

20

FIELD BOOK

MINING
TRANSIT BOOK

384

W138

8

Barrett

MICROFILMED

Index

Downstream Face - Radius 311.8 ² - (Elev. 1495 - 1505)	1
Elev of Lift near # 2 Tower	2
Depth of Hole - Star Drill - # 3 - # 4	3
Downstream face - Pts for Excavation -	4
Outline of Concrete	5
D.S.F. Radius - 311.8 ² Elev. 1495 - 1505 -	6
Elev 1505 - Lift -	7
Quarry Sections for # 3 Shot.	8-11
D.S.F. Lift 1505 - 1515 - 319.9 ¹ Radius	12
Concrete Est. June # 17 -	13-14
Elev. Hole # 5 Star Drill - Lift # 3	15
Elev. 1515 - Grade for Chamber Strip	15
Radius 328.0 ¹ D.S. Face -	16
Depth of Hole # 6 Star Drill	17
Chamber Strip - 1505	17
Points for Topog - on 50 Radial Line	18
Topog At 50 - 343.90 - Contour 1510	19
At Aux. Pt. from 50 - 343.9 - Contour 1515 - 1520	19
At 50 - 295.95 - Contour 1520 - 25 - 30	20
At 52 - 300 - Contour 1525 - 30 - 35	20
At 50 - 343.9 - Contour 1505	20
Set radius - 319.9 ¹ East Cont - Joint	21
Depth of Hole # 7 Star Drill -	22
Chamber Strip - 1515 East Cont - Joint	22
Sand Sections Storage Pile	28-36
Sections Concrete Est July -	37-39

Sections Excav. Est July	40-42
Line for D.S.F. Lift 1525-35 - 3352° Radius	43
Elev. -- for Hoist #2 Tower -- Location of	44
Quarry sections - Lift #4 - Holes 1 to 4	45-46
Profile Pinecreek below diversion Dam -- amount surfaced	47
Elev of Motor to #1 Hoist.	48
Location Quarry Toe (Quarry)	49
Sections Holes 5 To 8 inc.	50
D.S. Face Lift 1515-1525 - 325' Radius	51
Contraction Joint 4+86	52
Champer Strip Elev 1535	52
D.S.F. 328' Radius - 1515-1525 El.	53
Location of Forms + Conti Joint 4+86	54
Location of Grout Hole - Rt Abut.	54
Depth of Hole #5 Star Drill	54
D.S. Face Pts for Excavation	55
Elev. 1525 Champer Strip <small>east of #1 Joint</small>	55
D.S.F. Pts - 1525-1535	56
Sections for Sand Storage	57- 58 ⁶⁵
Concrete sections - Aug Est 1921	65-66
deflections for 335.7 - 3434 Radius	67

Filled

5-28-21
Bub
Fisher
Mixer

Downstream Radius
Elev. 1495 - 1505

Radius 311.82

Chained south - 51.69 from 34-363.51

Set nail = 34 - 311.82 -

10	0-55 ✓
20	1-50 ✓
30	2-45 ✓
40	3-40 ✓
50	4-36 ✓
60	5-31 ✓
70	6-26 ✓
80	7-21 ✓
90	8-16 ✓
100	9-11 ✓
6 ^{west}	0-33'

Set Nail - 306.82

offset in Form - 3.3 - 10' deep
parallel to sides

1

$$\begin{array}{r} 311.82 \overline{) 1718.87} \\ \underline{155910} \\ 159770 \\ \underline{155910} \\ 38600 \\ \underline{31182} \\ 74180 \\ \underline{62364} \end{array}$$

10'	0°-55'	123
20	1°-50'	246
30	2°-45'	369
40	3°-40'	492
50	4°-35'	615
60	5°-30'	738
70	6°-25'	861
80	7-20	984

5-28-21

Bub
Fisher
M. ...

34
363.51

Average Elev. Lift near Tower #2
2.09 90.88 1488.79

Average Elev
Lift near
Tower #2

896	}	8.9	81.92
		9.0	
		8.9	
		8.7	
		7.3	

Elev of
Form.

8.8 82.1

offset-

18.8 72.1

5/29/51
Fisher.

Depth of Holes Star Drill

3

Grade
Quarry Floor

Hole # 3

B.M.

1.8

49.6

1847.77

1743.5

7.1

1842.5

99.0

101.0

1743.5

Hole # 4

6-5-51
Fisher

23

50.07

47.77

1743.5

(97.0)

11.30

38.77

6/14/21

Elev. for marking dist to
D.S.F. - from 1st Delevopment

39-369.58

8.24 1506.83

1498.59

11.83 1495.0

1.83 1515.0

TP

12.92 18.05 170 1505.13

At 50-295.95 -

chained 81.45 = 50-377.40

outline of concrete

5

At 34-274¹⁴ Sight C 34 ft

Zero Az Right:

34-274¹⁴ . 5.26 72.43 . 1467.17

24.0	266-15	7.7	64.7 ✓
26.0	271-30	7.6	64.8 ✓
25.0	279-10	7.6	64.8 ✓
22.9	287-45	7.6	64.5 ✓
22.0	294-45	7.3	65.1 ✓
20.7	296.30	7.3	65.1 ✓
17.6	304-30	7.2	65.2 ✓

6/9/21
By
Mixer

Downstream Face.

Chained 13.07 from 28-298.75
= 28-311.82

~~Set nail 28-306.82~~

At 28-311.82 Sight 28-374.50 fm
90° - Turn -

10	0-55 ✓
20	1-50 ✓
30	2-45 ✓
39	3-35
45	3-45 Nail in whale

on Tangent.

10
20
30
40
50

At 30' - East sight 245

70' 1-50' Choked Form OK - ✓

6/18/21
Fisher
Mixer

Elevot Lift.

34 -
369.58

8.09 1506.68

1498.59

1.68 1505.0

June 23, 1921

Sub. Mitter

Levels - R.P.s	Quarry
B.M. hub "P" Line 087 1752.54	1751.67
Nail 0+00. 535 4589 12.00	40.54
3+24 Hub 663 48.26 4.26	41.63
B-5+18 ²² hub	264 45.62

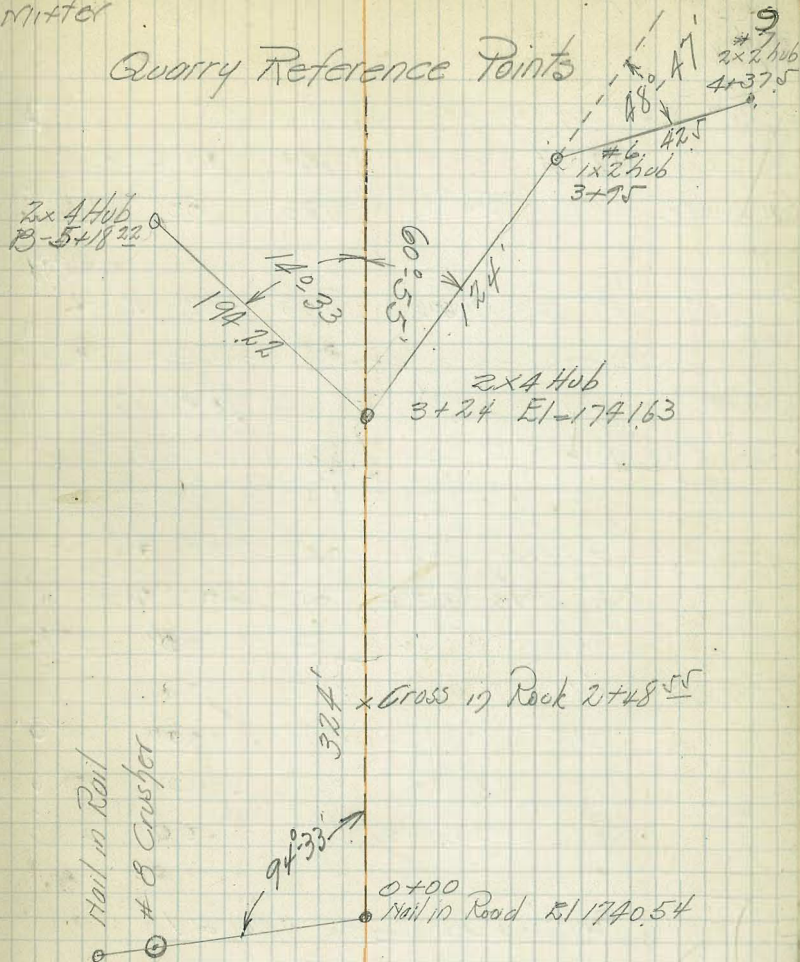
Quarry Top

At B 5+18²² Sight 3+24 for Level At Rd.

3+24 hub	865	50.28	Red	On Dist	174.63	Elev.
Stadia Dist	Azimuth					
158	347-30	00	68	158	435	-
160	325-15	00	5.1	160	45.2	-
168	319-20	+3°-58'	4.7	167	52.9	-
160	309-0	00	00	160	50.3	-
147	302-17	00	3.6	147	46.7	✓
135	292-0	+4°-10'	4.7	134	55.4	✓
134	280-20	+10°-50'	4.7	127	70.1	✓
145	272-30	+17°-6'	4.7	132	85.3	✓
144	260-25	+15°-22'	4.7	132	81.6	✓
132	252-10	+11°-45'	4.7	127	71.9	✓
153	241-37	+13°-26'	4.7	145	80.1	✓
153	236-45	+12°-27'	4.7	146	77.6	✓
171	230-8	+13-0	4.7	162	83.1	✓
184	225-52	+13°-	4.7	174	85.8	✓
202	221-30	+12°52'	4.7	192	89.6	✓
225	218-30	+16°-6'	4.7	207	1805.6	✓

Sub. Mitter June 23-1921

Quarry Reference Points



Note 3+24 not in - New hub was set changing Angles somewhat.

