

148

148

MINING
TRAVEL BOOK

383 A

8

8

$$\begin{array}{r} 16 \\ 9\frac{3}{4} \\ \hline 12 \\ 144 \\ \hline 156 \end{array}$$

$$27 \overline{) 5.25}$$

$$\begin{array}{r} 13\frac{1}{8} \\ \hline 3 \overline{) 26\frac{1}{8}} \\ 8 \\ \hline 104 \\ \hline 112 \end{array}$$

$$12\frac{1}{2} \times 2\frac{1}{2} = 31.25$$

$$\begin{array}{r} 5.25 \\ 27 \\ \hline 3675 \\ 1050 \\ \hline 14775 \end{array}$$

$$\begin{array}{r} 12.5 \\ 2.5 \\ \hline 625 \\ 250 \\ \hline 31.25 \end{array}$$

$$10.50 \frac{1}{6}$$

$$\begin{array}{r} 175 \\ 7350 \\ \hline 75.25 \end{array}$$

$$50 \frac{3}{4}$$

$$\begin{array}{r} 4050 \\ 37\frac{1}{2} \\ \hline 450 \\ \hline 487 \end{array}$$

5.25

Town.

$$13' \times 8'8'' = 112.66$$

$$10'6'' \times 7'2'' = 75.25$$

$$16' \times 9'9'' = 156$$

$$\hline 343.91$$

sq ft.

E. J. Roberts

$$12\frac{1}{2}' \times 2\frac{1}{2}' = 31.25$$

$$50' \times 9\frac{3}{4}' = 487.50$$

$$\hline 518.75$$

L. H. Brown Rd

Sta.	W. Strk	El. Sub-Gd	E. Strk.	
0+0	94.84	95.50	93.65	92.10
1+0	98.61	91.70	95.52	0
2+0	88.25	87.90	79.56	83.29
3+0	82.11	87.91	80.61	0
4+0	91.00	91.73	92.70	865
5+0	99.75	95.56	99.68	0
6+0	104.70	99.38	101.74	96.95
7+0	105.38	103.20	104.47	
8+0	106.33	106.21	108.67	0
9+0	104.48	104.42	106.92	93.14
10+0	101.83	101.84	103.11	
11+0	101.35	92.26	102.14	
12+0	94.52	96.68	94.45	0
13+0	92.50	94.08	90.23	93.87
14+0	92.06	91.50	92.90	
15+0	85.29	88.62	81.53	0
16+0	95.88	85.75	93.74	
17+0	96.50	82.87	90.52	94.5
18+0	69.87	80.34	67.25	
19+0	82.25	83.75	76.04	0
20+0	89.52	87.50	85.92	90.67
21+0	95.13	91.25	89.91	0
22+0	96.25	94.46	93.41	81.75
23+0	97.56	94.40	93.77	0
				70.96
				0
				70.25

87.786
 90.28
 B.M. 95.25
 West Endway
 77.96
 82.25
 45.1

95.25

Sta.	W. Sth	E. Sth
24+0	93.42	93.64
25+0	92.49	89.71
26+0	95.47	92.48
27+0	93.07	94.40
28+0	88.90	87.17
29+0	88.23	87.74
30+0	95.399	94.50
31+0	92.469	92.60
32+0	91.55	89.80
33+0	89.79	89.64
34+0	88.71	88.05
35+0	87.75	88.49
36+0	86.75	86.62
37+0	83.21	82.53
38+0	78.54	78.52
39+0	74.53	75.30
40+0	70.94	71.54
41+0	66.07	74.39
42+0	68.64	67.00
43+0	70.54	70.94
44+0	71.66	72.46
45+0	69.82	71.30
46+0	69.54	71.62
47+0	69.02	70.29
48+0	67.23	69.42

0.915

B.M. Brass Rock
92.92 Fence at 29+70

9342
611
8731

8465
611
7804

⊙ → 74.38

079.00

Sta.	W	E	BM
49+0	64.38	66.87	on
50+0	62.38	63.32	center
51+0	60.81	60.85	Rock
52+0	57.18	57.70	51.61
53+0	53.12	54.35	
54+0	51.47	52.30	
55+0	47.43	50.80	
56+0	46.57	47.43	
57+0	45.52	45.80	
58+0	44.69	45.08	
59+0	43.31	43.64	
60+0	43.83	42.43	
61+0	43.44	42.24	
62+0	43.64		
63+0	42.91	42.89	
64+0	44.39	46.90	
65+0	48.62		
66+0	51.31	50.01	
67+0	51.12	50.61	
68+0	53.41	51.19	
69+0	57.23	52.02	
70+0	47.72	49.34	
71+0	49.52	48.40	
72+0		53.15	
73+0		57.17	
74+0	57.68		

51.40

45.24

6.71

D79.71

Top slab
11.50

B.M.

51.90

50.34

	W	E
75+0	62.45	62.08
76+0	66.69	66.83
77+0	67.41	66.53
78+0	66.06	66.82
79+0	67.88	
80+0	67.30	64.21
81+0	65.28	62.19
82+0	65.67	63.91
83+0	66.04	66.79
84+0	67.66	68.34
85+0	68.83	69.05
86+0	69.81	69.93
87+0	71.12	70.95
88+0	71.99	72.09
89+0	73.74	72.75
90+0	74.13	73.89
91+0	75.34	75.05
92+0	76.86	77.30
93+0	78.31	79.31
94+0	81.82	81.12
95+0	83.79	81.61
96+0	81.71	79.79
97+0	75.80	75.79
98+0	71.63	72.73
99+0	73.14	74.44

71.88

66.34
65.28
1.06

9160
6541
6421
1.20

81.37

86.71
611
80.10

94.89

7963
7831
1.32

	W X	E
100+0	74.92	74.45
101+0	74.96	73.20
102+0	71.83	72.34
103+0	74.04	73.72
104+0	75.26	74.21
105+0	77.69	75.62
106+0	79.53	79.19
107+0	82.14	81.40
108+0	83.62	83.63
109+0	86.67	85.93
110+0	90.55	89.67
111+0	93.29	91.13
112+0	91.85	90.84
113+0	86.73	87.62
114+0	83.82	85.17
115+0	83.46	84.98
116+0	84.03	85.41
117+0	83.79	85.03
118+0	85.83	86.52
119+0	92.82	91.89
120+0	100.85	99.95
121+0	98.53	97.12
122+0	91.13	93.86
123+0	88.00	91.54
124+0	86.02	88.71

① 93.33

11

B.M. No 8.
 El. 89.45
 Conc. post. W side
 Sta. 117+17

① 88.64

① 85.79

89.45
 89.19

① 91.59

8491
 8362
 1.29

817

125+0
126+0
127+0
128+0
129+0
130+0
130+

W
87.01
91.25
97.98
94.70
92.67
91.24
90.94

E
88.46
90.39
97.78
97.16
96.86
94.36

92.69
91.245

3.71

99.25
95.54

3.71

9/60

B.M. Ho. 9.
El. 91.60
N end of N
header - Sta. 130+58

40493 Top Fin Tavit.
El. 68.14
67

68.81



Sta.	Gd.	Stk W. side	Cut Width	Fill Width	Stk E. side	Cut E. side	Fill E. side
130+0	91.92	92.67	0'-9"		95.90	3'-11"	
129+0	93.93	93.52		0'-5"	95.24	4'-5"	
128+0	95.00	96.19	1'-2"		98.82	3'-10"	
127+0	95.54	99.44	3'-11"		99.25	3'-8½"	
126+0	94.33	93.73		0'-7½"	92.91		1'-5"
125+0	92.60	88.43		4'-3"	89.89		2'-9"
124+0	91.50	87.39		4'-1½"	90.15		1'-4"
123+0	92.42	89.32		3'-1"	92.42	0'-0"	
122+0	93.85	92.44		1'-5"	95.05	1'-2"	
121+0	95.26	99.92	4'-8"		98.51	3'-3"	
120+0	94.71	102.23	7'-6"		101.34	6'-7½"	
119+0	92.14	94.17	2'-0½"		94.25	2'-1½"	
118+0	89.57	87.50		2'-1"	87.67		1'-8½"
117+0	87.32	85.06		2'-3"	86.39		0'-11"
116+0	86.00	85.21		0'-9"	86.72	0'-9"	
115+0	85.31	84.69		0'-7½"			
114+0	86.50	85.00		1'-6"	86.44		0'-1"
113+0	88.00	88.03	0'-0½"		89.07	1'-1"	
112+0	89.50	93.14	3'-7½"		92.23	2'-9"	
111+0	90.54	94.57	4'-0½"		92.45	1'-11"	
110+0	88.80	91.80	3'-0"		89.99	1'-2½"	
109+0	86.60	87.95	1'-4"		87.20	0'-7"	
108+0	84.40	84.91	0'-6"		84.95	0'-7"	
107+0	82.20	83.45	1'-3"		82.70	0'-6"	

New cut Sheet	
91.92	93.50
94.44	92.14
94.25	95.54
92.44	
211	390
91.81	93.55
	92.44
92.42	1.41
89.37	
	92.60
	88.43
	6.23
86.72	91.50
86.00	90.15
.72	1.35
	89.57
	97.81
	70
96.35	100
96.34	23
	77
	84.69
	83.66
92.34	1.23
83.84	

Sta	Gd	Stk W side	Cut W side	Fill W side	Stk E side	Cut E side	Fill E side
106+0	80.00	80.81	0'-10"		80.62	0'-7½"	
105+0	78.33	78.95	0'-7½"		76.97		1'-4"
104+0	76.67	76.54	0'-1½"		75.56		1'-1½"
103+0	75.14	75.39			75.05		
102+0	74.90	73.09			73.68		
101+0	74.80	76.33			74.58		
100+0	74.70	76.39			75.83		
99+0	74.60	74.48			75.86		
98+0	74.50	72.98			74.07		
97+0	76.33	77.12			77.13		
96+0	78.16	83.08			81.22		
95+0	79.65	85.17			83.00		
94+0	79.00	83.17			82.46		
93+0	78.00	79.63			80.64		
92+0	77.00	78.12			78.55		
91+0	76.00	76.60			76.35		
90+0	74.88	75.43			75.18		
89+0	73.75	75.01			74.02		
88+0	72.62	73.31			73.45		
87+0	71.50	72.35			72.23		
86+0	70.20	71.05			71.20		
85+0	68.90	70.08			70.32		
84+0	67.60	68.91			69.57		
83+0	66.30	67.25			67.98		
82+0	65.00	66.83			65.09		

⊙ 94.24 ²¹

7833

7597

1.36

⊙ 91.75

⊙ 96.65

⊙ 77.13

200
7965
7935
30
7574
7505

⊙ 92.27

B.M.

