<hr/>	<hr/>
495.59	158.10
0.21 -	
<hr/>	
495.38	645.38
16.30 +	488.50
<hr/>	<hr/>
511.68	156.88
15.44 +	
<hr/>	
527.12	
14.83 +	
<hr/>	
541.95	
16.02 +	
<hr/>	
557.97	
16.04 +	
<hr/>	
574.01	
15.07 +	
<hr/>	
589.08	
15.26	
<hr/>	
604.34	
15.84	
<hr/>	
619.38	
13.64	
<hr/>	
633.02	
13.58	
<hr/>	
646.60	
1.22 -	
<hr/>	
645.38	

C.S. No. 31/23A

645.38	733.90
15.30+	488.50
<hr/> 260.68	<hr/> 245.40
14.46+	
<hr/> 275.14	
16.22+	691.36
<hr/> 291.36	488.50
13.85+	<hr/> 202.86
<hr/> 705.21	
16.04+	
<hr/> 721.25	
14.91+	
<hr/> 736.16	
2.26-	
<hr/> 733.90	

	+	H.I.	-	
✓	0.21	691.57		691.36
✓			2.58	688.99
	0.75	689.74		
✓			1.00	688.74
	3.21	691.95		
			3.61	688.34

B.M. 10" W. Oak
 Drift Bolt in Root

$$\begin{array}{r}
 691.36 \\
 + 0.21 \\
 \hline
 691.57 \\
 - 2.58 \\
 \hline
 688.99 \\
 + 0.75 \\
 \hline
 689.74 \\
 - 1.00 \\
 \hline
 688.74 \\
 + 3.21 \\
 \hline
 691.95 \\
 - 3.61 \\
 \hline
 688.34
 \end{array}$$

$$\begin{array}{r}
 691.57 \\
 488.50 \\
 \hline
 203.07 \\
 \\
 689.84 \\
 488.50 \\
 \hline
 201.34 \\
 \\
 691.75 \\
 488.50 \\
 \hline
 3.25
 \end{array}$$

Stake
Top Hill

902.3

△

21°45'R

574.9

N.E. Cot.
Shop

Youngs Bay Lbr. Co.

Water Tank

Location No 1

902.3
574.9

1477.2

161.0
160.0 - 15°14' - 96486 =
300.0 - 15°57' - 96150 =
298.4

161.0
159.4
288.5
298.4

902.3

~~300.0 - 8°15' - 98865 =~~
278.0

296.9
278.0

574.9

C.E. No. 31/23A

Sta	+	H.I.	-	
				733.90
N.	426	733.90		
- 0+30			8.1	725.8
0+00			7.3	726.6
+25			5.6	728.3
+50			4.4	729.5
+75			4.1	729.8
1+00			4.7	729.2
+25			5.3	728.6
+50			6.1	727.8
+75			7.2	726.7
S.			9.9	724.0
- 0+30				

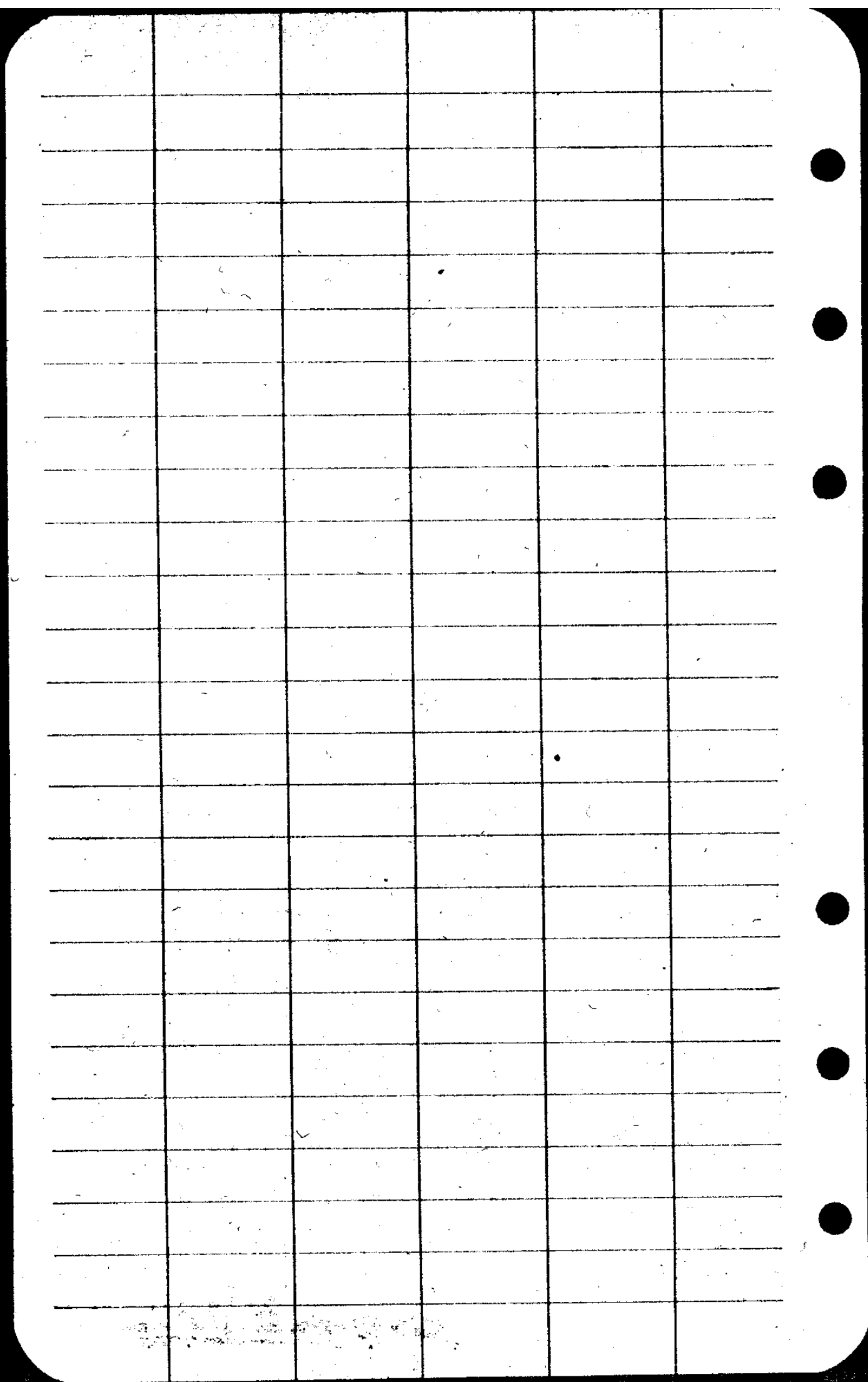
void

Left

Right

675	375	375	675
713.8	721.4	726.2	725.8
-12.0	-4.4	+0.4	0/0
715.4	724.3	723.9	722.9
-11.2	-2.3	-2.7	-3.7
717.2	725.7	722.3	720.1
-11.1	-2.6	-6.0	-8.2
720.0	728.5	722.0	717.4
-9.5	-7.0	-7.5	-12.1
718.3	727.2	722.1	715.5
-11.5	-2.6	-7.7	-14.3
718.7	727.2	722.7	713.5
-10.5	-2.0	-6.5	-13.7
718.2	725.9	722.5	713.4
-10.4	-2.7	-6.1	-15.2
717.5	725.6	722.5	715.5
-10.3	-2.2	-5.3	-12.3
715.7	725.2	722.1	714.6
-11.0	-1.5	-4.6	-12.1
708.5	718.8	719.9	712.8
-15.5	-3.2	-4.1	-11.2

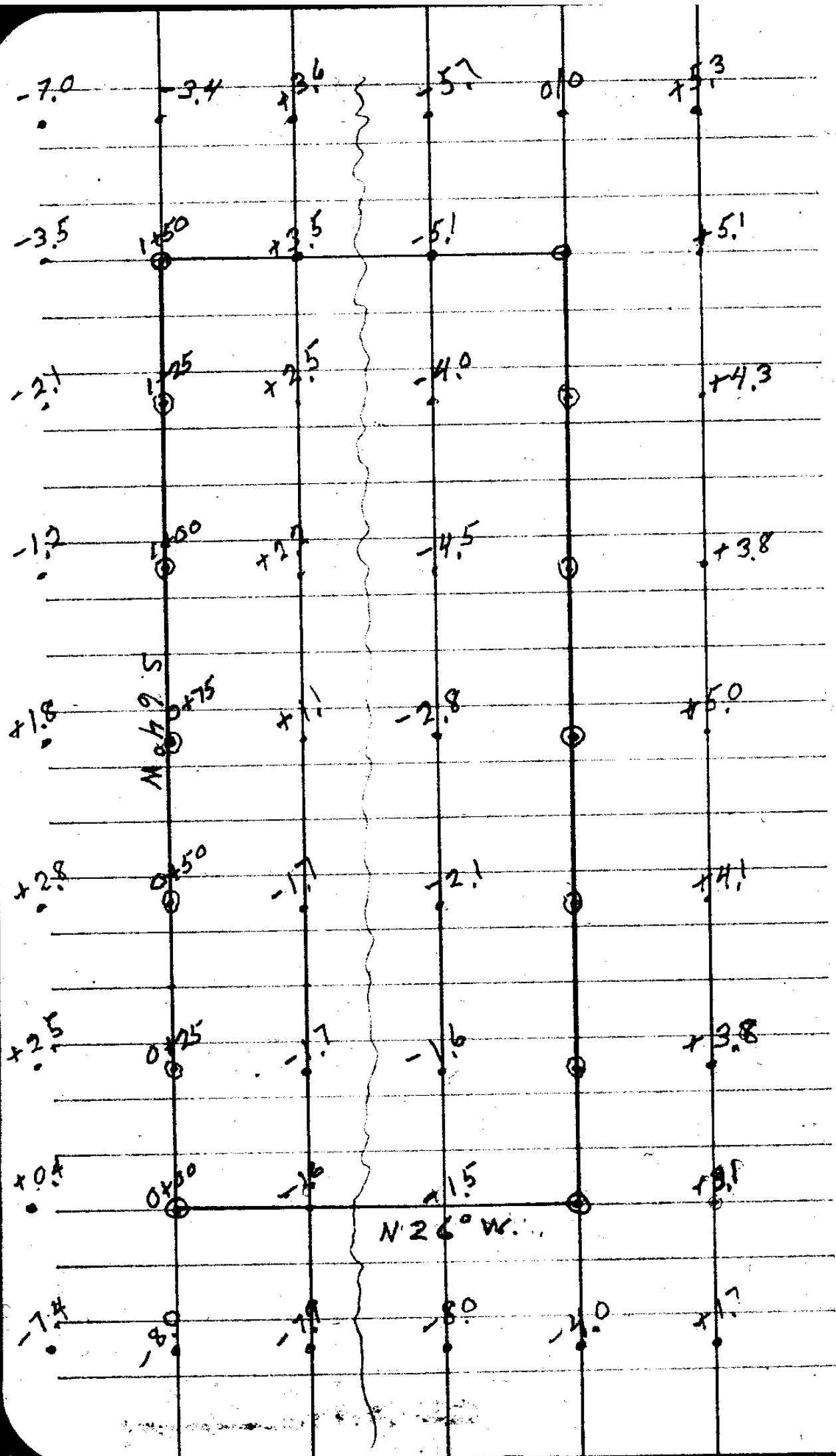
C.S. No. 311289

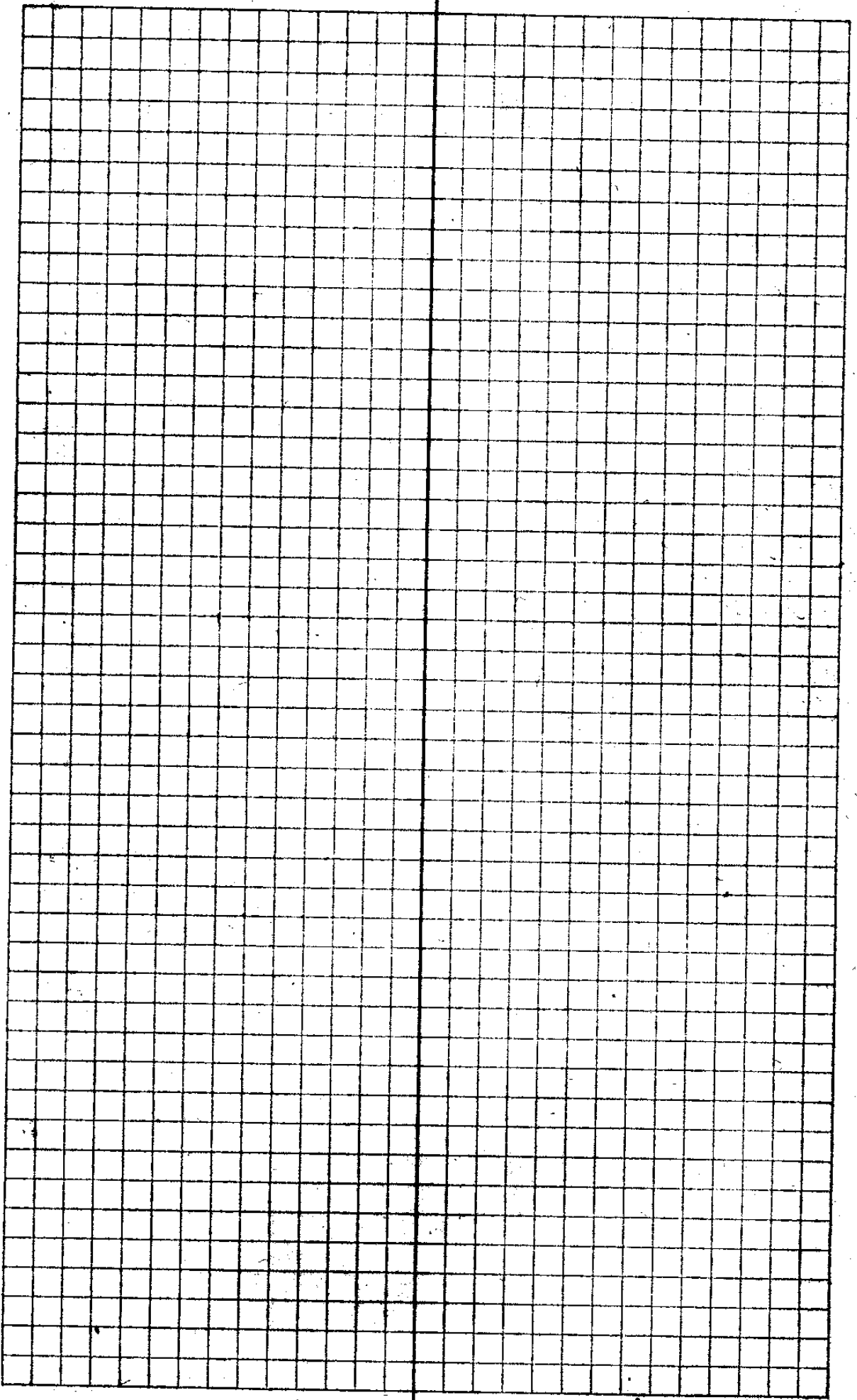


Water Tank

Location No 2

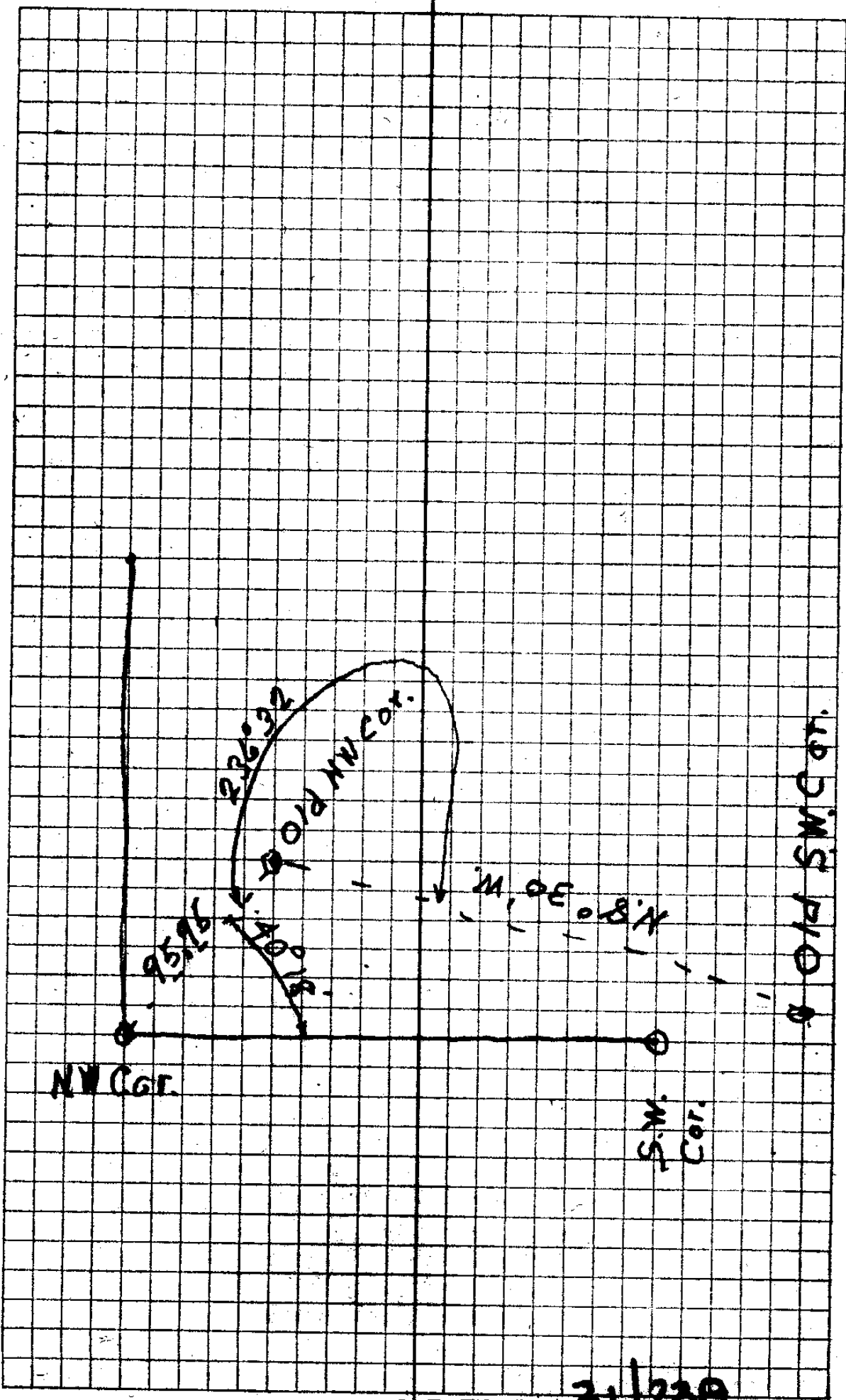
C.S. No. 31/23A





G. S. No. 31/23A

Sta	+	H.I.	-	Elev.
	7.35	728.60		721.25
1+50			9.5	719.1
1+25			6.8	721.8
1+00			4.2	724.4
0+75			1.7	726.9
T.P.			0.66	729.26
	6.06	735.32		
0+50			3.6	731.7
0+25			3.6	731.7
0+00			5.3	728.7
		North		
0+00			5.5	729.8
+25			2.0	733.3
+50			0.5	734.8
+75			0.4	734.9
1+00			0.1	735.2
+25			1.2	734.1
+50			1.7	733.6



C.S. No. 31/230

733.90	
<u>4.92</u>	
728.98	
<u>9.46</u>	
729.36	
<u>6.32</u>	
735.68	
<u>4.5</u>	
735.23	
	7388
	<u>10.1</u>
	7287
	735.68
	<u>10.9</u>
	725.78
	<u>719.</u>
	6.78
	729.4
	<u>2.8</u>
	732.2
	<u>9.1</u>
	723.1

(North Dike Mill Pond) outside

~~3/1/23~~

Station Angle 310.581

North Dike Nest Dike

TP 485.6800
E side
Dike

0+00	3.1	0.0
1+00	4.7	-1.6
2+00	5.9	-2.9
3+00	6.7	3.1
4+00	7.8	4.7
5+00	6.85	482.29

7.14 489.13 Mill Rod 8 ft

TP 4400
~~489.13~~
482.29

4+70	6.8	-5.8
5+00	6.2	3.2
6+00	6.3	3.2
7+00	6.3	3.3
7+18	5.2	3.3

3/1/23

55.687
687
91 587

18.5
2.5
2.5
2.5

208
2
2

265
28
106
9'01

18.1
2
9.11
5
2.7

282
0.5
1.5
1.6

0.81
0.5
6.5
5.7
61
9.7

9.81
0.5
8.7
8.7

8.9
9.2
8.8
6.7

8.05
0.5
9.4
5.4

1.71
0.9

9.11
5
8.8
8.8
8.8

1.6
5
2.2
2

6.7
5.7
9.7
5.7

CS 101 31/23A

Q.S. No. 31/23A

48750

6.00

190

241

0 5 7 1

84
2877

2177

5
2877

49282

+ 639

55184

- 121

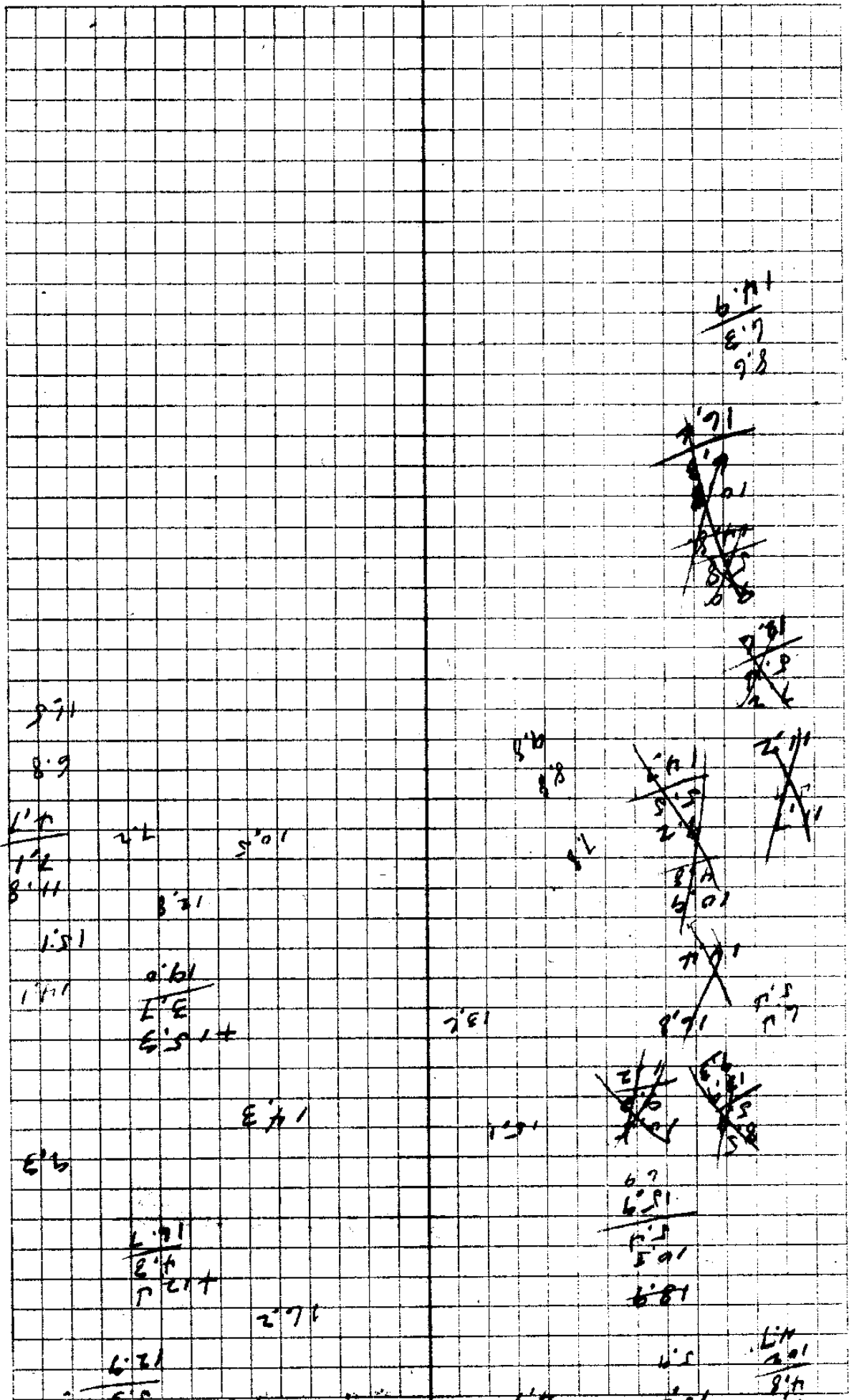
48884

41400

C.S. No. ~~31/23A~~

Cross-section
R.R. spur
+84
+63
=

14+00



6.71
 8.7
 9.8

~~7.91~~
~~8.1~~
~~8.21~~
~~8.31~~
~~8.4~~
~~8.5~~

~~7.81~~
~~8.9~~
~~9.1~~

9.71

8.9

1.4
 1.2
 8.44

2.2

5.01

8.8

~~7.41~~
~~8.5~~
~~9.2~~
~~8.4~~
~~8.01~~

~~2.11~~
~~1.1~~

1.51

8.21

1.11

0.61
 1.5
 3.7
 1.5.14

1.51

7.71

1.5
 1.7

8.6

8.11

1.51

~~7.21~~
~~8.3~~
~~8.4~~
~~8.5~~
~~8.6~~
~~8.7~~
~~8.8~~
~~8.9~~
~~9.0~~
~~9.1~~
~~9.2~~
~~9.3~~
~~9.4~~
~~9.5~~
~~9.6~~
~~9.7~~
~~9.8~~
~~9.9~~
~~10.0~~

