

W365

365

365

Tables for Excavations and Embankments.
Distances from Centre of Roadway for Cross Sectioning.
Roadway 22 feet wide. Side Slopes 1 to 1.
For Single Track Excavation.

	0	1	2	3	4	5	6	7	8	9	
	MICROFILMED										
0	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	0
1	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	1
2	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	2
3	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	3
4	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	4
5	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	5
6	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	6
7	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	7
8	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	8
9	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	9
10	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	10
11	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	11
12	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	12
13	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	13
14	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	14
15	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	15
16	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	16
17	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	17
18	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	18
19	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	19
20	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	20
21	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	21
22	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	22
23	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	23
24	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	24
25	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	25
26	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	26
27	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	27
28	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	28
29	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	29
30	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	30
31	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	31
32	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	32
33	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	33
34	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	34
35	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	35
36	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	36
37	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	37
38	49.0	49.1	49.2	49.3	49.4	49.5	49.6	49.7	49.8	49.9	38
39	50.0	50.1	50.2	50.3	50.4	50.5	50.6	50.7	50.8	50.9	39
40	51.0	51.1	51.2	51.3	51.4	51.5	51.6	51.7	51.8	51.9	40

Our Leather Bound Engineers Note Books are carried in the following rulings:

No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.

No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.

No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.

No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter "F" to catalog number.

THE FREDERICK POST CO.

ENGINEERING and DRAFTING SUPPLIES

IRVING PARK STATION

CHICAGO, ILL.

N3440

1

E

5310	580.9	✓
20	81.5	✓
30	81.9	✓
40	82.3	✓
50	83.2	✓
60	85.2	✓
70	85.3	✓
80	85.1	✓
90	85.3	✓
5400	84.9	✓
10	85.1	✓
20	85.5	✓
30	85.2	✓
40	85.8	✓
50	84.6	✓
60	84.4	✓
70	83.5	✓
80	82.6	✓
90	81.9	✓
5500	80.1	✓
10	79.2	✓
20	78.1	✓
30	76.1	✓
40	75.1	✓
50	75.4	✓

9/14/34
 ✓ 1st try see on
 2nd try see on
 3rd try see on
 4th try see on

N 3440

2

E

5560	575.6	✓
70	75.6	✓
80	75.8	✓
90	76.1	✓
5600	76.2	✓
10	76.7	✓
20	76.6	✓
30	77.4	✓
40	77.2	✓
50	76.8	✓
60	76.6	✓
70	76.6	✓
80	76.5	✓
90	76.3	✓
5700	76.0	✓
10	75.7	✓
20	75.7	✓
30	75.4	✓
40	74.9	✓
50	74.6	✓
60	74.7	✓
70	74.0	✓
80	70.0	✓
90	68.5	✓
5800	65.9	✓

E	
5810	565.3 ✓
20	63.7 ✓
30	63.2 ✓
40	63.0 ✓
50	63.2 ✓
60	62.6 ✓
70	62.6 ✓
80	62.6 ✓
90	63.3 ✓
5900	63.5 ✓
10	62.5 ✓
20	62.5 ✓
30	62.5 ✓
40	62.5 ✓
50	62.7 ✓
60	62.7 ✓
70	62.6 ✓
80	62.8 ✓
90	61.2 ✓
6000	62.5 ✓
10	62.5 ✓
20	62.7 ✓
30	62.1 ✓
40	60.2 ✓
50	

not on beam

E	
4080	555.6 ✓
90	56.1 ✓
4100	56.9 ✓
10	56.7 ✓
20	56.3 ✓
30	57.4 ✓
40	56.7 ✓
50	57.8 ✓
60	58.3 ✓
70	57.9 ✓
80	59.1 ✓
90	59.5 ✓
4200	63.1 ✓
10	62.8 ✓
20	64.1 ✓
30	67.1 ✓
40	67.0 ✓
50	66.8 ✓
60	68.1 ✓
70	67.9 ✓
80	66.3 ✓
90	67.8 ✓
4300	63.3 ✓
10	63.7 ✓
20	63.3 ✓

not on beam line
m

E

4330	564.2	✓
40	64.1	✓
50	65.1	✓
60	65.0	✓
70	66.6	✓
80	66.8	✓
90	66.1	✓
4400	65.1	✓
10	67.9	✓
20	69.3	✓
30	69.7	✓
40	69.9	✓
50	66.7	✓
60	70.0	✓
70	70.6	✓
80	71.2	✓
90	71.7	✓
4500	72.2	✓
10	72.8	✓
20	73.2	✓
30	73.7	✓
40	74.3	✓
50	74.7	✓
60	75.5	✓
70	76.1	✓

E		
45 80	577.5	✓
90	76.9	✓
4600	77.7	✓
10	78.4	✓
20	77.4	✓
30	76.3	✓
40	77.5	✓
50	79.1	✓
60	80.5	✓
70	80.8	✓
80	81.1	✓
90	81.7	✓
4700	78.5	✓
10	78.1	✓
20	79.1	✓
30	72.9	✓
40	68.1	✓
50	68.4	✓
60	68.6	✓
70	69.0	✓
80	69.7	✓
90	61.8	✓
4800	59.8	✓
10	59.9	✓
20	59.5	✓

N3450

7

E	
4830	559.8 ✓
40	60.0 ✓
50	60.1 ✓
60	56.7 ✓
70	56.1 ✓
80	56.7 ✓
90	57.1 ✓
4900	57.4 ✓
10	57.5 ✓
20	57.8 ✓
30	58.1 ✓
40	58.1 ✓
50	57.8 ✓
60	57.0 ✓
70	58.3 ✓
80	58.6 ✓
90	57.8 ✓
5000	57.8 ✓
10	58.2 ✓
20	58.3 ✓
30	58.6 ✓
40	58.4 ✓
50	58.4 ✓
60	58.1 ✓
70	59.3 ✓

N3450

8

E	
5080	560.9 ✓
90	62.6 ✓
5100	70.7 ✓
10	71.0 ✓
20	71.5 ✓
30	71.9 ✓
40	72.1 ✓
50	72.4 ✓
60	72.6 ✓
70	72.6 ✓
80	73.1 ✓
90	73.7 ✓
5200	73.9 ✓
10	74.6 ✓
20	76.0 ✓
30	78.0 ✓
40	78.7 ✓
50	78.5 ✓
60	77.9 ✓
70	77.6 ✓
80	77.1 ✓
90	76.7 ✓
5300	76.5 ✓
10	77.9 ✓
20	78.6 ✓

