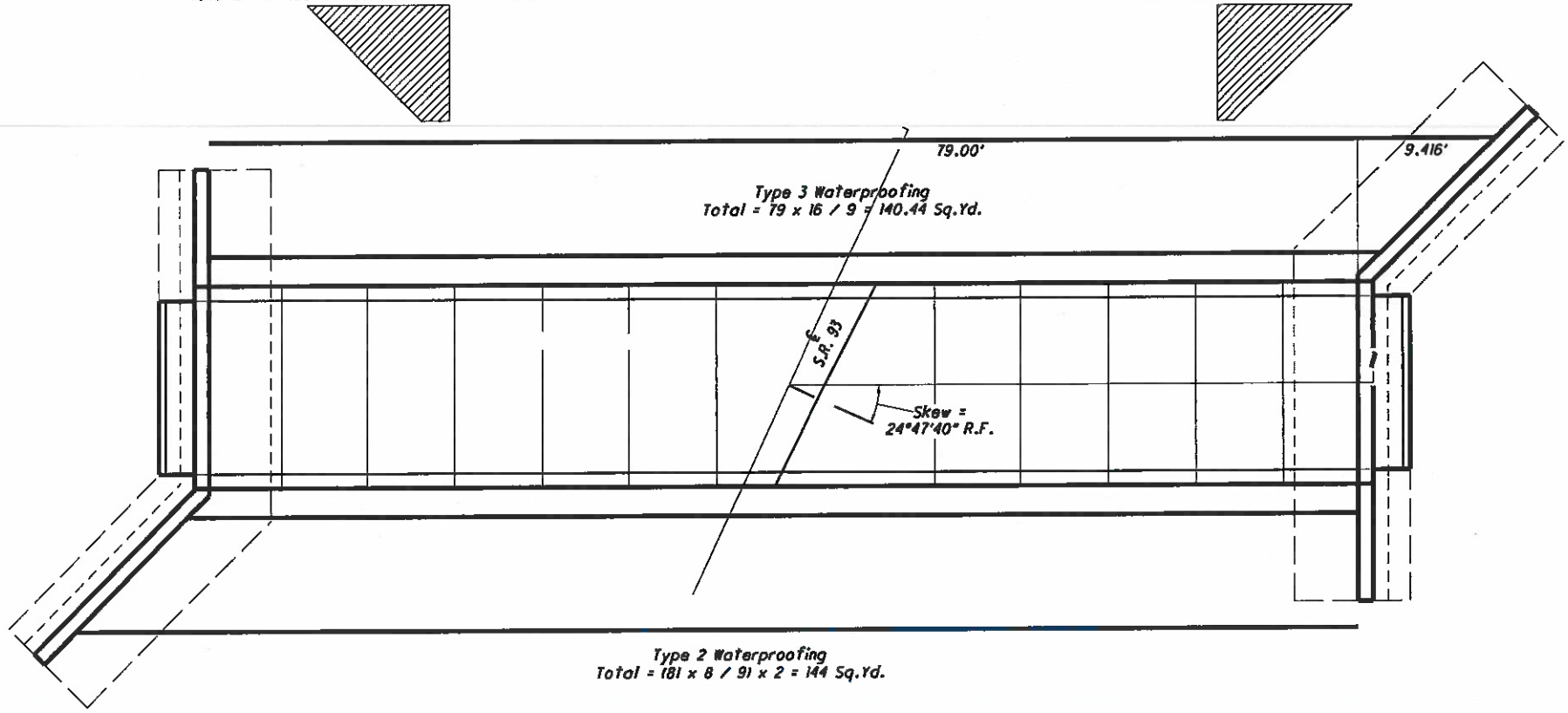


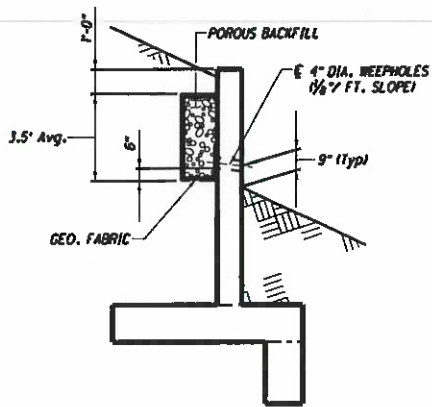
Low Strength Mortar Backfill (Type 2)
Total Volume = 276.82 + 14.29 = 291.11 Cu.Yd.