ON foundation
rock at NE cor.
of barn. 200'
W. of Sta. 108+75
E. 88.43

⊙ 75.52

⊙ 77.30

⊙ 77.88 ⁷⁸⁹⁵

7833

⊙ 72.59

.62

Sta	Gd.	Stk W side	Cut W side	Fill W side	Stk E side	Cut E side	Final E side
81+0	65.68	66.34			63.36		
80+0	66.34	68.49			65.41		
79+0	67.00	69.04					
78+0	66.00	68.22			67.98		
77+0	64.83	68.61			67.70		
76+0	62.20	67.85			67.97		
75+0	59.40	63.53					
74+0	56.60	58.82			58.33		
73+0	53.80	55.21			54.21		
72+0	51.35	50.64			49.56		
71+0	51.00	48.85			50.48		
70+0	51.00	52.28			53.30		
69+0	51.00	54.50			52.27		
68+0	49.90	52.15			56.65		
67+0	48.80	52.32			50.95		
66+0	47.70	49.58			52.37		
65+0	46.60	45.43			48.93		
64+0	45.50	42.95					
63+0	45.50						
62+0	45.20	44.41					
61+0	44.90	43.78			43.20		
60+0					43.35		
59+0	44.30						
58+0	44.00						
57+0	45.50						

⊙ 50.33 ²³

⊙ 66.03

⊙ 68.26

⊙ 61.44

⊙ 52.45

⊙ 51.81

B.M. on N end
of E rail of
Culvert Sta 71+
Ei. 53.40

Slab 52.44

Floor
steel
Bridge 46.43

B.M. N end
of E. rail

Ei. 45.44

Sta	Cd.	stk W side	cut W side	Full W side	stk E side	cut E side	Field E side
56+0	47.00						
55+0	49.00						
54+0	51.00						
53+0	53.00						
52+0	56.00						
51+0	59.00						
50+0	62.00						
49+0	64.50						
48+0	67.00						
47+0	69.50						
46+0	70.25						
45+0	71.00						
44+0	69.85						
43+0	68.71						
42+0	67.57						
41+0	68.00						
40+0	70.00						
39+0	73.80						
38+0	77.67						
37+0	81.50						
36+0	84.50						
35+0	87.50						
34+0	88.63						
33+0	89.76						
32+0	90.88						

Stn	G d.	Stk W side	Cut W side	Fill W side	Stk E side	Cut E side	Fill E side
31+0	91.75						
30+0	91.20						
29+0	90.40						
28+0	90.67						
27+0	91.91						
26+0	92.60						
25+0	93.20						
24+0	93.80						
23+0	94.40						
22+0	94.46						
21+0	91.25						
20+0	87.50						
19+0	83.75						
18+0	80.34						
17+0	82.87						
16+0	85.75						
15+0	88.62						
14+0	91.50						
13+0	94.08						
12+0	96.68						
11+0	99.26						
10+0	101.84						
9+0	104.42						
8+0	106.21						
7+0	103.20						

Sta	Co.	sth W. side	Cent W. side	Field W. side	Stk E. side	cut E. side	Field E. side
6+0	99.38						
5+0	95.56						
4+0	91.73						
3+0	87.91						
2+0	87.90						
1+0	91.70						
0+0	95.50						

	W	Check	Brown Rd
	Stk	to Stk	
0+0	94.84	94.98	⊙ 91.82
1+0	98.62	96.27	⊙ 84.93
2+0	88.28	78.50	79.60 ⊙ 87.52
3+0	82.14	80.92	80.65 ⊙ 99.05
4+0	91.00	91.92	92.72 ⊙ 101.35
5+0	99.82	98.95	99.67 ⊙ 92.15
6+0	104.81	103.68	101.77 ⊙ 95.90
7+0	105.39	104.91	104.48
8+0	106.35	106.86	108.70 B.M. No 2
9+0	104.47	105.45	106.95 100.55
10+0	101.85	102.32	103.14 ⊙ 96.92
11+0	101.35	101.71	102.14 B.M. No 3
12+0	94.64	94.89	94.48 94.65
13+0	92.66	91.12	90.20 ⊙ 94.64
14+0	92.15	91.57	92.74 B.M. No 4
15+0	85.42		91.23
16+0	95.90	94.20	93.83
17+0	96.60	93.96	
18+0			
19+0			
20+0			
21+0	94.52	92.79	
22+0	95.70	94.21	92.72
23+0	97.00	94.99	93.20
24+0		92.43	
		92.51	

BM. No 1. El. 100.00
Cor post 36' NW of
Sta 0+00

BM. No 2. El. 100.90
Cor post on E at Sta 16+53

BM. No 3 El. 95.25
W. Header of Culvt. Sta 21+00

BM. No 4 El. 92.42
N Gatepost - Sta 35+00

BM. No 5. El. 45.29
S end E rail of culvt. Sta 60+00

BM. No 6. El. 50.31
S end W. Hdwl. of Culvt.
Sta 71+42

BM. No 7. El. 80.11
S Gatepost on W. side
Sta 91+00

BM. No 8 El. 91.60
N end N header Sta 130+58

W side	E	E side
25+0	91.33	
26+0	92.88	
27+0	93.27	
28+0	88.67	
29+0	88.76	
30+0	91.95	
31+0	90.68	90.99
32+0	89.07	88.20
33+0	87.92	88.06
34+0	87.35	86.43
35+0	86.11	86.02
36+0	85.11	82.90 84.98
37+0	81.58	79.01 80.91
38+0	76.92	75.10 76.89
39+0	73.90	71.38 73.68
40+0	68.76	68.15 69.98
41+0	64.28	65.73
42+0	67.00	65.42 65.35
43+0		67.54 69.15
44+0	69.95	70.12
45+0	68.15	69.81
46+0	67.93	69.06
47+0	67.48	68.01
48+0	65.67	66.16
49+0	63.79	63.32

- ⊙ 91.24
- ⊙ 82.06
- ⊙ 73.03
- ⊙ 69.40

Bench ⁸⁵ 17 end. of W
 rail. bridge
 Sta 40+90
 El. 67.29
 Slab - 64.50

	W stk	E stk	
50+0	60.71	60.62	
51+0	59.21	58.11	
52+0	55.56	55.07	
53+0	51.49	52.15	
54+0	49.80	49.41	
55+0	45.83	47.20	
56+0	44.90	45.45	
57+0	43.82	44.23	
58+0	42.95	43.02	43.55
59+0	41.52	42.16	42.00
60+0			
61+0	41.04	40.66	40.54
62+0	41.76	41.23	40.52
63+0			
64+0	40.23		
65+0	42.68	43.45	45.19
66+0	46.97	47.43	49.67
67+0	49.61	49.79	48.23
68+0	49.45	50.08	48.98
69+0	51.78	50.72	49.48
70+0	49.55	48.86	
71+0		48.36	47.65
72+0	47.86	49.44	
73+0	52.43	51.52	51.42
74+0	56.05	54.44	55.56

① 60.16

① 49.40

① 42.80

① 48.61

① 49.59

B.M. of other set.
check.Slab 41.90
Sta 60+0check B.M.
50.57Slab 71+
49.64

Sta	W	E	E
75+0	60.83	58.60	
76+0	65.12	63.10	65.24
77+0	65.87	65.58	64.96
78+0	65.47	65.70	65.23
79+0		65.82	
80+0	65.71	64.65	62.62
81+0	63.45	62.95	60.58
82+0	63.94	63.42	62.27
83+0	64.39	64.53	65.09
84+0	66.03	66.07	66.68
85+0	67.18	67.60	67.42
86+0	68.16	68.58	68.31
87+0	69.44	69.71	69.30
88+0	70.37	71.27	70.50
89+0	72.06	72.10	71.06
90+0	72.42	72.72	72.18
91+0	73.53	73.74	73.32
92+0	75.07	75.01	75.50
93+0	76.69	76.41	77.51
94+0	80.22	78.67	79.38
95+0	82.11	80.55	79.94
96+0	79.82	76.53	78.20
97+0	74.10	74.00	74.11
98+0	69.92	72.63	71.09
99+0	71.51	73.00	72.95

② 58.97

39
check
B.M. No. 7.
E1.7832

① 65.70

① 64.56

① 70.06

① 73.87

① 77.77

0 72.35

7100

	W Stk	E Stk	E. Stk
100+0	73.39	73.71	72.92
101+0	73.40	73.01	71.66
102+0	70.10	72.25	70.76
103+0	72.41	72.73	72.08
104+0	73.56	73.99	72.58
105+0	75.88	75.84	73.91
106+0	77.82	77.75	77.64
107+0	80.50	79.97	79.76
108+0	82.01	81.83	82.03
109+0	85.00	83.95	84.27
110+0	88.89	86.71	87.07
111+0	91.67	88.50	89.99
112+0	90.11	87.80	89.23
113+0	85.00	85.15	86.05
114+0	81.92	84.29	83.38
115+0	81.60	83.41	82.80
116+0	82.09	83.78	83.60
117+0	81.92	84.95	83.15
118+0	84.29	87.68	84.67
119+0	90.95	90.38	91.01
120+0	99.04	92.35	98.16
121+0	96.77	92.97	95.32
122+0	89.23	91.41	91.83
123+0	86.13	89.90	89.67
124+0	84.18	88.74	86.93

① 76.26
 ② 83.57
 ③ 87.82
 ④ 87.79
 ⑤ 90.31

41
 Check.
 B.M.
 85.45

Stu	w sth	¢	¢ sth
125+0	85.26	88.90	86.72
126+0	90.55	91.06	89.72
127+0	96.23	94.54	96.05
128+0	93.02	93.33	95.64
129+0	90.39	92.03	95.39
130+0	89.50	89.95	92.70

84.66

09298

43
check
B.M. at
North End.
88.37

West Side

116+12 - 114+77 - 135'x6"

114+77 - 111+30 347x6"

East Sides

Encls 94+50 - 80+91

1359'x6"

West side 94+35 - 81+21

1314'x6"

East side

30+84 - 28+58

226'x6"

28+18 - 25+50

268x6"

West 12+72 - 10+60

212'x6"

7+42 - 2+53

489'x6"

26'x6" tile across Rd at

Sta 6+0

East side -

2+53 - 12+68 - 1015'x6"

5391'x6"

265

32

347

135

482

116+12

35

114+77

11477

347

11430

942

47

489

94+35

255

9180

215

12

94+50

1359

80+91

1359

45

1314

28+18

268

25+50

9435

1314

8121

25+50

30+84

226

2858

135

347

1359

1314

226

268

212

489

1015

5365

253

1015

1268

New Hd. El. Hd. Lts
Brown Rd. Stone Steps

130+0	92.55	93.05	130+25	91.78	92.28
129+75	93.22	93.72	130+50	91.00	92.00
129+50	93.90	94.40	130+58	90.25	91.25
129+25	94.54	95.04			
129+0	95.12	95.62			
128+75	95.60	96.10			
128+50	96.00	96.50			
128+25	96.31	96.81			
128+0	96.46	96.96	Let to Hd.		
127+75	96.47	96.97	Did not set.		
127+50	96.33	96.83			
127+25	96.12	96.62			
127+0	95.91	96.41			
126+75	95.67	96.17			
126+50	95.38	95.88			
126+25	95.02	95.52			
126+0	94.60	95.10			
125+75	94.15	94.65			
125+50	93.70	94.20			
125+25	93.27	93.77			
125+0	92.90	93.40			
124+75	92.59	93.09			
124+50	92.35	92.85			
124+25	92.13	92.63			
124+0	91.92	92.42			