June 23, 21 Quarry Sections for #3 Spot.
 Bob Miller
 BM #1 = 44.6
 1851.6 Set on 4+37.5 Sight 3+98 for 1847.2
 Me Zero Az. Rt. Rod Vert #

3+2 Blast Hole #2 129' 55°44' 9.33 00 1848.3 129 1848.3

B-
 #1 = 44.3
 1846.9 Set over hole #2 Sight 4+37.5 for 1847.3

#1 = 5
 3+2 BM nail in Rock 1/2 4898 1847.77
 Top Plug Hole #2 667 1847.31

Section 20' South Hole #1
 Dist Stadia Ang. Angle Rod Vert Angle ✓
 40' 175-30 9.0 00 37.7
 Edge Cliff 41 170- 11.0 00 35.7 ✓
 38 188- 4.7 00 42.0 ✓
 39 200- 4.1 00 42.6 ✓
 41 207-40 0.9 00 45.8 ✓

Section 40' South Hole #1
 20' Tower, Hummy 60 183- 6.5 00 40.2 ✓
 60 166- 20.2 ✓
 58 187 3.2 00 43.5 ✓
 60 196 2.1 00 44.6 ✓
 6.1 197-10 4.4 +5°30' 48.1 ✓
 6.3 203-30 4.4 +17°0' 55.1 ✓
 61 ✓
 60 ✓

Corrected Dist Elevation

6/23/21

H=467

18423

Bob Kistler Quarry Sections Shot #3 Crit

Cor Dist.

Section 60 South Hole #1

77'	181-45	40	00	42.7
78'	170	15' lower		27.7
78'	189-30	00	00	46.7
80	196-15	4.4	+5°	49.2

79 ✓

Section 80 South Hole #1

95	180-30	0.7	00	46.0
97	173-	20' lower		26.0
95	185-30	4.4	+2°-45'	47.8
98	193-	4.4	+6°-52'	54.1

95 ✓
97 ✓

Section 100 South Hole #1

115'	179-30	2.4	00	44.3
116	187-	4.4	+2°-7'	46.6
115	184-30	4.4	+2°-15'	46.8
120	192-	4.4	+6°-30'	56.8

116 ✓
115 ✓
119 ✓

Section 130 - South Hole #1

135	179-15	3.6	00	43.1
135	184-15	4.4	+1°-15'	45.2
137	187-15	4.4	+2°-50'	49.0
check	110-10'			

135 ✓

6/25/21
Bub
Fisher

D.S. Face Lift 1505-1515

At 28-306.22 Chained 13.09 =

Sta - 28-319.91 - Sight Center

At 28-319.91 Sight Center RP for

Zero Turn 90° fr. Tangent.

- 10
- 20
- 30
- 40
- 50
- 60

pt in rock -



Chained South 52 = 28-314.91

At 28-319.91 Sight Center RP for 90°-Turn.

10 0-54'
P.M. June 25-1921

Set on 28-314.91 = 5' offset point

Run 314.91 Radius curve east to
Center Joint.

Points for forms set 5' north

1" = 5.458

10' = 0° 54.58

20 = 10 49.16

30 = 20 43.74

40 = 30 38.32

319.91 Radius

12

5.373 = 1ft Deflection

319.91 | 1718.87
 1599.55
 1193.20
 958.73

 233470
 223937

 94333
 - 5973

10	0° 53' 43".8	✓
20	1 47-27.6	✓
30	2 41-11.4	✓
40	3 34-55.2	✓
50	4 28-39.0	✓
60	5 22-22.8	✓
70	6 16-06.6	✓
80	7 09-50.4	✓
90	8 03-34.2	✓
100	8 57-18.0	✓

6/29/21
Bub
Fisher

Concrete Estimate #17
Sections below Curtain Wall
East of Contraction Joint

34-369⁵⁸

2.85 1501.44

1498.59

00

73.9 94.1 ✓

0.0 = Contraction Joint

9

6.9 94.5 ✓

0

8.3 93.1 ✓

15

5.2 96.2 ✓

18

7.8 93.2 ✓

28

5.5 95.9 ✓

35

4.0 97.4 ✓

50

3.2 98.2 ✓

56.1

3.7 97.7 ✓

57.4

3.8 97.6 ✓

0 + 20

1 + 00

0

6.8 97.6 ✓

0

2.8 95.6 ✓

5.1

6.8 94.6 ✓

17

5.7 95.6 ✓

15.0

5.0 96.4 ✓

50

4.2 97.2 ✓

29.0

6.5 94.9 ✓

59

3.9 97.5 ✓

32.5

6.0 95.7 ✓

1 + 11

48.0

3.2 98.2 ✓

0

7.7 93.7 ✓

56.3

3.5 97.9 ✓

20

5.2 96.2 ✓

0 + 10

50

4.4 97.0 ✓

0

5.6 95.8 ✓

59.2

~~4.7~~ 97.0 ✓

19

5.7 95.7 ✓

1 + 20

34

4.3 97.1 ✓

0 + 00

7.2 94.2 ✓

48

3.4 98.0 ✓

13

8.2 93.2 ✓

56.4

3.5 97.9 ✓

22

5.8 95.6 ✓

0 + 60

40 R.C.

5.1 96.3 ✓

0

6.0 95.4 ✓

1 + 37 = 00

12.0

6.1 95.3 ✓

94

38.0

4.4 97.0 ✓

43

4.3 97.1 ✓

57.2

4.3 97.1 ✓

6/30/21
Bv6
Fisher
Mixer

concrete Estimate #17
Sections below Curtain Wall
West of Contr Joint

1500

14

0+60

34-375²⁸

6.12 15.00

1508.88

53⁹

7.5 10.5 ✓

42

3.9 11.1 ✓

31

6.6 08.4 ✓

16

6.6 08.4 ✓

00

7.7 07.3 ✓

- 5.2

3.3 11.7 ✓

00

3.3 11.7 ✓

14.0

4.5 10.5 ✓

20.0

5.8 9.2 ✓

31.0

4.6 10.4 ✓

36.0

2.9 12.1 ✓

Sum 54.0

4.5 10.5 ✓

00

5.7 09.3 ✓

12

6.8 08.2 ✓

20

6.0 09.0 ✓

31

6.2 08.8 ✓

42

5.0 10.0 ✓

52.5

4.5 10.5 ✓

0+20

57.5

4.5 10.5 ✓

44.0

4.9 10.1 ✓

34.0

3.0 12.0 ✓

27.5

3.9 11.1 ✓

17.4

3.9 11.1 ✓

3.0

6.6 08.4 ✓

00

6.6 08.4 ✓

Platted 7-1-21
EFF

0+40

10

6

4.0

5.8 9.2 ✓

~~19~~

6.5 08.5 ✓

23.2

5.6 9.4 ✓

27

7.9 07.1 ✓

39.0

3.1 11.9 ✓

38

7.0 09.0 ✓

53.0

4.5 10.5 ✓

51.5

5.1 09.9 ✓

4.9 10.1 ✓

0+80

Platted 7-1-21
EFF

~~1402~~
0+96

1402

1409

00 section

July 30 1921
Bob
Kitcher

El. Casing # 5 hole Lift # 3
407 1851.84 1847.77
7.35 1844.29
104.15 1747.69

7/6/21
Bub
Fisher

Grade Downstream face

Elev. 1515

34.375 ²⁵

12.20 21.08 1502.88

1505 608 1505

96.8
2.35

104.15

Top Casing

Roadway = 1745.46

15

1844.29

96.80

1747.49

1844.29

1745.00

99.3

94.5

5.8

7/11/21

Bvd
Fisher
Mixer.

At 28 - 314.91 Sight C 28 for zero

Chain 15.01 set nail = 28-323.00

Chain 13.01 = 28-328

occupy 28-328 sight center RR
for zero Turn 90°

10

20

30

40

50

60

65 Δ

occupy 28-328 sight center RR
for 90° Turn

10' 0°-52'

20' 1°-45'

30' 2°-37'

7/14/21

Bvd

Fisher

30'

occupy 28-323.00 Sight center RR

for 90° -

2°-40'

20

30

40

16

$$\begin{array}{r}
 524046 \\
 328 \overline{) 1718.87} \\
 \underline{1640} \\
 788 \\
 \underline{656} \\
 1327 \\
 \underline{1312} \\
 1500 \\
 \underline{1312} \\
 1880 \\
 \underline{1968}
 \end{array}$$

52405

60

144300

0°-5.14" for 1 ft.

9-16-21

10' 0°-52'-24" ✓

20 1°-44'-49" ✓

30 2°-37'-13" ✓

40 3°-29'-37" ✓

50 4°-22'-01" ✓

60 5°-14'-26" ✓

70

80

90

100

31491

500

31491

32800

1491

1391

7/11/21
Fisher
Mixer

Lift #3
Elev. of Hole # 6 Star Drill -

B.M. Nail
in Top of Rock

3.2 1850.97 1847.77

4.97 1846.0

Elev Ground

5.97 1845.0

1845 = Tip of Hole # 6.

1745 = Roadway

100

2' below Roadway.