E

5330	579.1	✓
40	79.4	✓
50	80.0	✓
60	80.1	✓
70	81.8	✓
80	81.9	✓
90	81.6	✓
5400	81.5	✓
10	81.9	✓
20	82.1	✓
30	81.6	✓
40	81.8	✓
50	78.1	✓
60	76.6	✓
70	79.1	✓
80	78.1	✓
90	76.7	✓
5500	74.9	✓
10	74.9	✓
20	75.1	✓
30	75.0	✓
40	75.1	✓
50	75.2	✓
60	75.5	✓
70	75.5	✓

N 3450

10

E	
5580	575.5 ✓
90	75.6 ✓
5600	75.7 ✓
10	76.3 ✓
20	76.3 ✓
30	76.4 ✓
40	76.1 ✓
50	76.1 ✓
60	76.2 ✓
70	76.1 ✓
80	75.9 ✓
90	75.7 ✓
5700	75.4 ✓
10	75.2 ✓
20	75.0 ✓
30	74.9 ✓
40	74.2 ✓
50	73.4 ✓
60	70.5 ✓
70	70.7 ✓
80	67.9 ✓
90	67.7 ✓
5800	66.2 ✓
10	64.8 ✓
20	63.5 ✓

not on same sec
m

E	
5830	564.0 ✓
40	64.2 ✓
50	63.1 ✓
60	62.6 ✓
70	62.7 ✓
80	63.1 ✓
90	63.5 ✓
5900	62.8 ✓
10	62.2 ✓
20	62.8 ✓
30	62.5 ✓
40	62.4 ✓
50	62.9 ✓
60	62.6 ✓
70	62.8 ✓
80	62.1 ✓
90	61.3 ✓
6000	62.6 ✓
10	62.6 ✓
20	62.1 ✓
30	60.9 ✓
40	
50	
60	
70	

not on same loc
M.

E

4060	551.7	✓
70	51.6	✓
80	51.8	✓
90	51.6	✓
4100	51.8	✓
10	52.3	✓
20	54.2	✓
30	53.3	✓
40	52.6	✓
50	52.9	✓
60	53.1	✓
70	53.4	✓
80	54.0	✓
90	54.5	✓
4200	54.2	✓
10	54.9	✓
20	55.5	✓
30	57.0	✓
40	59.3	✓
50	60.2	✓
60	64.2	✓
70	64.8	✓
80	62.7	✓
90	59.5	✓
4300	60.1	✓

not on new line

✓

N 3460

E

4310	560.3	✓
20	59.5	✓
30	60.4	✓
40	60.4	✓
50	60.3	✓
60	63.6	✓
70	62.1	✓
80	62.5	✓
90	62.5	✓
4400	62.6	✓
10	63.8	✓
20	64.4	✓
30	65.0	✓
40	63.7	✓
50	64.1	✓
60	68.0	✓
70	70.1	✓
80	71.3	✓
90	71.7	✓
4500	72.0	✓
10	72.2	✓
20	73.1	✓
30	73.5	✓
40	73.8	✓
50	74.5	✓

N3460

E

4560	574.7	✓
70	75.6	✓
80	76.1	✓
90	76.5	✓
4600	76.5	✓
10	76.0	✓
20	75.1	✓
30	74.9	✓
40	73.7	✓
50	74.5	✓
60	75.3	✓
70	75.0	✓
80	75.2	✓
90	72.9	✓
4700	71.7	✓
10	68.2	✓
20	68.3	✓
30	68.3	✓
40	68.3	✓
50	69.0	✓
60	68.8	✓
70	63.2	✓
80	59.7	✓
90	57.6	✓
4800	59.1	✓

✓

E	
4810	559.5 ✓
20	59.5 ✓
30	59.6 ✓
40	59.9 ✓
50	59.1 ✓
60	56.9 ✓
70	57.4 ✓
80	57.6 ✓
90	58.2 ✓
4900	58.8 ✓
10	59.2 ✓
20	59.8 ✓
30	60.3 ✓
40	60.5 ✓
50	59.7 ✓
60	60.4 ✓
70	60.3 ✓
80	60.6 ✓
90	60.6 ✓
5000	60.3 ✓
10	59.9 ✓
20	59.9 ✓
30	59.8 ✓
40	58.6 ✓
50	58.9 ✓

E

50	60	558.5	✓
	70	57.9	✓
	80	58.2	✓
	90	58.2	✓
5100		58.4	✓
	10	58.5	✓
	20	59.2	✓
	30	60.0	✓
	40	62.5	✓
	50	65.1	✓
	60	71.3	✓
	70	71.6	✓
	80	71.9	✓
	90	72.1	✓
5200		72.4	✓
	10	72.8	✓
	20	72.9	✓
	30	73.9	✓
	40	74.5	✓
	50	75.4	✓
	60	75.9	✓
	70	74.9	✓
	80	77.5	✓
	90	77.2	✓
5300		76.6	✓

N3460

17

E

5310	576.3	✓
20	76.3	✓
30	76.3	✓
40	76.2	✓
50	75.9	✓
60	75.9	✓
70	76.1	✓
80	75.8	✓
90	76.1	✓
5400	76.4	✓
10	76.6	✓
20	78.4	✓
30	76.8	✓
40	76.7	✓
50	76.1	✓
60	75.8	✓
70	75.3	✓
80	74.7	✓
90	74.5	✓
5500	74.5	✓
10	74.7	✓
20	74.7	✓
30	74.7	✓
40	74.4	✓
50	74.2	✓

N 3460

18

E

5560	574.5	✓
70	74.7	✓
80	74.9	✓
90	74.9	✓
5600	75.0	✓
10	75.1	✓
20	75.3	✓
30	75.7	✓
40	75.7	✓
50	75.6	✓
60	75.4	✓
70	75.2	✓
80	75.4	✓
90	75.0	✓
5700	74.6	✓
10	74.2	✓
20	71.6	✓
30	70.6	✓
40	69.3	✓
50	68.8	✓
60	68.4	✓
70	66.7	✓
80	67.1	✓
90	67.9	✓
5800	66.1	✓

not on stem see p.