New Hd	El. Hd.	Lts.	
123+75	92.15	92.65	✓ 94.20 93.80
123+50	92.37	92.87	✓ 51
123+25	92.66	93.16	✓
123+0	93.02	93.52	✓ 7.452
122+75	93.36	93.86	✓ 9.452
122+50	93.79	94.29	✓
122+25	94.25	94.75	✓ 9
122+0	94.72	95.22	✓
121+75	95.18	95.68	✓
121+50	95.65	96.15	✓
121+25	96.04	96.54	✓
121+0	96.29	96.79	✓ 96.70 ⁰
120+75	96.20	96.70	✓
120+50	95.97	96.47	✓
120+25	95.67	96.17	✓
120+0	95.36	95.86	✓
119+75	95.00	95.50	✓
119+50	94.56	95.06	✓
119+25	94.02	94.52	✓
119+0	93.40	93.90	✓
118+75	92.72	93.22	✓
118+50	92.05	92.55	✓
118+25	91.30	91.80	✓
118+0	90.70	91.20	✓

117+75	90.02	90.52	✓
117+50	89.35	89.85	✓
117+25	88.71	89.21	✓
117+0	88.17	88.67	✓
116+75	87.70	88.20	✓
116+50	87.33	87.83	✓
116+25	87.00	87.50	✓
116+0	86.67	87.17	✓
115+75	86.38	86.88	✓
115+50	86.22	86.72	✓
115+25	86.15	86.65	✓
115+0	86.20	86.70	✓
114+75	86.30	86.80	✓
114+50	86.40	86.90	✓
114+25	86.54	87.04	✓
114+0	86.77	87.27	✓
113+75	87.07	87.57	✓
113+50	87.47	87.97	✓
113+25	87.90	88.40	✓
113+0	88.34	88.84	✓
112+75	88.77	89.27	✓
112+50	89.21	89.71	✓
112+25	89.64	90.14	✓
112+0	90.08	90.58	✓
111+75	90.51	91.01	✓

93.49 on E. Hedwall. 89.10

$$\begin{array}{r} 8804 \\ 8690 \\ \hline 9864 \\ 9797 \\ \hline 67 \end{array}$$

$$\begin{array}{r} 8717 \\ 8665 \\ \hline 51 \end{array}$$

$$\begin{array}{r} 8743 \\ 8665 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 8780 \\ 8815 \\ 8721 \\ \hline 88 \end{array}$$

$$\begin{array}{r} 8820 \\ 8840 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 8864 \\ 8797 \\ \hline 8983 \\ 8750 \\ 93 \\ 8628 \\ 8746 \\ 58 \end{array}$$

$$\begin{array}{r} 54 \\ 8710 \\ 8672 \end{array}$$

38

$$\begin{array}{r} 8249 \\ 8670 \\ \hline 79 \end{array}$$

$$\begin{array}{r} 8687 \\ 8672 \end{array}$$

111+50 90.95 91.45 ✓
 111+25 91.25 91.75 ✓
 111+0 91.30 91.80 *one on East side to grade*
 110+75 91.08 91.58 ✓
 110+50 90.60 91.10 ✓
 110+25 90.04 90.54 ✓
 110+0 89.38 89.88 ✓
 109+75 88.77 89.27 ✓
 109+50 88.16 88.66 ✓
 109+25 87.55 88.05 ✓
 109+0 86.94 87.44 *on east side to grade*
 108+75 86.33 86.83 ✓
 108+50 85.72 86.22 ✓
 108+25 85.14 85.64 ✓
 108+0 84.56 85.06 *on East side to grade*
 107+75 84.06 84.56 ✓
 107+50 83.55 84.05 ✓
 107+25 83.07 83.57 ✓
 107+0 82.60 83.10 ✓
 106+75 82.12 82.62 ✓
 106+50 81.65 82.15 ✓
 106+25 81.17 81.67 ✓
 106+0 80.70 81.20 ✓
 105+75 80.22 80.72 ✓
 105+50 79.75 80.25 ✓

105+25 79.27 79.77 ✓
 105+0 78.80 79.30 ✓
 104+75 78.32 78.82 ✓
 104+50 77.85 78.35 ✓
 104+25 77.37 77.87 ✓
 104+0 76.90 77.40 ✓
 103+75 76.42 76.92 ✓
 103+50 75.95 76.45 ✓
 103+25 75.55 76.05 ✓
 103+0 75.32 75.82 ✓
 102+75 75.14 75.64 ✓
 102+50 75.12 75.62 ✓
 102+25 75.18 75.68 ✓
 102+0 75.24 75.74 ✓
 101+75 75.30 75.80 ✓
 101+50 75.32 75.86 ✓
 101+25 75.42 75.92 ✓
 101+0 75.49 75.98 ✓
 100+75 75.64 76.04 ✓
 100+50 75.60 76.10 ✓
 100+25 75.66 76.16 ✓
 100+0 75.72 76.22 ✓
 99+75
 99+50
 99+25
 99+0
 98+75

Don Rock
 at cor. Post
 Sta 103A
 El. 76.97

new
old.

100	7584	87+50	73.27
99+50	7578	87+0	72.65
99+0	7578	86+50	72.00
98+50	7567	86+0	71.41
98	7565	85+75	71.23
97+50	7614	85+50	70.85
97+0	7699	85+0	70.36
96+50	7834	84+50	69.51
96	7973	84+0	68.80
95+50	8022	83+50	68.07
95	8117	83+0	67.28
94+50	8086	82+50	66.75
94	8047	82+0	66.39
93+50	7996	81+50	66.36
93	7936	81+0	66.70
92+50	7865	80+50	66.85
92	7807	80+0	67.63
91+50	7731	79+50	67.70
91	7675	79+0	67.61
90+50	7634	78+50	67.38
90	7571	78+0	66.95
89+50	7537	77+50	66.70
89	7504	77+0	65.47
88+50	7448	76+50	64.15
88	7389	76+0	62.80

Q 62.74

070.23

75+50	61.58
75+0	59.96
74+50	58.47
74+0	56.80
73+50	55.29
73+0	54.25
72+50	53.48
72+0	52.94
71+75	52.95
71+50	52.83
71+0	51.92
70+50	51.74
70+0	51.71
69+50	51.53
69+0	51.53
68+50	50.84
68+0	50.73
67+50	49.89
67+0	48.98
66+50	49.03
66+0	48.64
65+50	47.73
65+0	47.27
64+50	47.15
64+0	47.05

7804

B. M. S. end W.
rail bridge
Sta 71+50

EL 53.53

63+50	47.04	plate
63+0	47.18	
62+50	46.13	
62+0	45.86	
61+50	45.78	
61+0		
60+50		
60+0		
59+50		
59+0		
58+50		
58+0		
57+50		
57+0		
56+50		
56+0		
55+50		
55+0		

B.M. N.E. End
of N. Wing of Bridge
E. 47.07

alkal.

100	7601	7551	93175	7957	8007
99	7507	7550	93150	7930	7982
99	7507	7549	93125	7904	7954
99	7525	7548	9310	7877	7921
99	7507	7547	92+75	7851	7901
99	7575	7546	92+50	7824	7874
99	7555	7545	92+25	7798	7848
99	7699	7549	92+0	7771	7821
98	7616	7566	91+75	7745	7795
97	7643	7593	91+50	7718	7768
97	7684	7634	91+25	7692	7742
97	7729	7679	91+0	7665	7715
97	7775	7725	90+75	7639	7689
96	7820	7770	90+50	7612	7662
96	7866	7816	90+25	7586	7636
96	7911	7861	90+0	7559	7609
96	7957	7907	89+75	7533	7583
95	8002	7952	89+50	7506	7556
95	8048	7998	89+25	7480	7530
95	8084	8034	89+0	7453	7503
95	8103	8053	88+75	7427	7477
94	8102	8052	88+50	7400	7450
94	8086	8036	88+25	7374	7424
94	8060	8010	88+0	7347	7397
94	8033	7983	87+75	7321	7371

side
 B.M. on J. Richards
 first step Q. 7847

87	7344	7294	81+75	6675	6625
87	7318	7268	81+50	6677	6627
87	729	7241	81+25	6680	6630
86	72	7215	81+0	6682	6632
86	7232	7188	80+75	6685	6635
86	7212	7162	80+50	6688	6638
86	7182	7162	80+25	6690	6640
86	7182	7132	80+0	6693	6643
85	7149	7098	79+75	6695	6645
85	7111	7061	79+50	6698	6648
85	7074	7024	79+25	6700	6650
85	7037	6987	79+0	6703	6653
84	7000	6950	78+75	6705	6655
84	6963	6913	78+50	6708	6658
84	6926	6876	78+25	6710	6660
84	6889	6839	78+0	6713	6663
83	6852	6802	77+75	6715	6665
83	6815	6765	77+50	6718	6668
83	6778	6728	77+25	6720	6670
83	6741	6691	77+0	6723	6673
82	6704	6654	76+75	6725	6675
82	6667	6617	76+50	6728	6678
82	6630	6580	76+25	6730	6680
82	6593	6543	76+0	6733	6683
82	6556	6506	75+75	6735	6685
82	6519	6469	75+50	6738	6688
82	6482	6432	75+25	6740	6690
82	6445	6395	75+0	6743	6693

75+50 61.57 61.01 /'
 75+25 60.80 60.30 /'
 75+0 60.10 59.60 /'
 74+75 59.40 58.90 /'
 74+50 68.69 58.19 on V /'
 74+25 57.98 57.48 /'
 74+0 57.27 56.77 /' on E
~~73+50 56.56~~
 73+0
 72+50
 72+0
 71+50
 71+0
 70+50
 70+0
 69+50
 69+0
 68+50
 68+0
 67+50
 67+0
 66+50
 66+0
 65+50
 65+0

Continued on Page 58

64+50
 64+0
 63+50
 63+0 4715
 62+50 4604
 62+0 4587
 61+50 4578
 61+0 4559
 60+50 4567
 60+0 4567
 59+50 4612
 59+0 4641
 58+50 4655
 58+0 4684
 57+50 4708
 57+0 4750
 56+50 4822
 56+0 4867
 55+50 4956
 55+0 5059
 54+50 5168
 54+0 5288
 53+50 5410
 53+0 5549
 52+50 5699

52+0 58.39
 51+50 59.89
 51+0 61.03
 50+50 62.15
 50+0 63.25
 49+50 65.17
 49+0 66.66
 48+50 67.65
 48+0 68.70
 47+50 69.29
 47+0 70.26
 46+50 70.85
 46+0 71.09
 45+50 71.34
 45+0 71.39
 44+50 71.20
 44+0 70.98
 43+50 70.59
 43+0
 42+50
 42+0

E elevat
 continued on
 Page 64

Stoa 58

Num 28

73+75 5356
73+50 5355
73+25 5359
73+0 5474
72+75 5443
72+50 5413
72+25 5382
72+0 5352
71+75 5330
71+50 5295
71+25 5278
71+0 5247
70+75 5225
70+50 5203
70+25 5181
70+0 5159
69+75 5137
69+50 5115
69+25 5093
69+0 5071
68+75 5049
68+50 5027
68+25 5005
68+0 4983
67+75 4961

Stoa Newell.