102'

7/14/21

Bob
Fisher
Mixer

Champion Strip - Elev
1505 - Lift

34-375-28

5.25 1509.13

1508.88

9.13

7/14/21

Bob
Fisher

At	50 - 295.95	Sight C	50 -
slpo Dist		vert Angle	Corrected Dist
53.29		25° 58'	47.91

$$\begin{array}{r} 89905 \\ 53.29 \\ \hline 809145 \\ 179810 \\ 269715 \\ 449525 \\ \hline 47.9103745 \end{array}$$

July 14 1921
Bob
Fisher

Points for Topog.

18

• Nail in Concrete Face
377.50

5360



16.48



• Nail in Rock
343.90

• Nail in Rock
327.42

Chain Dist 47.95



R 295.95

□ 3x4 hub

Instr Point doubled
on Paint X on
Road.

50 line

7/14/21

Bub
Fisher
Mixer.At 50-343.90 Sight 80-295-95
for Zero Az RightTop of
clamped Strip

5.64 1510.64

1505.0

Red 96.4

1510 21.2 278-0 ✓

18.4 286-30 ✓

19.4 293-30 ✓

17.0 292-30 ✓

15.6 313-30 ✓

26.5 345-30 ✓

27.6 352-0 ✓

~~30.8~~ 20-0 ✓

33.0 7-30 ✓

38.13 10-45 ✓

38.5 18-30 ✓

~~44.1~~ 20-15 ✓

Auxil/Pt. 30.51 308-43

Plotted 7/15/21

19

At Auxil/Pt. from 50-343.90 - Sight
464 50-343 70 for Zero Az RT.

59-375.28

11.110 1579.98

1508.88

HI

red 50

1515

-15 15 -

53 24-0 ✓

4.3 252-15 ✓

8.9 281-0 ✓

15.8 286-0 ✓

21.5 295-0 ✓

30.3 288-30 ✓

33.3 286-30 ✓

35.7 287-30 ✓

40- 284-15 ✓

41.7 287-0 ✓

-15 20 -

1520 23.9 286-15 ✓

18.4 284-0 ✓

12.3 279-0 ✓

7.9 260-0 ✓

3.0 225-0 ✓

3.1 179-30 ✓

5.0 154-30 ✓

8.2 158-0 ✓

11.9 134-0 ✓

4.64

15.34

Plotted 7/15/21

7/15/21
BvB
Fisher
MKT/01

Final Topog

At 50-295.95 Sight Center R.P. for Zero Az R

50-295.95 4.45 29.35 1524.90

Red 9.35

1520 8.5 72-0 ✓

" 7.3 84-15 ✓

" 7.5 160-0 ✓

8.4 177-0 ✓

12.0 191-45 ✓

Red 4.35 16.9 211-30 ✓

1525 12.9 209.30 ✓

8.4 208-30 ✓

3.7 204-0 ✓

1.0 181-0 ✓

Red-06

1530 9.5 243-30 ✓

12-0 225-30 ✓

17.6 220-0 ✓

19.5 ~~149-30~~ ✓
225-30 ✓

~~27.1 149-30 ✓~~

~~28.0 152-0 ✓~~ out

~~29.8 149-0 ✓~~

Platted 7/15/21

7/15/21

20

At 52-300 Sight 50-295.95 for Zero Az Right

4.62 41.32 1536.70

Red 16.3

1525 14.5

" 13.7

" 14.3

16.3

19.2

23.7

23.4

27.9

31.5

Red 11.3

1530 30.1

27.0

22.9

19.7

15.1

12.4

12.6

Red 6.3

1535 8.0

10.5

11.1

13.0

67-30 ✓

92-30 ✓

105-0 ✓

112-30 ✓

123-15 ✓

132-0 ✓

136-0 ✓

140-0 ✓

142-15 ✓

144-0 ✓

146-0 ✓

144-30 ✓

139-30 ✓

122-30 ✓

94-0 ✓

69-0 ✓

67-30 ✓

86-0 ✓

110-0 ✓

141-0 ✓

At 57-343.90 Sight

57-295.95 for Zero Az R

HT 4.64

5.18 1510.78 1575.00

Red 6.28

1505 12.7 147-0 ✓

6.5 131-0 ✓

3.1 164-0 ✓

4.3 69-0 ✓

8.3 21-0 ✓

16.6 14-15 ✓

20.3 6-0 ✓

21.8 35-20 ✓

26.6 2-30 ✓

29.2 7-30 ✓

29.9 18-30 ✓

34.5 21-0 ✓

26.4 25-30 ✓

Platted 7/15/21

7/16/21
Bob
Fisher
Mixer

At 28-314.91 Sight Center for
90° Turn.

30	2-44 ✓
40	3-38 ✓
50	4-33 ✓
60	5-27 ✓
70	6-22 ✓
80	7-16 ✓
90	8-11 ✓
100	9-06 ✓
110	10-00 ✓
1120	10-55 ✓
30	4-33

40 At 1120 Sight 28-314.91 for 10-55'
Turn.

10	0-55 ✓
20	1-49 ✓
30	2-44 ✓
40	3-38 ✓
50	4-33

On all pts - chained 5' - north =
319.91 Radius Curve -

7/16/21

21

Set on 50-343.90 Chained south.
23.99 = 50-319.91

Set on 50-319.91 - Sight Center B.P.
for 90° Turn 90° for Tangent
Chained 10' - nail in rock -
Chained 20' - + on rock -

At 50-319.91 Sight nail. 125.15'
for Zero, chained 10' + set nails
for 319.91 Curve.

10	0-54
20	1-47
30	2-41
40	3-35
50	4-28
60	5-22
70	6-16
80	7-10
90	8-00
100	8-57
110	9-51
1120	9-44

Dist. on Curve = chord lengths = 127.96

Chained
Diff = $\frac{127.89}{.07}$

7/23/21
Fisher
Mixer

Depth of Star Drill Hole #7

B.M.

4.0 1851.77

1847.77

3.5 48.3

4.5 47.3

1847.3

1745

1023

✓

104.3

7/26/21
Fisher
Mixer

Chamber Strip -

34
375-2F

7.34 16.22

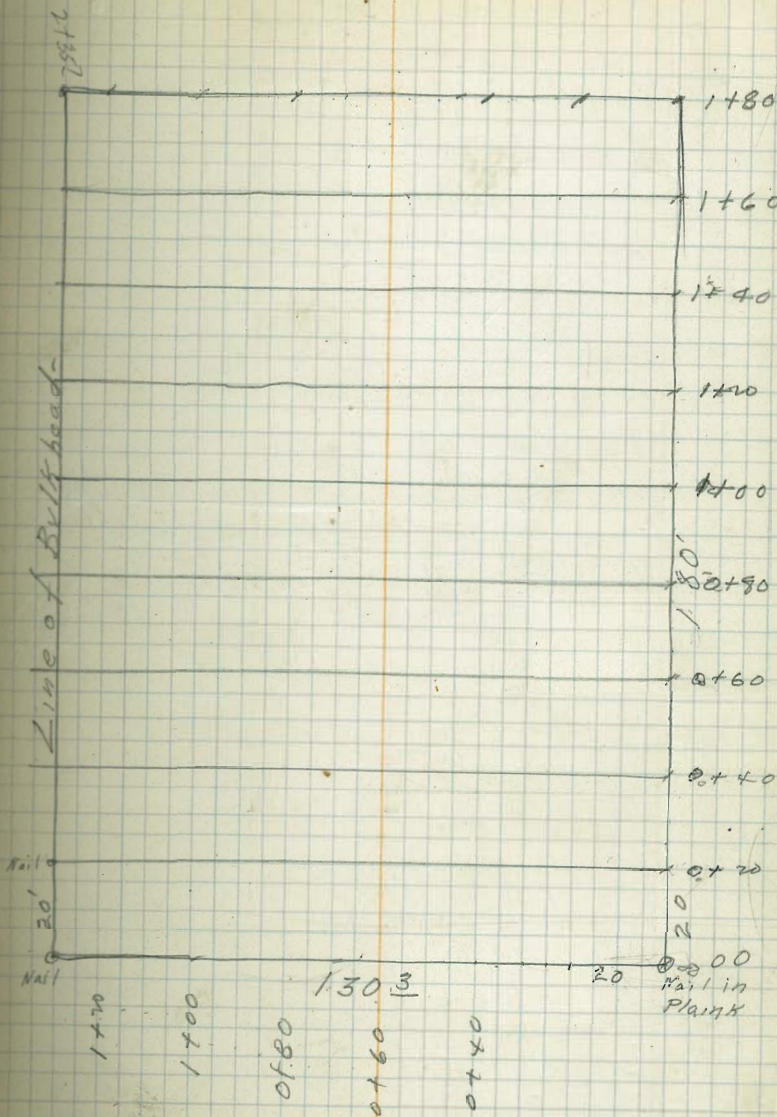
1508.81

1.22 1515.0

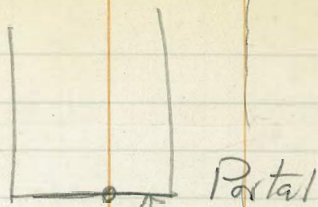
7/27/21

Bvd
Fisher
Mixer

Sectors For Estimate
of Sand Left in Storage Pile.