N3460

E	
5810	564.9 ✓
20	63.8 ✓
30	64.8 ✓
40	63.4 ✓
50	62.6 ✓
60	62.5 ✓
70	62.6 ✓
80	62.6 ✓
90	62.8 ✓
5900	62.3 ✓
10	62.6 ✓
20	62.2 ✓
30	62.4 ✓
40	62.7 ✓
50	62.5 ✓
60	62.1 ✓
70	62.8 ✓
80	61.9 ✓
90	61.2 ✓
6000	62.3 ✓
10	62.2 ✓
20	61.1 ✓
30	59.7 ✓
40	
50	

not on beam ✓

N3470

E

4050	551.0	✓
60	51.3	✓
70	51.4	✓
80	51.8	✓
90	52.0	✓
4100	51.7	✓
10	52.2	✓
20	52.2	✓
30	52.3	✓
40	52.1	✓
50	52.6	✓
60	52.2	✓
70	52.4	✓
80	52.4	✓
90	52.3	✓
4200	52.5	✓
10	52.3	✓
20	52.3	✓
30	53.3	✓
40	52.6	✓
50	53.3	✓
60	52.7	✓
70	53.9	✓
80	53.4	✓
90	54.4	✓

not on beam low 70

✓

N3470

E

4300	555.3	✓
10	56.8	✓
20	56.3	✓
30	57.4	✓
40	58.7	✓
50	59.3	✓
60	59.7	✓
70	60.0	✓
80	60.7	✓
90	61.9	✓
4400	61.8	✓
10	62.2	✓
20	61.5	✓
30	61.8	✓
40	61.9	✓
50	64.0	✓
60	65.7	✓
70	66.4	✓
80	68.2	✓
90	67.8	✓
4500	70.6	✓
10	70.3	✓
20	72.3	✓
30	71.9	✓
40	71.9	✓

✓

E

4550

574.0 ✓

60

72.5 ✓

70

74.7 ✓

80

74.6 ✓

90

76.5 ✓

4600

76.4 ✓

10

77.0 ✓

20

75.9 ✓

30

75.0 ✓

40

73.3 ✓

50

73.2 ✓

60

72.1 ✓

70

71.3 ✓

80

70.4 ✓

90

69.5 ✓

4700

69.0 ✓

10

~~68.9~~
68.9 ✓

20

69.0 ✓

30

68.8 ✓

40

67.7 ✓

50

~~63.9~~
63.9 ✓

60

59.4 ✓

70

57.4 ✓

80

57.1 ✓✓

90

55.8 ✓✓

E

4200	559.9	✓	✓
10	59.7	✓	✓
20	59.7	✓	✓
30	59.5	✓	✓
40	58.1	✓	✓
50	57.1	✓	✓
60	58.7	✓	✓
70	58.9	✓	✓
80	60.4	✓	✓
90	60.8	✓	✓
4500	60.6	✓	✓
10	60.7	✓	✓
20	60.7	✓	✓
30	60.6	✓	✓
40	61.1	✓	✓
50	60.8	✓	✓
60	61.0	✓	✓
70	60.8	✓	✓
80	61.1	✓	✓
90	60.9	✓	✓
5000	60.9	✓	✓
10	60.7	✓	✓
20	60.9	✓	✓
30	60.7	✓	✓
40	60.5	✓	✓

E

5050	56.04	✓	/
60	60.5	✓	/
70	59.1	✓	✓
80	59.2	✓	✓
90	58.8	✓	✓
5100	59.2	✓	/
10	58.9	✓	/
20	59.0	✓	✓
30	59.3	✓	✓
40	59.1	✓	/
50	60.8	✓	✓
60	62.1	✓	/
70	66.2	✓	/
80	70.7	✓	/
90	70.4	✓	/
5200	71.2	✓	✓
10	68.1	✓	/
20	71.6	✓	/
30	72.2	✓	/
40	72.5	✓	✓
50	72.6	✓	✓
60	72.4	✓	✓
70	72.6	✓	✓
80	73.3	✓	✓
90	73.4	✓	✓

N3470

E

5300	573.7	✓✓
10	74.1	✓✓
20	73.9	✓✓
30	74.3	✓✓
40	75.1	✓✓
50	76.1	✓✓
60	75.7	✓✓
70	76.0	✓✓
80	75.9	✓✓
90	75.9	✓✓
5400	75.9	✓✓
10	75.5	✓✓
20	75.3	✓✓
30	75.6	✓✓
40	75.8	✓✓
50	76.0	✓✓
60	75.7	✓✓
70	74.6	✓✓
80	73.7	✓✓
90	73.8	✓✓
5500	73.5	✓✓
10	73.6	✓✓
20	73.7	✓✓
30	73.9	✓✓
40	73.6	✓✓

✓

E	
5550	573.8 ✓ ✓
60	73.9 ✓ ✓
70	74.1 ✓ ✓
80	74.2 ✓ ✓
90	74.3 ✓ ✓
5600	74.6 ✓ ✓
10	74.8 ✓
20	75.0 ✓
30	75.1 ✓
40	74.9 ✓
50	75.0 ✓
60	74.9 ✓
70	74.8 ✓
80	74.6 ✓
90	74.1 ✓
5700	72.6 ✓
10	70.0 ✓
20	69.0 ✓
30	69.0 ✓
40	68.5 ✓
50	67.0 ✓
60	65.6 ✓
70	66.7 ✓
80	66.7 ✓
90	66.9 ✓

mt on beam
see
m

E

5800	565.1	✓
10	64.5	✓
20	64.2	✓
30	63.9	✓
40	62.5	✓
50	62.6	✓
60	62.4	✓
70	62.8	✓
80	62.5	✓
90	62.4	✓
5900	62.4	✓
10	62.4	✓
20	62.2	✓
30	62.5	✓
40	62.8	✓
50	62.2	✓
60	62.0	✓
70	62.6	✓
80	61.4	✓
90	61.5	✓
6000	61.8	✓
10	61.2	✓
20	59.4	✓
30		
40		

not on beam see
N

E		
4050	550.6	✓
60	509	✓
70	509	✓
80	509	✓
90	51.0	✓
4100	51.2	✓
10	51.2	✓
20	51.5	✓
30	51.9	✓
40	52.1	✓
50	52.0	✓
60	51.7	✓
70	52.7	✓
80	52.9	✓
90	53.3	✓
4200	52.8	✓
10	53.4	✓
20	53.1	✓
30	53.0	✓
40	52.4	✓
50	53.8	✓ ✓
60	53.7	✓ ✓
70	54.0	✓ ✓
80	53.1	✓ ✓
90	53.1	✓ ✓

not on Dam Sec
W

✓

✓

E			
4300	5533	✓	✓
10	53.4	✓	✓
20	53.8	✓	✓
30	53.7	✓	✓
40	54.6	✓	✓
50	55.3	✓	✓
60	55.9	✓	✓
70	57.1	✓	✓
80	57.7	✓	✓
90	59.3	✓	✓
4400	60.1	✓	✓
10	60.5	✓	✓
20	59.9	✓	✓
30	59.2	✓	✓
40	61.9	✓	✓
50	61.9	✓	✓
60	62.0	✓	✓
70	62.4	✓	✓
80	65.0	✓	✓
90	63.7	✓	✓
4500	64.4	✓	✓
10	65.2	✓	✓
20	67.4	✓	✓
30	68.4	✓	✓
40	69.1	✓	✓