67+50 4939
67+25 4917
67+0 4895
66+75 4881
66+50 4868
66+25 4854
66+0 4841
65+75 4827
65+50 4814
65+25 4800
65+0 4787
64+75 4773
64+50 4760
64+25 4746
64+0 4733
63+75 4719
68+50 4706

~~9440~~
~~9450~~
9

Jess Richardson
Gard.

93+0	25' back
92+50	7821
92+0	7807
91+50	7735
91+0	7690
90+50	7610
90+0	7562

07781
0.7902

09118
7996
1223

2 1/2 Bridge 4120
 stat. 67.01 65

43+0	6994	30+50	9266	18+0	8287
42+50	6868	30+0	9269	17+50	8479
42+0	6863	29+50	9210	17+0	8646
41+50	6871	29+0	9205	16+50	8824
41+0	6948	28+50	9208	16+0	8960
40+50	7065	28+0	9248	15+50	9095
40+0	7209	27+50	9302	15+0	9145
39+50	7392	27+0	9392	14+50	9252
39+0	7570	26+50	9397	14+0	9379
38+50	7728	26+0	9428	13+50	9467
38+0	7910	25+50	9466	13+0	9545
37+50	8096	25+0	9504	12+50	9698
37+0	8316	24+50	9489	12+0	9878
36+50	8478	24+0	9574	11+50	10044
36+0	8659	23+50	9597	11+0	10183
35+50	8808	23+0	9581	10+50	10332
35+0	8895	22+50	9579	10+0	10453
34+50	8930	22+0	9504	9+50	10592
34	8967	21+50	9399	9+0	10714
33+50	9010	21+0	9209	8+50	10750
33	9055	20+50	9004	8+0	10673
32+50	9108	20+0	8799	7+50	10575
32+0	9152	19+50	8500	7+0	10428
31+50	9226	19+0	8308	6+50	10230
31+0	9260	18+50	8240	6+0	10154

vent
 on p. 66

BM on
 S of Cor. W. Headen
 of Box Culvert
 @ 9620
 Sta 13+0

07650
 08620
 BM. on rail
 of cul.
 @ 9524

08836
 09096
 09964

5+50 9917

5+0 9678

4+50 9495

4+0 9192

3+50 9012

3+0 8957

2+50 8949

2+0 9082

1+50 9370

1+0 9586

0+50 9748

0+0

U.S. Rd.

BM ON

① 98.33

S. End W. Rail
of Bridge

Sta

Cl. 92.35

High Guard of Bridge

Cl. 98.4

Sta 2+71

Sta.	E. side	℄	W. side	Subj. side
93+0	79.35	78.95	79.35	78.77
92+75	out	78.82	79.08	78.51
92+50	78.83	78.56	78.82	78.24
92+25	78.37	78.21	78.56	77.98
92+0	78.30	77.91	78.29	77.71
91+75	78.00	77.54	out	77.45
91+50	77.73	77.14	77.64	77.18
91+25	out	76.85	77.47	76.92
91+0	77.24	76.48	out	76.65
90+75	76.94	76.41	76.93	76.39
90+50	76.65	76.18	76.67	76.12
90+25	out	75.85	76.41	75.86
90+0	76.12	75.60	76.12	75.59
89+75	75.87	75.47	75.86	75.33
89+50	75.58	75.20	75.58	75.06
89+25	75.35	75.03	75.35	74.80
89+0	75.07	74.92	75.08	74.53
88+75	74.82	74.65	74.82	74.27
88+50	74.55	74.35	74.55	74.00
88+25	74.34	74.01	74.31	73.74
88+0	74.04	73.77	74.03	73.47
87+75	73.77	73.46	73.77	73.21
87+50	73.41	73.25	73.45	72.94
87+25	73.20	72.90	73.19	72.68
87+0	72.91	72.75	72.91	72.41

79.35
78.77

69

74.03 0

	E. stk	E	W. stk	sub total.
86+75	72.64	72.27	72.65	72.15
86+50	72.38	71.95	72.37	71.88
86+25	72.11	71.70	72.11	71.62
86+0	71.81	71.33	71.81	71.32
85+75	71.48	71.15	71.47	70.98
85+50	71.08	70.82	71.10	70.61
85+25	70.76	70.50	70.71	70.24
85+0	70.35	70.25	70.35	69.87
84+75	70.00	69.90	70.00	69.50
84+50	69.62	69.41	69.62	69.13
84+25	69.25	69.15	69.25	68.76
84+0	68.88	68.70	68.87	68.39
83+75	out	68.39	68.46	68.02
83+50	68.10	67.91	68.05	67.65
83+25	67.75	67.46	67.73	67.30
83+0	67.42	67.12	67.43	67.00
82+75	67.25	66.90	67.25	66.75
82+50	67.06	66.69	67.05	66.55
82+25	out	66.50	66.81	66.40
82+0	66.71	66.37	66.72	66.31
81+75	66.69	66.49	66.69	66.28
81+50	out	66.32	out	66.27
81+25	out	66.29	66.71	66.30
81+0	out	66.48	66.72	66.32
80+75	66.85	66.30	66.83	66.35 ✓
80+50	66.88	66.52	66.88	66.38 ✓

71.88
70.98
70.98
69.24

Stk	E. Stk	E	W Stk	Sub Kd.
80+25	66.90	66.55	66.95	66.40 ✓
80+0	66.93	66.75	66.93	66.43
79+75	66.95	66.93	67.46	66.45
79+50	66.98	66.78	out	66.48
79+25	67.00	66.94	67.44	66.50
79+0	67.03	66.95	67.45	66.53
78+75	67.05	67.00	67.52	66.55
78+50	67.08	66.92	out.	66.58
78+25	67.10	66.71	out	66.60
78+0	67.13	66.71	out.	66.63
77+75	67.06	66.77	67.52	66.56
77+50	67.00	66.60	67.27	66.50
77+25	66.38	66.17	66.86	65.88
77+0	+	65.46	65.75	65.26
76+75	65.06	64.69	65.05	64.56
76+50	64.35	64.12	out	63.85
76+25	63.64	63.20	63.61	63.14
76+0	62.93	62.62	62.91	62.43
75+75	62.29	62.20	62.25	61.77
75+50	61.51	61.40	61.97	61.01
75+25	60.80	60.65	61.27	60.30
75+0	60.10	59.87	60.60	59.60
74+75	59.40	59.21	out	58.90
74+50	58.69	58.47	59.19	58.19
74+25	57.98	57.63	58.46	57.48
74+0	57.27	56.70	57.25	56.77

~~67.00~~ ①
~~58.46~~ ②

~~67.01~~ ① 73

59.40 ②

Sta	E 5th	E	W 5th	sub rod
73+75	56.61	55.89	56.45	56.11
73+50	56.08	55.15	55.91	55.58
73+25	55.66	54.93	55.51	55.16
73+00	55.35	54.53	55.21	54.85
72+75	55.10	54.15	54.97	54.60
72+50	54.85	54.17	54.23	54.35 X
72+25	54.60	53.72	53.98	54.10 Y
72+0	54.35	53.79	53.74	53.85 X
71+75	54.10	53.15	53.50	53.60 X
71+50	53.85	53.15	cut	53.35 X
71+25	53.60	53.03	53.60	53.10
71+0	53.35	52.82	53.35	52.85
70+75	53.10	52.07	52.60	52.60
70+50	52.85	51.92	52.85	52.35
70+25	52.60	51.78	52.60	52.10
70+0	52.35	51.87	52.35	51.85 ^{set}
69+75	52.10	51.52	52.10	51.60 ^{set 6/19/27}
69+50	51.85	51.45	52.35	51.35
69+25	51.60	51.45	52.10	51.00
69+0	51.35	51.40	52.00	50.85 51.85
68+75	51.10	51.28	51.70	50.40
68+50	50.85	50.70	51.95	50.35 50.85
68+25	50.60	50.70	51.70	50.10
68+0	50.35	50.60	51.45	49.85 50.35
67+75	50.10	50.24	50.70	49.60
67+50	49.85	49.85	50.45	49.35 49.85

Sub of Box Culvert at Sta 71+55
E.L. 52.48

Check on B.M.
of bridge at 71+50
53.42

B.M. 53.53

Reset Rod to B.M.

51.95
50.35
1.60

51.64

51.35

Sta	E. side	E	W. side	July 1921	also at Sept
67+25	5018 4960	4932	5018	4910	6192
67+0	4994 4935	4900	4993	4885	4936
66+75	4918 4868	4890	4966	4860	
66+50	4888 4838	4872	4942	4835	4885
66+25	4860	4872	4965	4810	
66+0	4838	4830	4939	4785	4835
65+75	4810	4810	4913	4760	
65+50	4785 4735	4752	4840	4735	4785
65+25	4760	4727	4817	4710	
65+0	4735	4722	4790	4685	4735
64+75	4708	4699	4819	4663	
64+50	4670 4620	4708	4755	4650	4700
64+25	4692	4681	4748	4642	
64+0	4693	4712	4747	4643	4693
63+75				4647	
63+50				4650	
63+25				4650	not at Sept 1921
63+0	4753	4730	4753	4650	4700
62+75	4702	4661	4701	4647	4697
62+50	4691	4610	4690	4636	4686
62+25	4689	4593	4688	4633	4683
62+0	4678	4586	4678	4622	4672
61+75	4664	4569	4665	4608	4658
61+50	4650	4574	4650	4594	4644
61+25	4638	4571	4637	4580	4630
61+0	4622	4554	4624	4566	4616

4990

4835

65

Side of Bl. 7 from Bl. N end - EL. 46.75
S. end EL. - 47.03

N. end of Bridge
is about Sta.

63+65 and
S. end is about
63+05

check B.M.

47.00

B.M. on NE end
of wing of Block
7 from Bridge.
EL. 47.07.