Tunnel



Conveyor #2

128'

line of Sand
Bulkhead

Sta 2+359

130.3

0+99
Sand Section

130.3

0+00

0+00

B.M. Nail in Post				
Billhead Wire Storage -	12.96	47.22		161.26
TP Top of Shotoff	11.72	54.71	10.23	42.99
Top of Stake D0-60	11.45	65.91	0.25	54.46
	12.31	77.77	0.45	65.46
TP for line			2.47	
Iron Pin near 0+40			0.28	79.30
TP Nail			0.28	78.49
Iron Pin near 0+40	0.99	74.29	2.47	75.30
0+60			4.17	72.12
0+80			3.83	72.46
1+00			3.74	72.55
1+20			4.32	72.97
1+40			5.68	70.61
1+60			8.38	69.71
1+80			10.07	66.22
2+00			12.59	63.70

Nail 100 Star Drill	4.66	1745.20		1740.54
00 Top of Nail			5.18	40.02
0+20			9.81	1735.39
0+40			11.61	1733.59
0+60 TP	2.78	35.33	12.65	1732.55
0+80			5.98	1729.35
1+00			4.10	1731.23
1+20			10.15	1725.18
1+40 TP	1.35	28.93	12.75	1722.58
1+60 TP	0.33	11.86	12.90	1718.03
1+80			12.58	1698.78

7/27/21

26

10' N- Section 00 - 00 section
00 Section

Depth of Sand

0-0	0.15	40.17	1740.00	0.0
4'			0.15	40.0
4			3.2	37.00
T.P.	0.4	28.6	12.0	28.2
20			2.0	26.6
30			8.0	20.6
40			13.0	15.6
T.P.	-4.4	12.5	11.7	16.9
0750			2.6	09.9
0460			5.9	06.6
0470			5.9	06.8
0480			10.0	02.5
T.P.	-2.7	99.3	10.5	02.0
1400			6.6	92.7
T.P.	0.6	88.1	11.8	87.5
1420			2.2	85.9
14303			5.0	83.1
T.P. chunk			10.4	77.7

Plotted 7/28/21

7/27

Section 0+20

130.3		1688.1	17.0	
130.3	ground elev.		17.0	71.1
10			10.9	77.7
23			3.1	85.0
72	13.0	1699.7	1.4	86.7
88.5			6.4	93.3
59.5			3.3	96.4
	13.0	1712.5	0.2	99.5
69.5			11.2	01.3
79.5			5.6	06.9
90.5	13.0	24.60	0.90	11.6
90.5			10.1	14.5
98.5			10.1	14.5
104.5			5.3	19.3
T.P.	12.9	37.0	0.50	24.10
117.5			9.4	27.6
129.5			0.9	36.1
- 2				40.1
- 12				40.1

Sand
Depth.130
27

2.0

4.0

6.0

1.0

3.0

5.5

7.0

5.5

5.5 + 10

5.5 + 10

5.5 + 10

00

104

7/27

1
Section 0440

00 0440	5.0	38.6		33.59
- 50			8.4	30.2
- 16			0.0	38.6
- 20			0.0	38.6
00	-4.6	29.0		33.6
+ 20			11.5	17.5
T.P.	00	16.0	13.0	16.0
46			8.5	07.5
T.P.	00	03.4	12.6	03.4
58			2.0	01.4
65			3.7	9.97
T.P.	00	90.9	12.5	90.9
88			2.9	88.0
100			8.7	82.2
113			11.8	79.1
T.P.	0.1	78.0	13.0	77.9
126			4.4	73.6
130.3			12.7	65.3
Top of Pin			2.7	75.3

Depth
Sand

28

4.0
4.5
4.0
00

20

3.0

2.0

3.0

3.0

1.0

5.5

8.0

8.0

73.1

7/27/21

Section 0+60

29

00	5.6	77.7		1672.12	
1+30.3			14.1	63.6 ^v	7.0
7.0			8.5	69.2 ^v	4.0
7.9	13.0	9.07	0.0	77.7 ^v	
24			10.6	89.1 ^v	4.5
43			2.0	88.7 ^v	2.0
T.P.	12.9	103.0	0.6	90.1	
56			10.2	92.8	7.0
68			7.9	00.1 ^v	2.0
75			1.3	01.7 ^v	0.0
T.P.	13.0	1715.7	0.3	1702.7	
88			7.1	08.6 ^v	2.0
101			3.2	12.5 ^v	0.0
114	13.0	28.7	0.0	15.7	
114			9.0	19.7 ^v	2.0
127			1.8	26.9	3.0
123	11.5	39.5	0.7	28.0	
T.P. stake 130.5			6.5	33.0	
-10			6.5	33.0	1.0

7/27-24

30

-7
Top of
slope

-0480-

+4.7

1729.4

34.1

50	0.0	1729.4		1729.35	8.0
+8			6.0	23.4	2.5
0420	00	16.5	13.9	16.5	1.0
0443			9.0	27.5	1.0
T.P.	0.0	04.0	12.5	04.0	
0156			2.6	01.4	1.5
69			8.5	95.5	1.5
78			12.7	91.3	0.7
T.P.	00	91.7	12.3	91.7	
88			4.8	86.9	1.0
103			10.8	80.9	2.0
T.P.	1.20	80.3	12.6	79.1	
119			8.7	71.6	3.0
130			8.0	72.3	8.5

7/27/21

1400 Section

Depth of
Sand

31

1430 ⁰⁰	13.0	85.55	1672.55	
00			29.0	63.6
10			13.5	72.1
22			6.7	78.9
35			3.3	82.3
T.P.	13.0	98.1	0.5	85.1
48			9.4	89.7
61			3.3	94.5
T.P.	13.0	1710.8	0.3	97.8
74			10.5	00.3
84			5.8	05.0
	13.0	23.7	0.1	10.7
97			11.4	12.3
107			5.4	18.3
147	13.0	36.7	0.0	23.7
130			5.1	31.6
7			1.8	34.9
-10				

00

7/27/21

840
Fisher
Mixer.

1+20 section

32

120 00	46	29.8		1725.18	
-13			2.0	27.8	00
-7			0.8	29.0	6.0 ✓
00				25.2	8.0 ✓
BM.	00	252		25.2	
+10			5.4	19.9	3.5
T.P.	00	132	12.5	12.7	
73			00	13.2	1.5
36			5.4	07.8	0.5
4.9,			11.0	02.3	0.5
12 T.P.	00	911	12.8	1701.21	
62			3.4	97.7	1.0
75			9.6	91.5	00
TP	00	888	12.3	88.8	
88		876	23	85.5	0.5
104			6.0	81.6	7.5
TP	1.4	778	12.4	76.4	
120			6.0	70.6	1.5
130.3			7.9	68.79	6.0
131.5			4.8	71.6	
				730	

error - rod -

→ 0.4 - here -

add 1.4

$$\frac{78.0}{21.8} = 3.58$$

7/28/21
Blub
Fisher.

	178.0				
00	3.5	1702.3		98.8	
10.0			58	96.5	0.0
7			4.0	98.3	0.0
20			30	99.3	
33			27	99.6	
46			3.8	98.5	
59			7.6	94.7	
72			12.0	90.3	
T.P.	00	898	12.5	89.8	
85			5.7	84.1	
98			11.9	77.9	
T.P.	00	774	12.4	77.4	
1+11			6.6	70.8	50
1+24			133	64.1	20
1+30 ³			11.2	66.2	
7 ⁵			16.4	61.0	50
1			19.5	57.9	ground
111			3.0		
2+00 zero Section -					
7 124			4.0		
131 ²			5.8		0.6
131 ³	3.5	1723		98.78	

7/28/41

1 + 00
- 0.5 = 00

2.6 13.6 11.03

00			2.5 5.1	08.5	2.5
15			2.5	11.1	
28			1.5	12.1	
41			3.8	09.8	
54			10.0	03.6	
T.P.	00	00.6	13.0	00.6	
67			0.6	00.0	
80			6.0	94.6	
93			11.9	88.7	
T.P.	00	88.1	12.5	88.1	
106			9.5	78.6	
T.P.	00	75.7	12.4	75.7	
119			3.0	72.7	
130.3			6.7	69.0	
1303			14.7	61.0	ground
T.P.			6.7	69.0	

35

7/28/51
Bub
Kistner

1+40

Depth of sand

36

-13	20			00	
	-20	206		22.6	
00				20.6	7.0
14			6.6	14.0	4.0
T.P. 27	00	07.5	12.8	07.5	1.0
40			4.1	03.7	2.0
53			9.1	99.7	0.5 ✓
66			13.0	04.8	2.0 ✓
T.P.	00	95.0	12.8	95.0	
79			5.7	89.3	1.5 ✓
92			9.4	85.6	5.5 ✓
T.P.	00	82.0	13.0	82.0	
105			1.0	81.0	7.0 ✓
117			8.0	74.0	10.0 ✓
1303°			11.4	70.6	
1523			19.9	62.1	Ground.

7/29/21
Bub
Fisher

- Chamber Strip - Elev. 1525 -
West of Construction Joint.

337.70 R. 1+97.19	0.90	1535.92	1535.02
1525		10.92	1525.0

7/29/21
Fisher
Mixer.

Concrete Sections for July Estimate
Sections - West - of Construction Joint.