E

4550	569.4	✓✓
60	69.4	✓✓
70	70.9	✓✓
80	70.4	✓✓
90	73.2	✓✓
4600	72.6	✓✓
10	72.4	✓✓
20	74.8	✓✓
30	71.1	✓✓
40	70.3	✓✓
50	69.0	✓✓
60	70.2	✓✓
70	70.8 70.7	✓✓
80	69.6	✓✓
90	68.9	✓✓
4700	67.5	✓✓
10	64.0	✓✓
20	62.9	✓✓
30	62.5	✓✓
40	62.4	✓✓
50	57.4	✓✓
60	57.1	✓✓
70	56.3	✓✓
80	56.2	✓✓
90	54.9	✓✓

N3480

E

4800

558.5 ✓ ✓

10

57.0 ✓ ✓

20

57.4 ✓ ✓

30

58.2 ✓ ✓

40

59.6 ✓ ✓

50

60.9 ✓ ✓

60

61.1 ✓ ✓

70

61.1 ✓ ✓

80

61.1 ✓ ✓

90

61.1 ✓ ✓

4900

61.1 ✓ ✓

10

61.1 ✓ ✓

20

61.1 ✓ ✓

30

61.2 ✓ ✓

40

61.1 ✓ ✓

50

61.2 ✓ ✓

60

61.1 ✓ ✓

70

61.1 ✓ ✓

80

61.4 ✓ ✓

90

61.3 ✓ ✓

5000

61.0 ✓ ✓

10

61.1 ✓ ✓

20

61.2 ✓ ✓

30

61.2 ✓ ✓

40

61.2 ✓ ✓

✓

E	
5050	560.9 ✓✓
60	608 ✓✓
70	608 ✓✓
80	60.6 ✓✓
90	60.3 ✓✓
5100	60.1 ✓✓
10	59.7 ✓✓
20	59.4 ✓✓
30	59.3 ✓✓
40	59.7 ✓✓
50	58.6 ✓✓
60	58.7 ✓✓
70	58.4 ✓✓
80	59.0 ✓✓
90	59.9 ✓✓
5200	59.6 ✓✓
10	61.9 ✓✓
20	63.2 ✓✓
30	66.8 ✓✓
40	66.9 ✓✓
50	67.8 ✓✓
60	68.0 ✓✓
70	65.4 ✓✓
80	64.6 ✓✓
90	67.6 ✓✓ ✓

E

5300

571.1 ✓ ✓

10

68.1 ✓ ✓

20

69.5 ✓ ✓

30

70.1 ✓ ✓

40

71.7 ✓ ✓

50

72.1 ✓ ✓

60

72.5 ✓ ✓

70

72.8 ✓ ✓

80

73.0 ✓ ✓

90

73.1 ✓ ✓

5400

73.0 ✓ ✓

10

73.2 ✓ ✓

20

73.0 ✓ ✓

30

73.4 ✓ ✓

40

72.8 ✓ ✓

50

74.4 ✓ ✓

60

73.5 ✓ ✓

70

72.4 ✓ ✓

80

72.2 ✓ ✓

90

72.6 ✓ ✓

5500

72.9 ✓ ✓

10

72.9 ✓ ✓

20

73.2 ✓ ✓

30

73.1 ✓ ✓

40

73.1 ✓ ✓

E

5550	573.6	✓✓
60	73.6	✓✓
70	73.9	✓✓
80	74.2	✓✓
90	74.1	✓✓
5600	74.3	✓✓
10	74.7	✓
20	74.6	✓
30	74.7	✓
40	74.6	✓
50	74.2	✓
60	73.9	✓
70	73.5	✓
80	72.0	✓
90	69.0	✓
5700	68.7	✓
10	68.4	✓
20	67.9	✓
30	67.2	✓
40	64.7	✓
50	64.8	✓
60	65.2	✓
70	65.6	✓
80	65.3	✓
90	66.2	✓

not on down leg
M

N 3480

F		
5800	564.7	✓
10	64.2	✓
20	63.7	✓
30	63.4	✓
40	62.6	✓
50	62.6	✓
60	62.6	✓
70	62.5	✓
80	62.3	✓
90	62.1	✓
5900	62.2	✓
10	61.9	✓
20	61.9	✓
30	62.5	✓
40	62.6	✓
50	62.1	✓
60	62.5	✓
70	62.2	✓
80	61.3	✓
90	61.5	✓
6000	61.1	✓
10	60.3	✓
20		
30		
40		

not on Dam due
to

E		
4060	550.1	✓
70	50.1	✓
80	50.4	✓
90	50.5	✓
4100	50.7	✓
10	51.0	✓
20	51.4	✓
30	51.4	✓
40	51.6	✓
50	51.5	✓
60	52.1	✓
70	52.5	✓
80	52.5	✓
90	52.3	✓
4200	52.4	✓
10	52.5	✓
20	52.4	✓
30	52.4	✓
40	52.4	✓
50	52.6	✓
60	52.4	✓
70	52.9	✓
80	53.6	✓
90	53.1	✓
4300	52.4	✓

put on Sam for
M

E

4310	552.4	✓
20	52.4	✓
30	52.5	✓
40	52.7	✓
50	52.8	✓
60	53.4	✓
70	54.1	✓
80	53.5	✓
90	55.7	✓
4400	55.7	✓
10	55.9	✓
20	56.6	✓
30	57.1	✓
40	58.7	✓
50	59.6	✓
60	59.7	✓
70	59.6	✓
80	60.8	✓
90	61.4	✓
4500	60.5	✓
10	62.4	✓
20	62.2	✓
30	62.9	✓
40	63.0	✓
50	64.3	✓

N 3490

E

4560	564.4	✓
70	65.7	✓
80	66.4	✓
90	66.4	✓
4600	67.3	✓
10	68.2	✓
20	67.7	✓
30	66.7	✓
40	65.8	✓
50	65.4	✓
60	63.5	✓
70	62.7	✓
80	64.0	✓
90	62.6	✓
4700	62.6	✓
10	61.1	✓
20	62.0	✓
30	60.2	✓
40	59.1	✓
50	57.3	✓
60	56.4	✓
70	56.3	✓
80	55.6	✓
90	55.0	✓
4800	57.1	✓

E

4810	558.5	✓
20	59.6	✓
30	61.1	✓
40	61.1	✓
50	61.2	✓
60	61.2	✓
70	61.3	✓
80	61.3	✓
90	61.2	✓
4900	61.3	✓
10	61.4	✓
20	61.3	✓
30	61.3	✓
40	61.4	✓
50	61.3	✓
60	61.4	✓
70	61.5	✓
80	61.4	✓
90	61.4	✓
5000	61.3	✓
10	61.3	✓
20	61.2	✓
30	61.3	✓
40	61.2	✓
50	61.3	✓