6.7
 6.81
 7.9
 8.01
 8.81

6.71
 8.4
 7.214

2.76

6.71
 8.5
 7.2

4.5
 7.01

1.14
 2.01
 8.4
 7.5

7.17

1.6

6.37

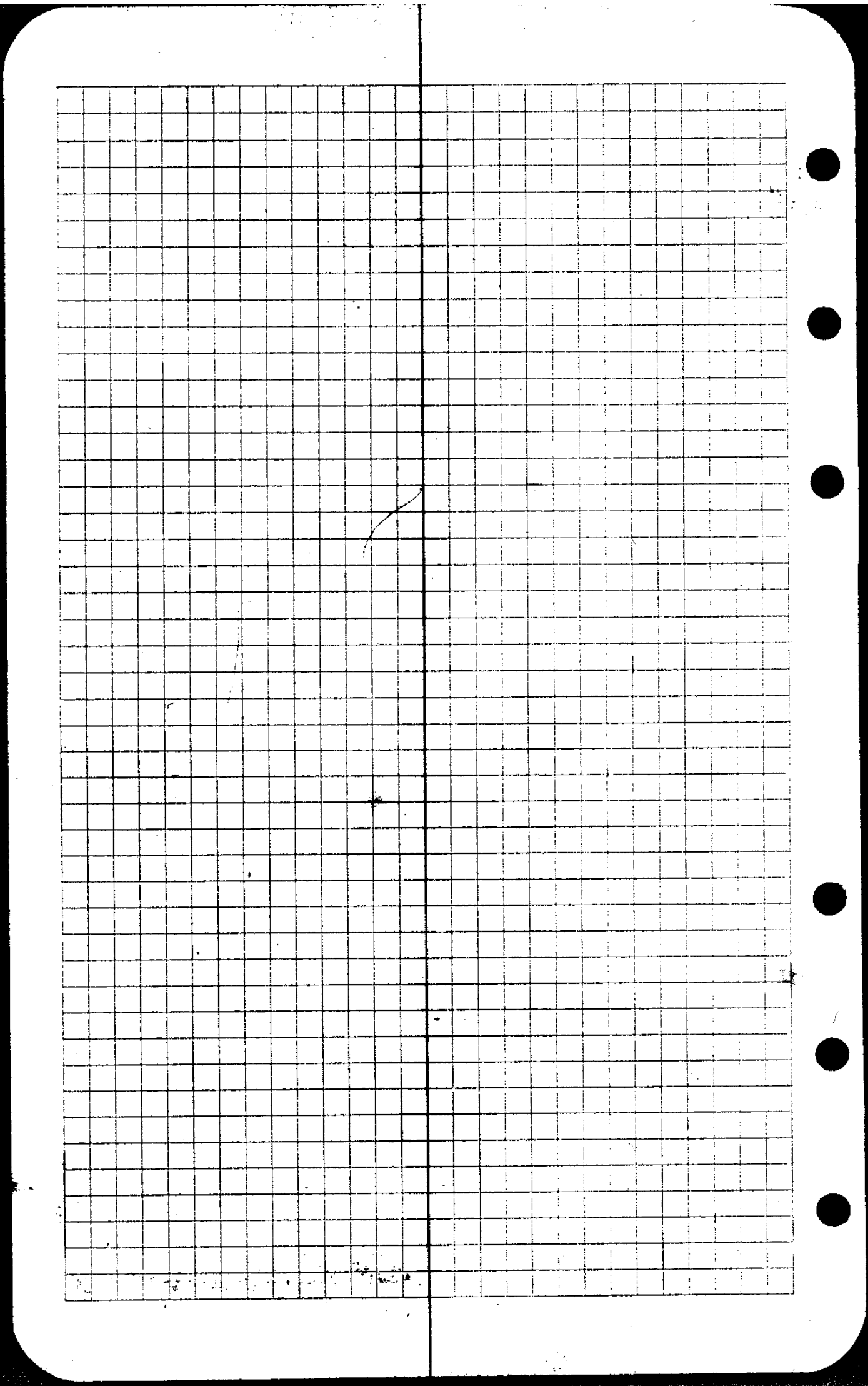
6.7

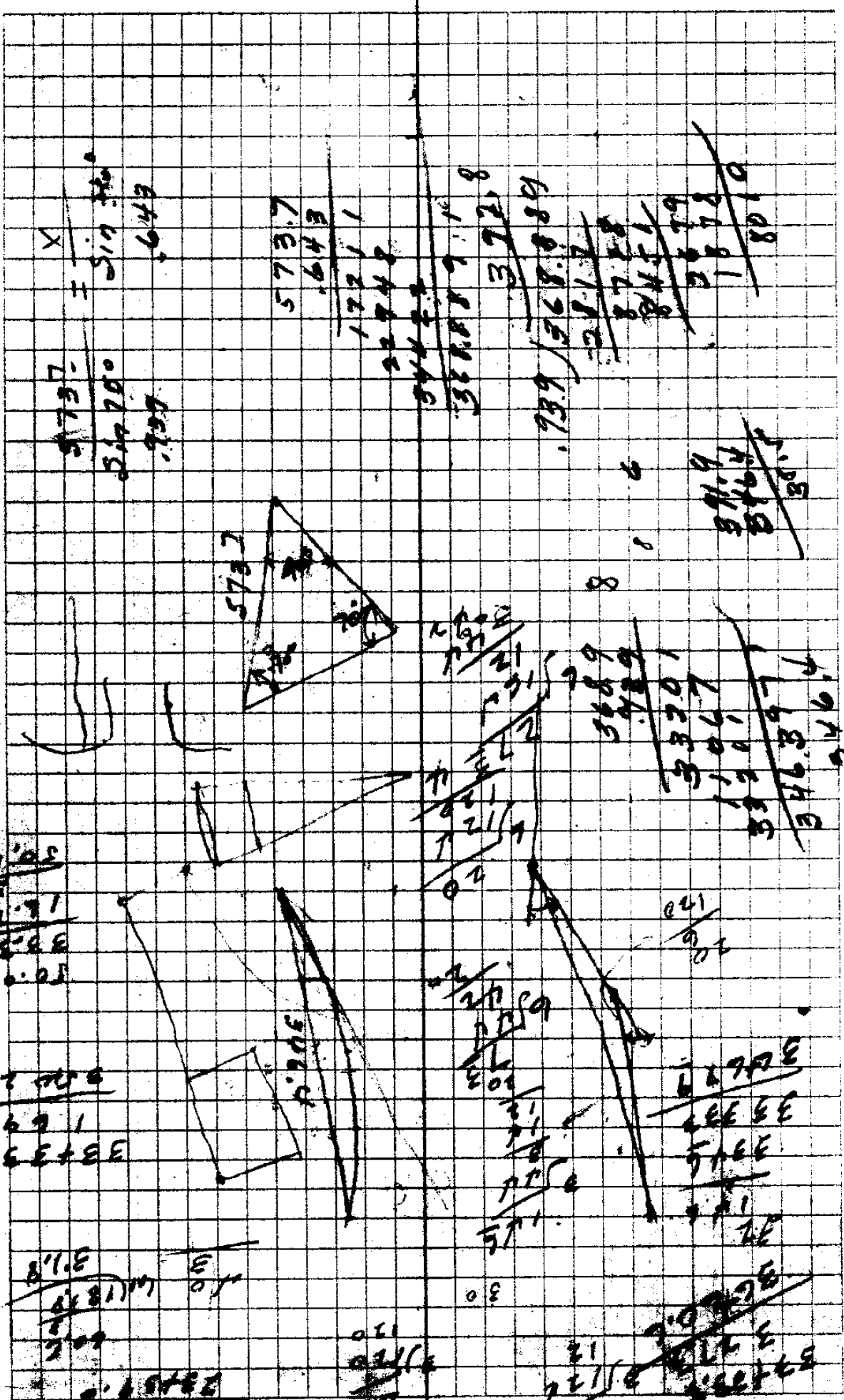
Tipe-Line Levels

C.S. No. 31/23A

B.M. 461.34

1+00	458.3	6.8		
4+00	458.2	6.9		
T.P.	458.29	6.77		
			459.71	1.42
H.A. 48.50	452.88	6.83		3.62
			456.50	
0+20	452.10	4.40		
0+00	440.2	16.3		
bottom ch.				
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				South Side Outside
				" " 0+80 Inside
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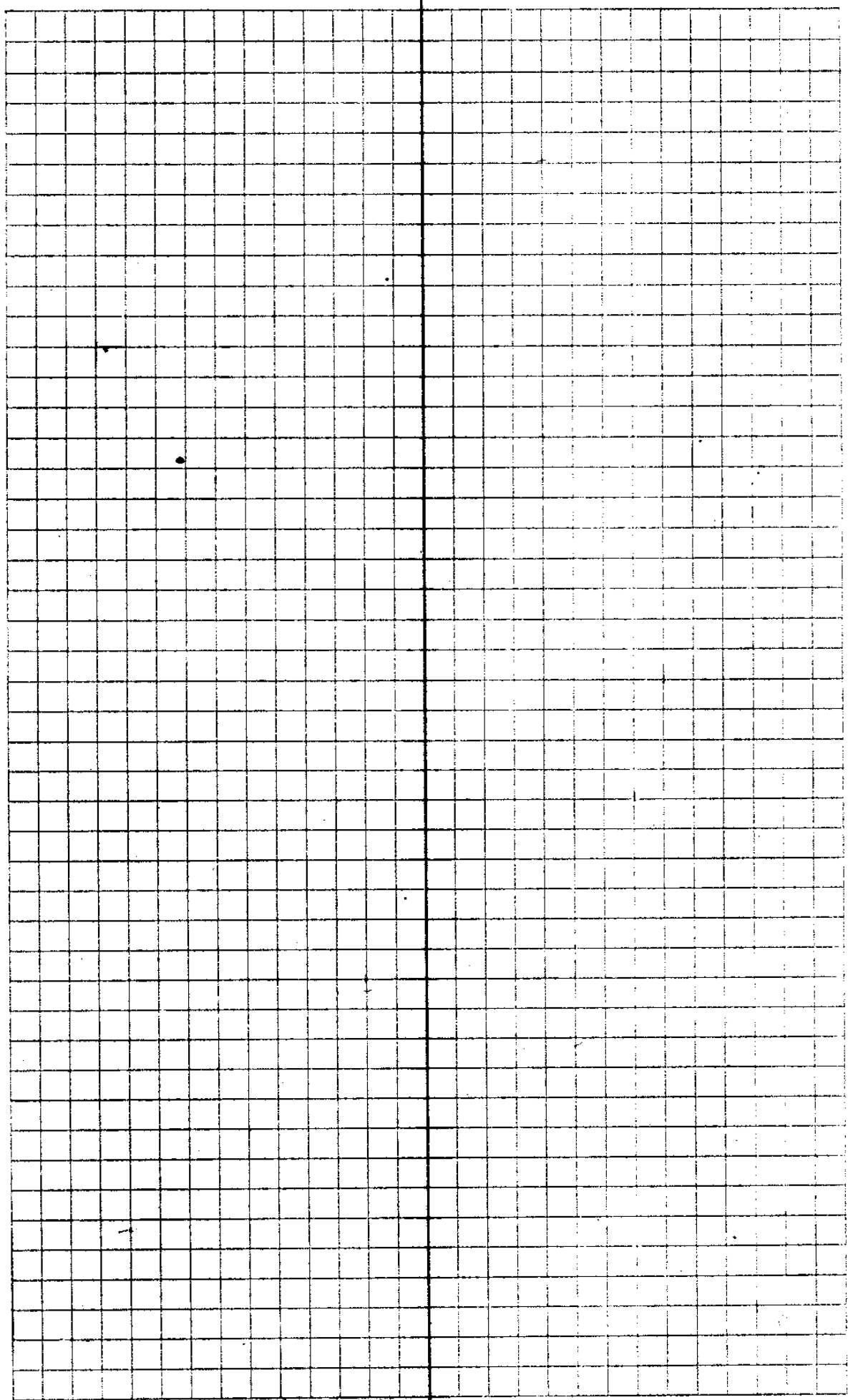
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485.9	5.8			1
			4.30 491.72	
487.42		2.13		I.P.
485.2	4.3			5+37.5
484.9	4.6			6+00
485.5	4.0			7+00
484.8	4.7			8+00
484.7	4.8			8+55.4
			2.62 489.55	
486.93		4.88		I.P.
487.50			4.31 491.81	

C.S. File No. 31/23A



45' 4

5' 5 8/4
80' 8 8/4

85' 0
0.9' 2 8/4

C.S. No. 31/23A

4859

58

4917

43

4874

213

4895

272

4868

488

4918

+ 131

4815

4874

39

4917

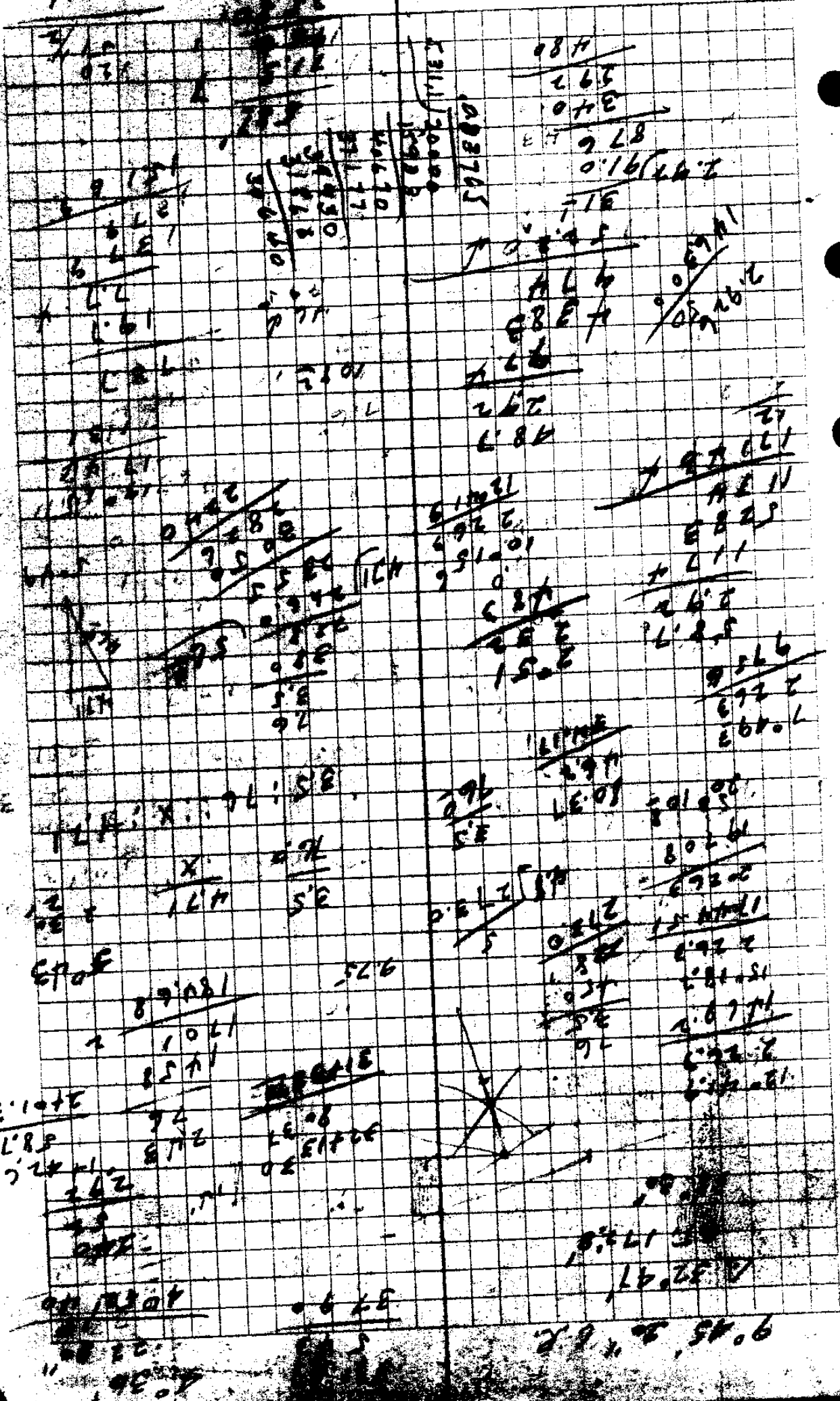
4851

44

4895

C.S. No. 31/23A

2/11/1



9°45' 30" E.R.

~~1/2~~
1/2
9/1

AP

1/2

1/2
1/2
1/2

9/1 01
8/11

65'

2
2

12
12

8/5 11 - 6 E1
" 1/5 "

139.97

9/1 17 - 6 E1
" 1/17 "

139.88
8 E 6 E1

C.S. No. 31/23A

Top of Stake
8+00 Passing Track

488.49
- 3.25

485.24

485.24

487.88
+ 1.61

489.49
- 5.72

483.77
+ 4.76

488.53

Top of Stake
1+50 Passing Track

CP No. 31/23A

Passing track

3+00

+0.2
+0.2

+1/6

3+50

+0.6
+0.6

+1/6

35+00

+1/2

4+00

+7.1
+15.1

+5.7

Passing Tr.

14+00

+5.7
+13.7

+5.1

13+50

+5.1

13+00

not set

12+50

" "

12+00

+4.3
+12.7

+1.0

11+50

+3.6
+11.6

+3.7

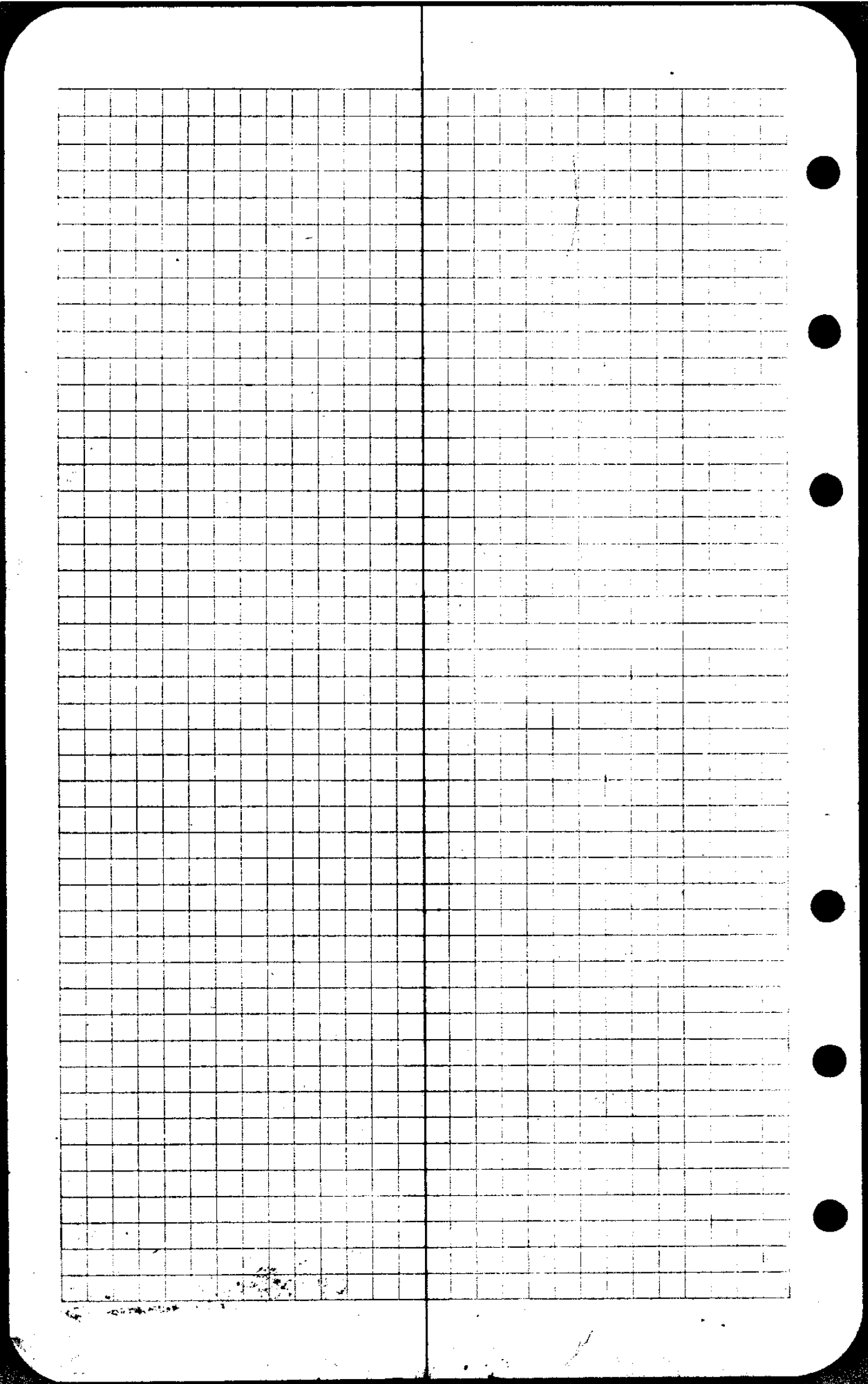
11+00

+3.4
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5.76 493.26 cut Rd
83



C.S. File No. 31/23A

Handwritten notes on graph paper, including various calculations and diagrams. The page is filled with numbers, lines, and some small sketches.

Top Left: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.73, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Top Center: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Top Right: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Middle Left: A vertical list of numbers: 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Middle Center: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Middle Right: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Bottom Left: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Bottom Center: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

Bottom Right: A diagram showing a triangle with a vertical line and a horizontal line. Numbers include 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0.

27+82 EC.

25+17
82

3457
to 21

Ext. 25+17

Δ SA
S.T. = 2852
L.C. 500'

22+52
600

BC 10°
22+52

2192

100

17+83
409

21+92 EC.

12
14
3
18
14

19+87 Ext.

+50

19+00

+50

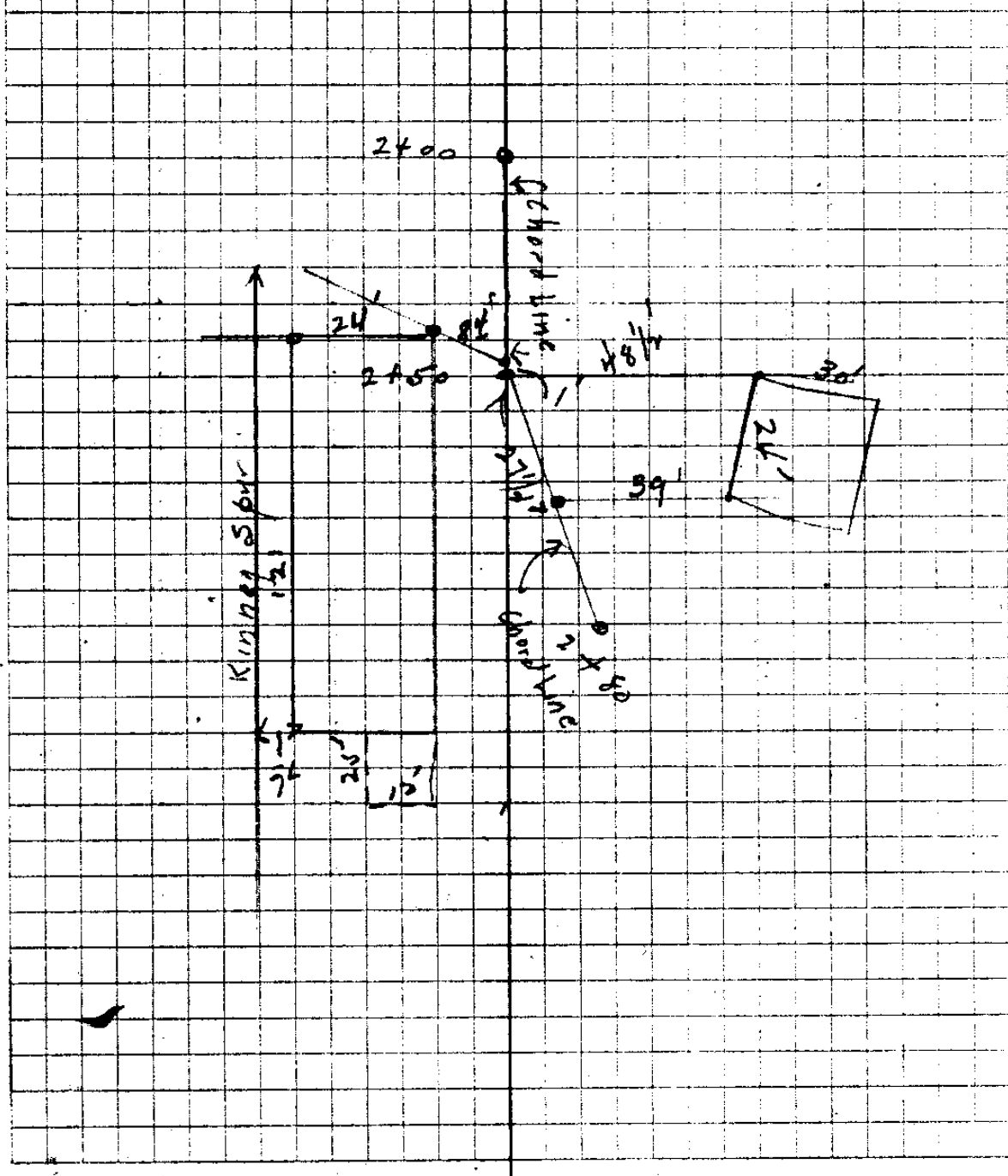
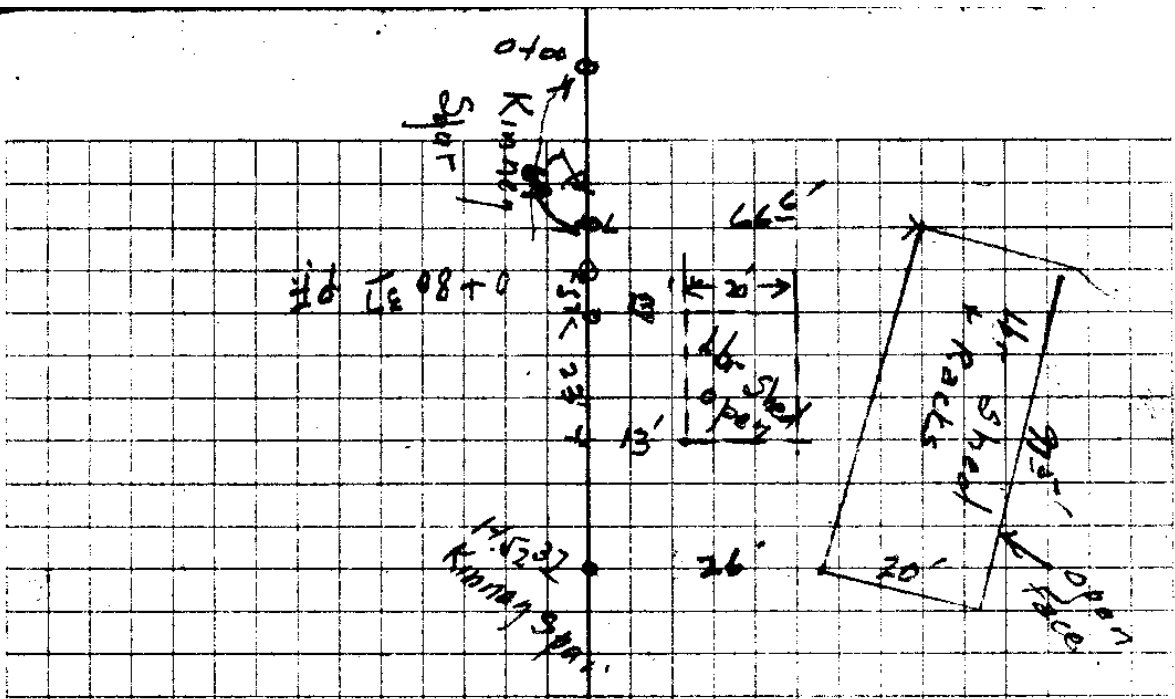
19+00

BC. 17+83

10+11
S.T. 215

Δ 40° SA

CS No. 31/23A



72
80 37
152 37

040
Kindy Spr 4483

152'

50'

12 1/2'

26 1/2'
46 Tool
Shovel

90°

incline
80°

6474 145°

~~806~~
806

50'

Tile Router
House

492.2d

Case No. 31/23A (19)

E-174 Com.