Top of Chamber Strip	0.40	1525.70	1525.0
	a.o. Section Center Wall = 80		
0.0		9.7	1571
11.0		8.2	17.4
30.0		8.7	16.7
51.0		10.3	15.1
	0+20		
0.0		8.7	16.7
13.0		7.3	18.1
26		8.1	17.4
39		6.9	18.5
49.5		7.7	17.7
	0+40		
0.0		6.2	19.2
13		5.0	20.4
25		4.2	21.2
31.0		3.5	
38		4.8	21.9
49		4.9	20.6
			20.5

1525.4
(10+60)

0.0	6.2	19.2
13.0	4.5	20.9
27.0	7.0	18.4
40.0	5.2	20.2
50.0	5.0	20.4
	- 0+20 -	
0.0	6.9	18.5
13.0	6.2	19.2
26.0	6.5	18.9
39	6.2	19.2
50.0	5.0	20.4
	1+64	
0.0	6.7	18.7
13.0	7.0	18.4
26.0	6.8	18.6
34.0	4.0	21.4
44	4.1	20.3
51	5.0	20.4
	1+15	
0.0	6.7	18.7
8.0	6.0	19.4
17	4.8	20.6
	1+20	
0.0	6.0	19.4

Fisher
Mixer
July 29/21

Concrete Sections for July Est -

34-375.28

4.42 1513.30

1528.85

Curtain Wall = 00

00
13
26
39
54

50 08.31
48 08.51
38 09.51
3.1 10.21
2.8 10.51

35
54.5
50
7
15
28

0+20

00
13
27
40
43
52

5.3 08.01
4.6 08.71
2.7 10.61
2.5 10.81
3.4 9.91
3.1 10.21

41.0
54
00
13
26
39
55

0+40

00
13
22
31
38
52

4.9 08.41
4.3 09.01
2.1 11.21
3.8 09.51
2.8 10.51
2.8 10.51

60
130
26
39
48

0+60

00
11.0
17
26

4.9 08.41
4.9 08.41
3.3 10.01
4.8 08.51

56.5

1513.30
0+60

3.0 10.31
3.1 10.21

0+80

5.3 09.01
5.4 07.91
3.9 09.41
3.8 09.51
4.3 09.01
3.0 10.31

1+00

5.6 07.71
5.5 07.81
5.1 08.21
3.7 09.61
3.0 10.31

1+20

5.9 07.41
5.0 08.31
3.4 09.91
3.2 10.11
3.5 09.81
3.5 09.81

1513.3

1740

00	3,7	09 6
13e	3,4	09,9
23.0	3,1	10 2
36.0	3,4	09 9
49	3,2	10 1
57	3 1	10 7

1760

00	4.3	09.0
13	3.3	10 0
26	3.5	09 9
39	4.1	09.2
42 RC.	4.3	09.0

1770

00	3.9	09.4
8	2.9	10.4
11	2.2	11.1
14	4.2	09.1
27	4.6	08.7
32 RC	6.3	07.0

1780

00	4.8	08.5
12		
RC.	6.5	06.8

1787

7.3

06.0

7/30/21
 Bus
 Fisher
 Mixer.

Excavation Estimate July
 Sections.

54-295 13

(54)

0.20 1552.20

1552.0

Change Strip

29

306

3.8

48.4

39

315

10.8

41.4

42.0

46

(56)

56-29821

1.0 64.61

63.61

00

56-310

5.6

59.0

14

316

18.6

46.0

23

320

21.6

43.0

30

(58)

58-30459

2.0 65.01

63.01

40

50

3146

TP

10

1.8

63.2

00

20 325

2.5

62.5

13

vert

23

-60 =

29

60-275

3.2 71.03

156783

TP

329

8.2

62.8

34

vert 9.0

17.2

53.8

39

45

Curlew Wall 0.0

40

54 Line

5.24 1520.24

1515.0

375 - R = 00

14.5

0.57

91

11.15

69

13.3

1.4

18.8

(374)

104

09.8

9.8

10.4

4.8

15.4

45

15.7

00

20.2

+ 90

29.2

Hand-level

12.4 27.3

5.3

14.9

(58)

12.8

14.5

10.2

17.1

34

23.9

25

24.8

13.0 383

20

25.3

6.3

32.0

4.8

33.5

+ 5.2

43.5

Plotted 7/31/21

Plotted 7/31/21

- 60 -

HI = 38.3

00	377 - 370	50	33.3
7		55	32.8
19		63	32.0 ✓
30		22	36.1 ✓
42		0.5	37.8 ✓
46		+12	50.0 ✓

Platted

7/31/21

Top of Fours	5.2	47.5	42.3
	8.8	43.8	35.0

next Fe			
404		10.4	33.4 ✓

400		10.5	33.3 ✓
-----	--	------	--------

392		10.1	33.7 ✓
-----	--	------	--------

37.0		8.5	35.3 ✓
------	--	-----	--------

382		7.8	36.0 ✓
-----	--	-----	--------

374 ²⁶		9.0	34.0 ✓
-------------------	--	-----	--------

44		7.8	36.0 ✓
----	--	-----	--------

356 ⁵⁵		4.0	39.8 ✓
-------------------	--	-----	--------

345			
-----	--	--	--

408		+20	45.8 ✓
-----	--	-----	--------

00		2.2	41.6 ✓
----	--	-----	--------

-398		5.6	38.2 ✓
------	--	-----	--------

387 ¹³		4.5	39.3 ✓
-------------------	--	-----	--------

21		4.5	39.3 ✓
----	--	-----	--------

30		3.0	40.8 ✓
----	--	-----	--------

Platted
7/31/21

64

39
49
6629.86
421
13
10
7

4133

407

404

077

441.3

367.6

346.7

66325

343.7

346

(64) 43.8

41

0.4
+10 → 43.4 ✓
53.4 ✓

(66)
6.85 02.26

8.3 94.0 ✓
131 89.2 ✓
131 89.2 ✓
17.1 85.2 ✓

(68)

1.7 00.5 ✓
6.0 96.3 ✓
7.0 95 ✓

70

2.12 26.71 1624.59

15.6 11.1 ✓
9.7 17.0 ✓
75.1

(68)

15.1 11.6 ✓

(66)

1.5 1604.2 1602.66

3.0 1601.2 ✓

15.0 89.2 ✓

Platted 7/31/21

64-325	(64)	08	924.0	1591.63	180
331			07	91.7	31.0
	(62)				40
325			8.3	84.1	47
<hr/>					
072		2.1	26.7	1624.6	T.P.
T.P.		00	14.6	12.10	7P.
70-91.3		0.8	02.4	13.0	01.6
- 6.7	(70)				450
- 401.6				0.5x0	450
- 9.7				40	98.41
- 3.968				6.2	96.2
390.6				3.8	98.61
20.7				4.1	01.31
388.7				1.5	00.9
22.6				00	02.4
380.6				+60	08.4
37.0					
375.3		3.2	93.2	124	90.0
30.7	(68)				
370.3					
4.1					
42				15.0	28.2
413				13.5	79.7
403				11.5	81.7
406				8.2	85.0
396				15.3	77.9
395				13.5	79.7
388				12.4	80.9

Platted 7/31/21

(28)	93.2				
		9.9	83.3		
		59	87.3		
		34	89.8		
		+2.6	95.8		
08	80.7	13.3	79.9		
01	678	13.0	67.7		
(66)					
		97	57.1		
		3.7	64.1		
		+2.0	69.8		
		9.3	88.5		
		12.5	55.3		
		12.4	55.4		
		0.2	67.6		
		0.2	67.6		
00	549	13.0	54.8		
		11.8	43.0		
			(43.3)		

Platted 7/31/21

00 Section -
15' from - 70

8/6/21

B&B
Fisher
Mixer

At 28-337.70 Sight Center for 90°

-Turn

1 0-05.0899

10 0-50.899

20 1-41.798

30 2-32.697

40 3-23.596

50 4-14.495

For Check-

At 28-337.70 Sight (RP 337.70 West)

Turn 89°-58' To C 28

At 1+97 1/2 337.70 Chained

2.81 = DZF00

D21

12.81

D22

23

24

25

26

28

Baker's
337.70
All on

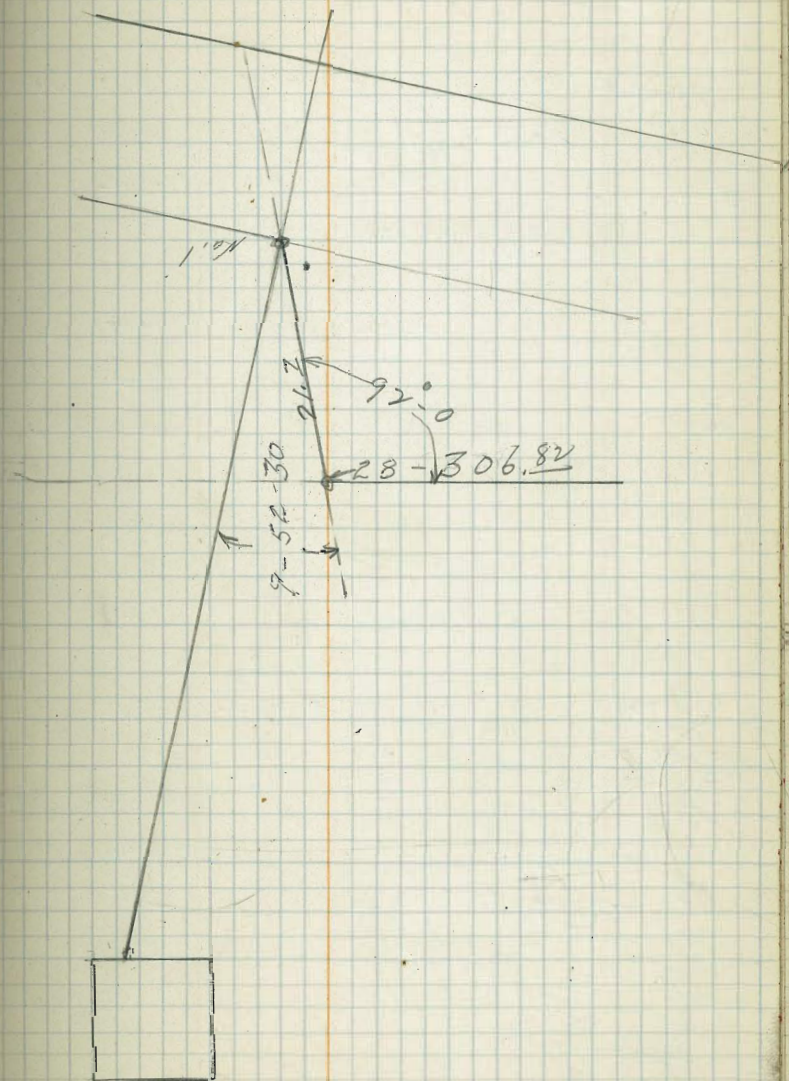
8/6/21

Bub
Fisher
MixedElevation for Hoist
#2 Tower

East- 1497.67

SE Cor.	12.67	1495.00
Bottom of 1495 lift	12.58	1485.09
Top of 1495 lift	2.65	95.02
Bottom of 1505 lift	2.58	95.09
West		
Bottom of 1505	2.64	95.03
Top of 1495 lift	2.69	94.95
Bottom of 1495 lift	12.52	85.15
SW Cor.	12.67	85.00

44



8/8/21

Fisher

Mixer

#1 4.4²

Quarry Sections.