Sta	E Str	E	W Str	Sub	Ad.	✓
60+75	46.02	45.48	46.02	45.52	46.02	
60+50	45.91	45.65	45.91	45.41	45.91	
60+25	45.87	45.80	out	45.37		
60+0	45.89	45.50	45.89	45.39	45.89	
59+75	45.99	45.75	45.99	45.49	45.99	
59+50	46.11	46.00	46.11	45.61	46.11	
59+25	46.24	46.09	out	45.74	46.24	
59+0	46.36	46.34	46.36	45.86	46.36	
58+75	46.48	46.41	46.48	45.98	46.48	
58+50	46.61	46.50	46.61	46.11	46.61	
58+25	46.74	46.55	46.74	46.24	46.74	
58+0	46.91	46.77	46.91	46.41	46.91	
57+75	47.12	46.87	47.12	46.62	47.12	
57+50	47.34	46.95	47.34	46.84	47.34	
57+25	47.59	47.70	47.59	47.09	47.59	
57+0	47.83	47.10	out	47.33	47.83	
56+75	48.09	47.65	48.09	47.59	48.09	
56+50	48.39	47.98	48.39	47.89	48.39	
56+25	48.77	48.23	48.77	48.23	48.73	
56+0	49.13	48.55	49.13	48.63	49.13	
55+75	49.55	48.95	49.55	49.05	49.55	
55+50	50.03	49.42	out	49.53	50.03	
55+25	50.54	49.89	50.54	50.04	50.54	
55+0	51.10	50.41	51.10	50.60	51.10	
54+75	51.68	51.02	51.68	51.18	51.68	
54+50	52.25	51.59	52.25	51.75	52.25	

Sta 60+

7hubs Guard - 45.83 79

48.93 ⊙

45.98
10

51.10 ⊙

Ball check
4837

Sta	E. Sta	E	W Sta	sub Hd	
54+25	5283	52.23	52.83	52.33	52.83
54+0	53.43	52.81	53.43	52.93	53.43
53+75	54.05	53.35	54.05	53.55	54.05
53+50	54.68	53.99	54.68	54.18	54.68
53+25	55.32	54.72	55.32	54.82	55.32
53+0	55.95	55.45	55.95	55.45	55.95
52+75	56.59	56.02	56.59	56.09	56.59
52+50	57.22	56.80	57.22	56.72	57.22
52+25	57.86	57.50	57.86	57.36	57.86
52+0	58.50	58.21	58.50	58.00	58.50
51+75	59.14	58.91	59.14	58.64	59.14
51+50	59.77	59.68	59.77	59.27	59.77
51+25	60.41	60.34	60.41	59.91	60.41
51+0	61.05	60.82	61.05	60.55	61.05
50+75	61.69	61.47	61.69	61.19	61.69
50+50	62.32	62.07	62.32	61.82	62.32
50+25	62.96	62.51	62.96	62.46	62.96
50+0	63.60	63.18	63.60	63.10	63.60
49+75	64.24	64.12	64.24	63.74	64.24
49+50	65.37	65.08	65.37	64.37	64.87
49+25	66.01	65.71	66.01	65.01	65.51
49+0	66.65	66.41	66.65	65.65	66.15
48+75	67.29	67.08	67.29	66.29	66.79
48+50	68.42	67.44	68.42	66.92	67.42
48+25	68.56	67.98	68.56	67.56	68.06
48+0	69.20	68.55	69.20	68.20	68.70

6710

53.83 0 81

6041

6041 0

$$\begin{array}{r} 6692 \\ 150 \\ \hline 6842 \end{array}$$

Sta	Est	Q	W	Sub	hd
47+75	69.34	68.90	69.34	68.84	69.34
47+50	69.97	69.58	69.97	69.47	69.97
47+25	70.53	69.61	70.53	70.03	70.53
47+0	70.98	70.14	70.98	70.48	70.98
46+75	71.26	70.25	71.26	70.76	71.26
46+50	71.37	70.38	71.37	70.87	71.37
46+25	71.41	70.87	71.41	70.91	71.41
46+0	71.45	71.00	71.45	70.95	71.45
45+75	71.49		71.49	70.99	71.49
45+50	72.02	71.27	71.52	71.02	71.52
45+25	72.03		72.03	71.03	71.53
45+0	71.99	71.30	71.49	70.99	71.49
44+75	71.39		71.89	70.89	71.39
44+50	71.74	71.09	71.74	70.74	71.24
44+25	71.56		71.56	70.56	71.06
44+0	71.38	70.78	71.38	70.38	70.88
43+75	71.20		71.20	70.20	70.70
43+50	unt	70.41		70.02	70.52
43+25	70.84			69.84	70.34
43+0	70.16	69.85		69.66	70.16
42+75	69.98			69.48	69.98
42+50	69.30	68.65		69.30	69.80
42+25	69.12			69.12	69.62
42+0	69.44	68.58		68.94	69.44
41+75	69.32			68.82	69.32
41+50	69.34	68.66		68.84	69.34

Check B. M. Ct Rd E

71.46

71.47

70.06

70.99

71.45

83

Sta	Estk	¢	W sek	S Rd.
41+25	69.49			6899 69.49
41+0	69.78	69.42		6928 69.78
40+75	70.19			6969 70.19
40+50	70.75	70.62		7025 70.75
40+25	71.43			7093 71.43
40+0	72.27	72.02		7177 72.27
39+75	73.65			7265 73.65
39+50	74.54	73.90		7354 74.07
39+25	75.42			7442 74.92
39+0	76.32	75.59		7532 75.82
38+75	77.20			7620 76.70
38+50	78.09	77.28		7709 77.59
38+25	78.98			7798 78.48
38+0	79.37	79.02		7887 79.37
37+75	80.25			7975 80.25
37+50	81.64	81.05		8064 81.14
37+25	82.53			81.53 82.03
37+0	83.42	83.06		8242 82.92
36+75	84.30			8330 83.80
36+50	84.69	84.76		8419 84.69
36+25	85.58			8508
36+0	86.97	86.47		8597 86.47
35+75	87.80			8690 87.30
35+50	88.55	88.03		87.55 88.05
35+25	89.20			8820 88.70
35+0	89.25	88.90		88.75 89.25

73.65 0

85.58 0

80.68

85

32+50.

7390
7202

288
44

7202
44

7246
50

(7939)

(8292)

Sta	E. Stk	W. Stk	Sub Bal.
34+75	89.71		89.21 89.71
34+50	90.07	89.25	89.57 90.07
34+25	89.83		89.83 90.33
34+0	90.00	89.59	90.00 90.50
33+75	90.62		90.12 90.62
33+50	90.74	90.14	90.24 90.74
33+25	91.36		90.36 90.86
33+0	91.48	90.54	90.48 90.98
32+75	91.60		90.60 91.10
32+50	91.72	91.18	90.72 91.22
32+25	91.84		90.84 91.34
32+0	91.96	91.65	90.96 91.46
31+75	92.58		91.08 91.58
31+50	92.70	92.32	91.20 91.70
31+25	93.32		91.32 91.82 out
31+0	93.44	92.54	91.44 91.94
30+75	93.56		91.56 92.06
30+50	93.18	92.60	91.68 92.18
30+25	92.80		91.80 92.30
30+0	92.42	92.52	91.92 out
29+75	92.54		92.04 92.54
29+50	92.66	92.00	92.16
29+25	92.78		92.28 92.78
29+0	92.40	91.95	92.40 92.90
28+75	93.02		92.52 93.02
28+50	93.14	92.00	92.64 93.14

43 48
91 66

1.50

92.54 0

out 1/2

92.96

Sta	E side	E	W side	Sub total
28+25	93.26			92.76 93.26
28+0	93.38	92.37		92.88 93.38
27+75	93.50			93.00 93.50
27+50	93.62	92.91		93.12 93.62
27+25	94.24			93.24 93.74
27+0	94.36	93.81		93.36 93.86
26+75	94.98			93.48 93.98
26+50	94.60	93.82		93.60 94.10
26+25	out			93.72 94.22
26+0	out	94.11		93.84
25+75	95.46			93.96
25+50	95.08	94.53		94.08 94.58
25+25	95.20			94.20 94.70
25+0	94.82	94.95		94.32 94.82
24+75	94.94			94.44 94.94
24+50	95.06	94.82		94.56 95.06
24+25	95.68			94.68 95.18
24+0	96.30	95.62		94.80 95.30
23+75	96.42			94.92 95.42
23+50	96.54	95.81		95.04 95.54
23+25	96.10			95.10 95.60
23+0	96.06	95.65		95.06 95.56
22+75	96.40			94.90 95.40
22+50	95.65	95.65		94.61 95.11
22+25	95.24			94.24 94.74
22+0	95.24	94.85		93.74 94.24
21+75	94.62			93.12 93.62

95.76

89

70

24+50

94.98
93.50

1.50

93.96
1.50

15.46

94.50
93.50
1.00
96.18

95.23
94.70
0.53

96.40
94.90
1.50

94.70
94.20
0.50

93.70
1.50
95.20

94.12
1.50
94.62

B.M.
N. end of E.
Hdwell. Sta 25+0
E.L. 95.25

Sta	*	±
21+50	93.84	93.79
21+25	93.16	
21+0	92.33	91.78
20+75	91.05	
20+50	90.29	89.89
20+25	88.99	
20+0	88.21	87.61
19+75	86.73	← out
19+50	87.15	84.76
19+25	84.59	
19+0	85.44	82.78
18+75	83.69	
18+50	84.41	82.23
18+25	83.45	
18+0	84.65	82.86
17+75	84.99	
17+50	86.00	84.85
17+25	86.12	
17+0	87.25	86.65
16+75	87.87	
16+50	89.00	88.34
16+25	89.62	
16+0	90.25	89.70
15+75	90.77	
15+50	91.00	90.84
15+25	91.12	

S.S.