to

E-174 North

380

8+83

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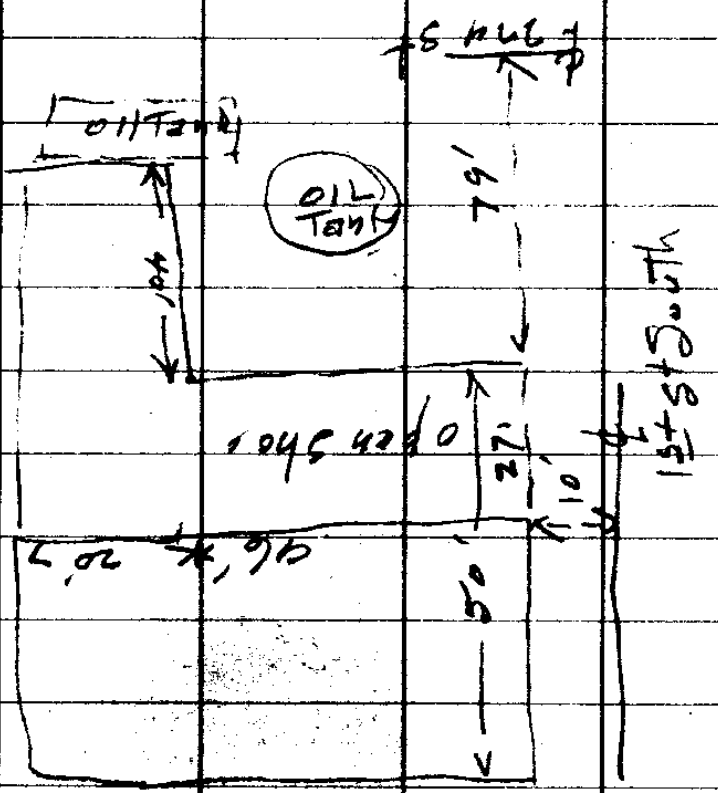
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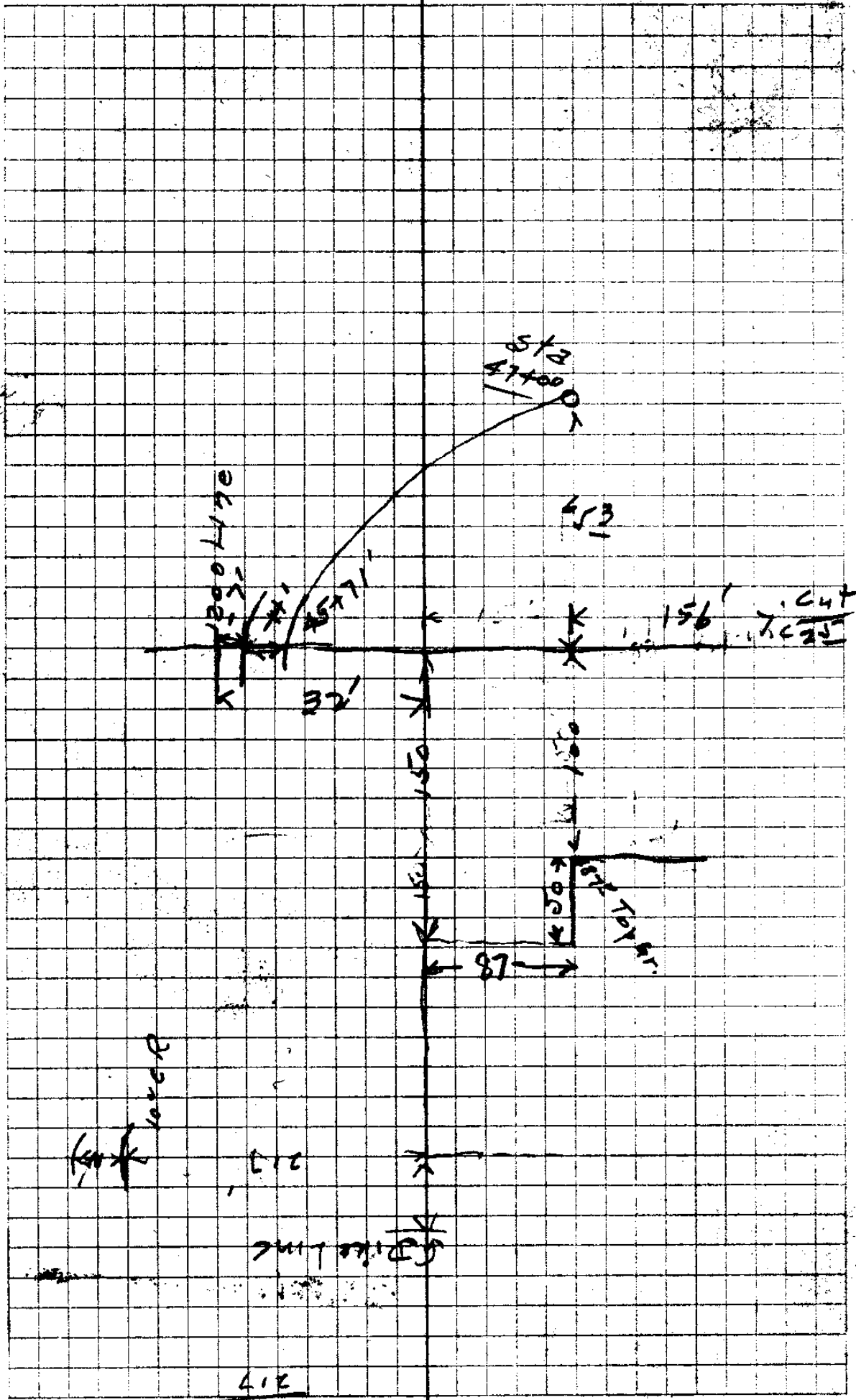
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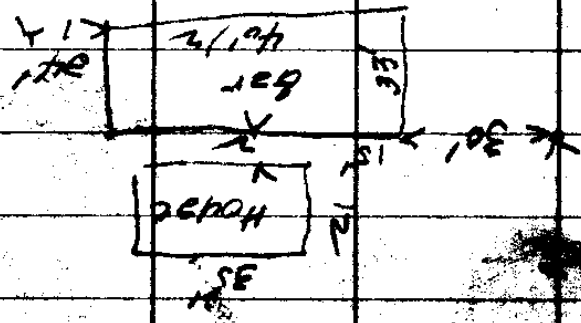
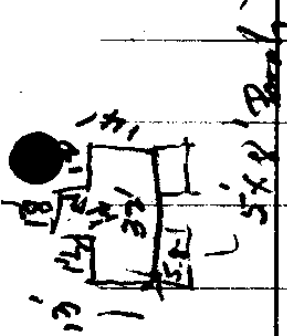
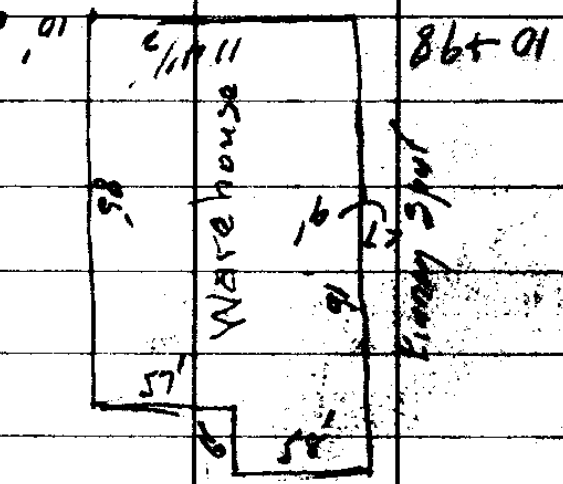
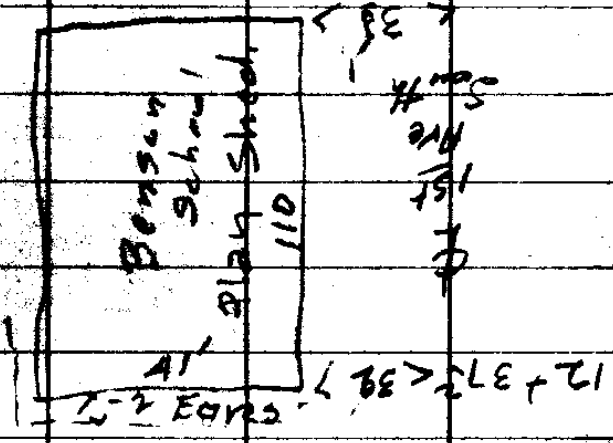
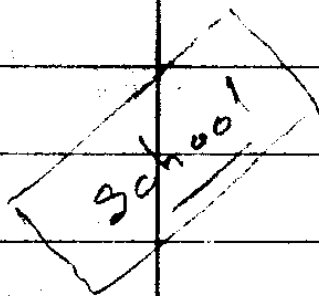
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Center Line

41E

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~~C.S. No. 31/23A~~

fs pub 7

Topography
B-23A

$$\begin{array}{r} 82.78 \\ \hline 80.28 \\ \hline 2.50 \\ \hline 85.78 \\ \hline 0.67 \\ \hline 81.11 \end{array}$$

$$\begin{array}{r} 82.11 \\ \hline 82.11 \\ \hline 4.5 \\ \hline 87.61 \\ \hline 6.9 \\ \hline 91.51 \\ \hline 82.28 \\ \hline 8.23 \\ \hline 87.78 \\ \hline 6.70 \\ \hline 81.08 \end{array}$$

$$\begin{array}{r} 86.16 \\ \hline 87.11 \\ \hline 87.11 \\ \hline 87.11 \end{array}$$

$$\begin{array}{r} 16.16 \\ \hline 6.15 \\ \hline 92.57 \\ \hline 6.87 \\ \hline 87.70 \\ \hline 87.70 \end{array}$$

$$\begin{array}{r} 87.11 \\ \hline 87.11 \\ \hline 87.11 \end{array}$$

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$$\begin{array}{r} 87.11 \\ \hline 87.11 \\ \hline 87.11 \end{array}$$

1326
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N	S	E	W
167.0 ✓		6.5 ✓	
79.6 ✓			1.7 ✓
148.2 ✓			16.3 ✓
215.2 ✓		1.1 ✓	0.0
125.3 ✓		12.7 ✓	
56.6 ✓		4.2 ✓	
248.0 ✓		27.7 ✓	
159.7 ✓		3.0 ✓	
106.0 ✓		2.0 ✓	
137.0 ✓		1.6 ✓	
133.6 ✓		11.6 ✓	

Total 1575.2 ✓

70.40

18.0

~~317238~~

sta	Dist. ✓	V. Ang.	H. Ang	Bearing ✓
Sta 11	(149.8) 152.7	-11° 15'	4° 11' R	N 9° 11' E
Sta 12	56.5	0° 00'	32° 04' L	N 22° 53' W
Sta 13	33.1	0° 00'	16° 08' R	N 6° 45' W ✓
Sta 14	(129.1) 147.6	-29° 00'	11° 53' L	N 18° 38' W
on Rock Sta 15	(172.8) 215.9	-37° 00'	6° 58' L	N 25° 36' W
Sta 16	(109.8) 126.0	-29° 20'	2° 46' R	N 25° 56' W
Sta 17	(117.2) 118.0	-6° 35'	22° 39' R	N 0° 17' W
Sta 18	153.4	0° 0'	20° 16' R	N 19° 59' E
Sta 19	(80.1) 80.7	-7° 00'	0° 31' L	N 19° 28' E
Sta 20	(104.8) 108.5	-15° 00'	14° 58' R	N 34° 26' E

990
92.5

11.5

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51958'

18.5 Jan

S.T. 279
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278.42

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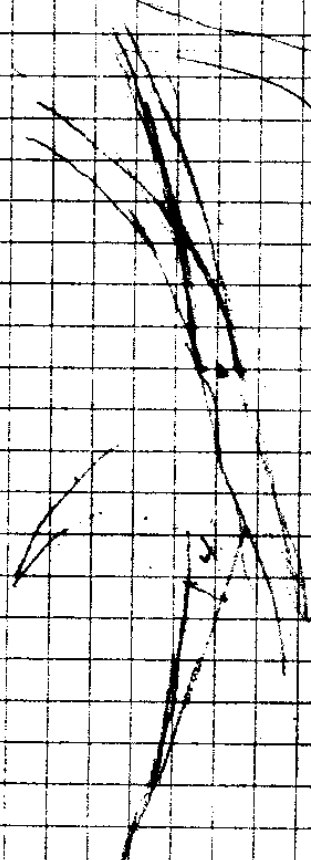
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1.56
1.6

Q.S. No. 31/239

Sec Line bet. 28-29

Sec Cor 28-29-32-32 Tp 26 Rq 2nd

Sta	Dist	Vert Angle [#]	Bearing
Sec Cor	169.7 169.7	-10°15'	2°14'R N 2°12'E
Sta ①	196 83.0	-16°25'	3°31'L N 1°17'W
Sta ②	149.1 153.9	-14°15'	5°00'L N 6°17'W
Sta ③	275.2 215.5	-3°00'	6°34'R N 0°17'E
Sta ④	125.9	+1°20'	5°30'R N 5°47'E
Sta ⑤	56.7	Horiz.	1°30'L N 4°17'E
Sta ⑥	249.3 252.0	+8°00'	2°05'R N 6°22'E
Sta ⑦	158.7 163.4	+13°45'	5°18'L N 1°04'E
Sta ⑧	706.0 107.2	+8°28'	0°00' N 1°04'E
Sta ⑨	137.0	0°00'	0°24'L N 0°40'E
Sta ⑩	134.7 134.9	-6°00'	4°20'R N 5°00'E

4.40 below

199'

4.65

9.74 south manhole

10.15 sewer at

2.0 North manhole.

1.9 cut at E

274.00

$$\begin{array}{r}
 2.0 \\
 4.65 \\
 \hline
 6.65
 \end{array}$$

9.74

4.40

34 100.00

44.40

104.20

9.74

114.14 H.I.

10.15

104.00

114.14

6.69

107.45

1.6 cut

6.2

10.8

5.9

1.9

C.S. File No. 31/238

1st Street Grades

North.

4. E 1st Ave South	461.26	4.67	456.59
0+50		3.39	457.87
1+00		2.17	459.09
1+50		0.20	461.06

South

0+50		6.31	459.95
1+00		8.16	453.10
1+538		9.39	451.87

Top Rail
Kinney
Spur

T.P. ✓ 9.39 451.87 ✓

2.41 454.28

B.M.
on North
Jackson
St. 5.53

1148.75 ✓

6.3
5.4

11.7

8.4

CS. No. 31/23A

- Street Grades -

East 2 nd			459.79	B.M. E 2 nd st.
2.76	462.75			E 1 st Ave South
- south -			Est Int. 254 = 460.04	
0+50		4.36	458.39	
1+00		6.47	456.78	
1+452		7.56	455.19	
1+519		7.54	455.21	
Top Rail Kinney Spur				
- North -				see above
	8.39	468.18	459.79	(B.M. str int)
0+30			7.91	460.27
0+50			6.73	461.45
1+00			3.37	469.18
1+50			0.52	467.66
East 3 rd				B.M. E 3 rd st
8.10	480.98		472.88	E 1 st Ave South
North				
0+15			8.16	472.82
+50			6.63	474.35
1+00			4.16	476.82
+50			1.90	479.18
South				
	7.32	474.20	472.88	B.M. E 1 st Int

459.79

1.25

460.04

CS. No. 31/23A

Street Grades

East 3rd St.

474.20

0+30			1.62	472.58
+50			3.02	471.18
1+00			7.30	466.90
T.P.			7.72	466.48

2.13 468.61

1+50.2			6.24	462.37
Top Rail Kinney Spur				

(South) E 6th St.

5.48 477.57 472.09

B.M. on
str. int.

E. 6 th + Corn.			5.48	472.09
0+50			7.26	470.31
1+00			8.75	468.82
1+50			9.98	467.59

North

0+47			3.68	473.89
T.P.			0.43	477.14
	8.34	485.48		
1+00			7.63	477.85
1+50			3.78	481.70

g

G.S. Form No. 31 / 23A

	Gene Richardson	E.S. Woodford	Time Youngs Bay Lbr. Co	Aug. 1943
16	1-	1		
17	1	1		
18	1	1		
19	1	1		
20	1	1		
21	1	1		
22	Sunday			
23	1	1		
24	1	1		
25	1	1		
26	1	1	} Sept - 10 " 11 " 12 " 13	
27	1	1		
28	1	1		
29	Sunday			
30	1	1		
31	1	1		

Gene Richardson - July 31 - 1 day.

E.S. Woodford " 31 1 "

" " Aug 1 1 "

M. R. Lundeen - Tel. 710 -

Carl Johnson = Hotel Rose.

(H.C. Parslow - Res - for Gene)

SE 11/23A

Sta	+	H.I.	-	Rod	E.L.
		493.02			
37+50				10.1	482.9
38+00				9.3	483.7
T.P.			8.12		484.90
	5.44	490.34			
39+00				6.1	484.2
40+00				5.0	485.3
40+17 1/2 Back = 40+00 Ahead				4.8	485.5
40+50				4.1	486.2
41+00				3.8	486.5
+50				3.0	487.3
42+00				2.5	487.8
T.P.			1.54		488.80
	5.66	494.46			
42+50				6.4	488.1
43+00				5.4	489.1
+50				4.8	489.7
44+00				4.3	490.2
+50				4.5	490.0
45+00				4.4	490.1
1200 line				4.1	490.4

On Payment

11 11

11 11

~~Case No. 31/23A~~

Sta	+	H.I.	-	Pod	El.
		483.62			
T.P.			1.55		482.07
	8.08	490.15			
28+00				8.1	482.1
+51				11.7	478.5
+60				7.5	482.7
29+00				5.0	485.2
30+00				4.4	485.8
31+00				3.6	486.6
32+00				3.1	487.1
T.P.			2.17		487.98
	3.29	491.27			
33+00				4.7	486.6
B.C. +60 ⁵				5.5	485.8
34+00				9.0	482.3
+50				4.6	486.8
35+00				2.4	488.9
+50				0.8	490.5
T.P.			0.00		491.27
	1.75	483.02			
36+00				4.4	488.6
E.C. +46 ⁹				8.5	484.5
37+00				10.3	482.7

11.10	1.17
7.52	1.34
18.62	2.51
2.51	
16.11	74.05
474.05	1.17
490.16	472.88
	1.10
	483.98

74.05
1.34
472.71
11.10
483.81

83.98
5.77
488.21
7.52
480.73
1.32
482.05
2.83
484.88

50
72.71
59.41
13.30
9.50
48.80
2.15

11.372
7.772
3.600
2.500
1.800
2.200
4.000

G. S. File No. 31/23A

R.R. Spur Levels

④				
		492.20 ✓		
17+00			6.3	485.9
B.C. 17+82.7			5.4	486.8
T.P.			5.04	487.20 ✓
	1.32	488.52 ✓		
T.P.			10.99	477.53 ✓
	2.02	479.55		
B.M. on Curb NE Cor E 6 th + Commercial St.			5.50	474.05 ✓
				474.05
	10.00	484.05		
T.P.			0.04	484.01
	7.63	491.64		
18+00			4.7	486.9
+50			4.6	487.0
19+00			7.2	484.4
+50			10.5	481.1
T.P.			7.63	484.01
	0.28	484.29		
EX. 19+87.9			8.5	475.8
20+50			9.0	475.3

$$\begin{array}{r} 474.05 \\ 5.76 + \\ \hline \end{array}$$

$$\begin{array}{r} 479.81 \\ 1.03 - \\ \hline \end{array}$$

$$478.76$$

$$\begin{array}{r} 484.01 \\ 7.63 \\ \hline \end{array}$$

$$491.64$$

$$\begin{array}{r} 484.01 \\ 0.28 \\ \hline \end{array}$$

$$484.29$$

31/23A

Sta	+	H.I.	-	Rod.	El.
		484.29			
21+00				8.9	475.4
+50				9.5	474.8
EC. 21+92.4				10.0	474.3
T.P.			9.31		474.98
	3.11	478.59			
22+47				4.5	473.6
BC. 22+52.4				8.8	469.3
23+00				7.15	470.94
Cent. E. 6th St.				7.43	470.66
23+50				7.37	470.72
24+00				6.5	471.6
+50				5.9	472.2
T.P.			5.12		472.97
	10.65	483.62			
25+00				9.7	473.9
EX. +17.4				9.1	474.5
+50				7.9	475.7
26+00				6.0	477.6
+50				4.8	478.8
27+00				3.1	480.5
+50				2.0	481.6
EC. 27+82.4				1.55	482.1
	13.76		14.43		

186.4

$$\begin{array}{r}
 87.50 \\
 5.76 \\
 \hline
 93.26 \\
 6.65 \\
 \hline
 99.91 \\
 3.02 \\
 \hline
 102.93
 \end{array}$$

22

$$\begin{array}{r}
 93.26 \\
 6.55 \\
 \hline
 99.81 \\
 2.40 \\
 \hline
 102.21
 \end{array}$$

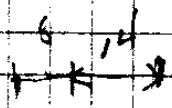
$$\begin{array}{r}
 493.26 \\
 485.00 \\
 \hline
 8.26
 \end{array}$$

YARD GRADES.

$$\begin{array}{r}
 93.26 \\
 5.72 \\
 \hline
 98.98
 \end{array}$$

Y. 1.40

$$\begin{array}{r}
 0+00 + 1.9 \\
 1+00 + 3.5 \\
 1+50 + 2.5 \\
 2+00 + 2.1 \\
 2+50 + 1.7 \\
 3+00 + 0.8 \\
 3+50 - 0.5
 \end{array}$$

$$\begin{array}{r}
 8.3 \\
 4.8 \\
 \hline
 13.1
 \end{array}$$


$$\begin{array}{r}
 8.3 \\
 4.8 \\
 \hline
 13.1
 \end{array}$$

$$\begin{array}{r}
 8.3 \\
 4.8 \\
 \hline
 13.1
 \end{array}$$

$$\begin{array}{r}
 8.3 \\
 6.2 \\
 \hline
 14.5
 \end{array}$$

$$\begin{array}{r}
 8.3 \\
 6.1 \\
 \hline
 14.4
 \end{array}$$

6.8

$$\begin{array}{r}
 8.3 \\
 7.5 \\
 \hline
 15.8
 \end{array}$$

$$\begin{array}{r}
 7.9 \text{ 50' RT. } + 0.4 \\
 7.5 \text{ 100' RT. } + 0.8
 \end{array}$$

C.S. File No. B-173B

Re - Cross-sections Yard 1200 Line &

	5.18	492.83	Rad 72	D.M. 487.5
0+07	Rad 62			
0+50	(2.8) B	+2.6 50.0	+2.1 35.0	+2.5 80.0
1+00	(2.2) B	+2.2 50.0	+2.7 75.0	+2.1 82.0
+50	Rad 62	(2.8) B	+2.7 50.0	+2.1 100.0
2+00	-0.5 B	+1.9 50.0	+1.7 50.0	+2.4 100.0
+50	-0.3 B	+1.3 25.0	+1.3 50.0	+1.3 100.0
3+00	0.0 B	+0.5 50.0	+0.9 50.0	+1.1 100.0
+50	-0.5 B	+0.2 50.0	+0.7 100.0	+1.2 150.0
East side	50+00 =	+0.8 B	+2.8 50.0	+2.5 146.0
	Rad 72			497.50
	4.48	491.98		
Building line	+1.6 0.0	+1.8 50.0	+1.8 100.0	+1.8 140.0
Sub.	2.40	489.90		487.50
485 = 6'				
Yard levels	+5.1 484.8	+4.6 485.3	+4.5 485.4	+4.85 484.5
2+58				+4.90 486.1
				+4.00 486.5
1+83	+5.9 484.0	+5.4 484.5	+4.8 485.1	+5.0 485.4
				+4.96 485.4

Reference Points

3/23/83

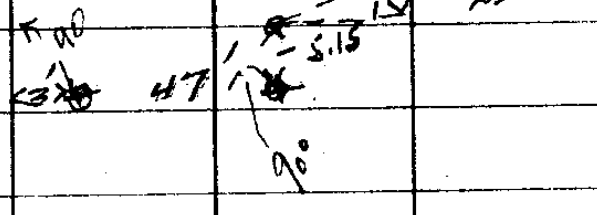
R.R. Spur
Revised Line

U.S. GEO. SUR. 31/23A

5.15

~~23~~ 1st Ave E - Jackson

237.27



515
235

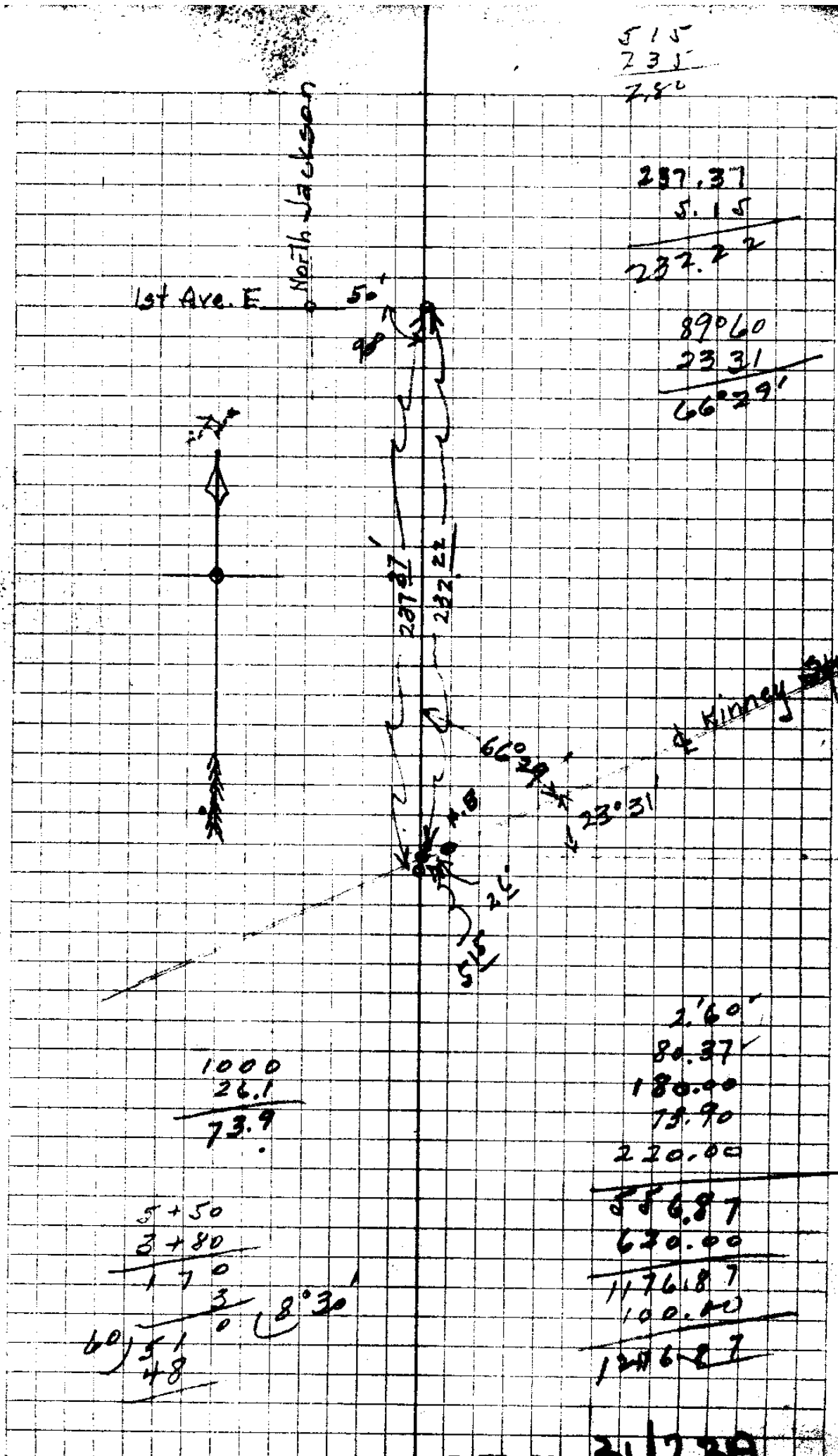
750

257.37
5.15

282.22

89060
2331

6629'