End Area = 47.304 Sq.Ft.
Volume = $(47.304 \times 79.00 / 27) \times 2 = 276.82$ Cu.Yd.

End Area = 40.974 Sq.Ft.
Volume = $40.974 \times 9.416 / 27 = 14.29$ Cu.Yd.

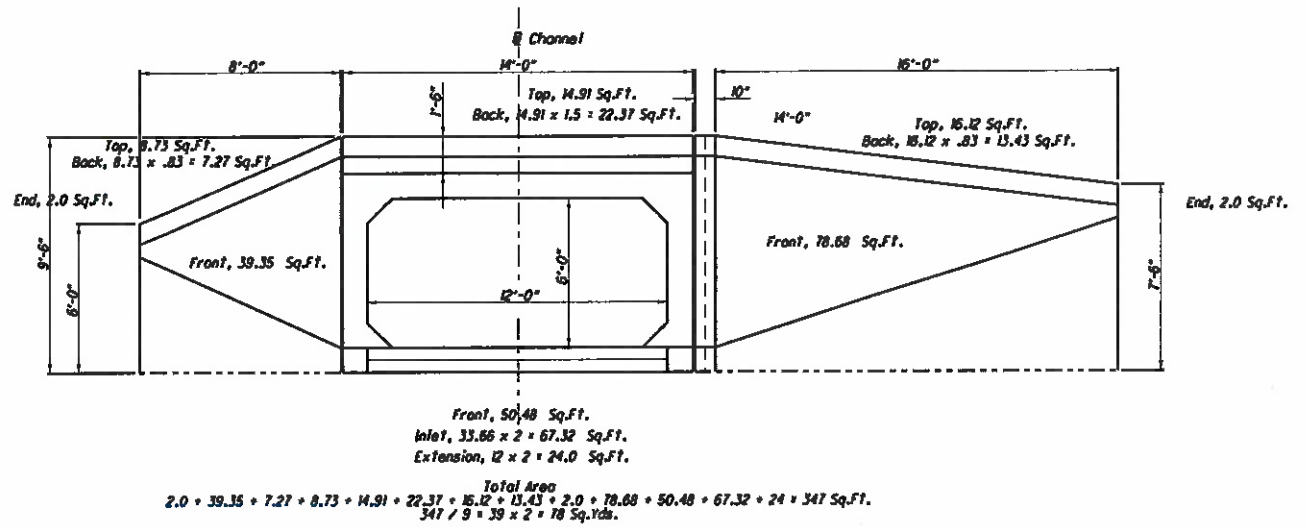


State Route 93
SLM 12.21



SECTION VIEW

Porous Backfill with Geotextile Fabric
 1,3 13.5 x 1.5 x 8 / 271 x 2 = 3.11 Cu.Yd.
 2,1 13.5 x 1.5 x 17.87 / 271 x 2 = 6.95 Cu.Yd.
 Total = 10 Cu.Yd.