✓

E

5060	561.3	✓
70	61.2	✓
80	61.4	✓
90	60.9	✓
5100	60.9	✓
10	60.8	✓
20	61.0	✓
30	60.9	✓
40	60.3	✓
50	59.7	✓
60	59.8	✓
70	60.2	✓
80	59.4	✓
90	59.3	✓
5200	60.0	✓
10	59.1	✓
20	59.1	✓
30	58.8	✓
40	60.0	✓
50	59.9	✓
60	64.2	✓
70	64.2	✓
80	64.1	✓
90	64.4	✓
5300	64.6	✓

E

5310

561.6 ✓

20

61.1 ✓

30

62.0 ✓

40

65.0 ✓

50

67.3 ✓

60

68.4 ✓

70

71.0 ✓

80

71.1 ✓

90

71.6 ✓

5400

70.8 ✓

10

71.0 ✓

20

70.7 ✓

30

71.0 ✓

40

70.6 ✓

50

71.1 ✓

60

71.0 ✓

70

71.4 ✓

80

71.7 ✓

90

71.9 ✓

5500

72.1 ✓

10

71.9 ✓

20

72.3 ✓

30

72.7 ✓

40

73.1 ✓

50

73.2 ✓

E		
5560	573.6	✓
70	73.7	✓
80	73.8	✓
90	73.8	✓
5600	72.2	✓
10	74.2	✓
20	71.1	✓
30	70.3	✓
40	71.7	✓
50	71.5	✓
60	70.5	✓
70	68.4	✓
80	65.4	✓
90	66.2	✓
5700	64.9	✓
10	64.5	✓
20	64.3	✓
30	64.5	✓
40	64.4	✓
50	64.7	✓
60	64.9	✓
70	64.5	✓
80	64.7	✓
90	65.3	✓
5800	64.7	✓

not on Braun Lee
m

E

58.10	563.9	✓
20	64.0	✓
30	62.8	✓
40	62.5	✓
50	62.6	✓
60	62.4	✓
70	62.4	✓
80	62.2	✓
90	62.1	✓
59.00	61.9	✓
10	61.6	✓
20	61.5	✓
30	62.8	✓
40	62.3	✓
50	61.8	✓
60	62.3	✓
70	61.7	✓
80	61.2	✓
90	61.3	✓
60.00	60.7	✓
10	59.6	✓
20		
30		
40		
50		

not on Dan Lee M

E

4060	550.2	✓
70	50.2	✓
80	50.1 50.4	✓
90	50.7	✓
41 00	50.9	✓
10	50.8	✓
20	50.8	✓
30	50.8 51.8	✓
40	51.4	✓
50	51.6	✓
60	51.4	✓
70	51.8 52.8	✓
80	52.1	✓
90	52.1	✓
4200	52.4	✓
10	52.4	✓
20	52.7	✓
30	52.8	✓
40	52.8	✓
50	52.4	✓ ✓
60	52.5	✓ ✓
70	52.5	✓
80	52.5	✓ ✓
90	52.5	✓
4300	52.8	✓ ✓

not on Sam Dec 19

E	
4310	552.9 ✓ ✓
20	52.8 ✓ ✓
30	52.9 ✓ ✓
40	52.8 ✓ ✓
50	52.7 ✓ ✓
60	52.7 ✓ ✓
70	52.7 ✓ ✓
80	53.1 ✓ ✓
90	53.8 ✓ ✓
4400	54.8 ✓ ✓
10	55.1 ✓ ✓
20	55.3 ✓ ✓
30	55.0 ✓ ✓
40	54.5 ✓ ✓
50	53.9 ✓ ✓
60	55.1 ✓ ✓
70	55.9 ✓ ✓
80	58.0 ✓ ✓
90	57.7 ✓ ✓
4500	58.7 ✓ ✓
10	59.2 ✓ ✓
20	60.3 ✓ ✓
30	61.4 ✓ ✓
40	60.5 ✓ ✓
50	60.1 ✓ ✓

✓

E	
4560	560.1 ✓ ✓
70	59.3 ✓ ✓
80	61.4 ✓ ✓
90	62.1 ✓ ✓
4600	64.5 ✓ ✓
10	63.4 ✓ ✓
20	62.2 ✓ ✓
30	61.4 ✓ ✓
40	61.4 ✓ ✓
50	61.0 ✓ ✓
60	60.7 ✓ ✓
70	60.7 ✓ ✓
80	60.8 ✓ ✓
90	60.1 ✓ ✓
4700	59.4 ✓ ✓
10	59.3 ✓ ✓
20	57.3 ✓ ✓
30	56.4 ✓ ✓
40	55.9 ✓ ✓
50	55.2 ✓ ✓
60	55.3 ✓ ✓
70	54.5 ✓ ✓
80	55.0 ✓ ✓
90	59.7 ✓ ✓
4800	60.7 ✓ ✓

E

4810	561.0	✓	✓
20	61.1	✓	✓
30	61.1	✓	✓
40	61.3	✓	✓
50	61.3	✓	✓
60	61.2	✓	✓
70	61.2	✓	✓
80	61.1	✓	✓
90	61.1	✓	✓
4900	61.4	✓	✓
10	61.3	✓	✓
20	61.4	✓	✓
30	61.3	✓	✓
40	61.4	✓	✓
50	61.4	✓	✓
60	61.6	✓	✓
70	61.6	✓	✓
80	61.4	✓	✓
90	61.5	✓	✓
5000	61.4	✓	✓
10	61.4	✓	✓
20	61.4	✓	✓
30	61.3	✓	✓
40	61.3	✓	✓
50	61.3	✓	✓

✓

E

5060	561.4	✓✓
70	61.3	✓✓
80	61.4	✓✓
90	61.4	✓✓
5100	61.4	✓✓
10	61.3	✓✓
20	61.4	✓✓
30	61.3	✓✓
40	61.4	✓✓
50	61.2	✓✓
60	60.9	✓✓
70	61.2	✓✓
80	60.5	✓✓
90	61.1	✓✓
5200	61.0	✓✓
10	61.6	✓✓
20	60.8	✓✓
30	61.1	✓✓
40	60.5	✓✓
50	60.8	✓✓
60	64.2	✓✓
70	64.6	✓✓
80	64.5	✓✓
90	64.7	✓✓
5300	64.0	✓✓