1000
26.1

73.9

2.60'
80.37
180.00
75.90
220.00

586.87
630.00

1176.87
100.00

1276.87

5+50
3+80

170
3

173
60) 510
48

30
8°30'

City No. 3173A

H. B to P.F = $80' 4 \frac{7}{16}''$

#10 Freq. $5^{\circ} 43'$

$80' 37''$

80.33

35

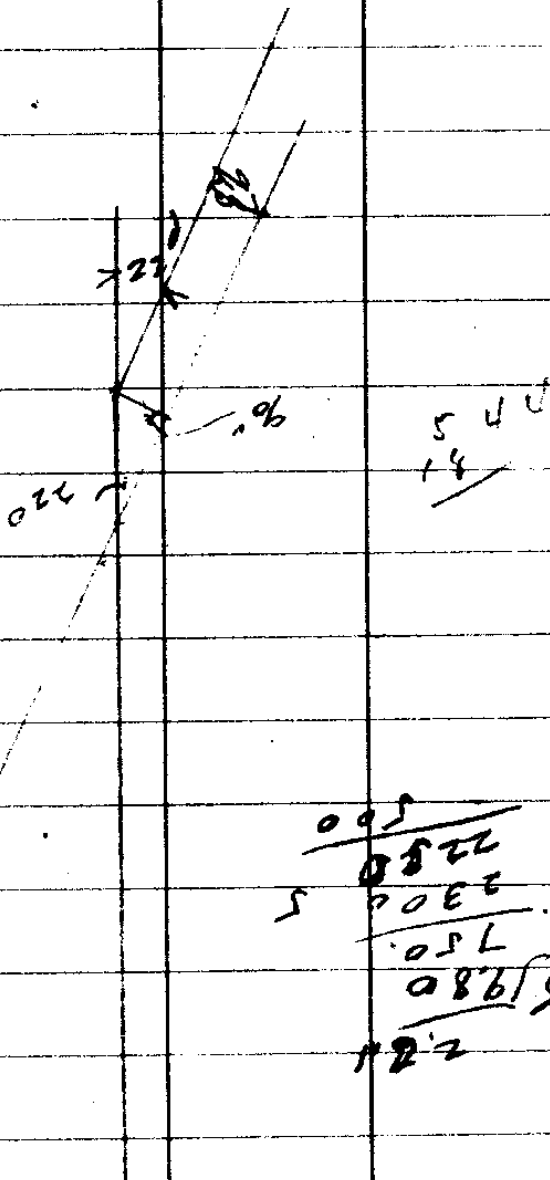
80.375

100.00

80.37

19.63

9.8' Lt 10' Line



Δ
23° 48'

$\frac{0.05}{22.80}$
 $\frac{0.05}{23.00}$
 $\frac{0.05}{23.10}$
 $\frac{0.05}{23.20}$
 $\frac{0.05}{23.30}$
 $\frac{0.05}{23.40}$
 $\frac{0.05}{23.50}$
 $\frac{0.05}{23.60}$
 $\frac{0.05}{23.70}$
 $\frac{0.05}{23.80}$
 $\frac{0.05}{23.90}$
 $\frac{0.05}{24.00}$

3467

$\frac{1}{37.5} = 0.0267$
 $\frac{1}{27.0} = 0.0370$
 $\frac{1}{9.8} = 0.1020$

10° CL
Δ 17° 52'
T. 90°
L. 178.7

B.C. 0+94[±]

1+25
+50
+75
2+00
+25
+50

E.C. 2+72[±]

2+73[±] Back =
2+80[±] Ahead

B.C. 3+67[±]

4+00 1° 38'
+50 4° 08'
5+00 6° 38'
+50 9° 08'

E.C. 6+05[±] 11° 54'

(72[±])

C.S. No. 31/028

R. R. Spur. Revised Curve.

BC. 12+30	$\Delta 39^{\circ}48'$	$8^{\circ}39'$ Curve Left	ST. = 2422
+50	39 ⁰³⁶	0 ⁰⁴¹ ' ✓	L.C. = 470 ⁰
13+00		2 ⁰⁴⁸ ' ✓	
+50		4 ⁰⁵⁶ ' ✓	
14+00		7 ⁰⁰³ ' ✓	
+50		9 ⁰¹¹ ' ✓	
15+00		11 ⁰¹⁸ ' ✓	
+50		13 ⁰²⁶ ' ✓	
16+00		15 ⁰³³ ' ✓	
+50		17 ⁰⁴¹ ' ✓	
17+00		19 ⁰⁴⁸ ' ✓	



Revised Curve

THIS IS OK

10° $\Delta 39^{\circ}16'$
ST. 208.3
L.C. 393¹

P.I. = 24+07.8

BC. 19+00

+50		2 ⁰¹⁹ ' ✓	2 ⁰³⁰ '
20+00		4 ⁰⁴⁹ ' ✓	2 ⁰³⁰ '
+50		7 ⁰¹⁹ ' ✓	2 ⁰³⁰ '
21+00		9 ⁰⁴⁹ ' ✓	2 ⁰³⁰ '
+50		12 ⁰¹⁹ ' ✓	2 ⁰³⁰ '
22+00		14 ⁰⁴⁹ ' ✓	
+50		17 ⁰¹⁹ ' ✓	
EC. 22+98		19 ⁰⁴⁸ ' ✓	

A = 39° 15'
D = 7° 00'
T = 227.3
L = 436.5

B.C. 12+51¹ -

13+00 - 2° 12'

+50 - 4° 27'

14+00 - 6° 42'

+50 - 8° 57'

15+00 - 11° 12'

+50 - 13° 27'

16+00 - 15° 42'

+50 - 17° 57'

+87¹ - 19° 39'

19+05 Back =
19+03⁵ Ahead

CSM No. 31/220

26.5
137.5
2-1972

25.6
126.8

2010.1
170.0
1936.3

54.91

80.37
9.51
0.46
49.

21407.891
203.3
192.0
392.6
2297.1

4015
2007
2008

4
250
41.0
207
2048
208
2.56
2007
7003

2018
2008
6.28
2.09
2.00
10.38
3.00
10.38

1978

200.8
203.2
1.0

2000.0

1970.5
303.1
2093.6

U.S. ENCL.

23+19° West side R.R. Spur - Revised Line

23+39° E 6th St + Loc Line

23+39 East side

23+60 O.C.

10° C.L.

$\Delta = 44^{\circ}00'$

43°47'

ST = 231.5

24+00 ✓ 2°00' 2°30'

+50 ✓ 4°30' 2°30'

25+00 ✓ 7°00' 2°30'

+50 ✓ 9°30' 2°30'

26+00 ✓ 12°00' 2°30'

+50 ✓ 14°30' 2°30'

27+00 17°00' 2°30'

27+10 17°30' 2°30'

+50 19°30' 2°30'

EC 28+00 22°00'

29+00 P.O.T.

P.I. = 35+02.4

10° C.R. $\Delta 32^{\circ}44'$ 37°45'

ST = 168.3

O.C. 33+30 0°47'

L.C. 327.3

+50 0°47' 2°30'

34+00 3°17' 2°30'

+50 5°47' 2°30'

35+00 8°17' 2°30'

+50 10°47' 2°30'

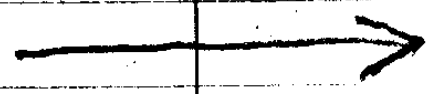
36+00 13°17' 2°30'

36+50 15°47' 2°30'

EC 36+61 16°24' 2°30'

~~This Account
OK - valid~~

Equation 2 Back
10+222 Back
10+00 Ahead



100 CL
 Δ 49° 47'
 T. 2302
 L. 4378

E.C. 23+613

24+00 - 1° 56'

+50 - 4° 26'

25+00 - 6° 56'

+50 - 9° 26'

26+00 - 11° 56'

+50 - 14° 26'

27+00 - 16° 56'

+50 - 19° 26'

E.C. 27+99L - 21° 53½'

33+34⁸ Back =
 33+34^L Ahead

21.5
 -47

49.1
 00.3 / 1473 | 227
 23-20 150
 22 95 627

64.4

28+00
 23 20
 440

159
 3
 47.1

G.S. 31/23A

R.R. Spur

Delta

10° C.R. Δ 28° 35'

S.T. 145'

L.C. 295'

B.C.
33+46

R. 33+60.5

+50

34+00 1° 58' $\frac{1}{2}$

34+00

2° 40' ✓ 34+50 4° 28'

+50

5° 11' ✓ 35+00 6° 58'

35+00

7° 41' ✓ +50 9° 28'

+50

10° 11' ✓ 36+00 11° 58'

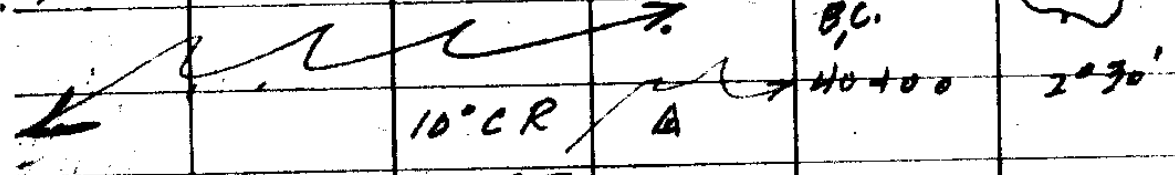
36+00

12° 41' ✓ EC +46.3 14° 17' $\frac{5}{8}$

EC +37.2

14° 17' $\frac{1}{2}$

Back =
40+17 +
40+00 Ahead



40+500 P.O.C.

S.T. =

41+00

2° 30' ✓

+50

5° 00' ✓

42+00

7° 30' ✓

+50

10° 00' ✓

43+00

12° 30' ✓

+50

15° 00' ✓

44+00

17° 30' ✓

+50

20° 00' ✓

45+00

22° 30' ✓

+50

25° 00' ✓

46+00

27° 30' ✓

45+50
45+50
67°

41862
 B.C. $3+672$
 $\hline 119.0$

$\Delta 23^{\circ} 08'$
 $100E.$
 $S.T. 120'$

$4+86.2$ Ext.
 119.0
 $6+05.2$ EC
Spike

$7+772$ \oplus E-2nd st \perp 1st Arc S.
 $11+372$ \oplus E 3rd st \perp 1st " S.

$\Delta 42^{\circ} 10' L$
 B.C. $12+372$
 $\hline 11972$
 $\hline 7772$
 $\hline 3600$

$4+10$
 F.C. $16+72$
 $\hline 135$
 $\hline 17+822$

S.T. = 2199
 $12+50$ 38.4
 $13+00$ 230.0
 $\hline 309.4$
 $13+50$ 230
 $\hline 539.4$
 $14+00$ 230
 $\hline 808.4$
 $14+50$ 230
 $\hline 1038.4$
 $15+00$ 230
 $\hline 1308.4$
 $+50$ 230
 $\hline 1538.4$
 $16+00$ 230
 $\hline 1808.4$
 $+50$ 230
 $\hline 2038.4$
 EC. $14+47$ 221.6
 $\hline 2029.6$

472
 $\hline 1416$
 $\hline 120$

2009.6

0.35
 $\hline 2.75$
 $\hline 2.40$

~~6200 3113A~~

R.R. Spur. Revised Curve

10° CR
 Δ

	39+80		1° 00'	
	40+00	✓	1° 00'	2° 30'
	+50	✓	3° 30'	2° 30'
	41+00	✓	6° 00'	2° 30'
	+50	✓	8° 30'	2° 30'
Track	42+00	✓	11° 00'	2° 30'
	+50	✓	13° 30'	2° 30'
	43+00	✓	16° 00'	5° 00'
	+50	✓	18° 30'	7° 30'
	44+00	✓	21° 00'	10° 00'
	+50	✓	23° 30'	12° 30'
Track	45+00	✓	26° 00'	2° 30'
	+50	✓	28° 30'	2° 30'
	46+00	✓	31° 00'	2° 30'
	+50	✓	33° 30'	2° 30'
Track	47+00	✓	36° 00'	2° 30'
	+50			
	48+00	✓	41° 00'	
	+50			
	49+00	✓	46° 00'	2° 30'
	+50	✓	49° 30'	
Track	50+00	✓	51° 00'	
	+50			
	51+00	✓	56° 00'	

45+75
 43+50
 2+25

$$\begin{array}{r} 461.34 \\ 7.75 \\ \hline 469.09 \\ 1.92 \\ \hline 467.17 \\ 7.95 \\ \hline 474.22 \\ 4.92 \\ \hline 469.30 \end{array}$$

$$\begin{array}{r} 141.80 \\ 6.84 \\ \hline 134.96 \\ 461.84 \\ \hline 698.80 \end{array}$$

$$\begin{array}{r} 388 \\ 731 \\ \hline 609 \end{array}$$

$$\begin{array}{r} 474.22 \\ 4.84 \\ \hline 469.38 \end{array}$$

$$\begin{array}{r} 485.00 \\ 69.38 \\ \hline 15.62 \end{array}$$

$$\begin{array}{r} 478.12 \\ 8.12 \\ \hline 486.24 \\ 1.04 \\ \hline 487.28 \\ 7.95 \\ \hline 488.19 \\ 0.82 \\ \hline 487.37 \end{array}$$

$$\begin{array}{r} 486.00 \\ 469.38 \\ \hline 16.62 \\ 1.51 \\ \hline 15.11 \end{array}$$

Passing Tract

~~420000/730~~

①

Passing Track

H.B.

31+329 = 0+00 ~~to~~ layout.

0+00

Passing Tr.

S.T. = 205'

P.F. 32+133 = 0+00

B.C.

1+423 9° 45' 20" C.R.

+50 ✓ 0° 21'

2+00 ✓ 2° 47'

+50 ✓ 5° 14'

3+00 ✓ 7° 40'

+50 ✓ 10° 06'

4+00 ✓ 12° 32'

+50 ✓ 14° 59'

5+00 ✓ 17° 25'

6+00 ✓ 19° 51'

2° 26'
2° 26'
2° 26'
2° 26'
2° 26'
2° 26'
2° 26'
2° 26'

2.926"
per Foot.

40+227 Back

40+00 B.C. Ahead

10° C.R.

Note: See Curve.

B.C. 8+983

30+80

Passing Track - Burner
New Curve

$11^{\circ}18' CR,$
 $\Delta 42.04'$
 $S.T. = 194.7$
 $L.C. = 372.3$

B.C. = $0+25.5$

$0+50$

$1+00$

$1+50$

$2+00$

$2+50$

$3+00$

$3+50$

E.C. $3+97.8$

Eg { $5+11.8$ Back =
 $0+00$ ahead.

Passing Track
Curve at Burner

B.C. $0+00$

$10^{\circ} CR$
 $\Delta 42.04'$
 $T. 220.3$
 $L. 420.7$

$+50' - 2^{\circ}30'$
 $1+00' - 5^{\circ}00'$
 $+50' - 7^{\circ}30'$
 $2+00' - 10^{\circ}00'$
 $+50' - 12^{\circ}30'$
 $3+00' - 15^{\circ}00'$
 $+50' - 17^{\circ}30'$
 $4+00' - 20^{\circ}00'$

E.C. $+20.2 - 21^{\circ}00'$

$5+09.5 =$ Back
 $0+00 =$ Ahead

C.S. No. 31/238

②

R. R. Spur, Passing Track

B.C. 84534

9+00	2° 10 ⁵ '	2° 26 ³ '			
+ 50	4° 36 ⁸ '	2° 26 ³ '			
10+00	7° 13 ¹ '	2° 26 ³ '			
+ 50	9° 39 ⁴ '	2° 26 ³ '			
11+00	12° 05 ⁷ '	2° 26 ³ '			
+ 50	14° 32 ¹ '	2° 26 ³ '			
12+00	16° 58 ³ '	2° 26 ³ '			
+ 50	19° 24 ⁶ '	2° 26 ³ '			
13+00	21° 50 ⁹ '	2° 26 ³ '			
+ 50	24° 17 ² '	2° 26 ³ '			
14+00	26° 43 ⁵ '	1° 57 ⁰ '			
X 14+40	28° 40 ⁵ '				
on Prof Line					

485.13
0.27
484.86
7.08
491.94
4.65
497.29
3.92
491.21

100
37.6
62.4

Passing Track Levels

①

Passing Track Levels

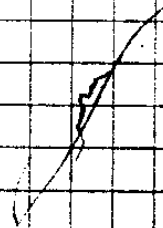
		491.21			
37+00	Dumped		8.2	483.0	
38+00			7.3	483.7	
39+00			6.9	484.3	
40+00			5.8	485.4	
40+21 ³		Back } Eq.		5.4	485.8
40+00	Ahead }				

On 29+00 5.49 cut. 490.35 Fill Sub Grade El 484.86

31+32.9 =	+3.2 ✓		483.2	4.0	486.4
H.B. 0+00					
P.F. 0+80.6	+2.7 ✓		484.3	3.4	487.0
1+00	+2.5 ✓		484.5	3.4	487.0
B.C. +42.7	+2.4 ✓		484.7	3.3	487.1
+50	+2.0 ✓		484.8	3.6	486.8
T.P.			2.47		487.88

	6.03	493.91			
2+00	cut +2.2	Fill	485.0	6.7	487.2
+50	+0.1 ✓			8.8	485.1
+63		-3.6		12.5	481.4
+72	+0.3			8.6	485.3
3+00	+1.6 ✓			7.3	486.6
+50	+3.6 ✓			5.3	488.6

Passing Track



$$\begin{array}{r} 490.35 \\ 3.6 \\ \hline 486.75 \end{array}$$

1450

C. & E. No. 31/238

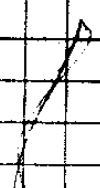
②

Passing Track Levels

Sta	+ Cut.	H.I.	- sub-Grd. Elev.	Rd.	El.
		493.91	485.00		
4+00	+5.7	Fill		3.2	490.7
+50	+7.2			1.7	492.2
5+00	+3.9			5.0	488.9
E.C. +376	+0.7			8.2	485.7
T.P.			7.39		486.52
	2.28	488.80			
6+00		-1.3		5.1	483.7
7+00		-0.6		4.4	484.4
8+00		-0.4		4.2	484.6
T.P.			3.56		485.24
Top Stake 8+00	5.91	491.15			
B.C. 8+554	+0.3			5.9	485.3
9+00	+1.1			5.1	486.1
+50	+1.5			4.7	486.5
10+00	+1.7			4.5	486.7
+50	+2.5			3.7	487.5
11+00	+3.1			3.1	488.1
T.P.			2.17		488.98
	5.63	494.61			
11+50	+3.4			6.2	488.4
12+00	+4.0			5.6	489.0

485.24	488.8
5.91 +	4.2
491.15	484.6
6.6	
484.6	

11+00



 C.S. No. 31/23A

N	S	E	W
1575.2 ✓		20.4 ✓	18.0 ✓
147.8 ✓		23.9 ✓	
52.0 ✓			22.0 ✓
32.9 ✓			3.9 ✓
127.5 ✓	<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> Levels </div>		41.3 ✓
155.6 ✓			74.5 ✓
101.1 ✓			42.8 ✓
212.9		73.3	200.5
117.2 ✓			0.6 ✓
144.2 ✓		52.4 ✓	18° 38'
75.5 ✓		26.7 ✓	25 8
86.4 ✓		59.3 ✓	24 96
2610.1 ✓			2530
		232.7 ✓	240
		203.1 ✓	2350

N 00° 05' W
 26400 - Dep. 3.3 W

U.S. Fish No. 311220

Sta. ①	+ BS	R.R. Spur Levels		Elev.	① B.M. 45.65
		H.I.	FS		
	2.35	479.75			477.40
T.P.			12.19	467.56	
	3.30	470.86			
T.P.			12.41	458.45	
	6.90	465.35			
T.P.			10.80	454.55	
	0.85	455.40			
#4-T.P.			11.25	444.15 ✓	Bolt. on S.E. Side Bridge
	4.57	448.72			
T.P.			0.40	448.32	
	7.30	455.62			
B.M.	on East Curb of South Track		6.87	448.75 ✓	
H.B. Top Rail		449.81	6.31	449.31	
P.F. " "		Grade	5.32	450.31	
1+00 B.C. Hub.		448.5	5.12	450.50 ✓	
1+50		449.1	5.9	449.7	
2+00		449.7	4.4	451.2	
+50		450.3	4.7	450.9	
BC 2+80		450.8	4.3	451.3	
T.P. Top 2+80			3.66	451.96 ✓	
	6.33	458.29 ✓			
BC, 3+67.3			4.70	453.59 ✓	

2

1400	+2.0
+50	+1.5
2+00	+1.5
+50	+0.6
+80	+0.7

450.50
5.40
<hr/>
455.90 HI
4.90
<hr/>
451.00

450.6
 451.0
 451.0

C.S. No. 31/230

2.35
3.30
6.90
0.85
13.40

12.19
12.41
10.80
11.25
46.65
13.40
33.25

77.20
33.25
43.95

0.40
5.87
6.27

4.57
7.30
11.87
7.27
4.80
44.95
448.75

55.62
48.75
6.87

3.66
45.09
451.96
6.38
458.29
41.70
453.59

186
29000

4503
448.5
2.0

C. S. File No. 31/23A

②	+ BS.	R. R. Spur Levels			②
		HI.	FS.	Elev	
		458.29			
4+00	4.1.		4.1	454.2	
T.P. 450			3.86	454.43 ✓	
	8.97	463.40 ✓			
4+50			8.4	455.0	
4+86.2	Ext.		8.7	454.7	
5+00			8.3	455.1	
+50			6.7	456.7	
E.C. 6+05.2			5.3	458.1	
7+00.7	See Page 9		5.7	457.7 ✓	
T.P.			1.67	461.73 ✓	
	5.62	467.35 ✓			
7+77.2	E 2 nd on pavement		7.94	459.41	
B.M.					
Int. Mon. E 3 rd St First Ave S.			7.56	459.79	
8+30			6.2	461.2	
T.P.			2.28	465.07 ✓	
	3.22	468.29 ✓			
9+50			6.5	461.8	
	8.98	474.05 ✓			T.P. 465.07 ✓
10+00			8.2	465.8	
11+00			4.0	470.0	

77.2
51

9+28

458.29
3.86

454.43
8.97

463.40
1.67

461.73
5.62

467.35
2.78

465.07
3.22

468.29

65.07
8.98
74.05

465.07
8.98
474.05

	Grade
6+05.2	455.9
6+50	456.9
7+00	457.9
7+50	458.9
8+00	459.9
8+50	460.9
9+00	461.9
9+50	462.9
10+00	463.9
10+50	464.9

G & M No. 31/23A

③

R. R. Spur, Levels

474.05

11+37.2

1.34 472.71

East 3rd St.

T.P. Int.

E 3rd + E 1st Ave
South

1.17 472.88

11.10 483.98

11+67.2

9.5 474.4

12+00

4.7 479.2

BC 12+37.2

4.2 479.7

+50

4.6 479.3

13+00

2.6 481.3

+50

5.8 478.1

14+00

6.7 477.2

T.P.

5.77 478.21

7.52 485.73

+50

8.1 477.6

15+00

8.4 477.3

+50

4.4 481.3

16+00

4.1 481.6

EG. + 47.2

2.4 483.3

T.P.