45

Set on 4+375 Sight 3+95 for Zero to R-

4+375 7.44 1851.64 1847.20

#1					
Blast hole #5	182	59-35	0 0	9.0	42.6
(#2) #6	202	59-30	00	6.3	45.3
(#3) #7	221	58-30	00	4.2	47.4
(#4) #8	239	57-38	00	5.2	46.4

0.50 40.18 11.96 39.68

Hole #1 37. 36.5

-22

-15

edge of cliff

13 8.5 31.71

+1 2.9 37.31

8 00 40.21

14 + 1.0 41.21

14 4.0 44.21

#2

Hole #2

8.1 - 32.1

28.0

19.5

edge of cliff

-15

09.5

12.5

12.7 27.51

+5.0 5.5 34.71

7 2.5 37.71

11 1.4 38.81

14 + 1.5 41.71

14 + 8.5 48.71

T.P 0.10 30.0 10.3 39.9

8/8/21
Fisher
Mixer

Hole #3
30.00

46

26			09.0	
- 18.5			11.5	
- 13		6.8	23.2	
21.5		9.0	21.0	
- 4		00	30.0	
T.P.	6.4	36.4	00	30.0
5			4.5	31.9
12			3.5	32.9
15			+ 1.5	37.9
25			+ 18.5	52.9

30.0

Hole #4

Hole #4			10.3	19.7
- 9			8.3	21.7
11			9.0	21.0
2.1			12.8	17.2
+ 3			8.3	21.6
+ 7			33	26.7
10			+ 5.0	35.0
13			+ 12.0	47.0

0 + 20 to 80

07			8.0	22.0
26			+ 20	32.0
5			9.5	20.5
8			15.5	14.5
8			15.5	14.5

8/10/21

Elev of Motor To #1 Hoist -

48

Base of Hoist	0.9"	03.00	
Bottom of Shaft		+ 5 ⁷ / ₈ "	+ 14 ⁷ / ₈
Bottom Base Motor		- 13 ³ / ₈ "	+ 3 ³ / ₈
		- 10 ⁵ / ₈ "	- 1 ⁵ / ₈
Top of Motor.		+ 2' 3"	+ 3.0

Top #3⁷

Hole # 1-02⁷⁵ (1)
0.80 48.2

1847.40

up-hill
+ 4.5
+ 5.5
+ 4.5
7 14.5

- 5.0
10
11
1.8
31.2

9.9 43.3
4.4 43.9
1.1 46.9
+ 0.6 49.5
+ 5.8 54.0

5.0 43.2
7.2 41.0
9.6 38.6
15.0 33.0
25.0 13.0

Hole #8 (2)

+ 00
+ 4
+ 5
+ 9
7 11.4
7 11.4
- 6
20

3.4 44.8
3.0 45.2
0.9 47.3
00 48.2
+ 11.5 49.7
9.5 51.7
3.4 44.8
27.2

07 hole
- 25' edge of cliff

Hole # 7 (3)
0.30 47.70

47.40

20.5 27.2

47.40

27
- 5'
- 12'
+ 4
11
13
13

55 52.9

5.9 47.5

8.3 44.6

5.3 47.6

00 52.9

00 52.9

+ 10' 62.9

#8 (4)

6.3 53.7

47.40

Hole #8

6.6 47.1

7.4 46.3

16.2 37.5

- 5
- 17.5
- 21

63 53.7

47.4

+ 40
6
+ 19
24

~~6.3~~ 47.9

2.9 50.8

+ 20 55.7

15.0 68.7

8/11/21

Sub
Fisher
Mixer

D.S.F. Pts - Liff 1515-1525

- 328⁰⁰' Radius -

51

At 34-382.36 chained toward

Center. 54.36 = 328' Radius

At 34-328 Sight C 34 for 90°

turn

West -

8.55

0-43'

East

1.45

0-07.598

11.45

1°-00.003

21.45

1°-52.402

31.45

2°-49.813

41.45

3°-37.218

51.45

4°-29.623

131.29

11°-28' checked 50-328 by apo-

To establish 50-328 Chained from

50-295.95 for 32.05 - set nail

8/12/21
Fisher
Mixer

Contraction Joint 4+86

At 50-377 - Radius Chained West - 12.2

At 50-320 " " " 10.2

Will take elev. Bottom after this Lift. 1515

6-15

8-12-21

Fisher
Mixer

Chamber Strip Elev. 1535

West of Contraction Joint.

149719-3372

1.05 36.07 35.02

1535

1.07 35.00

8/19/21 (Fisher
Mixer)

149719-3372

4.90 39.92 35.02

4.92 35.08

966

52

10.34

10.00

10.09

8/16/21
Sub.
Fisher
Mixer.

D.S. Face Litt 1515-1525

Radius 328⁰⁰ -

At 50-295-25 Sight C50 for Zero

Chained 32.05 set nail = 50-328

At 50-328 take nail 41.45 from

34-328 for Zero Turn.

53

10 0-52

20 1-45

30 2-37

40 3-30

50 4-22

60 5-14

70 6-07

80 6-59-

Chained to 50-328 = 9.66

East Tangent At 50-328 - Sight C50 for Zero Turn 90°

10.34

Nail in concrete

20.34

Nail in concrete

30.34

+ on Rock

Chained north - 11-23 = 50-339.23 -

At 50-339.23 Sight C50 - Turn 90°

Set 2 nail with red flagging.

8/18/21

Sub
Fisher
MixerLocation of Forms
+
Contraction Joint -

At 50-328-Sight C 50 for Zero Az Pt

Point Elev

on 1st Day Section

5.01 1520.01

1515.00

(H₂O³)

3.9

51.30

1847.40

54

Firm
D.S.F. Elg 1555

10.65 269-18 ✓

4.85 15.16

Hole Depth 105.1

5.3

48.00

51.40 346-39 ✓

4.90 15.10

Average
Elev Contraction Joint

1515.1

480

455

1025

20

1045

R.C.

Top of Concr

273 99-24 ✓

4.3 15.71

Tip of D

Concr

23.0 82-0 ✓

4.5 15.51

Bottom

23.0 82-0 ✓

5.7 14.35

Top

223 56-35 ✓

6.3 13.71

Bottom

11 11 11 ✓

10.5 09.51

24.8 39-30 ✓

10.2 09.81

Average
Elev.

Contraction

4.9 1515.1

Plotted 8/18/21

Fisher
Mixer

Location of Grout Hole RT Abut

8/19/21

At 1+8188-3372 Sight - R.P. - Cement Shed.

1+925-3372

4.90 1539.92

1535.02

Grout

2.5 3.30 42.4 0.83 39.09

Grout Hole
#1

62.5 49-20' 1.3 42.1

Grout Hole

Depth - 22'-0"

#2

53' 71-30 33.7

Depth 24'-0"

8/20/21
Fisher
Mixer.

Pts for Excar.
D.S. Face -

55

B 70	2.55	26.61		1624.06
	00	25.00	1.61	25.00
Bench,			10.0	15.0
	00	12.7	12.3	12.7
			12.7	16.00 00

8-21/21
Bob
Fisher.

- East of #1 Joint -

Chamber Strip - Elev 1525

H 9719	1.01	36.03		1535.02
			1.03	35.00
7.P.	4.48	29.62	10.89	25.14
			4.62	25.00

8/25/21

Bud.
Fisher
Minko

D. S. Face Pts Radius - 335.70

L.H. - 1525 - 1535 -

At 34-382.36 Chained - 47.29
 toward Center - measured back 0.63
 Set nail - 335.70

At - 34 - 335.70 - Sight - 34 - 382.36 for ^{90°}West
9.35

East

0.70	0-03.584 ✓
10.7	0-54.787 ✓
20.7	1-45.990 ✓
30.7	2-37.193 ✓
40.7	3-28.396 ✓
50.7	4-19.599 ✓
60.7	5-10.802 ✓
70.7	6-02.005 ✓
80.7	6-53.208 ✓

8/25/21

At 28 - 343-40 Sight R.P. C-2 F for 90°

20	1-40.1088 ✓
30	2-30.1632 ✓
40	3-20.2176 ✓

At 2 incof forms

56

At 50.7 - East of 34 - 335.70 Sight
 34 - 335.70 for 187-19 -

Turn

10	0-51 ✓
20	1-42 ✓
30	2-33 ✓
40	3-25 ✓
50	4-16 ✓
60	5-07 ✓
70	5-58 ✓
72 1/2	6-01

to from

8/27/21

Sub
Fisher
Mixer

Nail

0 + 00

Hvb

0 + 20

Hub

0 + 40

Nail

0 + 60

Nail in Rocks.

