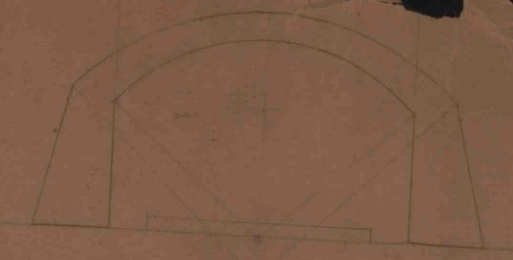
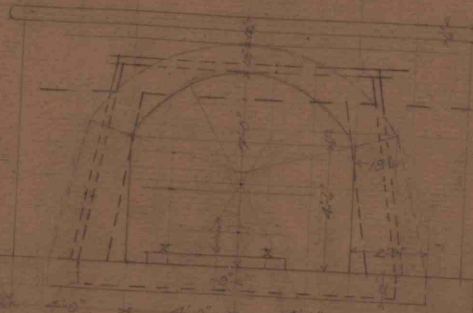
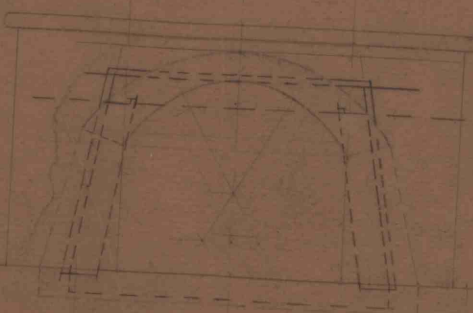


Area of Concrete Lining at top

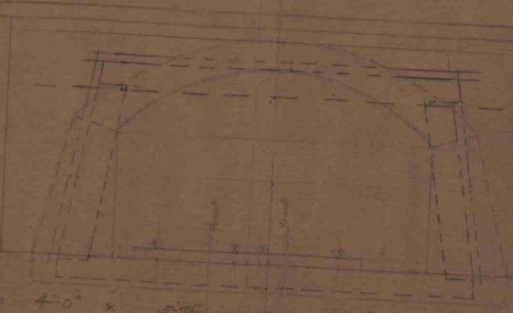
$$\frac{(2.5)^2 \cdot \frac{3}{4} + 2 \cdot 2.5 \cdot 10}{2 \cdot 10 + 3} = 54 + 24.9 = 78.9$$

$$\frac{(2.5)^2 \cdot \frac{3}{4} + 2 \cdot 2.5 \cdot 10}{2 \cdot 10 + 3} = 78.9$$

$$2 \cdot 10 \cdot 4.5 = 90$$



Area of Concrete Lining = 340 sq ft
Area of Opening = 63.0



Timber per set = 36 lin ft 1212
= 432 BM

AIRWAY PORTAL - C' Seam

Concrete in Portal = cu yds
Area Concrete Lining & Flooring = 58.40 sq ft
Area of Opening = 89.98 sq ft

3 Lagging per set = 312 x 24" = 510
@ 32.00 1475

Mud Sill = 112 x 12" = 216 BM
Total B.M. = 1472 B.M. @ 95 BM/ft = 139.76 Per Set

MANWAY PORTAL - C' Seam

Concrete in Portal = 18.21 cu yds
Area Concrete Lining & Flooring = 48.80 sq ft
Area of Opening = 87.08 sq ft

22.5 lin ft 4" x 4" = 270 BM
11.5 lin ft 8" x 8" = 115 BM
3 Lagging 24" x 24" = 375 BM
760 BM per set @ 95 BM/ft = 64.00

HAULAGE PORTALS AND RETAINING WALL - C' Seam

Concrete in Portal = 17.26 cu yds
Area Concrete Lining & Flooring = 48.80 sq ft
Area of Opening = 87.08 sq ft
Area Concrete Lining on Road = 52.50 sq ft

Concrete in Retaining Wall (Exclusive of Portal) = 45.66 cu yds

Concrete in Portal = 19.78 cu yds
Area Concrete Lining & Flooring = 56.48 sq ft
Area of Opening = 70.08 sq ft

760 BM per set @ 95 BM/ft = 64.00
Retaining timber 12" x 12" per set

Scale 1/4" = 1'

24 lin ft 4" x 4" = 288 BM
3 Lagging = 400 BM
16 lin ft 8" x 8" = 150 BM
Total = 838 BM @ 95 BM/ft = 79.61