N 3500

E

5310		561.5	✓	✓
20		61.3	✓	✓
30		61.5	✓	✓
40		61.4	✓	✓
50		61.4	✓	✓
60		61.1	✓	✓
70		61.6	✓	✓
80	64.5	65.4	✓	✓
90		65.6	✓	✓
5400		66.3	✓	✓
10		66.0	✓	✓
20		67.8	✓	✓
30		66.9	✓	✓
40		66.9	✓	✓
50		67.0	✓	✓
60		67.1	✓	✓
70		67.3	✓	✓
80		67.4	✓	✓
90		67.8	✓	✓
5500		67.5	✓	✓
10		68.2	✓	✓
20		68.3	✓	✓
30		68.3	✓	✓
40		68.2	✓	✓
50		68.2	✓	✓

B 334 P 53

E

5560	568.8	✓ ✓
70	66.6	✓ ✓
80	67.4	✓ ✓
90	65.7	✓ ✓
5600	64.4	✓ ✓ ✓
10	63.6	✓
20	63.7	✓
30	64.3	✓
40	64.5	✓
50	64.3	✓
60	63.9	✓
70	63.9	✓
80	64.0	✓
90	64.0	✓
5700	64.0	✓
10	64.3	✓
20	64.4	✓
30	64.4	✓
40	64.5	✓
50	64.1	✓
60	63.8	✓
70	63.9	✓
80	64.0	✓
90	64.0	✓
5800	63.9	✓

not on beam face

E

5810	563.8 ✓
20	63.6 ✓
30	62.4 ✓
40	62.4 ✓
50	62.5 ✓
60	62.5 ✓
70	62.2 ✓
80	61.9 ✓
90	61.8 ✓
5900	61.5 ✓
10	61.4 ✓
20	62.2 ✓
30	62.7 ✓
40	61.8 ✓
50	61.9 ✓
60	62.0 ✓
70	61.4 ✓
80	61.1 ✓
90	60.7 ✓
6000	60.0 ✓
10	
20	
30	
40	
50	

not on Dew for
m

E

4060	550.2	✓
70	50.2	✓
80	50.3	✓
90	50.3	✓
4100	50.4	✓
10	50.3	✓
20	50.3	✓
30	50.4	✓
40	50.4 50.4	✓
50	50.4 50.4	✓
60	50.7 50.7	✓
70	50.5	✓
80	50.6	✓
90	51.3	✓
4200	51.6	✓
10	52.2	✓
20	52.2	✓
30	52.0	✓
40	52.4	✓
50	52.7	✓ /
60	53.1	✓ /
70	53.9	✓ /
80	53.3	✓ /
90	53.4	✓ /
4300	53.9	✓ /

see book 341 page 50-57

not on saw see
N.

E

4310	554.2	✓✓
20	53.5	✓✓
30	53.6	✓✓
40	53.4	✓✓
50	53.4	✓✓
60	53.2	✓✓
70	53.2	✓✓
80	53.2	✓✓
90	53.1	✓✓
4400	53.1	✓✓
10	54.4 54.3	✓✓
20	54.5	✓✓
30	54.9	✓✓
40	54.2	✓✓
50	54.2	✓✓
60	54.6	✓✓
70	55.4	✓✓
80	56.3	✓✓
90	56.4	✓✓
4500	54.9	✓✓
10	55.4	✓✓
20	55.9	✓✓
30	56.2	✓✓
40	56.7	✓✓
50	56.8	✓✓

E

4560	557.3	✓✓
70	57.9	✓✓
80	58.1	✓✓
90	58.4	✓✓
4600	59.7	✓✓
10	58.7	✓✓
20	58.8	✓✓
30	60.6	✓✓
40	57.2	✓✓
50	61.5	✓✓
60	56.3	✓✓
70	57.3	✓✓
80	56.9	✓✓
90	56.6	✓✓
4700	58.3	✓✓
10	58.0	✓✓
20	56.2	✓✓
30	56.3	✓✓
40	55.5	✓✓
50	54.8	✓✓
60	54.8	✓✓
70	54.9	✓✓
80	60.0	✓✓
90	61.0	✓✓
4800	60.9	✓✓

N3510

E

4810

561.0 ✓✓

20

61.0 ✓✓

30

61.1 ✓✓

40

61.1 ✓✓

50

61.1 ✓✓

60

61.1 ✓✓

70

61.1 ✓✓

80

61.1 ✓✓

90

61.2 ✓✓

4900

61.4 ✓✓

10

61.4 ✓✓

20

61.2 ✓✓

30

61.3 ~~63.1~~ ✓✓

B 334 P 3

40

61.4 ✓✓

50

61.4 ✓✓

60

61.4 ✓✓

70

61.6 ✓✓

80

61.6 ✓✓

90

61.7 ✓✓

5000 ✓

61.3 ✓✓

10

61.4 ✓✓

20

61.5 ✓✓

30

61.5^H ✓✓

P14 Part 334

40

61.5 ✓✓

50

61.4 ✓✓

E

5060	561.6	✓	✓
70	61.5	✓	✓
80	61.4	✓	✓
90	61.5	✓	✓
5100	61.4	✓	✓
10	61.5	✓	✓
20	61.4	✓	✓
30	61.5	✓	✓
40	61.4	✓	✓
50	61.5	✓	✓
60	61.8	✓	✓
70	61.8	✓	✓
80	61.8	✓	✓
90	61.8	✓	✓
5200	61.8	✓	✓
10	62.2	✓	✓
20	62.3	✓	✓
30	62.4	✓	✓
40	61.5	✓	✓
50	62.5	✓	✓
60	62.8	✓	✓
70	62.8	✓	✓
80	63.0	✓	✓
90	62.9	✓	✓
5300	63.0	✓	✓

E			
5310		563.1	✓✓
20		63.2	✓✓
30		63.0	✓✓
40		63.0	✓✓
50		63.1	✓✓
60		62.6	✓✓
70		62.9	✓✓
80		62.2	✓✓
90		61.6	✓✓
5400		61.8	✓✓
10	62.0	62.6	✓✓
20		62.1	✓✓
30		62.7	✓✓
40		62.3	✓✓
50		62.6	✓✓
60		62.6	✓✓
70		62.6	✓✓
80		62.8	✓✓
90		63.1	✓✓
5500		63.2	✓✓
10		62.6	✓✓
20		62.6	✓✓
30		63.1	✓✓
40		63.8	✓✓
50		63.9	✓✓

B 334 P 55

E		
5560	563.7	✓✓
70	63.3	✓✓
80	63.7	✓✓
90	63.5	✓✓
5600	63.6	✓✓ ✓
10	63.8	✓
20	63.7	✓
30	63.7	✓
40	63.8	✓
50	63.9	✓
60	63.9	✓
70	64.2	✓
80	64.2	✓
90	64.2	✓
5700	64.2	✓
10	64.3	✓
20	64.3	✓
30	64.2	✓
40	63.9	✓
50	63.5	✓
60	63.5	✓
70	63.6	✓
80	63.6	✓
90	63.8	✓
5800	64.0	✓

met on New Sec
m

N3510

E

58 10	568.0	✓
20	62.6	✓
30	62.5	✓
40	62.3	✓
50	62.4	✓
60	62.4	✓
70	61.9	✓
80	61.5	✓
90	61.3	✓
59 00	61.2	✓
10	61.0	✓
20	62.7	✓
30	63.1	✓
40	61.6	✓
50	61.8	✓
60	61.4	✓
70	61.2	✓
80	61.9	✓
90	59.8	✓
60 00		
10		
20		
30		
40		
50		

not on Dam Lee
M.