0 + 80

Nail

1 + 00

1 + 20

Nail

1 + 32

1 + 32 Line

Nail in Plank

0 0

sect 1

✓

3

4

5

6

7

8

1 + 80

9

Hvb

2 + 05

Sections Sand Storage
Stock Pile -

57

Sections Sand Storage stock Pile

8/27/21 B.V.B. F. Sh. G. M. X. W.				
B.M. Hub end P Line above Quarry Road	2.04	1753.71		1751.67
	1.88	45.11	10.48	43.23
On Park. TP			12.22	32.89
Nail 0.0 Section TP 1+32	4.37		5.11	40.00
	0.37	332.6		
#7 R.P.			9.7	23.6
# 6 Sect. 1+32	2.15	22.92	12.49	20.77
# 7 1+32			8.77	14.15
#8 R.P. T.P.	0.44	10.61	12.75	10.17
# 8 1+32			5.82	04.79
# 9 1+32			14.79	95.82
Sect 10-14.5 1+32			12.24	98.37
# 6 Sect 1+32	11.13	31.90		1720.77
# 5 Sect 1+32			3.67	28.23
# 4 Sect 1+32			1.71	30.19
# 3 Sect 1+32			5.10	268
# 2 sect 1+32 ✓			5.20	267
# 1 Section 1+32 ✓			2.56	2904
Stake - near TP 0.0 line	9.00	40.68	0.22	31.69
			0.64	40.04 ✓

ann. 9. 21

Sand Storage Stock Pile.

# Section	section 0-00 -			
1+32	11.13	1731.90	1720.77	
1+28			0.0	31.91
1+20			5.1	26.81
#1 T.P.	0.63	19.52	13.01	18.89
Nail 17 00			2.52	17.00
0+95			5.9	13.61
0+81			9.7	09.81
HUB 0+70			10.39	09.13
0+50			11.4	08.11
#2 T.P. on Rock	1.6.9	09.50	11.71	02.81
0+65			5.2	04.31
HUB 0+60			7.83	01.67
0+55			9.3	00.21
0+40			14.50	95.01
HUB 0+40	0.73	97.71	12.52	96.98
HUB 0+20			8.47	89.24
0+20			9.5	86.22
T.P. Peg Nail 00 00	0.19	85.89	12.01	85.70
Sect 1-00			5.55	80.34
Sect 2-00 Top of Peg			5.87	80.02
Sect 3-00			7.51	78.38
Sect 4-00			6.60	79.79
Sect 5-00			8.33	77.56

Platted
8/29/21

Sand Storage Stock Pile

#6 Sect	85.89		
#7 Sect		10.68	75.21
#8 Sect		11.31	74.58
#9 Sect		11.19	74.70
		12.78	73.11

Section #1-

00	10.60	1690.62	1680.02
00		13.5	70.5
0+10		19.6	72.0
0+23		10.6	90.0
0+31		8.1	91.5
3.7		2.5	88.1
0+50			
00 Section			
0+60	3.20	04.87	01.67
0+50		11.2	93.7
0+68		7.8	97.1
0+86 TP	13.00	17.00	09.0
1107			5.2
1107			11.8
121	41.14		29.04
1+45			3.8
1+45			0.5

Platted 8/29/21

Sand Storage Stock Pile 61

Section 2

cut 1	12.1	41.14	29.04
1+32			
1+44	7.5		33.6
1+53	1.4		39.7
Sect 2	00	26.7	26.7
1+32			
1+05			10.0
TP	00	15.4	11.3
1+02			3.3
0+87			10.0
TP	00	02.6	12.8
0+72			4.0
0+70			6.6
0+60			8.6
TP	0.20	89.7	13.1
0+42			2.5
0+27			8.0
0+21			14.7
Sect 2 - 00			9.2

Platted
8/29/21

Sand Storage Stock Pile

Section 3

Sect 3	Top of Post			
00	8.60	96.98		78.38
00				66.41
0+15			17.5	69.51
0+30			4.3	82.71
T.P.	13.0	99.3	0.70	86.28
45			11.2	88.11
50			9.7	89.61
60			4.7	94.61
T.P.	13.00	171.00	1.30	98.00
75			9.4	01.61
90			3.4	07.61
T.P.	13.0	73.7	0.3	10.7
1+05			9.6	14.11
1+20			2.4	21.31
T.P.	13.0	35.90	0.80	22.90
Sect 3				
1+32			8.8	27.11
42			2.7	33.21
46			00	35.91

Platted
8/29/12

Sand Storage - Stock Pile

Section 4

62

Sect 4				
1+32	4.7	31.5		26.81
1+38			1.3	30.21
(Sect 4)	00	26.8		26.8
1+22			7.6	19.21
1+17			11.0	15.81
T.P.	00	14.4	12.4	14.4
7+02			5.7	08.71
0+17			11.5	02.91
T.P.	00	01.3	13.1	01.3
0+22			4.8	96.51
0+57			11.2	90.11
T.P.	0.10	88.2	13.2	88.1
0+42			5.2	85.21
0+27			13.0	75.01
T.P.	0.60	77.8	11.00	77.2
26.8			13.8	64.01
Sect 4			17.	78.381
00				72.11
00				60.8

Platted
8/29/12

8/29/21
B/S
Fisher
Mixer

Sand Storage Stock Pile

Section 5

Sect. 5-00	5.8	83.36		77.56
00				66.61
11			11.7	71.7
21			6.3	77.1
30			2.1	81.3
T.P.	13.00	95.7	0.7	82.7
45			5.3	87.4
60			1.3	94.4
T.P.	13.0	1708.3	0.4	95.3
75			7.8	00.5
90			17	06.6
T.P.	12.8	20.4	0.7	07.6
105			7.4	13.0
TP, 113	13.00	32.00	1.4	19.00
120			10.2	21.8
132			3.3	28.7
140			00	32.0

Platted
8/29/21

Section 6

(6-132)	9.5	30.3		20.77
1742				5.6
(6-132)	00	20.77		20.77
117				4.6
102				11.0
TP	00	07.9		12.8
87				3.3
72				9.6
TP	00	95.1		12.8
57				3.3
42				10.1
TP	00	82.7		12.7
31				20
27				4.8
16				9.0
12				12.1
(6-00)				66
00				25.2
				75.1
				67.2

Platted
8/29/21

Sand Storage stock Pile

Section 7

(7-00)	2.3	81.9		74.5
00				66.6
10			13.0	68.9
15			10.2	71.7
30			5.8	76.1
T.P.	13.0	94.6	0.3	81.6
45			10.6	84.0
50			6.7	87.9
60			3.5	91.1
T.P.	13.0	07.3	0.3	74.3
75			9.7	97.6
90			4.3	03.0
105			1.1	06.2
T.P.	13.0	20.2	0.0	07.2
120			9.3	10.9
(7-132)			5.8	14.4
44			2.8	17.4

Platted
8/29/21

Section 8

64

7-132	2.0	06.8		04.7	91
1-40				0.6	06.2
117				5.4	01.4
102				9.1	97.7
0+87				10.0	96.8
T.P.	0.1	93.9		13.0	93.8
85				0.4	93.5
5.7				5.8	85.1
50				10.0	83.9
42			0.3	81.7	12.5
31				5.4	76.3
27				7.6	74.1
20				13.0	68.0
14				15.7	66.7
12				13.0	68.7
00				16.0	65.7
(8-00)				16.0	65.7
				6.7	75.0

Platted

8/29/21

8/29/31
Bub
Fisher
Mixer

Sand storage stock Pile
Section 7-

(9-00)	60	79.1	73.11
00			63.11
12		14.5	64.6 ✓
20		10.5	68.6 ✓
27		8.1	71.0 ✓
30		8.1	71.0 ✓
T.P	120	90.3	0.8 78.3
45			120 78.3 ✓
52			108 79.5 ✓
57			6.5 83.8 ✓
60			6.7 83.6 ✓
75			4.5 85.8 ✓
90			3.4 87.9 ✓
7P	120	17020	0.3 90.0
105			11.0 91.0 ✓
120			8.0 94.0 ✓
132			5.6 96.4 ✓

Platted 8/29/31

8/29/31
Fisher
Mixer

Concrete Sections
August Est
Section 0-0

65

Markon Wall	3.00	1518.00	1515.00
00			2.7 15.3 ✓
10			5.5 12.5 ✓
20			7.6 10.4 ✓
30			9.8 08.2 ✓
35			10.5 07.5 ✓
	0+10		
00			4.0 14.0 ✓
10			5.5 12.5 ✓
20			7.5 10.5 ✓
25			6.7 11.3 ✓
30			9.0 9.0 ✓
36			10.8 07.2 ✓
40			11.5 06.5 ✓
	0+20		
00			2.4 15.6 ✓
10			4.4 13.6 ✓
20			7.3 10.7 ✓
30			8.7 9.3 ✓
36			11.6 6.4 ✓
	0+30		
00			2.2 15.8 ✓
10			3.8 14.2 ✓
20			6.5 11.5 ✓
30			8.7 09.3 ✓
35	P.C		10.6 07.4 ✓