1.32 484.41

7.83 492.24

Remainder

SPUR LEVELS
0+00 TO
17+00

C.S. No. 3123A

Sta	+	H.I.	-	Rod	Elev.
			Grade		
	5.18	493.68			488.50
0+00			487.3	5.6	488.1
+50			487.6	4.2	489.6
1+00			487.9	3.5	490.2
+50			488.0	4.2	489.6
2+00			488.2	4.8	488.9
+50			487.8	4.9	488.8
3+00			487.4	5.8	487.9
+50			486.8	6.6	487.1
4+00			486.3	7.5	486.2
T.P.		488.04		7.46	786.22
	1.86	489.08			
4+50			485.5	2.8	485.3 486.3
5+00			484.7	3.0	485.1 486.1
+40			483.9	3.3	484.8 485.8
6+00			483.0	4.3	484.8 483.8
7+00			481.3	7.4	481.7 480.7
8+00			479.5	10.2	478.9 477.9

4

- + 0.8
- + 2.0
- + 2.9
- + 1.6
- + 0.7
- + 1.0
- + 0.5
- + 0.3
- + 0.1

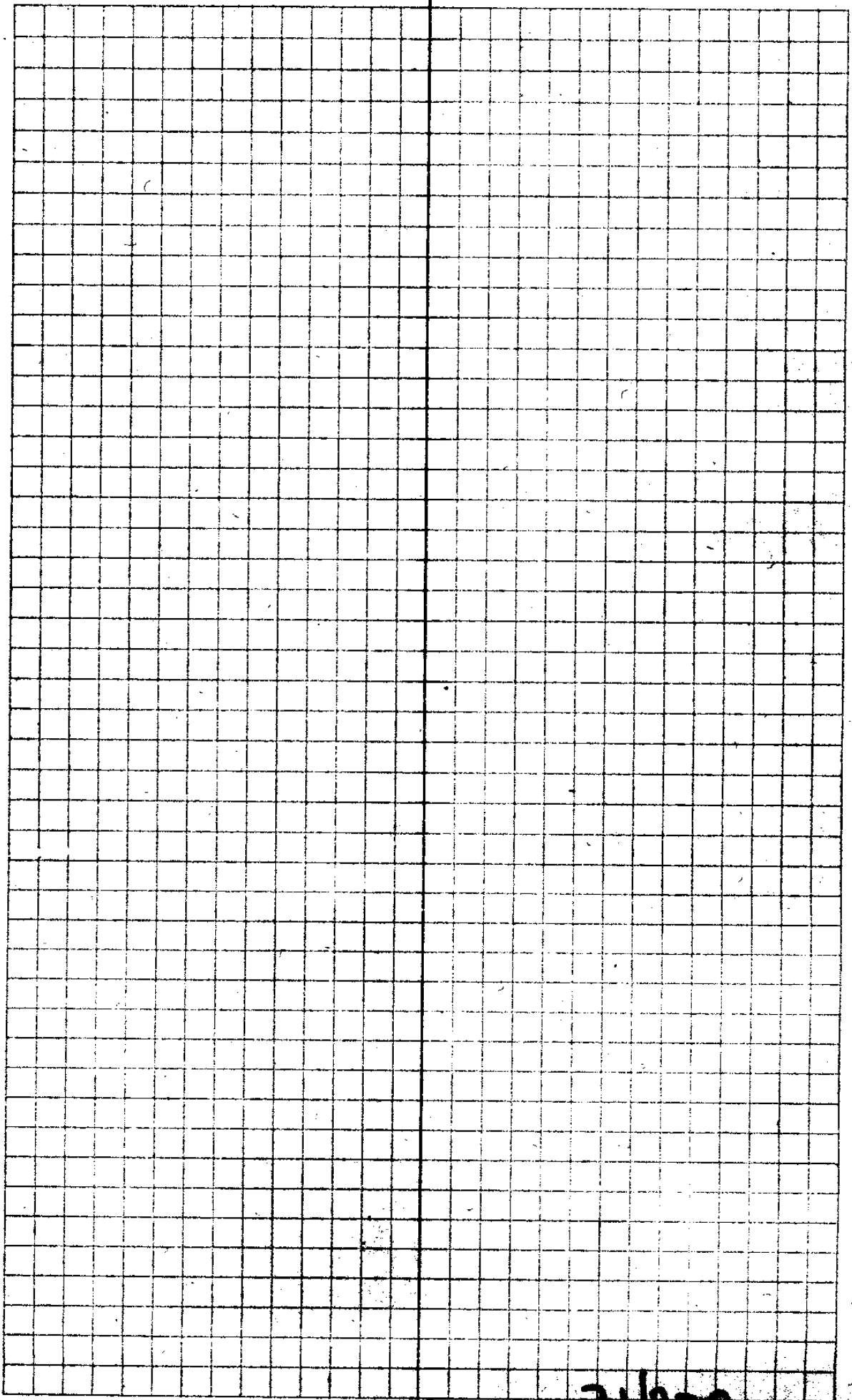
86.22
1.96

88.08

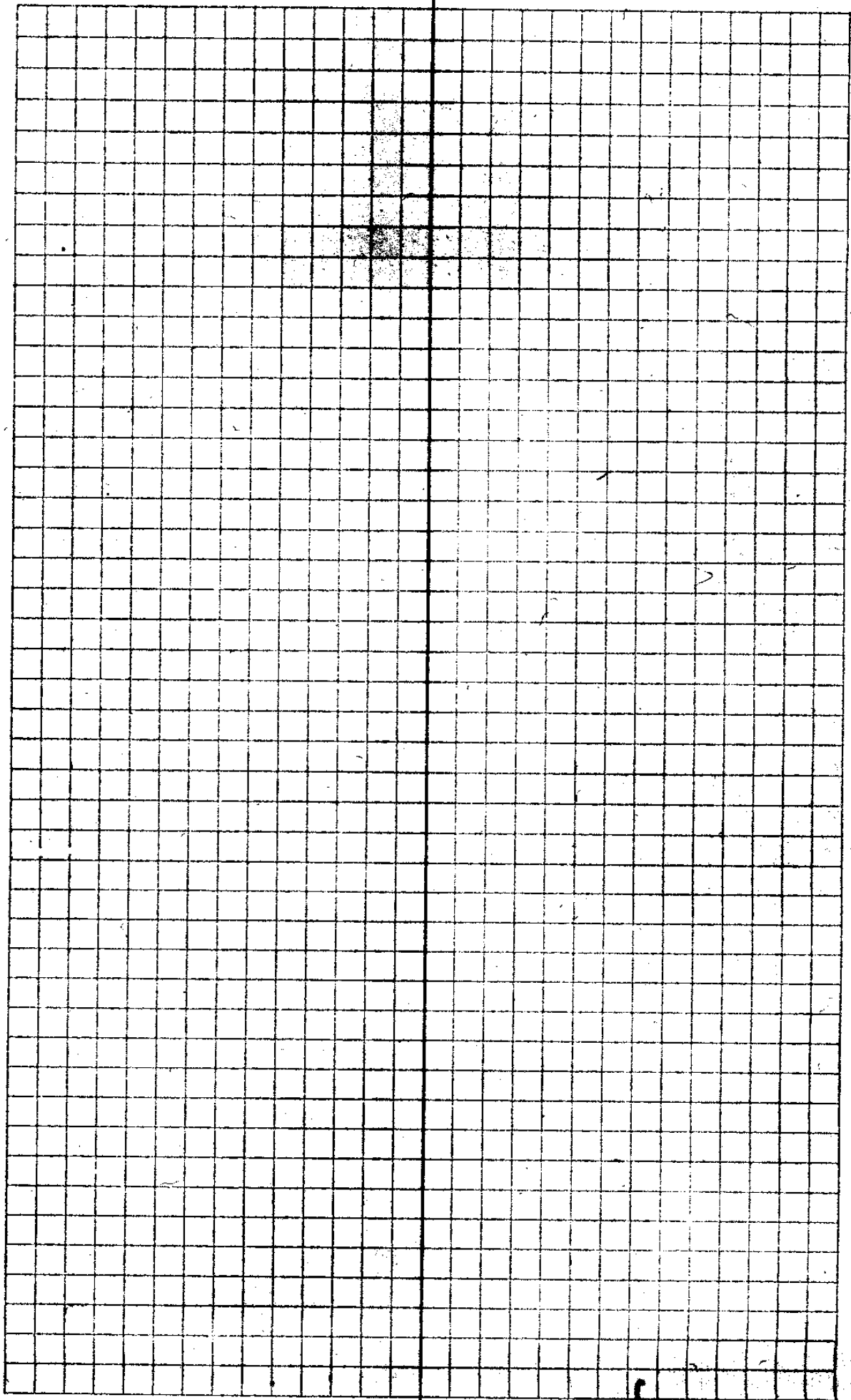
C.S. No. 31/23A

Profile R.R. Spur

	3.98	492.48		488.50
BC 39+85			6.0	486.5
40+00			5.8	486.7
+50			6.0	486.5
41+00			7.8	484.7
+50			7.5	485.0
42+00			7.2	485.3
+50			5.4	487.1
43+00			4.4	488.1
+50			3.7	488.8
	5.08	493.58		488.50
44+00			4.6	489.0
+50			5.7	488.9
45+00			4.5	489.1
EC. 45+46.2			4.3	489.3
46+16.5			3.6	490.0
3+50				
T.P.			2.78	490.80
	1.62	492.42		
3+00			3.00	489.42
2+50			3.50	488.9
2+00			4.20	488.20



C. S. File No. 31/23A



G.S. No. 31/23A

Sta	+	H.I.	- Sub Grade	Rod	Elev.
	8.54	467.95			459.41
8+00			459.8	7.4	460.6
+50			460.8	6.2	461.8
9+00			461.8	5.0	462.9
+50			462.8	4.1	463.9
10+00			463.8		
+50			464.8	0.9	467.1
11+00			465.8	0.3	467.7
T.P.				0.17	467.78
	7.07	474.85			
B.C. 12+50 ⁵			468.7	4.6	470.3
B.M.				1.63	473.22
13+00			469.4	4.5	470.4
+50			470.0	4.4	470.5
T.P.				4.22	470.63
	5.04	475.67			
14+00			470.3	5.3	470.4
+50			470.8	5.0	470.7
15+00			470.6	5.1	470.6
+50			470.6	4.9	470.8

♀

E. 2nd on pavement

+ 0.8

+ 1.0

+ 1.1

+ 2.3

+ 1.9

+ 1.6

Top of large rock L. Sta. 12+40

+ 1.0

+ 0.5

+ 0.1

+ 0.2

0.0

+ 0.2

C.S. File No. 31/23A

Sta	+	H.I.	Sub	-	Elev.
		475.67	Grade		
16+00			470.6	4.9	470.8
+50			470.6	5.2	470.5
E.C.					
16+87.4			470.6	4.7	471.0
T.P.				2.20	473.47
	3.04	476.51			
17+00			470.6	5.4	471.1
+50			470.6	5.3	471.2
18+00			470.6	5.1	471.4
+50			470.6	5.2	471.3
B.C.					
19+03.5			470.6	4.8	471.7
+50			470.6	5.5	471.0
20+00			470.6	5.9	470.6
+50			470.6	6.0	470.5
T.P.				5.15	471.36
	5.09	476.45			
21+00			470.6	5.7	470.8
+50			470.6	4.8	471.7
22+00			470.6	4.5	472.0
+50			470.6	4.4	472.1
E.C.					
+95.6			470.6	4.4	472.1
T.P.				3.87	472.58
	4.91	477.49			

Φ

+ 0.2

- 0.1

+ 0.4

On Rock

+ 0.5

+ 0.6

+ 0.8

+ 0.7

+ 1.1

+ 0.4

0/0

- 0.1

+ 0.2

+ 1.1

+ 1.4

+ 1.5

+ 1.5

CE No. 31/23A

Sta	+	H.I.	-	Elev.	
		477.49			
			Sub. Grade		
BC.					
23+60			470.6	5.2	472.3
24+00			470.7	5.5	472.0
+50			470.9	5.0	472.5
25+00			471.4	4.8	472.7
+50			471.9	4.4	473.1
26+00			472.7	3.6	473.9
T.P.				3.31	474.18
	5.66	479.84			
26+50			473.7	5.6	474.2
27+00			474.7	4.0	475.8
+50			475.7	4.1	475.7
28+00			476.7	2.4	477.4
T.P.				5.00	474.84
	8.37	483.21			
BM				6.32	476.89
29+00			478.7	4.3	478.9
30+00			480.7	2.4	480.8
T.P.				1.77	481.44
	7.05	488.49			
31+00			482.7	5.7	482.8

±

+ 1.7

+ 1.3

+ 1.6

+ 1.3

+ 1.2

+ 1.2

+ 0.5

+ 1.1

0.0

+ 0.7

S. End Culvert

N. End Culvert

+ 0.2

+ 0.1

+ 0.1

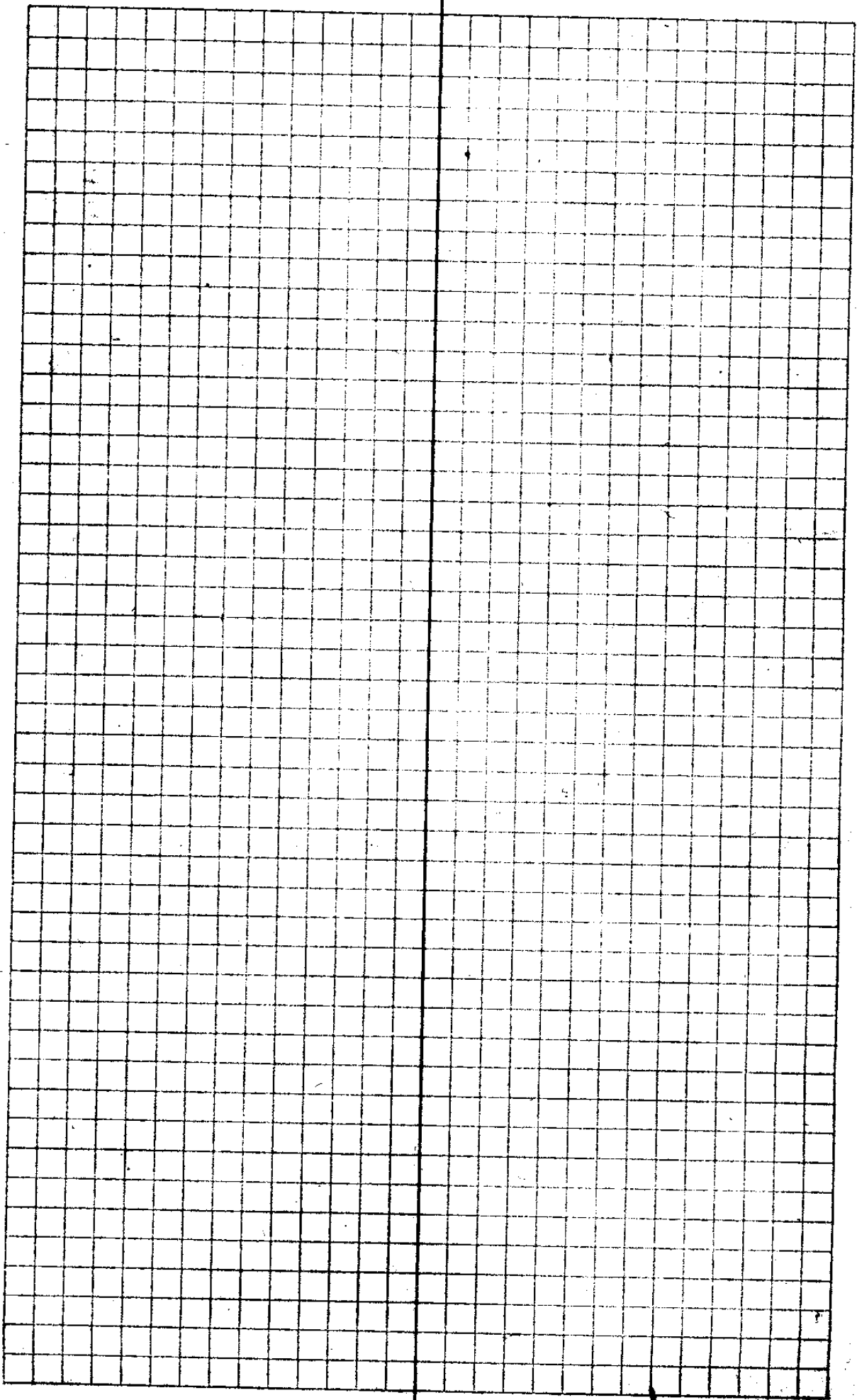
C. S. No. 3123A

- 0.1

- 0.1

+ 0.1

G.S. No. 31/22A



C. S. File No. 31/22A

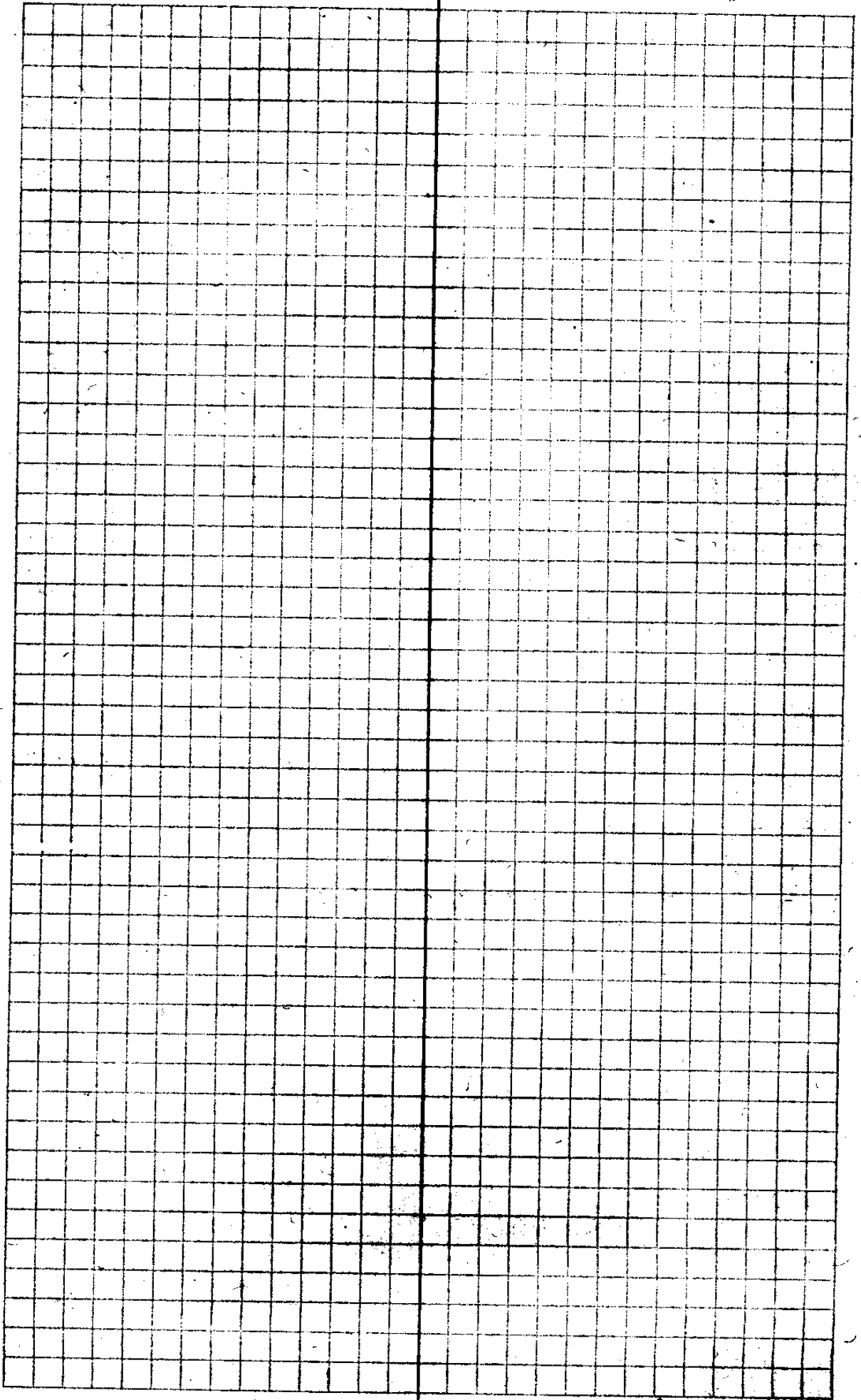
Sta	*	H.I.	-	Elev.
				448.75
	6.38	455.13		
T.P.			3.35	451.78
	7.20	458.98		
			5.9	453.1
	7.07	455.82		448.75
Top Rail 1+44			4.51	451.31
	6.08	457.39		
4+00			2.73	454.66
+20			2.38	255.01
+50			1.87	255.52
On St. Grade			1.9	455.5

$$\begin{array}{r} 448.75 \\ 7.07 \\ \hline 455.82 \\ 4.51 \\ \hline 451.31 \end{array}$$

Top Rail

C. S. File No. 31/239

Sta	+	H.I.		Rod	Elev.
	7.05	455.80			448.75
Top Rail Frog Point B.C. 0+94 L				5.24	450.56
				6.2	449.6
1+50				5.9	449.9
+75				5.3	450.5
2+00				5.2	450.6
+25				4.9	450.9
+50				4.6	451.2
E.C. 2+72.8				4.3	451.5
3+00				4.1	451.7
+50				3.4	452.4
B.C. +67.2				3.0	452.8
T.P.			2.71		453.09
	7.60	460.69			
4+00				7.0	453.7
+50				6.3	454.4
5+00				5.7	455.0
+50				5.1	455.6
E.C. 6+05.2				4.2	456.5
T.P.			3.28		457.41
	6.30	462.71			



C.S. File No. 31/23A

		463.71		
6+50			5.9	457.8
7+00			5.0	458.7
Cent.				
E. 2nd			4.31	459.40
7+77 2				
	8.21	468.00		459.79
7+50			8.3	459.7
8+00			7.2	460.8
+50			6.2	461.8
9+00			5.1	462.9
+50			4.3	463.7
10+00			3.2	464.8
+50			1.8	466.2
T.P.			1.00	467.00
	7.72	474.72		
11+00			8.0	466.7
+50			6.7	468.0
12+00			5.8	468.9
B.M.			1.51	473.21
11+27	1.98	475.19		
11+37			6.40	468.8
B.C. 12+51 1			5.4	469.8

On Pavement

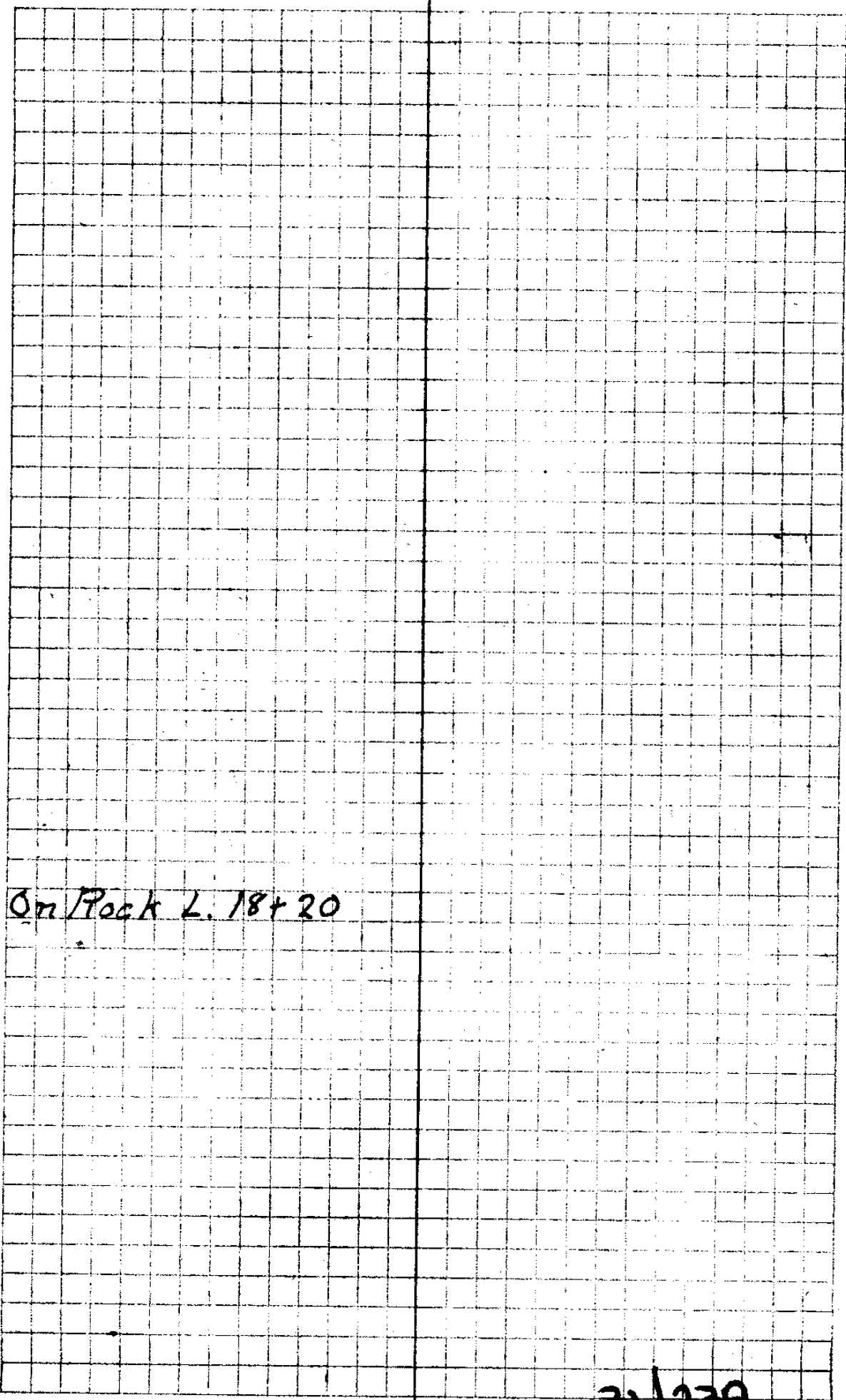
St. Man 1st Ave & 2nd St

On Rock Sta. ^{Left} 1240

473.22

Top Rail 3rd St.

C. S. No. ~~3123A~~



Om Pock L. 18+20

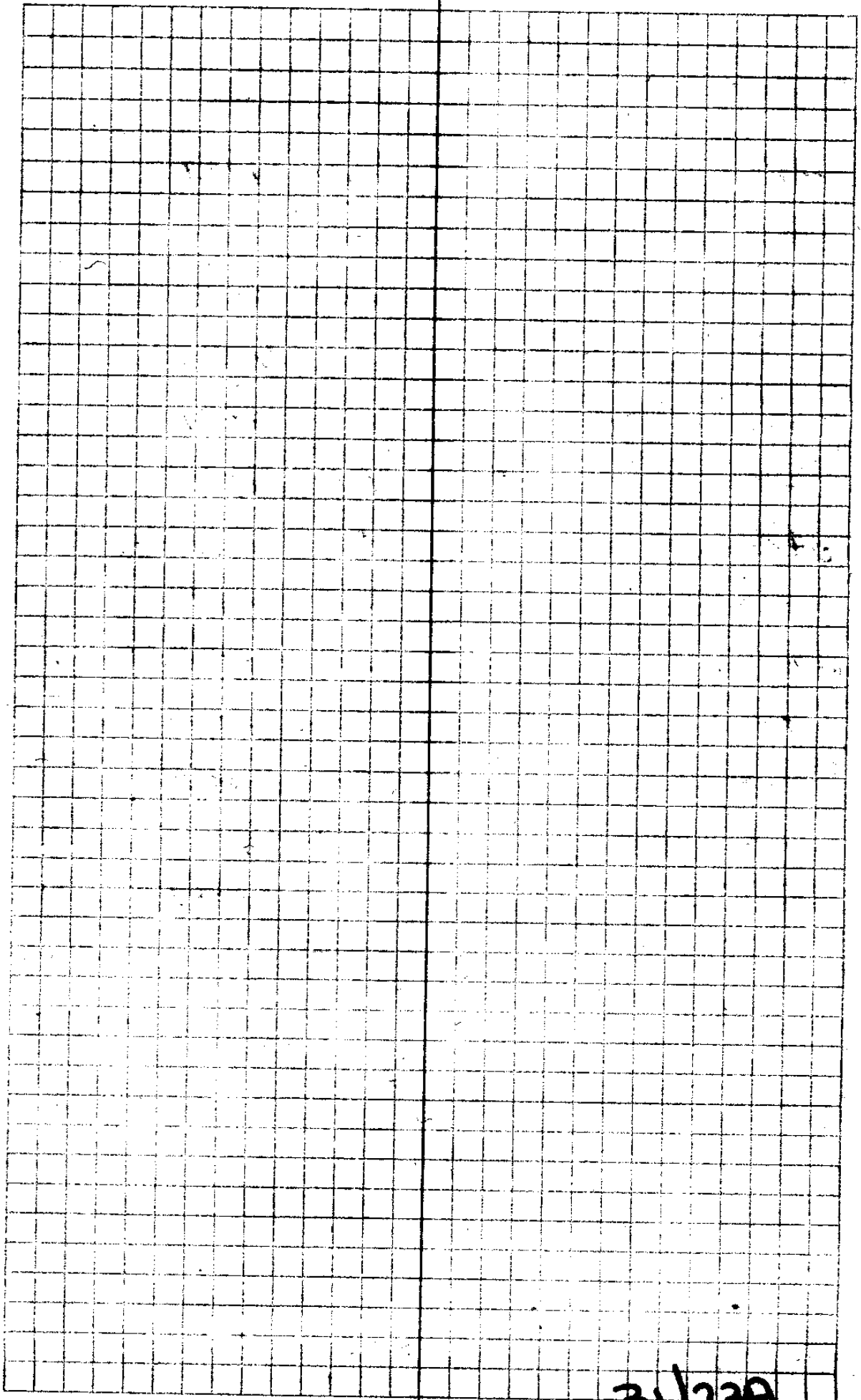
C.S. Bl. No. 31/23A

Passing Track Levels. (Burner)