E			
4060	550.1	✓	
70	50.2	✓	
80	50.3	✓	
90	50.1	✓	
4100	50.4	✓	
10	50.4	✓	
20	50.5	✓	
30	50.4	✓	
40	50.5	✓	
50	50.5	✓	
60	50.6	✓	
70	50.7	✓	
80	50.7	✓	
90	50.4 50.9	✓	
4200	50.7 50.9	✓	
10	50.7 50.9	✓	
20	50.8 51.0	✓	
30	50.9	✓	
40	51.8	✓	
50	52.1	✓ ✓	~~~~~
60	52.5	✓ ✓	
70	52.7	✓ ✓	
80	53.1	✓ ✓	
90	53.0	✓ ✓	
4300	52.9	✓ ✓	

Nest on Dam
 Dec 1911

F		
4310	553.0	✓✓
20	53.2	✓✓
30	53.3	✓✓
40	53.5	✓✓
50	53.7	✓✓
60	53.5	✓✓
70	53.3	✓✓
80	53.2	✓✓
90	53.0	✓✓
4400	53.1	✓✓
10	52.7	✓✓
20	52.6	✓✓
30	52.8	✓✓
40	53.4	✓✓
50	54.0	✓✓
60	54.1	✓✓
70	53.9	✓✓
80	54.0	✓✓
90	53.5	✓✓
4500	53.9	✓✓
10	54.2	✓✓
20	54.5	✓✓
30	54.4	✓✓
40	53.9	✓✓
50	54.1	✓✓

✓

N3520

E

4560	554.8	✓✓
70	54.6	✓✓
80	54.7	✓✓
90	56.3	✓✓
4600	54.4	✓✓
10	54.6	✓✓
20	55.7	✓✓
30	55.0	✓✓
40	55.0	✓✓
50	54.4	✓✓
60	54.2	✓✓
70	54.6	✓✓
80	55.1	✓✓
90	54.9	✓✓
4700	54.5	✓✓
10	54.9	✓✓
20	55.0	✓✓
30	55.3	✓✓
40	54.7	✓✓
50	54.8	✓✓
60	55.2	✓✓
70	58.0	✓✓
80	60.7	✓✓
90	60.7	✓✓
4800	60.8	✓✓

E

4810	560.8	✓✓
20	60.9	✓✓
30	60.8	✓✓
40	60.7	✓✓
50	61.0	✓✓
60	61.1	✓✓
70	61.2	✓✓
80	61.0	✓✓
90	61.2	✓✓
4900	61.1	✓✓
10	61.3	✓✓
20	61.4	✓✓
30	61.6	✓✓
40	61.5	✓✓
50	61.6 61.4	✓✓
60	61.3	✓✓
70	61.1	✓✓
80	61.0	✓✓
90	61.6	✓✓
5000	61.4	✓✓
10	61.7	✓✓
20	61.7	✓✓
30	61.6	✓✓✓
40	61.6	✓✓
50	61.6	✓✓

B 334 P 5

E

5060	561.7	✓✓
70	61.5	✓✓
80	61.6	✓✓
90	61.7	✓✓
5100	61.6	✓✓
10	61.8	✓✓
20	61.8	✓✓
30	62.0	✓✓
40	61.6	✓✓
50	61.6	✓✓
60	61.8	✓✓
70	61.6	✓✓
80	61.8	✓✓
90	61.9	✓✓
5200	62.1	✓✓
10	62.2	✓✓
20	62.2	✓✓
30	62.2	✓✓
40	62.4	✓✓
50	62.6	✓✓
60	62.7	✓✓
70	62.7	✓✓
80	62.7	✓✓
90	62.8	✓✓
5300	62.8	✓✓

N5320
3520

E

5310	562.9	✓	✓
20	63.0	✓	✓
30	63.2	✓	✓
40	63.2	✓	✓
50	63.0	✓	✓
60	63.2	✓	✓
70	63.2	✓	✓
80	63.2	✓	✓
90	63.4	✓	✓
5400	63.4	✓	✓
10	63.5	✓	✓
20	63.5	✓	✓
30	63.6	✓	✓
40	63.6	✓	✓
50	63.7	✓	✓
60	63.8	✓	✓
70	63.8	✓	✓
80	63.9	✓	✓
90	63.7	✓	✓
5500	63.8	✓	✓
10	63.9	✓	✓
20	63.9	✓	✓
30	63.9	✓	✓
40	63.4	✓	✓
50	62.8	✓	✓

N3520

E

5560	563.8	✓	✓
70	63.7 63.2	✓	✓
80	63.7	✓	✓
90	64.1	✓	✓
5600	64.1	✓	✓
10	64.2	✓	
20	63.9	✓	
30	63.9	✓	
40	63.9	✓	
50	63.8	✓	
60	63.9	✓	
70	63.9	✓	
80	63.9	✓	
90	63.9	✓	
5700	63.9	✓	
10	63.7	✓	
20	63.6	✓	
30	63.7	✓	
40	63.5	✓	
50	63.5	✓	
60	63.7	✓	
70	63.2	✓	
80	63.7	✓	
90	63.9	✓	
5800	63.3	✓	