92.39	92.89
91.61	92.11
90.83	91.33
90.05	90.55
89.27	89.77
88.49	88.99
87.71	88.21
86.93	87.93
86.15	86.65
85.48	85.99
84.94	85.44
84.59	85.09
84.41	84.91
84.41	84.91
84.60	85.10
84.98	85.48
85.50	86.00
86.12	86.62
86.75	87.25
87.37	87.87
88.00	88.50
88.62	89.12
89.25	89.75
89.87	90.37
90.50	91.00
91.12	91.62 out

~~087.95~~
~~090.03~~ 50

91.0
 92.16
 93.16

88.23

85.96
 85.45

9207

Sta	check \$ Per. Rd.
12+50	97.30
12+0	98.85
11+50	100.65
11+0	101.95
10+50	
10+0	

0
~~089.4~~ 91
 44

Sta	check
24+0	95.30
23+50	95.43
23+0	95.03
22+50	94.68
22+0	93.50
21+50	92.70
21+0	91.25
20+50	89.60
20+0	87.95
19+50	86.30
19+0	84.51
18+50	83.40
18+0	83.75
17+50	84.75
17+0	85.72
16+50	87.80
16+0	88.92
15+50	89.70
15+0	90.95
14+50	92.30
14+0	93.81
13+50	95.00
13+0	95.80

check of present Rd.

sta 2

15+0	+92.25	91.43
14+75	+92.87	
14+50	+93.50	92.50
14+25	+94.12	
14+0	+95.25	93.76
13+75	+94.57	
13+50	+95.50	94.63
13+25	+95.62	out
13+0	out	95.42
12+75	+97.37	
12+50	+98.50	97.05
12+25	+99.12	
12+0	+99.75	98.78
11+75	+100.37	
11+50	+101.50	100.46
11+25	+102.12	
11+0	+102.75	101.77
10+75	+103.37	
10+50	+104.00	103.30
10+25	+104.62	
10+0	+105.25	104.47
9+75	+105.81	
9+50	+106.45	105.95
9+25	+107.06	
9+0	+107.76	107.07
8+75	+107.82	

9175	92250
9237	9287
9300	9350
9362	9412
9425	9475
9487	9537
9550	9600
9612	
9675	
9737	9787
9800	9850
9862	9912
9925	9975
9987	10037
10050	10100
10112	10162
10175	10225
10237	10287
10300	10350
10362	10412
10425	10475
10481	10531
10525	10576
10556	10606
10576	10626
10582	10632

Check B.M. at
13+0.
check - 96.04

103.99

9412
9267
150

9975
9823
150

10700
10430
250

10754
10554
200

10525
150
10675

~~98.39~~
~~95.36~~ 8 03

10
90
9225
9075
150

9137
150
9287

~~97.49~~

~~105.87~~

~~93.3~~

0104.62

10800
10550
250

10582
150
10732

Sta	+	e
8+50	107.26	107.39
8+25	107.59	
8+0	107.28	106.50
7+75	106.85	
7+50	106.29	105.65
7+25	105.62	
7+0	104.31	104.07
6+75	103.94	
6+50	102.57	102.15
6+25	101.70	
6+0	101.33	100.43
5+75	100.46	
5+50	99.09	98.92
5+25	97.72	
5+0	96.85	96.66
4+75	95.98	
4+50	95.11	94.77
4+25	94.24	
4+0	92.37	91.62
3+75	91.50	
3+50	90.74	90.10
3+25	90.70	
3+0	89.95	89.50
2+75	89.25	
2+50	89.35	89.43
2+25	89.19	

107 22 107 26 107 30	mark on the	sta	e
		10576	10626
		10559	10609
		10528	10578
		10495	10535
		10429	10479
		10362	10412
		10281	10331
		10194	10244
		10107	10157
		10020	10070
		9933	9983
		9846	9896
		9759	9809
		9672	9722
		9585	9635
		9498	9548
		9411	9461
		9324	9374
		9237	9257
		9150	9200
		9074	9124
		9020	9070
		8985	9035
		8975	9025
		8985	9036
		9019	9069

sta	+	e
2+0	93.23	90.60
1+75	92.00	
1+50	93.87	93.57
1+25	94.75	
1+0	95.62	95.65
0+75	96.40	
0+50	96.46	97.20
0-25	96.33	
0-50	95.95	
0-75	96.54	
-1+0	96.60	

W-stk	Sub Hd.
91.23	90.73
92.00	91.50
93.87	92.37
93.75	93.25
94.62	94.12
95.40	94.90
95.96	95.46
96.33	95.83
96.48	95.98
96.54	96.04
96.60	96.10

B.M. on S end
of West Rail of
Bridge Sta 2+75
EL. 92.38

Hub Sand
on Bridge
at Sta. 2+75
EL. 89.70

B.M. on N End
of E Rail Sta 2+75
EL. 92.43

9950
9180
9060
116

	STK.	SUBG.	CUT	FILL	- TO -
0+0	1.06	-0.50	1'-7"		
1+00	3.13	1.54	1'-7"		
2+00	5.56	3.58	1'-1½"		
3+00	7.85	5.62	2'-3"		
4+00	8.81	7.66	0'-2"		
5+00	10.80	9.70	0'-½"		
6+00	10.78	11.07	0'-3½"		
7+00	11.56	12.44	0'-1½"		
8+00	12.50	13.80	1'-3½"		
9+00	15.14	15.17	0'-0½"		
10+00	16.83	16.54	0'-3½"		
11+00	18.56	17.90	0'-8"		
12+00	20.99	17.90	3'-1"		
13+00	19.50	17.90	1'-7½"		
14+00	18.33	16.97	1'-4½"		
15+00	17.22	16.05	1'-2"		
16+00	16.74	15.12	1'-7½"		
17+00	15.70	14.20	1'-6"		
18+00	14.44	13.27	1'-2"		
19+00	13.36	12.35	1'-0"		
20+00	12.07	11.42	0'-8"		
21+00	11.35	10.50	0'-10"		
22+00	10.43	10.28	0'-2"		
23+00	10.27	10.06	0'-3"		
24+00	10.24	9.84	0'-5"		
25+00	10.31	9.62	0'-8"		
26+00	10.48	9.40	1'-1"		

have Wilson Rods

17.22
 16.55

 .67
 83

 1.50

17.22
 16.05

 1.17

	Stk	Sub Gd	Cut to Sub Gd	Fill
27+00	71.72	9.18	1'-11 1/2"	
28+00	10.38	8.96	1'-5"	
29+00	9.16	8.74	0'-5"	
30+00	9.00	8.52	0'-6"	
31+00	9.06	8.30	0'-9"	
32+00	10.07	8.30	1'-9"	
33+00	11.38	8.30	3'-1"	
34+00	11.93	8.30	3'-7 1/2"	
35+00	8.90	8.30	0'-7 1/2"	
36+00	6.03	8.30		2' 3 1/2"
37+00	9.24	8.30	0'-11 1/2"	
38+00	10.97	8.30	2'-8"	
39+00	13.02	8.90	4'-1 1/2"	
40+00	14.56	9.50	5'-1"	
41+00	12.54	10.10	2'-5 1/2"	
42+00	9.17	10.70		1'-6 1/2"
43+00	11.27	11.30		0'-3"
44+00	14.59	11.90	2'-8"	
45+00	18.09	14.13	3'-1 1/2"	
46+00	19.32	16.36	2'-11 1/2"	
47+00	19.57	18.60	0'-11 1/2"	
48+00	20.01	18.66	1'-4"	
49+00	20.76	18.73	2'-0"	
50+00	18.85	18.80	0'-1"	
51+00	18.98	16.97	2'-0"	

⊙ 13.32

11.97
9.50

2.47

⊙ 14.55

7.60
2.83

10.43

8 1/2
1 1/2

7

9 1/2
1 1/2

8

66
Slab - 41+65
El. 11.80

1129
890

139

10.16
10.10

6

B.M. W. end
S. rail bridge
41+65
El. 13.39

Sta	Sub	Cut	Fill
Grade	Grade	Sub. Co.	Sub. Co.
52+00	18.91	15.15	3'-9"
53+00	16.13	13.14	3'-0"
54+00	9.29	11.50	2'-2 $\frac{1}{2}$ "
55+00	8.67	11.50	2'-10"
55+99	15.12	14.73	0'-5"
56+99	21.51	17.96	3'-7"
57+99	22.19	21.20	1'-0"
59+00	22.64	21.88	0'-9"
60+00	23.11	22.56	0'-6 $\frac{1}{2}$ "
61+00	23.70	23.25	0'-5 $\frac{1}{2}$ "
62+00	24.62	23.93	0'-8"
63+00	25.47	24.61	0'-10"
64+00	26.41	25.30	1'-1 $\frac{1}{2}$ "
65+00	26.01	24.89	1'-4"
66+00	24.97	24.08	0'-11"
67+00	23.43	23.47	0'-1"
68+00	22.94	22.86	0'-1"
69+00	23.01	22.25	0'-9"
70+00	22.56	21.64	0'-11"
71+00	21.65	21.00	0'-8"
72+00	20.67	20.42	0'-3"
73+00	21.19	19.81	1'-4 $\frac{1}{2}$ "
74+00	19.92	19.20	0'-8 $\frac{1}{2}$ "
75+00	19.80	19.20	0'-5"
76+00	21.24	19.20	2'-0"

076.79

El Top slab
11.50

017.03

22.00 Sta 57+50
End Work

1670
1515
155

1473
1383
90

B.M. W. end
of S rail of
Bridge 55 f
E1. 14.72

102

	Stk	Sub. Cd.	Cut To Sub. Cd.	Fill To Sub. Cd.
77+00	21.92	20.62	1'-4"	
78+00	22.83	22.04	0'-8" 1/2	

103

South East
B.M. north Bolton Corner Post
23.02

E

	8' out	Q	8' out
0	94.64	95.27	95.26
1	94.07	96.02	96.65
2	99.39	99.25	99.55
3	81.01	81.03	81.47
4	92.55	91.87	91.93
5	99.51	98.21	99.10
6	102.92	103.97	104.24
7	104.33	105.82	105.41
8	117.72	107.14	106.87
9	104.84	104.69	104.46
10	101.82	102.14	101.93
11	99.41	99.17	99.30
12	95.66	95.95	96.12
13	93.05	93.10	93.19
14	91.40	91.34	91.29
15	88.34	89.37	89.54
16	91.16	91.15	90.22
17	90.13	90.24	89.47
18	76.72	77.35	76.68
19	80.07	80.71	81.79
20	88.29	88.32	88.41
21	91.87	92.10	92.50
22	93.93	94.74	95.14
23	94.26	94.85	95.57
24	94.00	94.37	94.23

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24

Bin Corn, past
 same as before
 Cl. 100.00

- 0 91.00
- 1 92.25
- 2 83.25
- 3 94.48
- 4 104.44
- 5 98.39
- 6 92.57
- 7 ~~003.38~~
- 8 *on stop*
- 9 80.30
- 10 90.87

	g'out	g'out	g'out
25	9347	9860	9354
26	9332	9335	9304
27	9282	9253	9264
28	9165	9150	9144
29	91.12	91.47	91.11
30	91.71	91.32	91.40
31	92.15	91.97	91.51
32	90.18	90.68	89.56
33	89.26	89.59	88.93
34	88.45	88.83	88.00
35	87.52	87.60	86.97
36	84.46	84.59	85.00
37	80.52	80.73	81.17
38	76.88	76.94	77.57
39	73.64	73.32	73.79
40	69.83	69.80	69.85
41	67.69	67.81	67.81
42	67.13	67.38	67.05
43	69.04	69.00	69.38
44	70.17	70.27	70.27
45			
46			
47			
48			
49			

B.M.