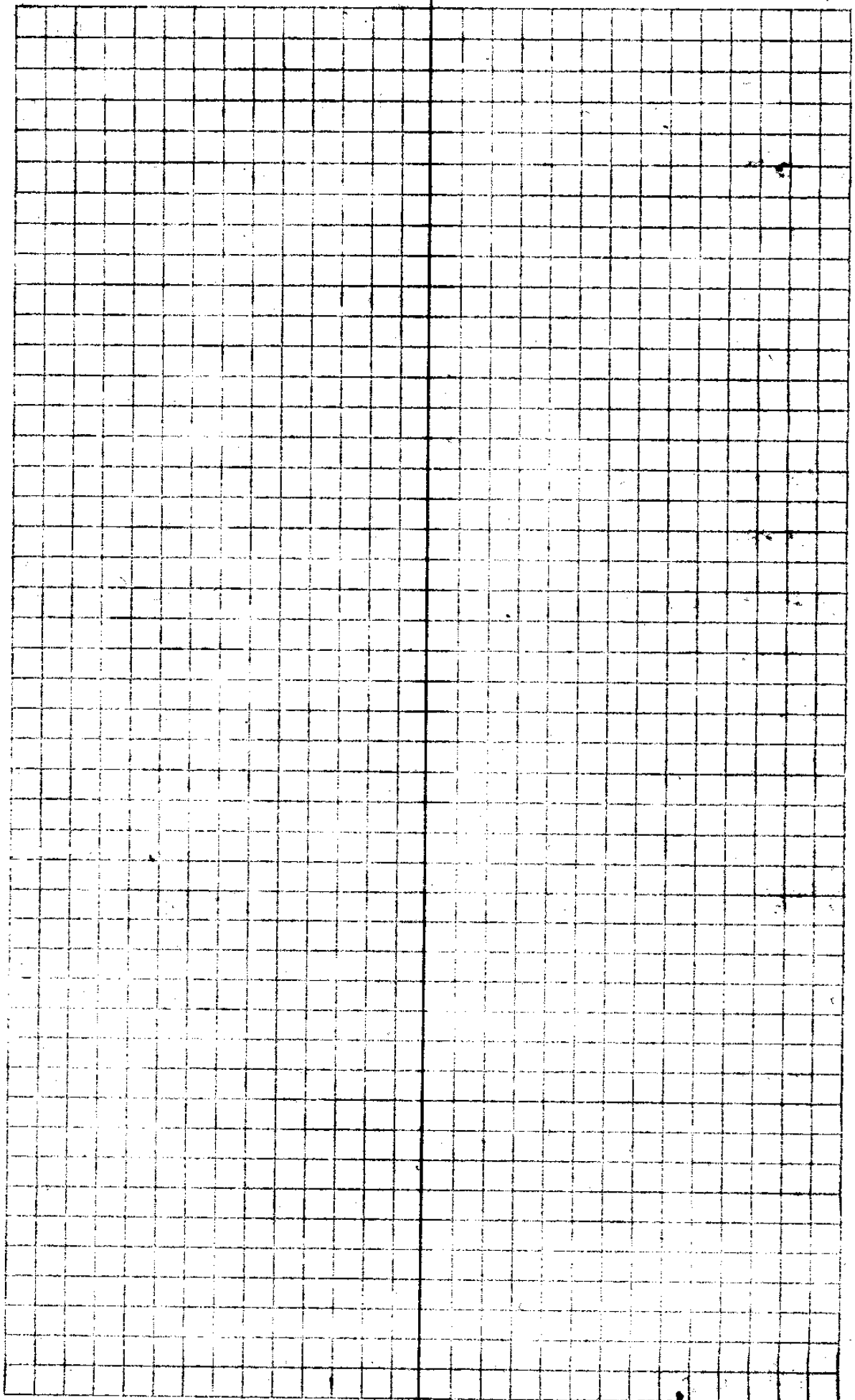
B.M 488.5

	3.56	492.0			
-100			5.2	486.9	
-50			5.2	486.9	
0+00 B.C.			5.4	486.7	
+50			5.5	486.6	
1+00			4.9	487.2	
+50			5.3	486.8	
2+00			5.4	486.7	
+50			5.1	487.0	
3+00			4.7	487.4	
+50			5.1	487.0	
4+00			3.7	488.4	
+20 ⁷ E.C.			3.5	488.6	
+50			3.7	488.4	
5+09.5 = Back			3.7	489.1	
0+00 =					

Top Rail
 4.3 487.3



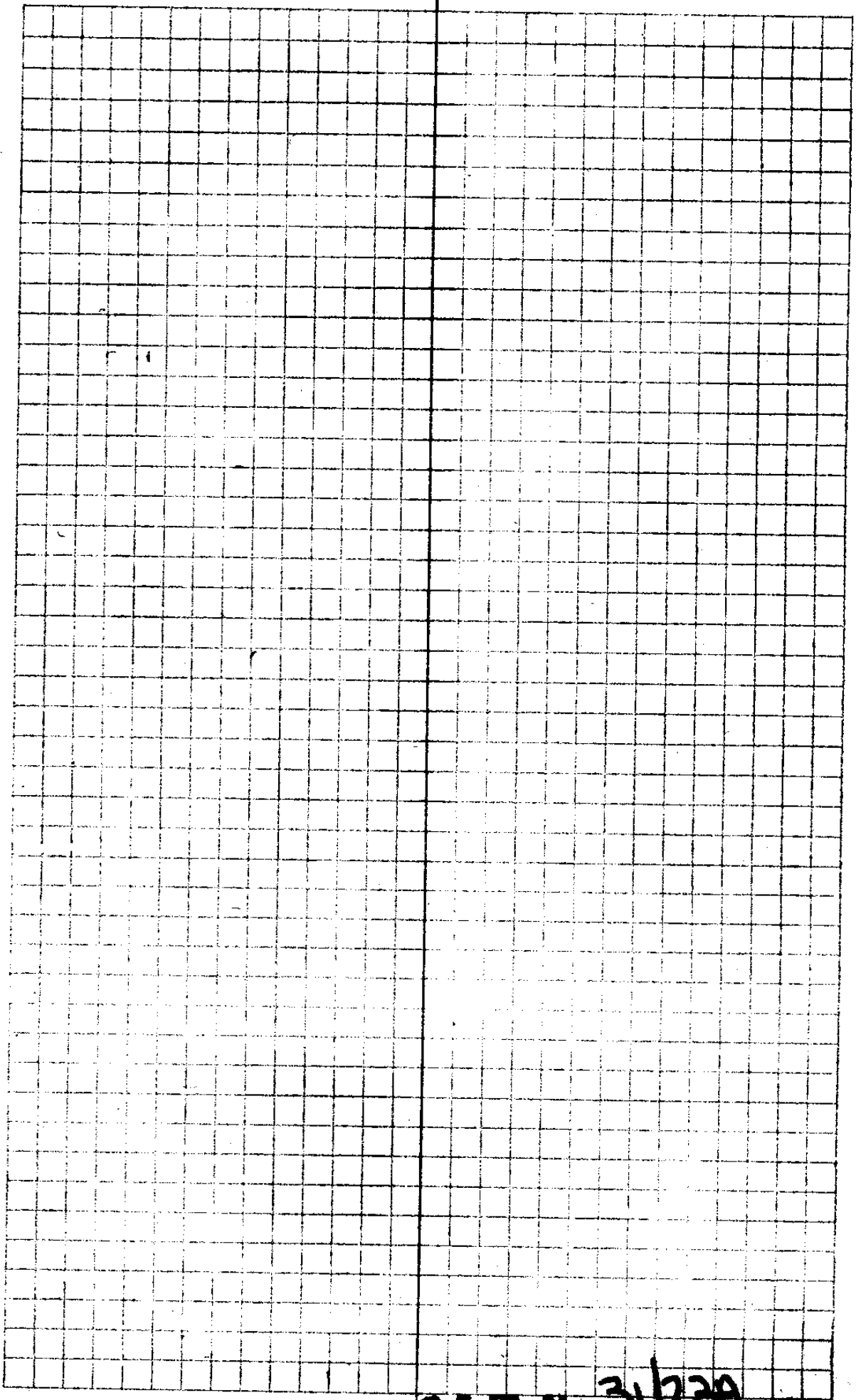
G.S. PHS No. 31/22A



G. E. P. No. 31/239

Main Line (Deck)

		492.35	(From H.I.)	(Passing Track Deck)	
- 45'			7.7	484.7	✓
= 137'			9.0	483.4	✓
0+00	B.C.		8.9	483.5	✓
+ 50			8.1	484.3	✓
1+00			7.2	485.2	✓
+ 50			6.0	486.4	✓
2+00			5.7	486.7	✓
+ 50			4.9	487.5	✓
3+00	E.C.		5.3	487.1	
+ 50	= }		5.0	487.4	
46+165					
① 45+468	E.C.		3.10	489.25	
	4.20	493.45			
45+00			4.00	489.5	
44+50			5.10	488.4	✓
44+00			5.20	488.3	
43+50			5.60	487.7	
Check on B.M.			4.94	489.51	B.M. 489.50
					488.50
	4.22	492.72			
43+00			5.0	487.7	Grd.
42+50			4.8	487.9	Top. Rail



C. S. No. 31/22A

492.72

42+00

5.32 487.4

41+50

5.12 487.6

41+00

4.86 487.86

40+50

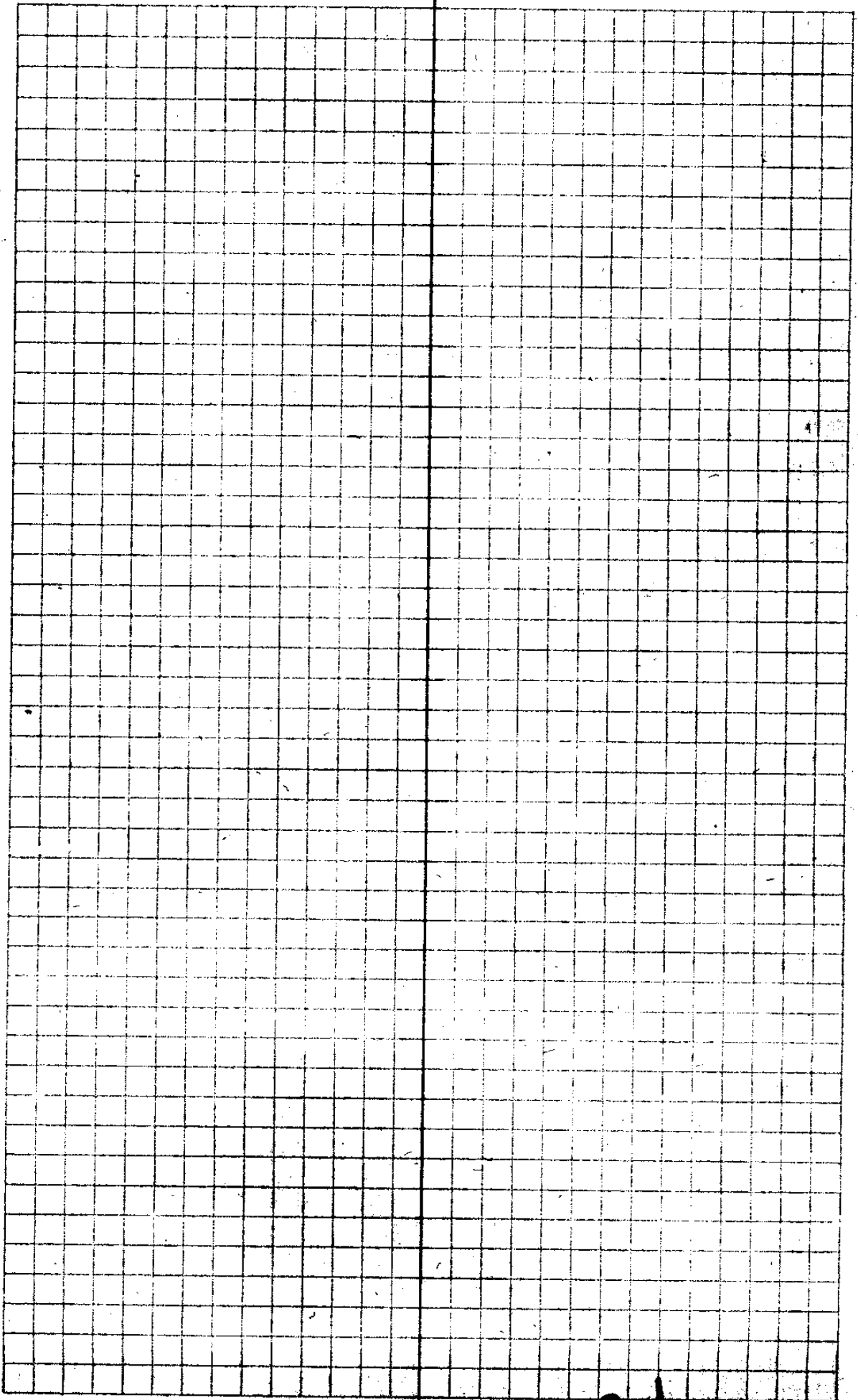
5.27 487.45

40+00

5.10 487.62

39+85

5.13 487.59



C.S. File No. 31/23A

Loading Deck Curve

$11^{\circ}18' C.$

$\Delta 54^{\circ}00'$ Def. 3390 Per. Ft.

$T. 2584$

$L. 4779$

0+00

+50 - $2^{\circ}49\frac{1}{2}'$ ✓

1+00 - $5^{\circ}39'$ ✓

+50 - $8^{\circ}28\frac{1}{2}'$ ✓

2+00 - $11^{\circ}18'$ ✓

+50 - $14^{\circ}07\frac{1}{2}'$ ✓

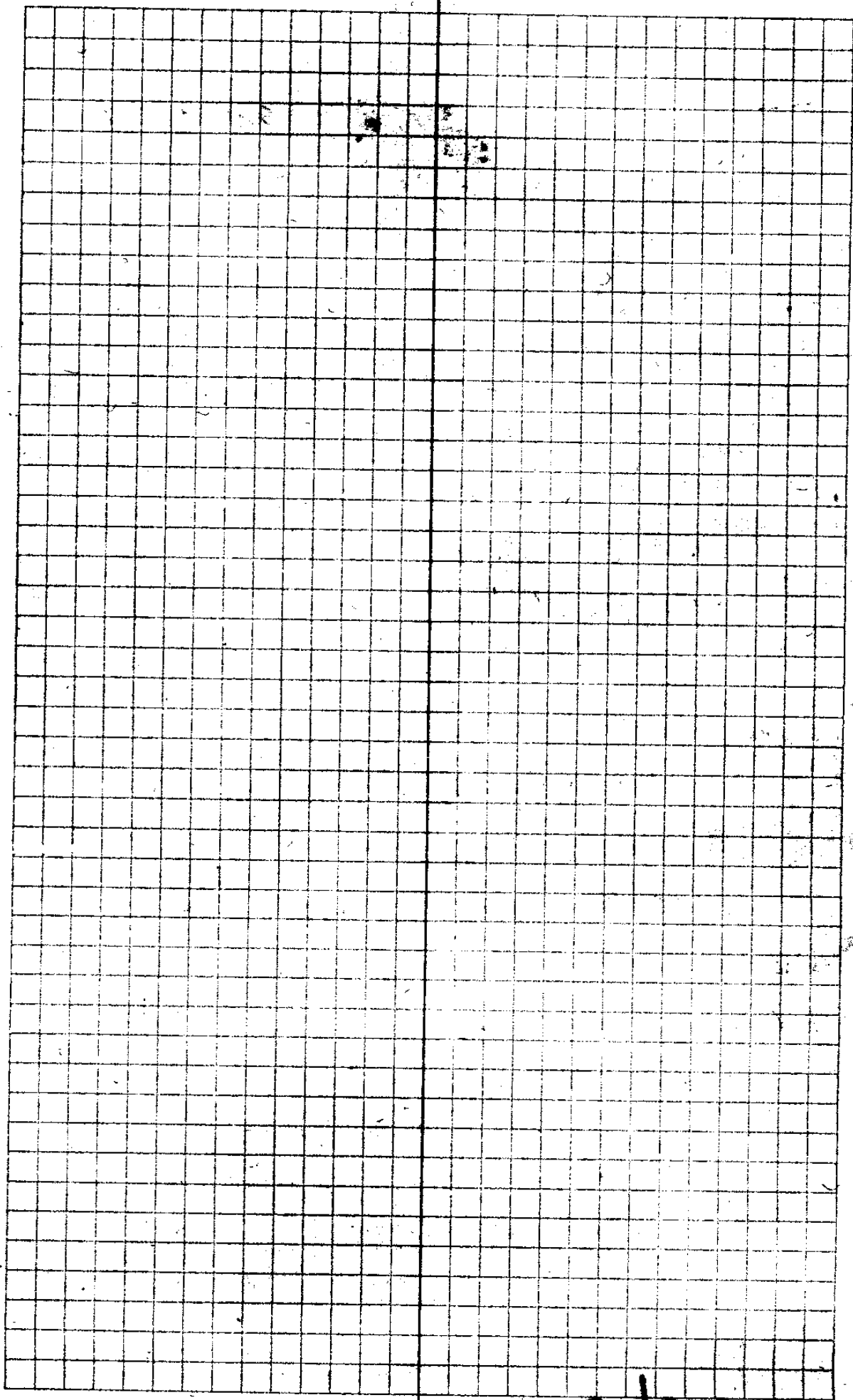
EC 3+00 - $16^{\circ}57'$ ✓

+50 - $19^{\circ}46\frac{1}{2}'$

4+00 - $22^{\circ}36'$

+50 - $25^{\circ}25\frac{1}{2}'$

EC +779 - $27^{\circ}00'$ $1^{\circ}34\frac{1}{2}'$



C. S. File No. 31/23A

$11^{\circ} 03.6' \text{ C.R.}$
 $\Delta = 62^{\circ} 08'$
 $S.T. = 312'$
 $L.C. = 561'$

Def.
 $3.318'$
 per ft.

B.C.	39+85			
	40+00	$0^{\circ} 49'$		
	+50	$3^{\circ} 36'$	$2^{\circ} 46'$	
	41+00	$6^{\circ} 32'$	$2^{\circ} 46'$	✓
	+50	$9^{\circ} 08'$	$2^{\circ} 46'$	✓
	42+00	$11^{\circ} 54'$	$2^{\circ} 46'$	✓
	+50	$14^{\circ} 40'$	$2^{\circ} 46'$	✓
	43+00	$17^{\circ} 26'$	$2^{\circ} 46'$	✓
	+50	$20^{\circ} 12'$	$2^{\circ} 46'$	✓
P.O.C.	44+00	$22^{\circ} 58'$	$2^{\circ} 46'$	✓
	+50	$25^{\circ} 44'$	$2^{\circ} 46'$	✓
	45+00	$28^{\circ} 30'$	$2^{\circ} 46'$	✓
	+50	$31^{\circ} 04'$	$2^{\circ} 35'$	✓
E.C.	46+16.5			

{ 46+16.5 - Main Line =
 { 3+50 - Loading Dock Track.

46 + 16.5
45 + 46.8

69.7

140 40
5 74

856

109146

11'

42 500
17.6

42482.4

13041
504

7054

G.S. No. 31/23A

	R. R. Grade	Top. Rail		
	583	494.43		B.M 488.50
			Top. Rail	Rod
				1' High
1 ✓			488 ¹	6.3
2 ✓			487 ⁸	6.6
3			487 ⁶	6.8
4			487 ³	7.1
5			487 ⁰	7.4
6			486 ⁷	7.7
7			486 ⁵	7.9
8			486 ²	8.2
9	494.43 7.26		485 ⁹	8.5
10	487.17 4.70		485 ⁶	6.3
11	491.87		485 ⁴	6.5
12			485 ¹	6.8
13			484 ⁸	7.1
14 ✓			484 ⁵	7.4
15 ✓			484 ³	7.6
16 ✓			484 ⁰	7.9
17 ✓			483 ⁷	8.2

wrd 5, 0c rod h 27

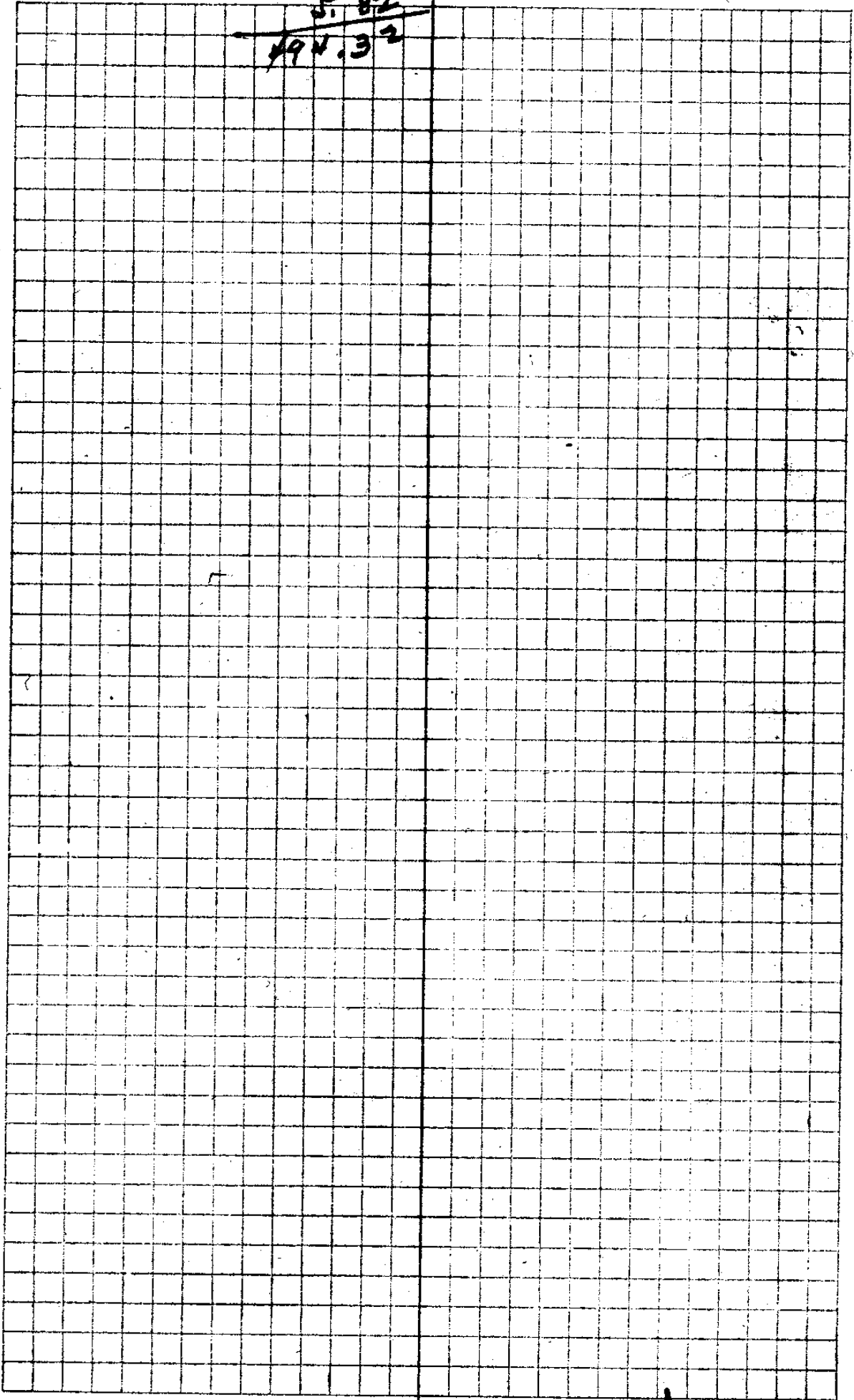
1.37
11
491.87

494.43
7.26
487.17
4.70
491.87

488.50

~~5.82~~

494.32



G.S. No. 31/23A

$\Delta 54^{\circ}00'$

S.T. 291.9

L.C. 540°

10° Lt.

5+095 Back
B.C.

0+00 ✓ Ahead.

+50 ✓ 2°30'

1+00 ✓ 5°00'

+50 ✓ 7°30'

2+00 ✓ 10°00'

+50 ✓ 12°30'

0 3+00 ✓ 15°00'

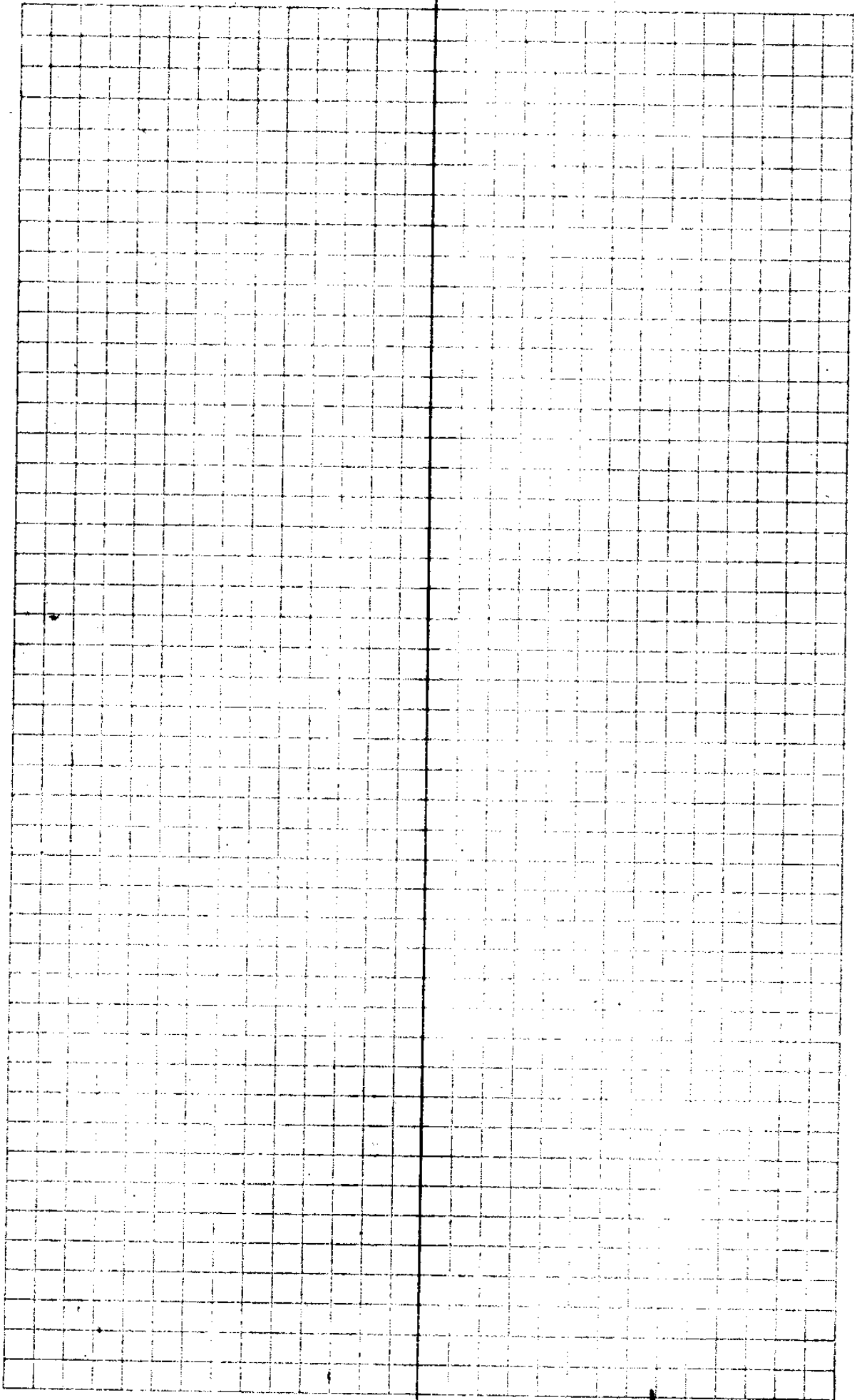
+50 ✓ 17°30'

4+00 ✓ 20°00'

+50 ✓ 22°30'

5+00 ✓ 25°00'

Ec, +40 27°00'



C. S. File No. 31/23A

- Cross-Drop -

Frog.