Platted
8/29/31
0+20

8/29/21
Fisher
Mixer

0+40

3.00 1518.00

00	2.2	15.5
10	2.8	15.2
20	2.6	15.4
30	2.8	15.2
316	3.1	14.9
316	4.8	13.2

0+50

00	2.4	15.6
10	2.6	15.4
20	2.8	15.2
30	2.5	15.5
354	1.8	16.2
354	2.5	15.5

Platted
8/29/21

0+58.3

00	3.0	15.0
10	3.0	15.0
20	3.0	15.0
26	2.0	16.0

RC

8/29/21
Fisher
Mixer

D.S.F. Chamber Strip 66
Elev. 1535 - East North Front #1

4.65 39.67

1535.02

4.67 1535

335.7 Radius -

5.1203 = 1 ft

$$\begin{array}{r} 335.7 \overline{) 1718.87000} \\ \underline{16785} \\ 4037 \\ \underline{3357} \\ 6800 \\ \underline{6714} \\ 86 \end{array}$$

1'	0 05.07
10	0-51-12
20	1-42-24
30	2-33-36
40	3-24-48
50	4-16-00
60	5-07-12
70	5-58-24
80	6-49-30
90	7-40-48
100	8-32-00

343.4 Radius

5.00544 = 1 ft.

$$\begin{array}{r} 343.4 \overline{) 1718.8700} \\ \underline{17170} \\ 18700 \\ \underline{17170} \\ 15300 \\ \underline{13736} \\ 15440 \end{array}$$

(343.4)

1	0-05.00544
10	0-50.0544
20	1-40.1088
30	2-30.1632
40	3-20.2176
50	4-10.2720
60	5-00.3264
70	5-50.3808
80	6-40.4352
90	7-30.4896
100	8-20.5440

4.9764

$$\begin{array}{r} 345.4 \overline{) 1718.8700} \\ \underline{13816} \\ 33727 \\ \underline{31086} \\ 26410 \\ \underline{24178} \\ 22320 \\ \underline{20724} \\ 15960 \\ \underline{13512} \\ 24480 \end{array}$$

(345.4)

1	0-04.9764
10	0-49.764
20	1-39.528
30	2-29.292
40	3-19.056
50	4-08.820
60	4-58.584
70	5-48.348
80	6-38.112
90	7-27.876
100	8-17.640

Elevations of Coordinate + Reference Points

For Left Abut. see Page -

68

1+99 43 - 353 ¹⁰ RADIX - Nail in Lift.	1555.04	60-300	Hub.	1571.58
1+85 69 - 353 ¹⁰ " - " " "	1555.01	60-275	Hub.	1567.83
1+97 29 - 345 ⁴⁰ " - " " "	1545.06	62-275	Hub.	1579.76
1+83 93 - 345 ⁴⁰ " - " " "	1545.07	64-275	Hub.	1588.57
1+97 19 - 337 ⁷⁰ " - " " "	1535.02	66-275	Hub.	1600.51
1+81 88 - 337 ⁷⁰ " - " " "	1535.05	68-275	Hub.	1614.90
Top of Nail D 2+70	1540.85			
34-382 36 Nail in 4 th Lift Curtain Wall	1529.79	70-275	Hub.	1622.83
34-375, 28 " " 3 " " "	1508.88	72-275	Hub.	1633.37
34-369, 58 " " 2 " " "	1498.59			
34-363, 51 " " 1 " " "	1488.79	56-325	Hub.	1553.95
34-274 14 + on rock	1467.17	58-325	Hub.	1562.11
Top of Plumbrock 2 nd Lift in Dam	1472.91	62-325	Hub.	1582.64
Nail in rock - Right Abut. - (about 24-250)	1464.85	64-325	Hub.	1591.63
Nail in Top of Stringer Supporting #2 Tower ^{At top}	1479.56	66-325	Hub.	1602.66
38-250 + on rock	1491.69	68-325	Hub.	1612.60
40-250 Hub	1496.43	70-325	Hub.	1623.05
42-250 Nail in rock	1507.27	72-325	Hub.	1633.56
44-250 Hub	1513.15			
46-250 Hub	1520.08	66-360	Hub.	1598.55
48-250 Hub	1526.32	68-360	Hub.	1607.89
50-250 Hub	1526.80			
52-250 Hub	1538.45			
60-250 Hub.	1568.29			

D Line Reference Points.

56-450	Hub	1550.30	D-0+20 371.28		Nail in Post Landing Platform. Iron Pin under Blacksmith shop.
58-450	Hub.	1559.50	D-0+20 425.73	1626.95	
64-450		1588.48	D-0+40		HUB
66-450	Nail Top of rock	1603.39			
68-450	Nail in rock	1617.52	D-0+60 317.76		Hub.
70-450	Hub	1624.06	"D" 0+60 418.42	1608.14	Hub. Nail in Rock.
			D 0+80		
64-428 <u>72</u>	Hub	1586.06	D 1+00		
66-429 <u>86</u>	Hub	1595.41	D 1+00 307.49		Hub.
68-411 <u>96</u>	Hub	1600.60	"D" 1+00 409.78	1595.49	Hub (3)
			"D" 1+36 58	R.P. on Rock North	
B.M. Hub with witness about C7+60		1649.86	"D" 1+36 58 3+12.70		Hub
			D 1+36 58 412.16	1573.21	North Hub.
			R.P. on Rock.		
			"D" 1+50 306.55		Hub.
			D 1+80 417.23	1547.57	HUB
			D 120 385.70	1572.30	HUB
			D 16-414 <u>23</u>	1557.00	HUB
			D-16-468	1572.94	
			D 1+20=413.67	1581.28	

Elevations of Coordinate Reference Points

Station	Elev.		Sta	Elev.	
6-476 ⁶⁵	1515.38	Hvb.	18-470 ⁷⁵	1561 ⁵⁷	Nail in Rock.
			18-488 ⁰	1561. ¹¹	Hub
8-450	1601.89	Hub.	18-502 ¹⁷	1564.95	Nail in Rock.
10-446 ⁵⁸	1597.27	Hub. End of Steel Type Sewer Joint.			
10-350	1576.97	Hub.			
B.M.		Nail in stump.	of Tunnel 0+20.0R	1541 ¹¹	Hub & Outlet Tower.
12-330	1570.96	Nail in Rock	SW Cor. outlet Tower Fillet.	1524.18	Nail in Center Center of Fillet
12-426 ³²	1587.35	Nail in Rock	NW Cor outlet Tower Fillet	1524.30	Nail in Top of Fillet.
12-437 ⁰	1588.38	Nail in Rock			
12-455 ²⁹	1587.34	Nail in Rock			
12-502 ⁰⁹	1600.83	Nail in Rock			
All Elev. East will be checked.					
14-417.92	1575.02	+ on Rock			
14-436 ²⁸	1574.94	+ on Rock			
14-455 ²⁹	1577.19	Hub.			
14-495 ¹⁰	1588.91	Nail in Rock			
RP & Outlet Tower North	1581.45	Hub			
16-446 ¹⁷	1567.82	Nail in Rock			
B.M.		Nail in stump.			
16-468	1572.94				
16-490 ⁰⁹	1577.99	Nail in Rock			
18-411 ¹⁹	1548.20	Hub			
18-438 ⁰⁹	1554.12	Hub.			

New Points.

28-376	Nail in whale	
28-374 ⁵	Nail in Lift 3 Curtain Wall	
28-369 ²	Nail in Lift #2 Curtain Wall.	
28-364 ²	" " " #1 " "	
28-310 ⁰	" " Concrete	
28-250	" " Lift #1-Dam.	
38-358 ⁷⁵		
38-365 ⁰⁰	Nail in Lift #1 Curtain Wall	
38-370 ⁰⁰	" " " #2 " "	
38-375 ⁵⁰	" " " #3 " "	
50-295.95		1524.9
52-300		1536.7
54-295.13		1552.0
52-297.21		

List of B.M.'s

Harris B.M. Iron Pin Set in Rock 40' South of Conveyer #2 Barrett Dam Datum	1626.33
End of P Line above Quarry road (Hub)	1751.67
Nail in rock (West Cableway) 30' North of 3 + 00	1764.33
Nail 10-447 - End of steel pipe Sewer Joint	1597.77
Nail in Stump 12-330	1570.96
Nail in Stump 16-468	1572.94
S.W. Cor. Outlet Tower Fillet nail	1524.18
N.W. Cor. Outlet Tower Fillet nail	1524.30
Top of Plumb Rock 7' East of 34-329	1472.91
Nail in front face of Dam for Outlet Tower	1505.67
Top of Pipe - Flap Valve -	1508.87
Nail in Stump 11' S E of 52-468 II	1537.77
Nail in Lift #4 Near Cont'r Joint 4 + 86.5	1530.45
Nail in Rock Auxil from 5 + 88 71	1512.56
Nail in rock 19' NW Hole #1 - Lift #4 Star Drill	1847.77
Top of Rock 100' N of Hole #1 Lift #4 Star Drill	1846.13

of Curve

DIRECTIONS FOR USE OF TABLES

TABLE No. 90

90

Distance of stake from side or shoulder
stake for any width roadway slope 1:
If ground is nearly level the cut will at side
stake is located by the double entry method in
TABLE No. 90

A-RH

IMPROVED TABLES

AND
INFORMATION

out
check

end of present const. 4-1-24

TABLE No. 91

To find Tangent and External for curve of
any other degree divide by degree of curve and
add correction found in column of corrections

Distance of curve with a given L may be found
by dividing tangent (or external), opposite L by
given tangent (or external).

The distance from a point on the tangent to
the curve is very nearly the square of the tangent
length divided by twice the radius

R 1718087

48.0
45.6

103.6
1.5

105.1

25.99

200.4

60.3