S. END of W. HEADER
STA. 28 + 40

EL. 90.67

S. END of W. HEADER
STA. 40 + 90
EL. 68.840
85.370
75.320
72.57850
748

0 96.73
 0 100.40
 0 95.67
 0 89.58
 0 80.58
 0 71.33
 0 66.08
 0 54.08
 0 49.25
 0 57.73
 0 65.77
 0 74.55
 0 64.97
 0 73.19
 0 82.54

B.M. No 1 on Cor Post
 used for primary B.M.
 El. 100.00

B.M. No 2. SW SW Cor. top
 of Header Sta. 24+50
 El. 93.01

B.M. No 3. SW Cor. W. Header
 Sta. 40+90
 El. 67.68

B.M. No 4. SW. Cor. W. Rail
 W. Bridge Sta 60+10
 El. 45.84

B.M. No 5. SW. Cor. W. Header
 Sta. 71+35
 El. 50.88

B.M. No 6. SW. Cor. W. Header
 Sta 114 + 50
 El. 86.06

B.M. No 7. on SW. Cor. North
 Header at int on NE side of
 Road at end of Road El. 89.71

	W 8' out	Q	E 8' out
130+50	✓ 8938	8976	8995
130+0	✓ 91.00	9110	9116
129+50	✓ 91.91	92.30	9243
129+0	✓ 9320	93.35	9326
128+50	✓ 93.53	94.05	9412
128+0	✓ 9431	94.81	9466
127+50	✓ 94.70	94.15	93.82
127+0	✓ 9392	9394	93.89
126+50	✓ 9323	9353	9342
126+00	✓ 9276	9266	9231
125+50	✓ 9139	9138	9147
125+00	✓ 9095	9092	9085
124+50	✓ 90.40	90.60	90.21
124+0	✓ 91.05	90.73	91.76
123+50	✓ 9045	9090	9071
123+0	✓ 9126	9115	9119
122+50	✓ 91.81	91.98	91.56
122+0	✓ 92.59	9271	9264
121+50	✓ 9346	9382	9358
121+0	9420	9395	9437
120+50	✓ 9430	9442	9423
120+0	✓ 93.69	9353	9362
119+50	✓ 9288	9295	9287
119+0	✓ 9150	9155	9144
118+50	✓ 9026	9030	9018
118+0	✓ 8861	8917	8983

	W	L	E
117+50	8676	8718	8730
117+0	✓	8629	8647
116+50	✓	8530	8543
116+0	✓	8458	8426
115+50	✓	8414	8429
115+0	✓	8452	8470
114+50	✓	8506	8508
114+0	✓	8524	8542
113+50	✓	8602	8604
113+00	✓	8676	8693
112+50	✓	8783	8811
112+0	✓	8879	8894
111+50	✓	8927	8938
111+0	✓	8936	8924
110+50	✓	8882	8875
110+00	✓	8794	8793
98+10	✓	8404	8410
98+00	✓	8397	8414
97+50	✓	8450	8461
97+00	✓	8526	8557
96+50	✓	8686	8690
96+00	✓	8768	8791
95+50	✓	8862	8869
95+00	✓	8941	8940
94+50	✓	8955	8971

B.M. Check No 6
 El. 75.88

76.0 ✓
 75.88
 ———
 20

② 73.66

	W 8' out	E 8' out	E 8' out
94+0	78.92	78.95	78.62
93+50	78.60	78.44	78.43
93+0	78.05	78.10	77.85
92+50	77.15	77.30	77.20
92+0	76.46	76.54	76.75
91+50	75.69	75.78	75.92
91+0	75.06	75.19	75.38
90+50	74.82	74.80	74.75
90+00	74.32	74.25	74.18
89+50	73.80	73.94	73.97
89+00	73.60	73.50	73.57
88+50	73.06	73.07	73.03
88+00	72.50	72.53	72.57
87+50	71.90	72.10	71.94
87+00	71.14	71.30	71.34
86+50	70.51	70.65	70.57
86+00	69.98	70.10	69.94
85+50	69.25	69.61	69.31
85+00	68.85	69.08	68.79
84+50	68.06	68.42	68.44
84+00	67.37	67.60	67.67
83+50	66.53	66.90	66.96
83+00	65.82	65.75	66.03
82+50	65.44	65.60	65.53
82+00	65.35	65.21	65.38

⊙ 72.56

⊙ 65.28

amco

	W	♀	♂
81+50	63.58	65.25	65.22
81+00	64.77	64.90	64.74
80+50	65.02	65.20	65.10
80+00	65.90	66.02	65.85
79+50	66.44	66.31	66.37
79+00	66.15	66.00	66.20
78+50	66.05	66.04	65.68
78+00	65.61	65.64	65.42
77+50	65.36	65.35	65.16
77+00	64.75	64.74	64.70
76+50	63.90	64.32	63.95
76+00	62.37	62.38	62.15
75+50	60.52	60.75	60.56
75+00	58.97	59.10	59.05
74+50	57.69	57.66	57.18
74+00	55.93	56.01	55.66
73+50	54.01	54.29	54.15
73+00	52.93	52.89	52.79
72+50	51.92	51.94	51.62
72+00	51.02	51.02	50.90
71+50	51.60	51.25	51.31
71+40	Bridge	51.18	49.76
71+0	49.50	49.84	49.76
70+50	49.11	49.00	48.70
70+0	49.09	49.04	49.07

058.85

check B.M

H 5 5088
42.00
8,88

91.60

91.60

89.71

11.89

R

118
 69+50
 69+0
 68+50
 68+0
 67+50
 67+0
 66+50
 66+0
 65+50
 65+0
 64+50
 64+0
 63+50
 63+0
 62+50
 62+0
 61+50
 61+0
 60+50
 60+0
 59+50
 59+0

slant	\$	slant
4948	4969	4980
4971	4971	4944
4918	4924	4938
4871	4881	4859
4838	4840	4833
4787	4795	4782
4745	4710	4716
4685	4665	4689
4520	4528	4521
4473	4455	4436
4447	4448	4394
4443	4389	4400
slant	4437	en
"	4437	3
4270	4253	4219
4123	4180	4190
4198	4213	4212
4205	4208	4218
4202	4215	4217
slant	4236	

4584
 4526
 8
 5498 0
 6594
 7120 0
 08270

68
 67.55
 13
 el. for white
 8500 cov. wing
 2.89.50

Sta 120

	8' out W	♀	8' out E
31+0	9093	9048	9034
30+50	9082	9026	9025
30+0	9037	9054	9003
29+50	9000	8988	9009
29+0	8975	9032	8990
28+50	8986	8980	8963
28+0	9020	9042	9024
27+50	9034	9053	9041
27+0	9135	9150	9133
26+50	9190	9204	9184
26+0	9192	9190	9158
25+50	9226	9231	9215
25+0	9255	9338	9229
24+50	9271	9275	9210
24+0	9319	9297	9298
23+50	9402	9379	9349
23+0	9410	9378	9335
22+50	9436	9392	9314
22+0	9405	9370	9314
21+50	9315	9291	9262
21+0	9095	9102	9085
20+50	8923	8910	8890
20+0	8705	8712	8665
19+50	8452	8448	8394
19+0	8016	7930	7864

#301

0 86.28

	Start	Q	End
	W		E
18+50	7511	7548	7552
18+0	7675	7620	7590
17+50	8246	8260	8200
17+0	8801	8786	8821
16+50	8893	8811	8810
16+0	9101	8952	8961
15+50	9134	9125	9105
15+0	8951	8943	8838
14+50	8984	8973	8921
14+0	9127	9110	9120
13+50	9269	9236	9220
13+0	9346	9327	9304
12+50	9438	9437	9406
12+0	9642	9609	9595
11+50	9794	9778	9757
11+0	9910	9909	9915
10+50	10095	10085	10057
10+0	10197	10203	10187
9+50	10286	10315	10345
9+0	10440	10457	10470
8+50	10580	10579	10576
8+0	10673	10737	10720
7+50	10726	10738	10740
7+0	10509	10499	10456
6+50	10386	10350	10285

~~85.99~~

86.00

9408

10538

924

W	Q	E
6+0	10433	10260
5+50	10110	10110
5+0	9840	9875
4+50	9575	9513
4+0	9215	9244
3+50	8347	8343
3+0	8115	8044
2+50	8479	
2+0	8511	837
1+50	9355	8693
1+0	9000	9449
0+50	9613	9517
0+0	9559	9507

W	Q	E
6+0	10433	10260
5+50	10110	10110
5+0	9840	9875
4+50	9575	9513
4+0	9215	9244
3+50	8347	8343
3+0	8115	8044
2+50	8479	
2+0	8511	837
1+50	9355	8693
1+0	9000	9449
0+50	9613	9517
0+0	9559	9507

925

9712

87.99

89.53

Stakes set 11' from E - 9' from stake line.
 & Rd. stake line

50' N.	89.30		
130+58	91.00	91.00	
130+0	93.09	92.55	✓
129+50	94.22	93.90	✓
129+0	95.27	95.12	✓
128+50	96.01	96.00	✓
128+0	96.61	96.46	✓
127+50	96.03	96.93	ext to grade ✓
127+0	95.82	95.91	✓
126+50	95.65	95.38	✓
126+0	94.74	94.60	✓
125+50	93.67	93.70	✓
125+0	92.74	92.90	93.22 ✓
124+50	92.35	92.35	✓
124+0	92.55	91.92	✓
123+50	92.79	92.37	✓
123+0	93.04	93.02	✓
122+50	93.90	93.79	✓
122+0	94.71	94.72	95.22 ✓
121+50	95.75	95.65	✓
121+0	96.38	96.29	96.77
120+50	96.09	96.97	ext to grade ✓
120+0	95.39	95.36	95.86 ✓
119+50	94.85	94.56	95.06 ✓

96.70	96.97	92.84
93.90	50	92.58
50	97.47	50
94.40		93.05
	95.48	
	94.40	
	1.08	93.99
96.41		93.05
		94
97.0	0	95.65
50		50
97.20		96.10
96.13		93.55
95.62	0	92.42
51	93.79	1.13
	50	
91.92	94.29	93.29
50	96	92.87
92.72		1.40
	95.92	
	95.22	
	90.70	

Sta	Red.	Stkline	
119+0	93.39	9340	9390
118+50	92.23	9205	9255
118+0	90.92	9070	9120
117+50	89.19	8935	8985
117+0	88.18	8817	8867
116+50	87.10	8733	8753
116+0	86.55	8667	8717
115+50	86.00	8622	8672
115+0	86.45	8620	8670
114+50	86.78	8640	8690
114+0	86.90	8677	8727
113+50	87.58	8747	8797
113+0	88.45	8834	8854
112+50	89.63	8921	8951
112+0	90.40	9008	9058
111+50	91.15	9095	9145
111+0	91.15	9130	9180 set to grade
110+50	90.57	9060	9110
110+0	89.65	8938	8988
109+50	89.38	8816	8866
109+0	87.03	8694	8744
108+50	85.97	8572	8622
109+0	84.70	8456	8506
107+50	83.75	8355	8405
107+0	82.61	8260	8310

9110

9430

2390

40

8934
 8757
 8690
 67

8794

8727

67

9083

9058

25

8648 8572

8602 50

5 8622

129

8984

Turn.