Δ 12° 21'

P.F. Sta.

7'

10° 30' Rt.

42+32 1/2 Main Line

15'

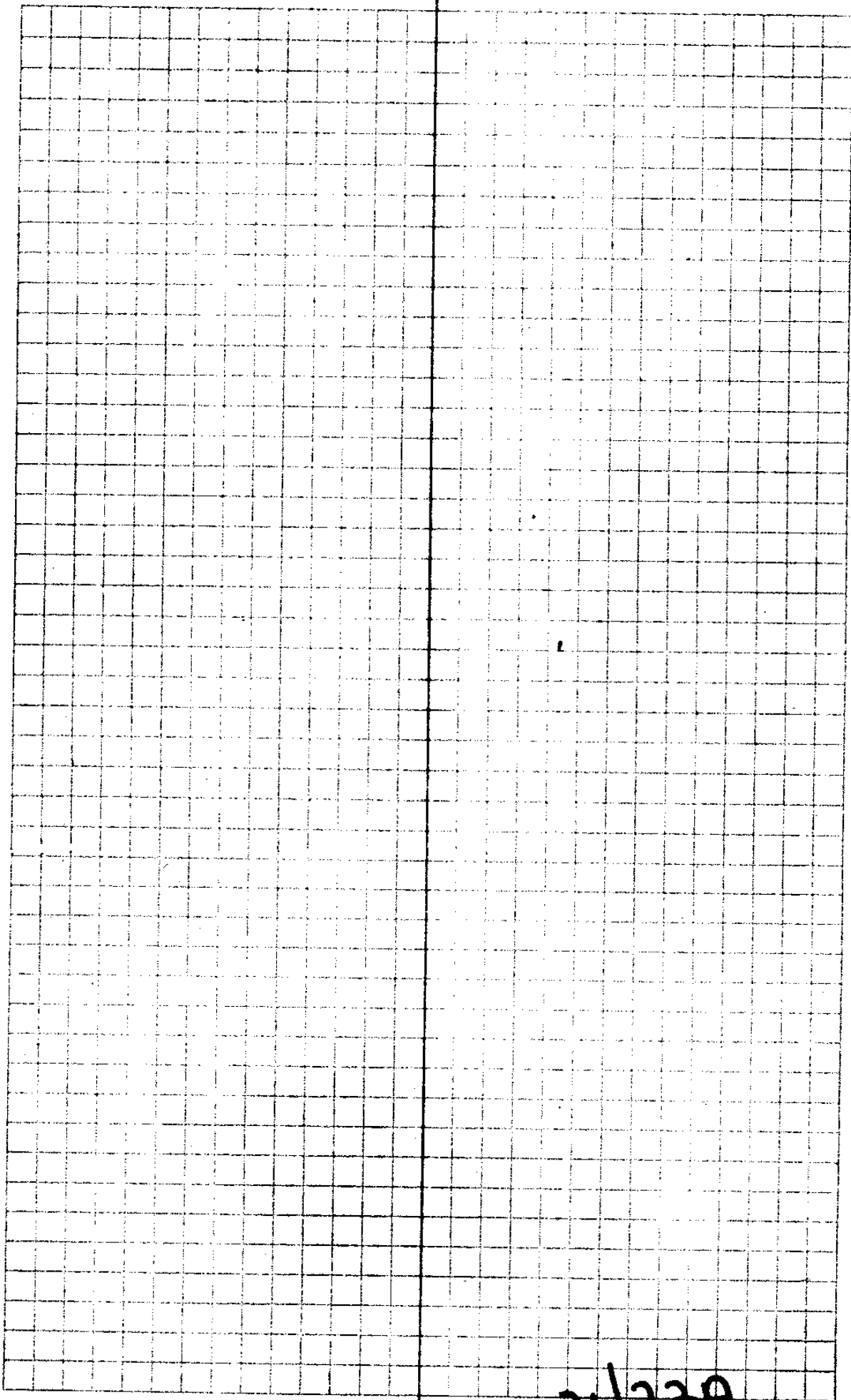
S.T. = 59°

L.C. = 116'

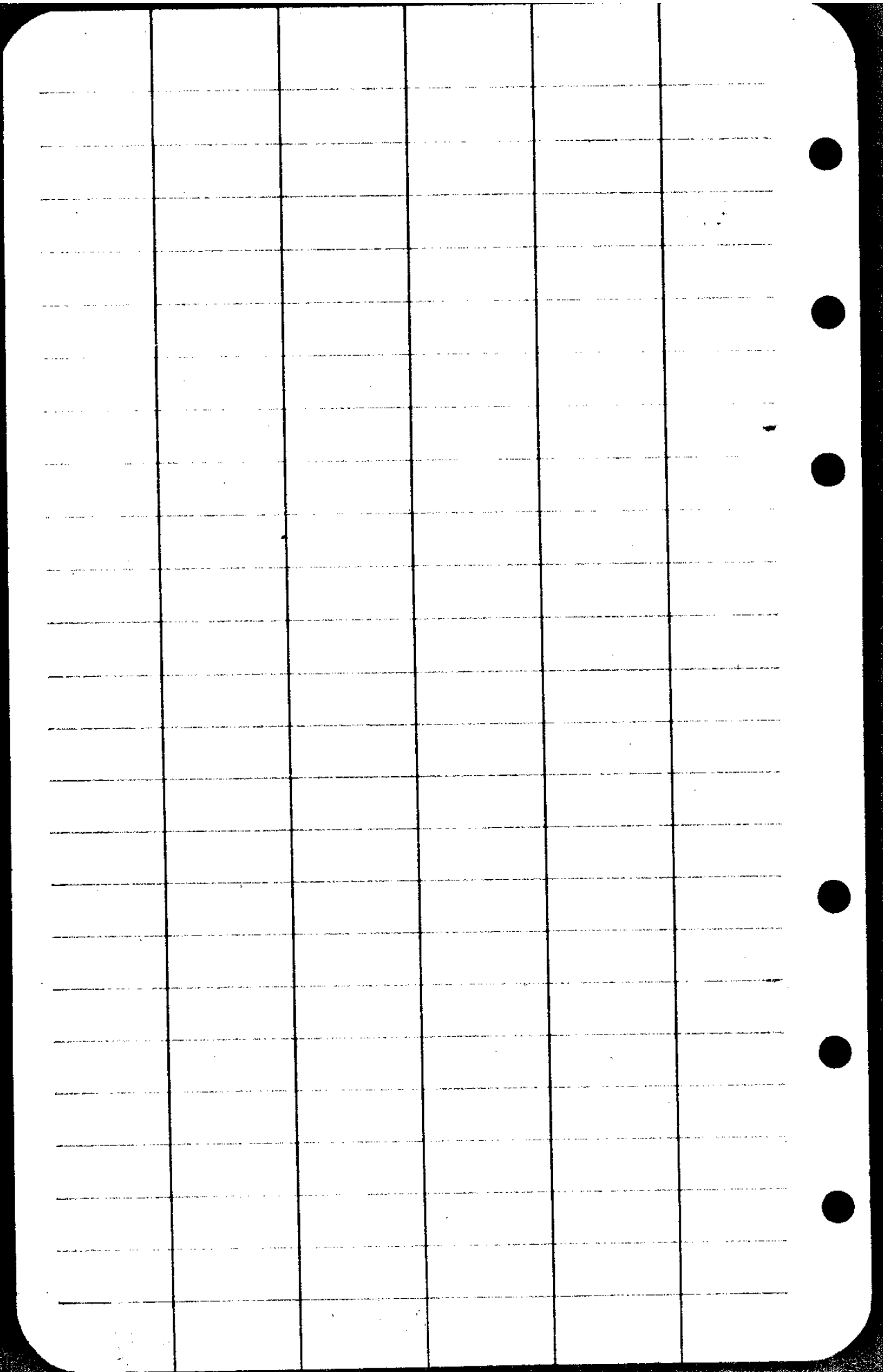
P.F. Sta - Pass. Tr.

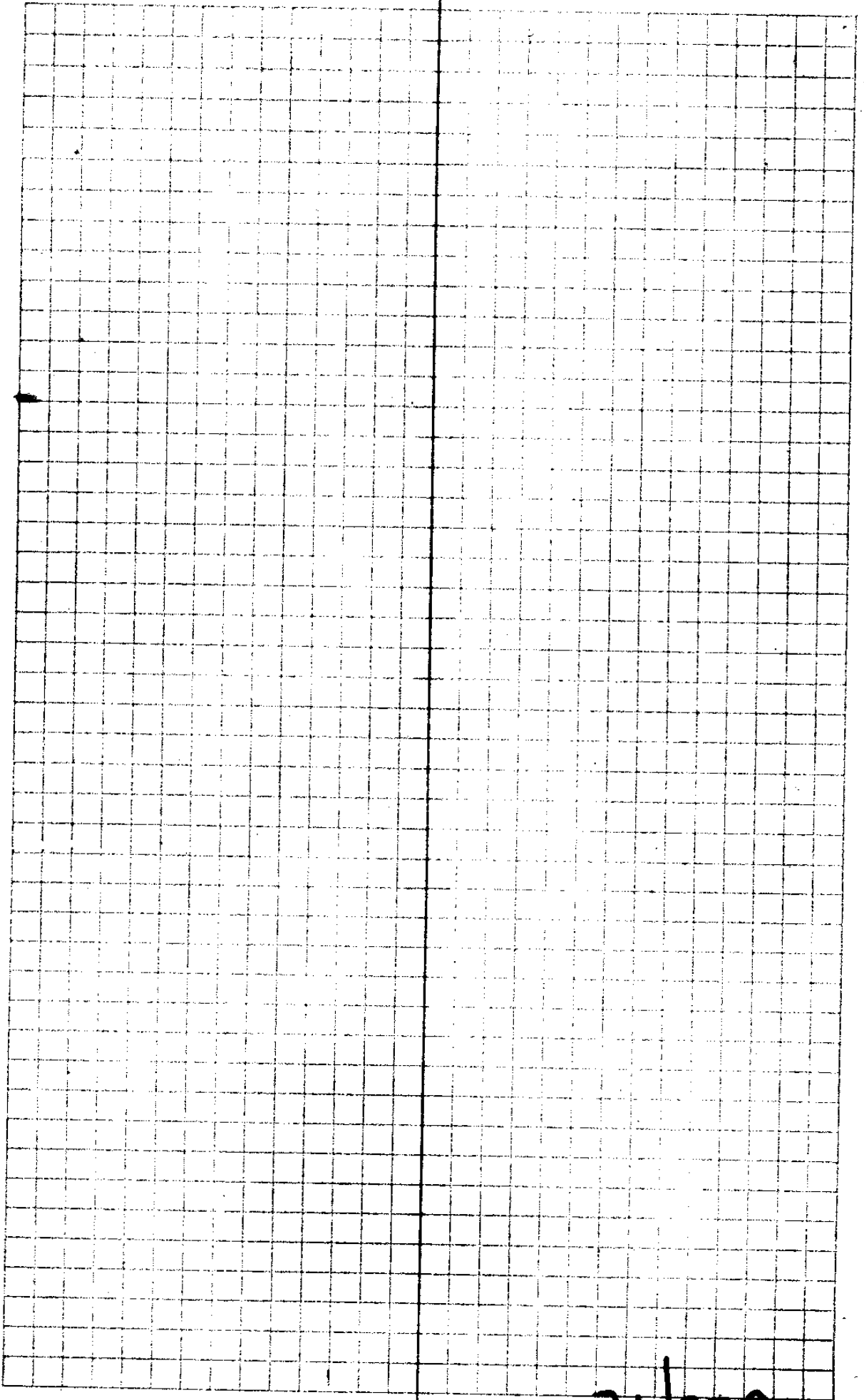
4+46'

L.C.U. P.F. to P.F.
189'



C. & P. No. 31/23A





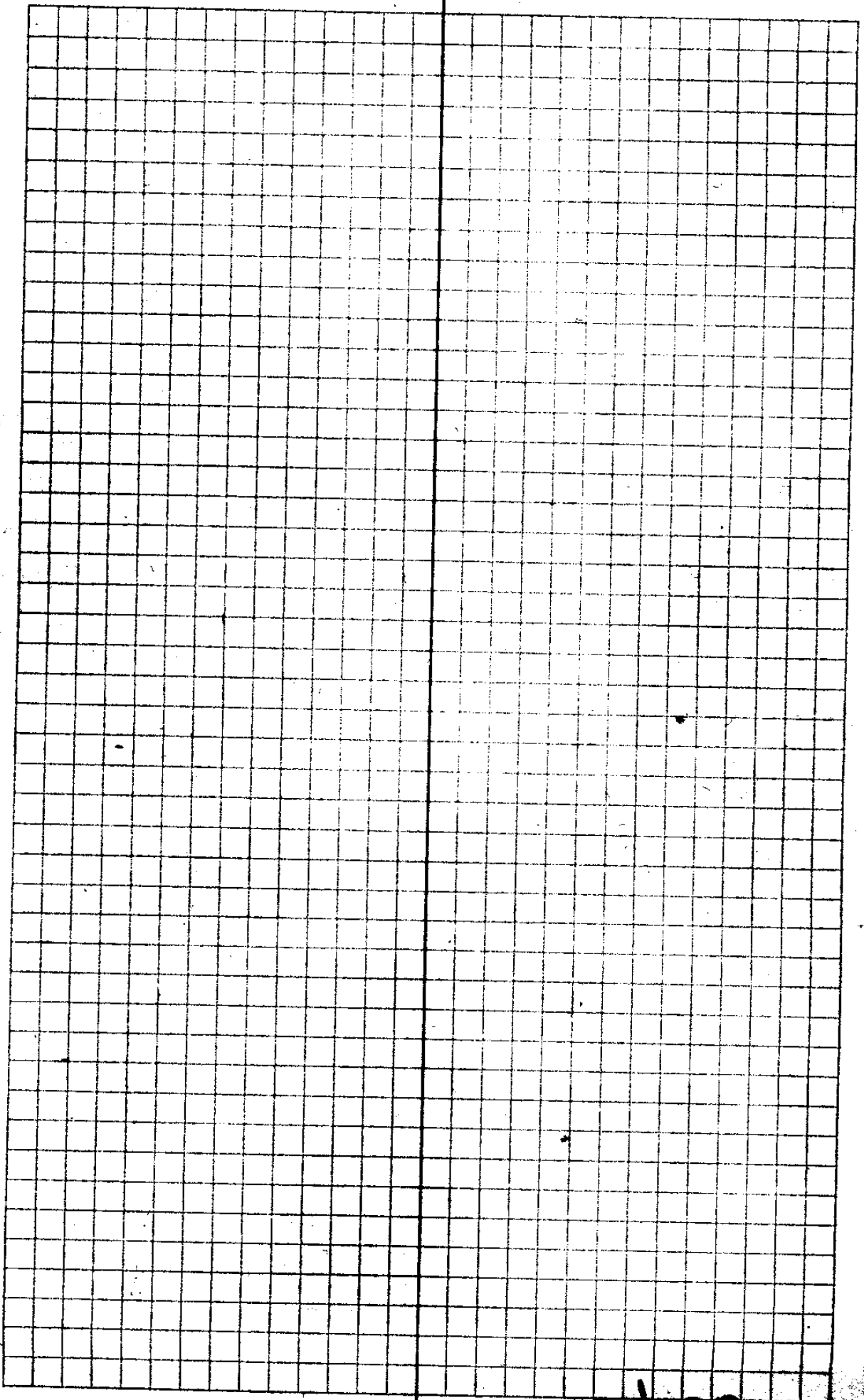
C.S. File No. 31/23A

	Top Rail		Top Rail
1+44	451.31	12+00	469.89 ✓
+50	451.39	+50	470.75 ✓
2+00	452.05	13+00	471.41 ✓
+50	452.71	+50	471.99 ✓
3+00	453.37	14+00	472.35
+50	454.03	+50	472.55
4+00	454.69	15+00	472.60
+50	455.36		
5+00	456.11	23+61.5	472.60
+50	456.94		
6+00	457.95		
+50	458.95		
7+00	459.95		
+50	460.95		
8+00	461.95		
+50	462.95		
9+00	463.95		
+50	464.95		
10+00	465.95		
+50	466.95		
11+00	467.95		
+50	468.95		
+80	469.50		

+	MT	-	
6.89	455.64		448.75
		2.27	453.37
6.57	459.94	3.83	456.11
6.45	462.56		
<hr/>			
6.92	466.38		459.96
<hr/>			
7.82	472.77		464.95

U.S. No. 31/230

11480



S. File No. 31/239

42° 04'

GLN 31/23A

~~NE Cor
Lot 8.~~

~~To~~

~~SECOR LOT-B
DEPT-3'~~

~~89°12'~~

~~N 0°40' W~~

~~378'~~

~~To~~

~~D-1~~

~~N 89°59' W~~

E Corner of Prop line

To

Prop. line
at R/W

88°25'

N 0°16' E

680'

To

1.P. - NEW H.
NW of RT.
40' out.

N 88°09' W

720'

To

1.P. - New S.
NW of RT

N 0°00'30" E

80'

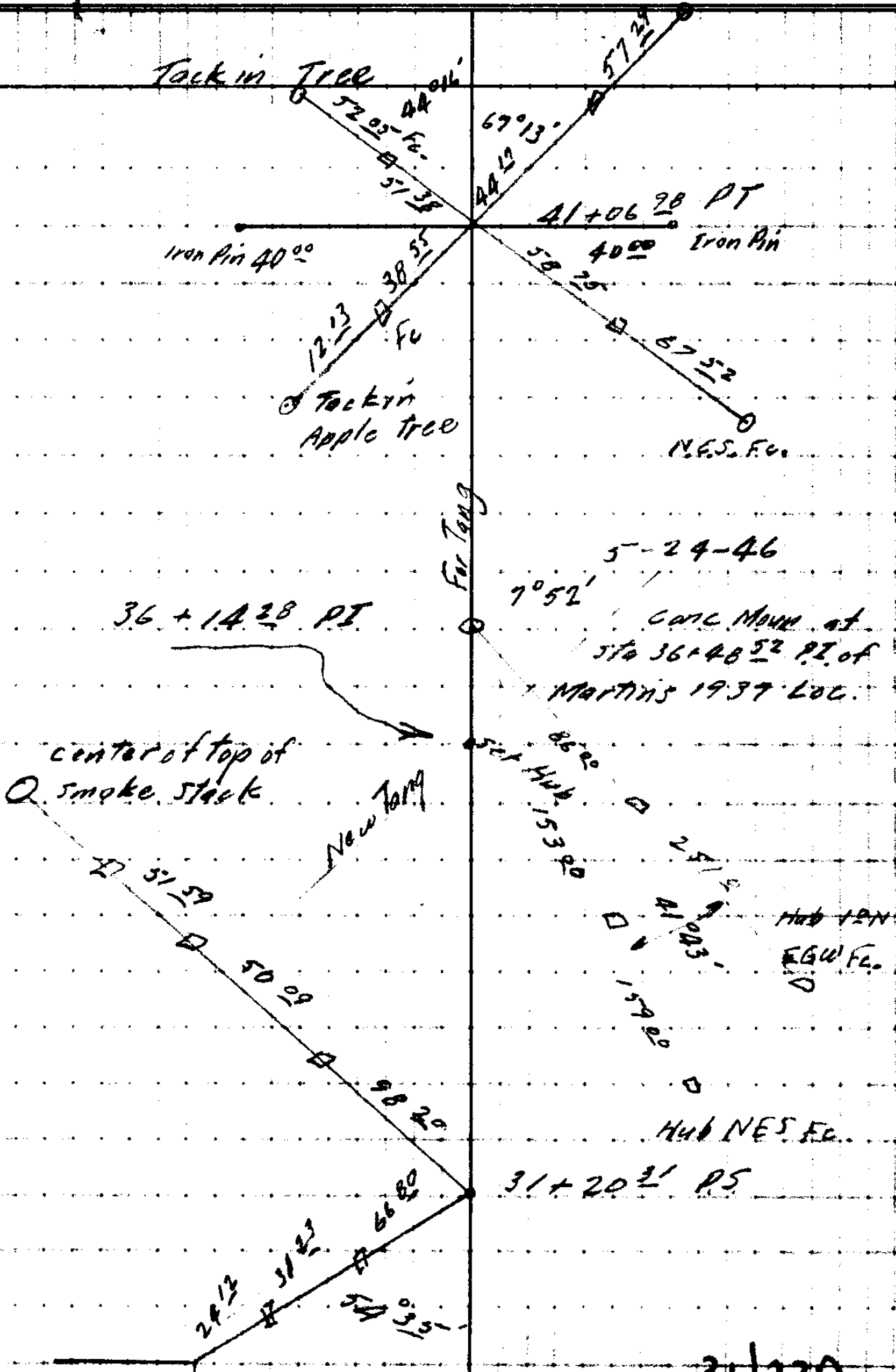
Line Date 10-29-46 Party

Project Roseburg - Dixonville

		Tang. - 589°59'30"E	
	+04.17 +06.98 PT	0°00'	
41		0°00'	
+50		0°01E	Δ 7°52' Lt
40		0°05 ⁵	1° C.L.
+50		0°12 ⁵	R = 5729.58
+06.98	PC5	0°20' 2°56'	\$ 493.97
39		2°54'	Lmc 586.67
+50		2°39'	2-200' spirals
38		2°24'	S = 1°00'
+50		2°09'	A = 0.5
37		1°54'	P = 0.29
+50		1°39'	Q = 100.00
36		1°24'	X = 1.16
+50		1°09'	Y = 199.99
35		0°54'	U = 133.34
+50		0°39'	V = 66.67
34		0°24'	
+50		0°09'	P.I. 36 + 14.28
+20.31	P5C	0°00' 0°20'	
33		0°16'	
+50		0°08 ⁵	
32		0°03'	
+50		0°00 ⁵	

OREGON STATE HIGHWAY COMMISSION
TRANSIT SHEET

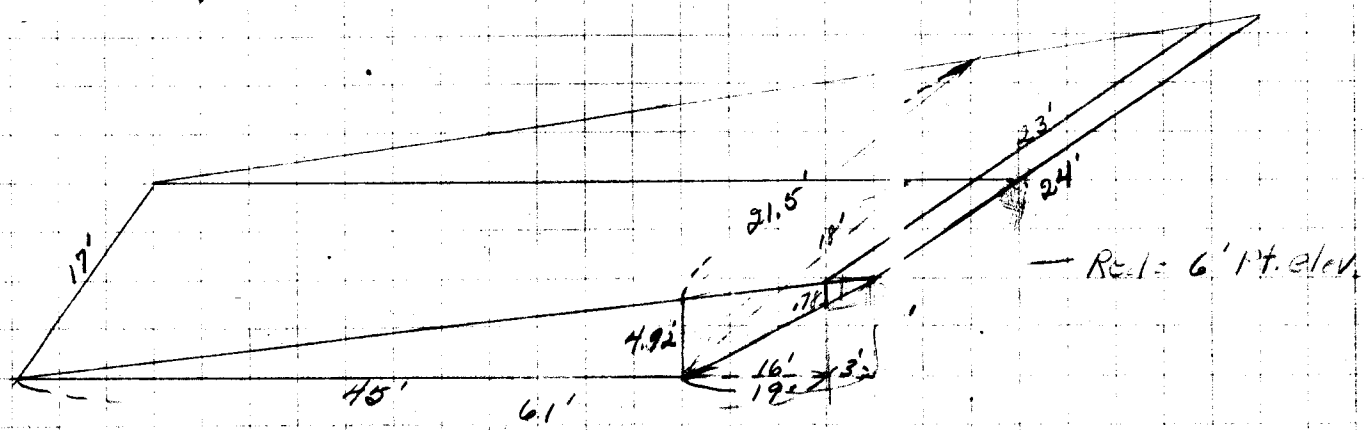
Form E33-8M-4-45



Reservoir Capacity

Jordan Bay
1 of 5

Volume of Ramp

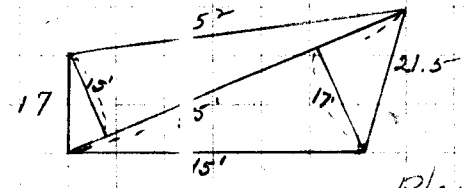


elev at 45' point = $\frac{45 \times 7}{64} = 4.92'$

Volume of wedge upto 45' point

$V = \frac{1}{2} \text{ Area of base } \times \text{ height}$

Area of base = $\frac{1}{2} \times 55 \times 17 = 467.5$
 $+ \frac{1}{2} \times 55 \times 15 = 412.5$
880 sq ft.



Plan View of Base

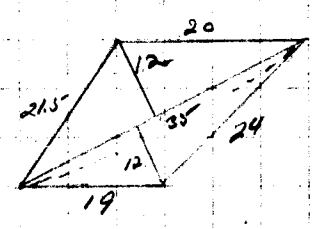
$V = \frac{1}{2} \times 4.92 \times 880 = \underline{2164 \text{ cu ft}}$

Volume of wedge from 45' pt to End

Area of top = $\frac{1}{2} \times 35 \times 12 = 210$
 $+ \frac{1}{2} \times 35 \times 12 = 210$
420 sq ft.

$V = \frac{1}{2} \times 11.9 \times 420 = \underline{1029 \text{ cu ft}}$

Plan View of top



Volume from 45' point to 6' Elev point

$h_{6' pt} = \frac{3 \times 4.92}{19} = .78 \text{ ft.}$ $V = \frac{4.92 \times 21.5 + .78 \times 23}{2} \times 16 = \frac{123.72}{2} \times 16 = \underline{990 \text{ cu ft}}$

Totals. Vol of Ramp 6' elev.

45' pt.	2164 cu ft.
6' pt.	990 "
	<u>3154 Cu ft.</u>

Vol of Ramp 7' elev.

45' point	= 2164 cu ft.
to end	= 1029 cu ft.
	<u>3193 Cu ft.</u>

Area of Plane at 6' Elev.

See Page 4+5 for Area used.