Not on Sawdce
m

B. 334 P. 71

N 3520

67

E		
5810	562.8	✓
20	62.7	✓
30	62.4	✓
40	62.4	✓
50	62.2	✓
60	62.0	✓
70	61.4	✓
80	61.2	✓
90	61.3	✓
5900	60.7	✓
10	61.8	✓
20	63.0	✓
30	61.6	✓
40	61.4	✓
50	61.5	✓
60	61.0	✓
70	61.0	✓
80	60.5	✓
90		
6000		

not on Saw Lee
m

E

4060	550.4	✓
70	50.4	✓
80	50.4	✓
90	50.5	✓
4100	50.5	✓
10	50.6	✓
20	50.4	✓
30	50.6	✓
40	50.6	✓
50	50.6	✓
60	50.8	✓
70	50.9	✓
80	50.8	✓
90	50.8	✓
4200	50.7	✓
10	50.9	✓
20	50.9	✓
30	50.8	✓
40	50.5 51.0	✓
50	50.6 50.9	✓ ✓
60	50.9 51.0	✓ ✓
70	50.9 51.0	✓ ✓
80	50.6	✓ ✓
90	51.8	✓ ✓
4300	51.1 51.4	✓ ✓

not on Sun Jan 11

E

4310	52.3	✓	✓
20	52.2	✓	✓
30	52.5	✓	✓
40	52.7	✓	✓
50	53.0	✓	✓
60	53.6	✓	✓
70	52.9	✓	✓
80	52.9	✓	✓
90	52.7	✓	✓
4400	53.0	✓	✓
10	52.9	✓	✓
20	53.0	✓	✓
30	53.0	✓	✓
40	53.0	✓	✓
50	52.7	✓	✓
60	53.0	✓	✓
70	52.9	✓	✓
80	53.4	✓	✓
90	53.2	✓	✓
4500	52.6	✓	✓
10	53.0	✓	✓
20	53.0	✓	✓
30	53.8	✓	✓
40	54.1	✓	✓
50	54.6	✓	✓

E				
4810		560.1	✓	✓
20		60.4	✓	✓
30		59.9	✓	✓
40		60.5	✓	✓
50		60.8	✓	✓
60		60.5	✓	✓
70		60.7	✓	✓
80		60.7	✓	✓
50		60.8	✓	✓
4900		61.1	✓	✓
10		61.4	✓	✓
20		61.1	✓	✓
30	61.3	61.2	✓	✓
40		60.4	✓	✓
50		60.4	✓	✓
60		60.1	✓	✓
70		59.9	✓	✓
80		60.4	✓	✓
50		61.2	✓	✓
5000		61.6	✓	✓
10		61.7	✓	✓
20		61.7	✓	✓
30		61.7	✓	✓
40		61.8	✓	✓
50		61.7	✓	✓

9/14/34
 The plotting of
 elev. as to
 these figures checked
 by JRM

B 3.34 P 3

Table VII. Excavation and Embankments, Cu. Yds. per 100 ft.

Slope	¼ to 1	1 to 1			1½ to 1				All Slopes 1 Ft. Base
		BASE			BASE				
		20'	20	22	24	14	16	20	
1	75	78	85	93	57	65	80	94	3.7
2	152	163	178	193	126	141	170	200	7.4
3	230	256	278	300	206	228	272	316	11.1
4	311	356	385	414	296	326	385	444	14.8
5	393	463	500	537	398	435	509	583	18.5
6	477	578	622	666	511	556	644	733	22.2
7	564	700	752	804	635	687	791	894	25.9
8	652	830	889	948	770	830	948	1067	29.6
9	742	967	1033	1100	917	983	1116	1250	33.3
10	833	1111	1185	1259	1074	1148	1296	1444	37.0
11	926	1263	1344	1425	1243	1324	1487	1650	40.7
12	1022	1422	1511	1600	1422	1511	1689	1867	44.4
13	1119	1589	1685	1781	1613	1709	1902	2094	48.1
14	1219	1763	1867	1970	1815	1919	2126	2333	51.8
15	1319	1944	2055	2166	2028	2139	2361	2583	55.5
16	1422	2133	2251	2369	2252	2370	2607	2844	59.2
17	1527	2330	2456	2582	2487	2613	2865	3117	62.9
18	1633	2533	2667	2800	2733	2867	3133	3400	66.6
19	1742	2743	2885	3025	2991	3131	3413	3694	70.3
20	1852	2963	3111	3259	3259	3407	3704	4000	74.0
21	1963	3189	3344	3500	3549	3694	4005	4317	77.7
22	2078	3422	3585	3748	3830	3993	4318	4644	81.4
23	2193	3663	3833	4003	4131	4302	4642	4983	85.1
24	2310	3911	4089	4267	4444	4622	4978	5333	88.8
25	2430	4167	4352	4537	4769	4954	5324	5694	92.5
26	2551	4430	4622	4814	5104	5296	5681	6067	96.2
27	2675	4700	4900	5100	5450	5650	6030	6450	100.0
28	2800	4978	5185	5392	5807	6015	6430	6844	103.6
29	2926	5263	5477	5691	6176	6391	6820	7250	107.3
30	3055	5556	5778	6000	6556	6778	7222	7667	111.0
31	3185	5856	6085	6314	6946	7176	7635	8094	114.7
32	3318	6163	6399	6635	7348	7585	8059	8533	118.4
33	3452	6478	6722	6966	7761	8006	8494	8983	122.1
34	3589	6800	7052	7304	8185	8437	8941	9444	125.8
35	3727	7130	7389	7648	8620	8880	9398	9917	129.5
36	3866	7467	7733	8000	9067	9338	9867	10400	133.2
37	4008	7811	8084	8358	9524	9798	10346	10894	136.9
38	4051	8163	8444	8725	9993	10274	10837	11400	140.6
39	4296	8522	8811	9100	10472	10761	11339	11917	144.3
40	4444	8889	9185	9481	10963	11259	11852	12444	148.0
41	4593	9263	9567	9871	11465	11769	12376	12983	151.7
42	4744	9644	9955	10266	11978	12289	12911	13533	155.4
43	4897	10033	10351	10669	12502	12820	13457	14094	159.1
44	5052	10430	10756	11084	13037	13363	14015	14667	162.8
45	5208	10833	11166	11499	13583	13917	14583	15250	166.5
46	5366	11244	11584	11924	14141	14481	15163	15844	170.2
47	5527	11663	12011	12359	14709	15057	15754	16450	173.9
48	5688	12089	12444	12799	15289	15644	16356	17067	177.6
49	5853	12522	12884	13246	15880	16243	16968	17694	181.3
50	6018	12963	13333	13703	16481	16853	17592	18333	185.0
52	6355	13867	14251	14635	17719	18104	18874	19644	192.4
54	6700	14800	15200	15600	19000	19400	20200	21000	200.0
56	7051	15763	16177	16591	20326	20741	21570	22400	207.2
58	7410	16756	17186	17516	21696	22126	22985	23844	214.6
60	7777	17778	18222	18666	23111	23555	24444	25333	222.0
70	9722	23332	23850	24368	30852	31370	32407	33444	259.0
80	11852	29629	30221	30813	39704	40296	41480	42667	296.0
90	14167	36666	37333	38000	49667	50333	51665	53000	333.0
100	16667	44444	45184	45924	60741	61481	62962	64444	370.0

Tables for Excavations and Embankments.
Distances from Edge of Roadway for Cross-Sectioning.
Any Roadway. Side Slopes 1½ to 1.
Half the width of roadway to be added to table to find distance from centre line.

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