Driller. El. 8779

9043

8988

57

8893

8866

27

Sta	E.R.d.	alt. line	
106+50	81.66	8165	8215 ✓
106+0	80.89	8070	8120 ✓
105+50	79.85	7975	8025 ✓
105+0	78.84	7880	7930 ✓
104+50	77.87	7785	7835 ✓
104+0	76.98	7690	7740 ✓
103+50	76.24	7595	7645 ✓
103+0	75.65	7532	7582 ✓
102+50	75.35	7512	7562 ✓
102+0	75.58	7524	7574 ✓
101+50	75.70	7536	7586 ✓
101+0	75.55	7548	7598 ✓
100+50	75.78	7560	7610 ✓
100+0	75.88	7572	7622 ✓
99+50	75.80		
99+0	75.91		
98+50	75.78		
98+0	75.46		
97+50	76.20	9322	
97+0	77.15	56	
96+50	78.76	9870	
96+0	80.18		
95+50	80.41		
95+0	81.43		
94+50	80.96		

81.15

9529
9372

147

9645
7582

63

Elon Rock
Sta 100+0 alt. 75.70

9581

9450

9390
00

9440

9531

9390

171

Sta	Rd.
94+0	8042
93+50	8014
93+0	7956
92+50	7863
92+0	7823
91+50	7748
91+0	7681
90+50	7641
90+0	7574
89+50	7532
89+0	7528
88+50	7460
88+0	7414
87+50	7350
87+0	7294
86+50	7205
86+0	7170
85+50	7114
85+0	7058
84+50	6960
84+0	6897
83+50	6805
83+0	6730
82+50	6696
82+0	6677

07841

070.68

81+50 6652
 81+0 6700
 80+50 6718
 80+0 6811
 79+50 6796
 79+0 6803
 78+50 6768
 78+0 6726
 77+50 6698
 77+0 6568
 76+50 6448
 76+0 6289
 75+50 6181
 75+0 6018
 74+50 5875
 74+0 5892
 73+50 5552
 73+0 5453
 72+50 5372
 72+0 5314
 71+50 5290
 71+0 5218
 70+50 5215
 70+0 5190
 69+50 5178

86227

136

Pen

69+0 5165
 68+50 5102
 68+0 5106
 67+50 5022
 67+0 4900
 66+50 4966
 66+0 4866
 65+50 4776
 65+0 4782
 64+50 4728
 64+0 4714
 Cent. bridge
 63+50 4700
 63+0 4718
 62+50 4616
 62+0 4604
 61+50 4590
 61+0 4566
 60+50 4572
 60+0 4576

0 51.73

137

On Bridge data
 60+50
 South End C. Rail
 El. 48.39

130

12975

12950

12925

12900

12875

12850

12825

12800

6410	4643	50	4722	4772
75	4647	25	4740	4790
50	4650	57	4758	4808
25	4650	75	4779	4829
63	4650	50	4805	4855
75	4647	25	4837	4885
50	4606	56	4874	4924
25	4633	75	4917	4967
62	4622	50	4966	5016
75	4608	25	5020	5070
50	4594	55	5080	5080
25	4580	75	5142	5192
61	4566	50	5205	5255
75	4552	25	5267	5317
50	4542	59	5330	5380
25	4540	75	5392	5442
75	4560	50	5455	
50	4578	25	5517	5567
25	4596	53	5580	
59	4614	75	5642	5692
75	4632	50	5705	5755
50	4650	25	5767	5817
25	4668	52	5830	5880
58	4686	75	5892	5942
75	4704	50	5953	6003

25 6017 6067
 51 6080 6130
 51+75 6142 6192
 50 6205 6255
 25 6267 6317
 50 6330 6380
 50+75 6392 6442
 50 6455 6505
 25 6517 6567
 49 6580 6630
 49+75 6642 6692
 50 6705 6855
 25 6767 6867
 48 6830 6930
 48+75 6892 6942
 50 6955 7005
 25 7006 7056
 47 7039 7084
 47+75 7072 7122
 50 7087 7137
 25 7091 7141
 46 7095 7145

63 6270
 63 6300
 71.09
 70.45
 14

66.45
 65.80
 86

Brown Rd
N. Salina Rd.

	E _{20'}	£	W _{20'}
I.P.	95.55	97.08	97.20
25'S	95.18	96.76	96.95
50'S	95.34	96.49	96.10
75'S	94.86	96.23	96.00
90'S	94.90	96.21	95.85
100'S	94.89	96.18	95.76
125'S	94.62	95.98	94.41
150'S	94.60	95.90	95.51
175'S	94.48	95.78	95.55
200'S	94.50	95.56	95.63
225'S	94.40	95.09	95.60
250'S	93.40	93.85	94.60
275'S	92.30	92.35	93.48
300'S	90.56	90.60	90.95
<hr/>			
25' N	96.28	97.54	97.05
50' N	96.79	98.09	97.61
75' N	96.90	98.75	98.35
100' N	96.80	99.56	99.23
125' N	98.68	100.00	99.85
150' N	100.25	100.00	99.70
175' N	97.70	99.10	98.80
200' N	96.95	98.20	97.51
225' N	96.25	97.53	95.95
250' N	94.70	96.96	95.25
275' N	95.68	96.78	94.89

CURVE N. SALEM RD.

- 2° 7 1/2'
- 4° 15'
- 6° 22 1/2'
- 8° 30'
- 10° 37 1/2'
- 12° 45'
- 14° 52 1/2'

CUT STRS. FROM 0+0 MW

ON NORTH SALEM RD.

Gd, STR CUT

0+	95.46	97.54	2.08
1+0	95.92	100.75	4.83
2+0	95.97	97.95	1.98
2+50	96.00	97.20	1.20

an.	Sec.	Cosec.	Coty.	Cosin.	Angle.	Sine.	Tan.	Sec.	Cosec.	Coty.	Cosin.
0	1.	∞	∞	1.	90	0					
1					89	.1392	1.405	1.0098	7.185	7.115	.99027
2					88	.1421	1.435	1.0102	7.040	6.968	.98986
3					87	.1449	1.465	1.0107	6.900	6.827	.98944
4					86	.1478	1.495	1.0111	6.766	6.691	.98902
5					85	.1507	1.524	1.0115	6.636	6.561	.98858
6	1.0001	85.94	85.94	.99993	84	.1536	1.554	1.0120	6.512	6.435	.98814
7	1.0001	68.76	68.75	.99989	83	.1564	1.584	1.0125	6.394	6.314	.98769
8	1.0002	57.30	57.29	.99985	82	.1593	1.614	1.0129	6.277	6.197	.98723
9	1.0002	48.11	48.10	.99979	81	.1622	1.644	1.0134	6.166	6.084	.98676
10	1.0003	42.98	42.96	.99973	80	.1650	1.673	1.0139	6.058	5.976	.98629
11	1.0003	38.20	38.19	.99966	79	.1679	1.703	1.0144	5.955	5.871	.98580
12	1.0004	34.38	34.37	.99958	78	.1708	1.733	1.0149	5.855	5.769	.98531
13	1.0005	31.26	31.24	.99949	77	.1736	1.763	1.0154	5.759	5.671	.98481
14	1.0006	28.65	28.64	.99939	76	.1765	1.793	1.0160	5.665	5.576	.98430
15	1.0007	26.45	26.43	.99929	75	.1794	1.823	1.0165	5.575	5.485	.98378
16	1.0008	24.56	24.54	.99917	74	.1822	1.853	1.0170	5.488	5.396	.98325
17	1.0010	22.93	22.90	.99905	73	.1851	1.883	1.0176	5.403	5.309	.98272
18	1.0011	21.49	21.47	.99892	72	.1880	1.914	1.0181	5.320	5.226	.98218
19	1.0012	20.23	20.21	.99878	71	.1908	1.944	1.0187	5.241	5.145	.98163
20	1.0014	19.11	19.08	.99863	70	.1937	1.974	1.0193	5.164	5.068	.98107
21	1.0015	18.10	18.07	.99847	69	.1965	2.004	1.0199	5.089	4.989	.98050
22	1.0017	17.20	17.17	.99831	68	.1994	2.035	1.0205	5.018	4.915	.97992
23	1.0019	16.38	16.35	.99813	67	.2022	2.065	1.0211	4.945	4.843	.97934
24	1.0020	15.64	15.60	.99795	66	.2051	2.095	1.0217	4.877	4.773	.97875
25	1.0022	14.96	14.92	.99776	65	.2079	2.126	1.0223	4.810	4.705	.97815
26	1.0024	14.34	14.30	.99756	64	.2108	2.156	1.0230	4.745	4.638	.97754
27	1.0027	13.76	13.73	.99736	63	.2136	2.186	1.0236	4.682	4.574	.97692
28	1.0029	13.23	13.20	.99714	62	.2164	2.217	1.0243	4.620	4.511	.97630
29	1.0031	12.75	12.71	.99692	61	.2193	2.247	1.0249	4.560	4.449	.97568
30	1.0033	12.29	12.25	.99668	60	.2221	2.278	1.0256	4.502	4.390	.97502
31	1.0036	11.87	11.83	.99644	59	.2250	2.309	1.0263	4.445	4.331	.97437
32	1.0038	11.47	11.43	.99619	58	.2278	2.339	1.0270	4.390	4.275	.97371
33	1.0041	11.10	11.06	.99594	57	.2306	2.370	1.0277	4.336	4.219	.97304
34	1.0043	10.76	10.71	.99567	56	.2334	2.401	1.0284	4.284	4.165	.97237
35	1.0046	10.43	10.39	.99540	55	.2363	2.432	1.0291	4.232	4.113	.97169
36	1.0049	10.13	10.08	.99511	54	.2391	2.462	1.0299	4.182	4.061	.97100
37	1.0052	9.839	9.788	.99482	53	.2419	2.493	1.0306	4.133	4.011	.97030
38	1.0055	9.587	9.514	.99452	52	.2447	2.524	1.0314	4.086	3.962	.96959
39	1.0058	9.309	9.255	.99421	51	.2476	2.555	1.0321	4.039	3.914	.96887
40	1.0061	9.065	9.010	.99390	50	.2504	2.586	1.0329	3.994	3.867	.96815
41	1.0065	8.834	8.777	.99357	49	.2532	2.617	1.0337	3.949	3.821	.96742
42	1.0068	8.614	8.556	.99324	48	.2560	2.648	1.0345	3.906	3.776	.96667
43	1.0072	8.405	8.345	.99290	47	.2588	2.679	1.0353	3.864	3.732	.96593
44	1.0075	8.206	8.144	.99255	46	.2616	2.711	1.0361	3.822	3.689	.96517
45	1.0079	8.016	7.953	.99219	45	.2644	2.742	1.0369	3.782	3.647	.96440
46	1.0082	7.834	7.770	.99182	44	.2672	2.773	1.0377	3.742	3.606	.96363
47	1.0086	7.661	7.596	.99144	43	.2700	2.805	1.0386	3.703	3.566	.96285
48	1.0090	7.496	7.429	.99106	42	.2728	2.836	1.0394	3.665	3.526	.96208
49	1.0094	7.337	7.269	.99067	41						
50					82						

Sec. Tan. Sine. Angle. Cosin. Coty. Cosec. Sec. Tan. Sine. Angle.