Youngs Bay

20 of 5

Elev. 6'

$$\begin{aligned} \text{Area} &= 118 \times 118 = 13,924 \text{ sq ft.} \\ \frac{1}{2} \times 114 \times 11 &= 627 \text{ sq ft.} \\ \frac{1}{2} \times 118 \times 7 &= 413 \text{ sq ft.} \\ \frac{1}{2} \times 121 \times 36 &= 2,178 \text{ sq ft.} \\ &= \underline{17,142 \text{ sq ft.}} \end{aligned}$$

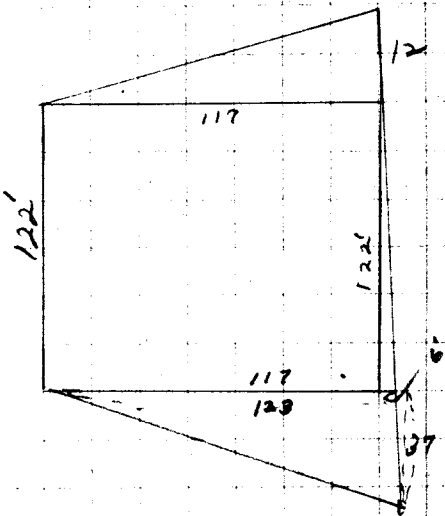
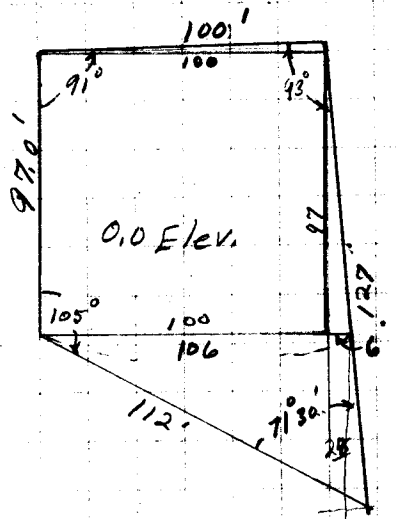
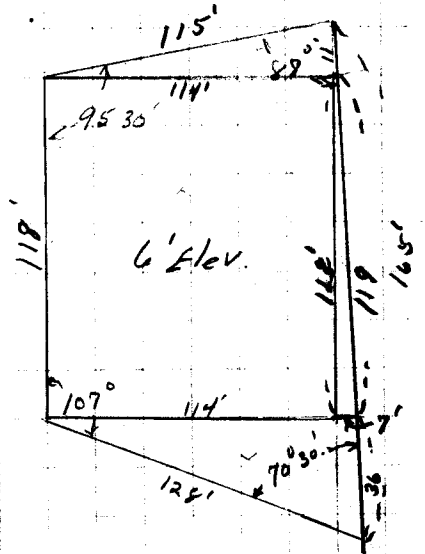
Elev. 0.0'

$$\begin{aligned} \text{Area} &= 100 \times 97 = 9,700 \text{ sq ft.} \\ \frac{1}{2} \times 100 \times 1 &= 50 \text{ " " " " } \\ \frac{1}{2} \times 97 \times 6 &= 291 \text{ " " " " } \\ \frac{1}{2} \times 106 \times 28 &= 1,484 \\ &= \underline{11,525 \text{ sq ft.}} \end{aligned}$$

$$V = \frac{(A_1 + A_2) \times h}{2}$$

$$V = \frac{17,142 + 11,525}{2} \times 6$$

$$V = 3(28,667) = 86,001 \text{ cu ft.}$$



Area of Plane at 7' elev.

$$\begin{aligned} A &= 117 \times 122 = 14,274 \text{ sq ft.} \\ \frac{1}{2} \times 117 \times 12 &= 702 \text{ " " " " } \\ \frac{1}{2} \times 122 \times 6 &= 366 \text{ " " " " } \\ \frac{1}{2} \times 123 \times 37 &= 2,275 \text{ " " " " } \\ &= \underline{17,617} \end{aligned}$$

$$V = \frac{A_1 + A_2}{2} \times h = \frac{17,617 + 11,525}{2} \times 7$$

$$V = 29,142 \times 3.5 = 101,997 \text{ cu ft.}$$

Reservoir Capacity.

Area of Plane of 8' elevation

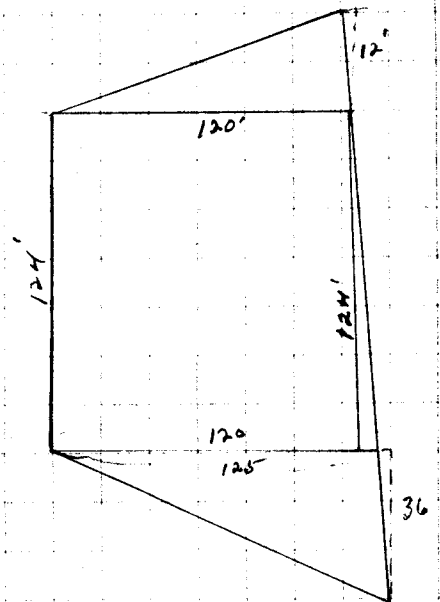
$$\begin{aligned} \text{Area: } 120 \times 124 &= 14,880 \text{ sq ft.} \\ \frac{1}{2} \times 120 \times 12 &= 720 \text{ " " } \\ \frac{1}{2} \times 124 \times 5 &= 310 \text{ " " } \\ \frac{1}{2} \times 125 \times 36 &= \underline{2,250 \text{ " "}} \\ &18,160 \text{ sq ft} \end{aligned}$$

$$V = \frac{A_1 + A_2}{2} h = \frac{18160 + 11525}{2} \times 8$$

$$V = 29,695 \times 4 = 118,740$$

Youngs Bay

3 of 5

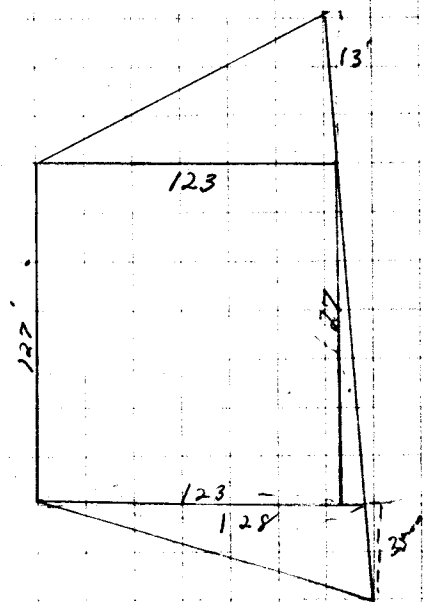


Area of Plane of 9' elevation

$$\begin{aligned} \text{Area: } 123 \times 127 &= 15,621 \text{ sq ft.} \\ \frac{1}{2} \times 13 \times 123 &= 800 \text{ " " } \\ \frac{1}{2} \times 127 \times 5 &= 317 \text{ " " } \\ \frac{1}{2} \times 128 \times 35 &= \underline{2,240 \text{ " "}} \\ &18,978 \text{ Sq ft} \end{aligned}$$

$$V = \frac{A_1 + A_2}{2} h = \frac{18978 + 11525}{2} \times 9$$

$$V = 4.5 \times 30,503 = 137,263$$



Page 4 and 5 are Vol 46, 47.

C.S. File No. 31/23A

Check of Areas.

Area of Plane 0' Elev.

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times 165 \times 63 = 5197.5 \\ &+ \frac{1}{2} \times 165 \times 77 = 6352.5 \\ &11,550. \text{ sq ft.} \end{aligned}$$

Area of 6' Plane

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times 197 \times 74 = 7289 \\ &+ \frac{1}{2} \times 197 \times 96 = 9456 \\ &16,745 \end{aligned}$$

$$V = \frac{A_1 + A_2}{2} \times h - \text{Ramp Vol.}$$

$$V = \frac{16,745 + 11,550}{2} \times 6 - 3154 \text{ Cu ft.}$$

$$V = 84,885 - 3154 = 81,731 \text{ Cu ft.}$$

$$\therefore \text{Vol} = 81,731 \times 7.48 \frac{\text{gal}}{\text{ft}^3} = \underline{\underline{611,348 \text{ gal}}}$$

Area of Plane at 7' Elev.

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times 202 \times 75 = 7575 \\ &+ \frac{1}{2} \times 202 \times 100 = 10100 \\ &17,675. \text{ sq ft.} \end{aligned}$$

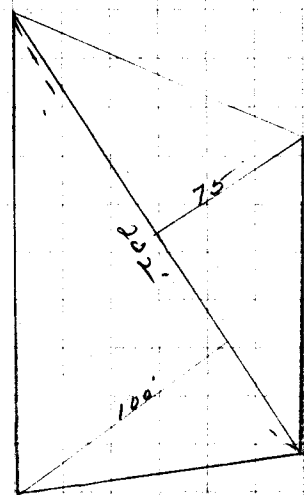
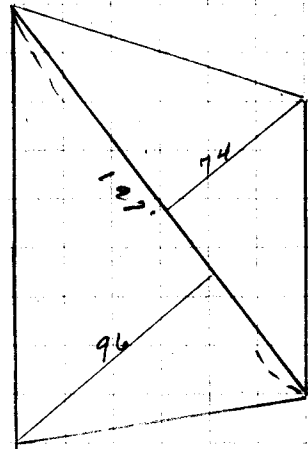
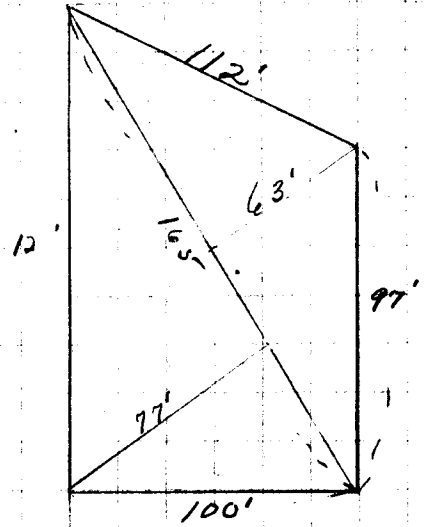
$$V = \frac{17,675 + 11,550}{2} \times 7 - 3193 \text{ ft}^3$$

$$V = 102,288 - 3193 = 99,095 \text{ ft}^3$$

$$V = 99,095 \times 7.48 = \underline{\underline{741,229 \text{ gal}}}$$

Youngs Bay

4 of 5



Check of Areas.

Area of Plane of 8' Elev.

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times 206 \times 77 = 7931 \\ &+ \frac{1}{2} \times 206 \times 102 = \underline{10506} \\ &18,437 \text{ sq ft.} \end{aligned}$$

$$V = \frac{18437 + 11550}{2} \times 8 = 3193$$

$$V = 119,948 - 3193 = 116,855 \text{ cu ft.}$$

$$V = 7.48 \times 116,855 = \underline{874,055 \text{ gal.}}$$

Area of Plane of 9' elevation.

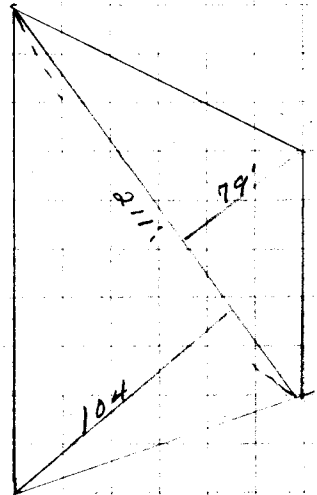
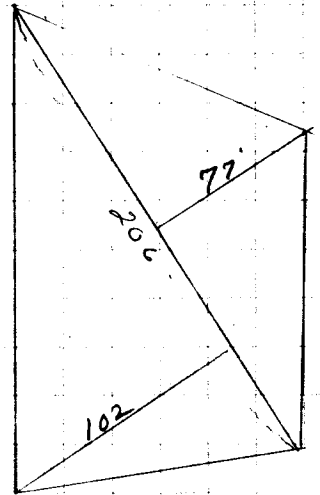
$$\begin{aligned} \text{Area} &= \frac{1}{2} \times 211 \times 79 = 8335 \\ &+ \frac{1}{2} \times 211 \times 104 = \underline{10972} \\ &19,307 \text{ sq ft.} \end{aligned}$$

$$V = \frac{19307 + 11550}{2} \times 9 = 3193$$

$$V = 138,856 - 3193 = 135,663$$

$$V = 7.48 \times 135,663 = \underline{1,014,759 \text{ gals.}}$$

Young's Bay
50 f 5



1874.56 ✓
 970
 904.56

87
 61

INIT. PT. HUGGEST.			0.0	0.0
904.56 ✓ 589°08'30"W	13.48 ✓ .06 ✓ .01 ✓ -13.55 ✓	899.90 ✓ 4.56 ✓ -904.46 ✓	-13.55	-904.46
SW cor Prop.			-13.55	-904.46
565°44'W 976.91	369.88 ✓ 28.77 ✓ 2.47 ✓ .37 ✓ -401.49 ✓	820.48 ✓ 63.81 ✓ 5.47 ✓ .82 ✓ .01 ✓ -890.59 ✓	-401.49 -415.04	-890.59 -1795.05
Cor Sec. 10/4 13/14			-415.04	-1795.05

242
 .05
 12.10

Log 1795.05 = 3.254076
 Log 415.04 = 2.618090
 Log ~~100.53~~ 76°58'52" = 0.635986
 5485
 50.1
 9.58

60.60
 635986
 495 - 58
 501
 -6°58'52" - 1985.99

12
 254060
 254076

42
 618048
 618090

.65
 14
 260
 65
 910

9.980052
 9.980061

Log 1795.05 = 3.254076
 - Log Sin 76°58'52" = 9.98869
 1842.40
 9886.66
 25
 5385
 5290
 95
 235
 4.7
 13.1

48
 2
 46
 210
 249.6
 98866
 25
 98839.1

5 25
 25 14
 15 4 52 30"

5.76°58'52"W - 1842.40

C.S. No. 3/23A

Youngs Bay

#1

Tang	L	D	T-L	T-D
N 89° 59' 30" W (R 2020')				
P.T. Sta 41+06.98			0	0
N 89° 39' 30" W - 200' -	1.19 -	200.00 -	+ 1.19 -	- 200.00 -
PGS. Sta 39+06.98			+ 1.19 -	- 200.00 -
N 87° 02' W - (R 2° 30' 30") 523.98	25.88 -	499.33 -		
	1.04 -	19.91 -		
	.16 -	3.00 -		
	.05 -	.90 -		
	27.13	523.20 -	+ 27.13 -	- 523.28 -
Sta. 34+82.84 E			+ 28.32 -	- 723.28 -
N 5° 35' E - (R 92° 37") 28.69 -	19.91 -	1.95 -		
	7.96 -	0.78 -		
	.69 -	.06 -		
		.01 -		
	28.56 -	2.80 -	+ 28.56 -	+ 2.80 -
Prop line at old R/W			+ 56.88 -	- 720.48 -
N 0° 16' E - 6.33 -	6.33 -	0.00 -		
	6.33	0.03	+ 6.33	+ 0.03
Prop. line at New R/W ^{FOVA}			+ 63.21 -	- 720.45 -
P.T. Sta 41+06.98			0	0
N 0° 00' 30" E - 40' -	40 -	0 -	+ 40.00 -	0 -
Iron Pin - New N-R/W at P.T.			+ 40.00 -	0 -
To Prop line at New R/W ^{FOVA}			+ 63.21	- 720.45
			(N) 23.21	(W) 720.45

LD 2.857604
 LL 1.365675
 LT 1.491929

B19 = N 88° 09' W

2.857604
9.999774
 2.857630

Dist = 720.83

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Youngs Bay

PC5 to Pt. L to Prop Line Point

$$\text{Sta.} = \frac{40 + 06.98}{34 + 82.84} \quad \left. \begin{array}{l} \text{ } \\ \text{ } \end{array} \right\} 524.14'$$

$$L = 1^{\circ}00' \quad , \quad d = 5.2414^{\circ} = 5^{\circ}14'30''$$

$$\frac{d}{2} = \underline{2^{\circ}37'15''}$$

$$C = 2R \sin \frac{d}{2} \quad , \quad C = 5729.76$$

8279
42
8123
44

$$\log 2 = 0.301030 -$$

$$\log R = 3.753123 -$$

$$\log \sin \frac{d}{2} = \underline{8.660169 -}$$

$$\log C = 2.717317 \quad \checkmark \quad C = \underline{523.98} \quad \checkmark$$

208
67

YOUNG'S BAY

#3

From Plat of KUNNEY'S ADD.

West side block 11 to A pt.

N 87° 04' W
 579° 00' W
 164° 04'
 179 60
 A = 15° 56'

Log 146 = 2.164353
 Log Cos. 15° 56' = 9.982986
 2.147339 Dist = 140.39

A pt. to E. 6th St.

690.00
 140.39
 549.61

N 87° 04' W
 N 83° 35' W
 A = 3° 29'

(TT to St.)

Log 549.61 = 2.740055
 Log Cos. 3° 29' = 9.999197
 2.740858 Dist = 550.63 (on line)

E 6th St. To SE Cor. Blk-14

1100 00
 550 63
 549 37

(on line)

Log 549.37 = 2.739866
 Log Cos 3° 29' = 9.999197
 2.739063 Dist = 48.36 (TT to St.)

N 87° 04' W
 584° 15' W
 171 19
 179 60
 8° 41'

Log 343 = 2.535294
 Log sin 8° 41' = 9.178900
 1.714194 Dist = 51.78

Log 146 = 2.164353
 Log sin 15° 56' = 9.438572
 1.602925 Dist = 40.08

Log 1100 = 3.041393
 Log sin 3° 29' = 8.783605
 1.824998 Dist = 66.83

710.00
 -25.03
 684.97

- 91.86
 + 66.83
 - 25.03

YOUNG'S BAY

#4

684.97

N 87° 04' W

289° 60'

N 2° 56' E

N 1° 15' W

4° 11'

Log 684.97 = 2.835672

(+) Log Cos 4° 11' = 9.998841

Dist along E line to Comm St. 2.835631 = 686.80

Log 684.97 = 2.835672

(+) Log Tang 4° 11' = 8.864173

1.699845 = 50.11

~~X~~ E 6TH & Commercial to Commercial at E line. KINNEY'S ADD.

548.36

- 50.11

Dist = 498.25

New NE 1/4 Highway at Popline ^{Road} 1/8 to Commercial at E line KINNEY'S ADD.

686.80

6.33

Dist = 680.47



C = 28.5711

N
 $5^{\circ} 89^{\circ} 59' 30''$ W
 20'
 $89^{\circ} 39' 30''$

2414
 60
 14840

4006.98
 3470.84
 524.14

N $87^{\circ} 02' W$
 $R 92^{\circ} 37' 30''$
 N $5^{\circ} 35' 30'' E$

668

44.5

5730.80
 68
 3748

5142.5
 521
 5661.64

4
 15

89°

R 89.5960
N $89^{\circ} 59' 30'' W$

0.301030
 3.758123
7.940842
 1.999995

36+14.28
 31+2031
4+93.99

2.75.28
 34 10 31
 3.3.37

No. 1 (ORIGINAL MILL SITE AND ADDITION)

Beginning at the southeast corner of Block 14, Kinney's Improved Plat vacated as platted and filed in the office of the County Clerk of Douglas County, Oregon; running thence North $1^{\circ}15'$ West approximately 1532 feet along the east side of Blocks 14, 15, 34, and 35 to the northerly line of First Addition to Brookside if extended westerly; thence North $69^{\circ}30'$ East to the Northwest corner of Lot 1, First Addition to Brookside; thence southerly along the West side of Lot 1, First Brookside Addition to the North line of Second Avenue South; thence North $83^{\circ}35'$ West along the North line of Second Avenue south to the Southeast corner of Block 14, Kinney's Improved plat and the place of beginning; containing 4.22 acres more or less; all situated in Sections 18 and 19, Township 27 South, Range 5 West of Willamette Meridian, in Douglas County, Oregon;

ALSO all of Lots and fractional Lots in Blocks 34 and 35 now vacated, together with vacated alleys in said blocks and also all of East First Avenue North now vacated between said blocks, and also all the North half of Commercial Avenue now vacated South of Block 34, all in Kinney's Improved Plat to the City of Roseburg, Douglas County, Oregon;

ALSO beginning at a point which is the intersection of the North line of East Second Avenue North, if extended easterly, with the East line of East Seventh Street, Kinney's Improved Plat to the City of Roseburg; thence East on the North line of the East Second Avenue North if extended easterly to the easterly line of Kinney's Improved Plat to the City of Roseburg if extended; thence North $1^{\circ}15'$ West to the North line of First Brookside Addition, if extended westerly; thence South $69^{\circ}30'$ West to the East line of East Seventh Street; thence South along the East side of said East Seventh Street to the North line of East Second Avenue North and the place of beginning; being a corner lot fronting approximately 30 feet on East Second Avenue North and fronting approximately 40 feet on East Seventh Street;

ALSO Lots One (1), Two (2), Three (3), Four (4), Five (5), Six (6) and Seven (7), of First Brookside Addition to the City of Roseburg, Douglas County, Oregon, according to the official plat and survey thereof now on file in the office of the County Clerk of Douglas County, Oregon, excepting therefrom the following parcel, to wit:

Beginning at the Southwest corner of Lot Eight (8) of First Brookside Addition to the City of Roseburg, Douglas County, Oregon, according to the official plat and survey thereof now on file in the office of the County Clerk of Douglas County, Oregon, running thence Westerly along the North side of East Avenue or the Dixonville Road and the Southerly line of First Brookside Addition 947 feet; thence North 217.8 feet; thence East 200 feet; thence North 157.2 feet; thence East 747 feet; thence South 375 feet to the place of beginning, containing 7.43 acres more or less, being the same premises acquired by Defense Plant Corporation, as a part of Plancor 1862, from Peninsula Plywood Corporation Inc. by deed dated August 26, 1943, recorded on Page 24 in Volume 106, and by deed dated April 14, 1945 and recorded on ~~Page 24 in Volume 106 and by deed dated April 14, 1945 and recorded on~~ Page 32 in Volume 112 of the Deed Records of Douglas County, Oregon.

No. 2 (ADDITION TO MILL SITE AND WEST PORTION OF RESERVOIR SITE -- Formerly U. S. RIFLE RANGE)

Beginning at the quarter section corner between Sections seventeen (17) and eighteen (18) Township twenty-seven (27) South of Range 5 West of the Willamette Meridian; thence North ten (10) chains; thence east ten (10) chains; thence South ten (10) chains; thence south six degrees and 50 minutes West 14.53 chains to the Northeast corner of Lot Eight (8) in First Brookside Addition to Roseburg, Oregon; thence south 31.30 chains to southeast corner of said Lot Eight (8); thence west along East Avenue three chains to the southwest corner of Lot Eight (8); thence North 30.25 chains to Northwest corner of said Lot Eight (8); thence South sixty-nine degrees West 5.25 chains to a point south from place of beginning; thence North 18.40 chains to the place of beginning, containing 34.18 acres more or less, all in Sections Seventeen (17) and Twenty (20) Township Twenty-seven (27) South of Range Five (5) West of the Willamette Meridian, in Douglas County, State of Oregon, being the same property acquired by Reconstruction Finance Corporation by deed from the War Department of the United States under date of

No. 3 (EAST HALF OF RESERVOIR TRACT)

A tract of land in Section 17, Township 27 South, Range 5 West, Wilamette Meridian, Douglas County, Oregon described as follows, to wit:

Beginning at a point from which the one quarter section corner on the west side of said Section 17 bears N. 76° 31' W. 896.34 feet; running thence N. 25° 04' W. 300 feet; thence S. 64° 56' W. 93.31 feet more or less to a point in the line between the grantors property and the United States Rifle Range; thence southerly along said line to an intersection with a line run S. 64° 56' W. from point of beginning; thence N. 64° 56' E. 284.5 feet more or less to point of beginning, containing 1.285 acres more or less, being the same property acquired by Defense Plant Corporation by deed from Howard M. Bailey and Hettie K. Bailey, dated May 2, 1944, recorded May 8, 1944 in Volume 107, Page 384, Deed Records of Douglas County, Oregon.

FOLLOWING 2 PARCELS RELEASED TO STATE HIGHWAY COMMISSION FOR NORTH UMPQUA HIGHWAY

Parcel No. 1

A parcel of land lying in the Northeast quarter (NE $\frac{1}{4}$) of Section 19, Township 27 South, Range 5 West, W.M., Douglas County, Oregon, and being a portion of the following described property; That tract of land which was conveyed by that certain deed to Youngs Bay Lumber Co. Inc., recorded in Book 141, Page 319-22 of Douglas County Record of Deeds. The said parcel being described as follows:

Beginning at the Southeast corner of Block 14, Kinney's Improved Plat of Roseburg; said beginning point being 28.69 feet distant Northerly from (when measured at right angles to) the located center line of the North Umpqua Highway at Engineer's Station 34+82.84; thence South 82° 07' 30" East, along the North line of East Second Avenue South, a distance of 136.93

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feet; to the Southwest corner of Lot 1, First Brookside Addition; thence North $0^{\circ} 40'$ West, along the West line of said Lot 1 a distance of 14.26 feet to a point 35 feet distant northerly from said Highway center line; thence parallel to said highway center line along a 5694.58 foot radius curve right (the long chord of which bears North $85^{\circ} 25' 30''$ West, 135.87 feet) a distance of 135.88 feet to the east line of said Block 14; thence South $0^{\circ} 16'$ West along said East line a distance of 6.33 to the point of beginning; containing 1330 square feet, more or less.

Together with the perpetual right and easement to construct, maintain repair and have free access to all slopes of cuts or fills upon the property of the grantor, for a distance of 5 feet, outside of and adjoining on the Northerly side of the property herein conveyed, occasioned by or resulting from the construction, operation or maintenance of a public highway and its appurtenances.

Parcel No. 2

A parcel of land lying in Lots 1, 2, 3 of First Brookside Addition to City of Roseburg, Oregon, of Section 19, Township 27 South, Range 5 West, W.M., Douglas County, Oregon, and being a portion of the following described property; That tract of land which was conveyed by that certain deed to Youngs Bay Lumber Co., Inc., recorded in Book 141, Page 319-22 of Douglas County Record of Deeds. The said parcel being described as follows:

Beginning at the Southwest corner of Lot 1 of the First Brookside Addition to the City of Roseburg; thence North $0^{\circ} 40'$ West on the West line of Lot 1 a distance of 14.26 feet to a point 35 feet Northerly from (measured at right angles to) the located center line of the North Umpqua Highway at Engineer's center line Station 36+19; thence South $88^{\circ} 56'$ East 444 feet to a point on a North and South line of said property; said point being 40 feet Northerly from said Highway center line; thence South 5.51 feet on property line; thence North $89^{\circ} 59'$ West on the South line of said property a distance of 444 feet to the point of beginning.

The parcel of land to which this description applies contains 4,387 square feet.

LOTS 9 & 10 PURCHASED FROM DOUGLAS COUNTY

A portion of Lots Nine (9) and Ten (10) of First Addition of Brookside to Roseburg, Oregon, as the same is platted and recorded in Volume 2, at page 13, Town Plats, in the office of the County Clerk of Douglas County, Oregon and also situated in the West half of the Southwest quarter ($W\frac{1}{2}$ $SW\frac{1}{4}$) of Section 17, township 27 South, Range 5 West, W.M., Douglas County, Oregon and described as follows:

Beginning at a 36-inch Iron Pin on the West line of Lot 9 said First Addition of Brookside, which is 374.5 feet North of the Southwest corner of said Lot 9; thence East 111.0 feet to a 36-inch Iron Pipe; thence North 379.0 feet to a 36-inch Iron Pin; thence North 89 degrees 00 minutes East 285.0 feet to a 24-inch Iron Pipe on the East line of Lot 10, Brookside Addition, which is 1260 feet North of the Southeast corner of said Lot 10; thence North along the East Line of said Lot 10 approximately 1066.5 feet to the Northeast corner of said Lot 10; thence South 69 degrees 00 minutes West along the North line of Lots 10 and 9 to the Northwest corner of said Lot 9; thence South along the West side of Lot 9 approximately 1323.3 feet to the place of beginning, and containing 10.1 acres of land, more or less.

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