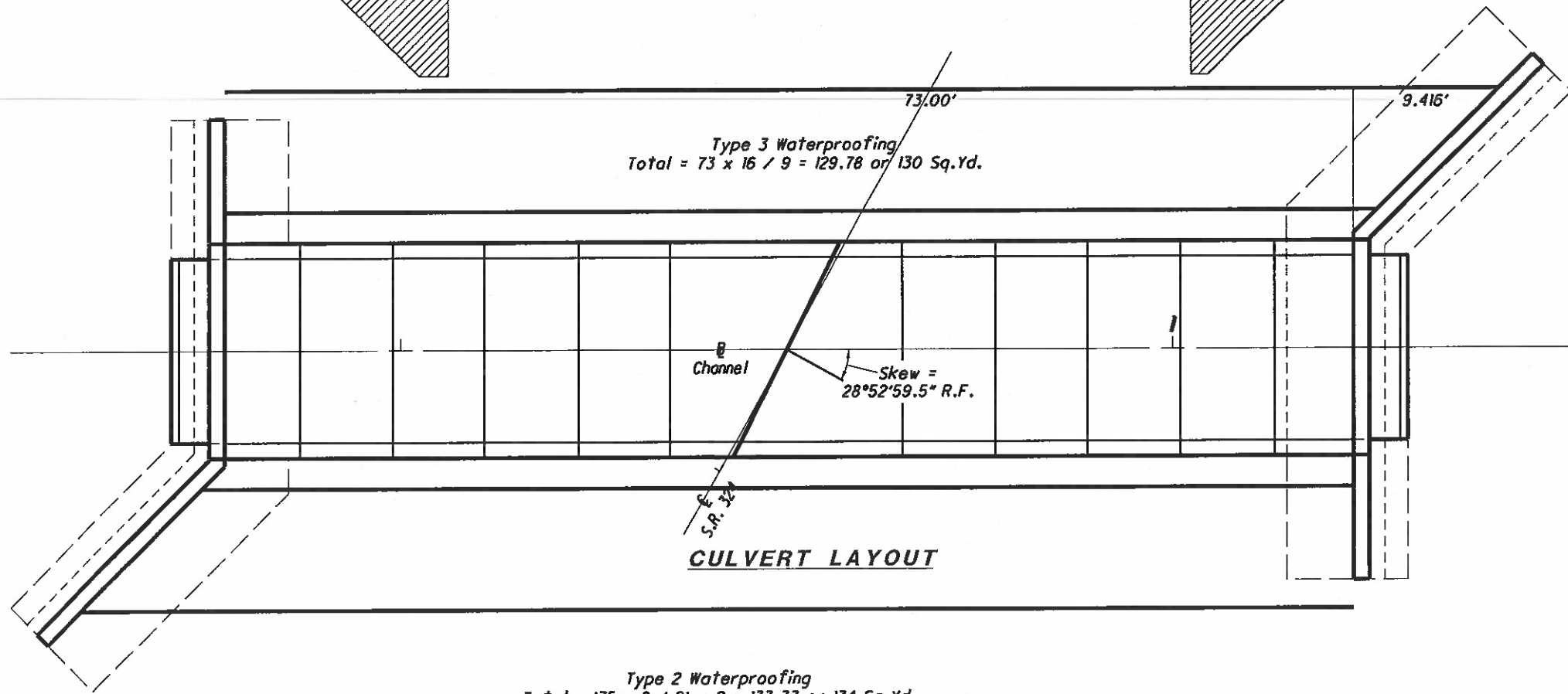
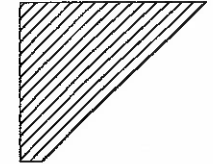
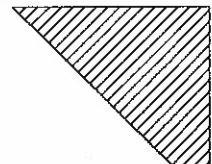
WINGWALL ELEVATION

State Route 93
 SLN 12.21

Low Strength Mortar Backfill (Type 2)
Total Volume = 255.79 + 14.29 = 270.08 Cu.Yd.

End Area = 47.304 Sq.Ft.
Volume = $(47.304 \times 73.00 / 27) \times 2 = 255.79$ Cu.Yd.

End Area = 40.974 Sq.Ft.
Volume = $40.974 \times 9.416 / 27 = 14.29$ Cu.Yd.



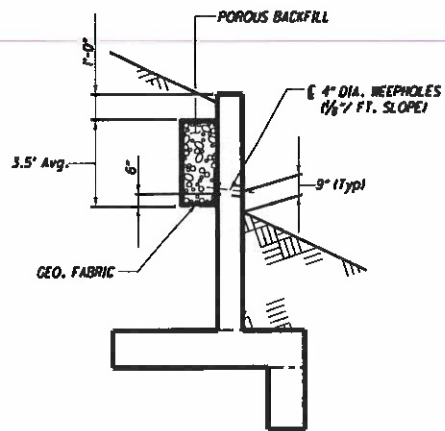
Type 3 Waterproofing
Total = $73 \times 16 / 9 = 129.78$ or 130 Sq.Yd.

Channel
Skew = 28°52'59.5" R.F.

CULVERT LAYOUT

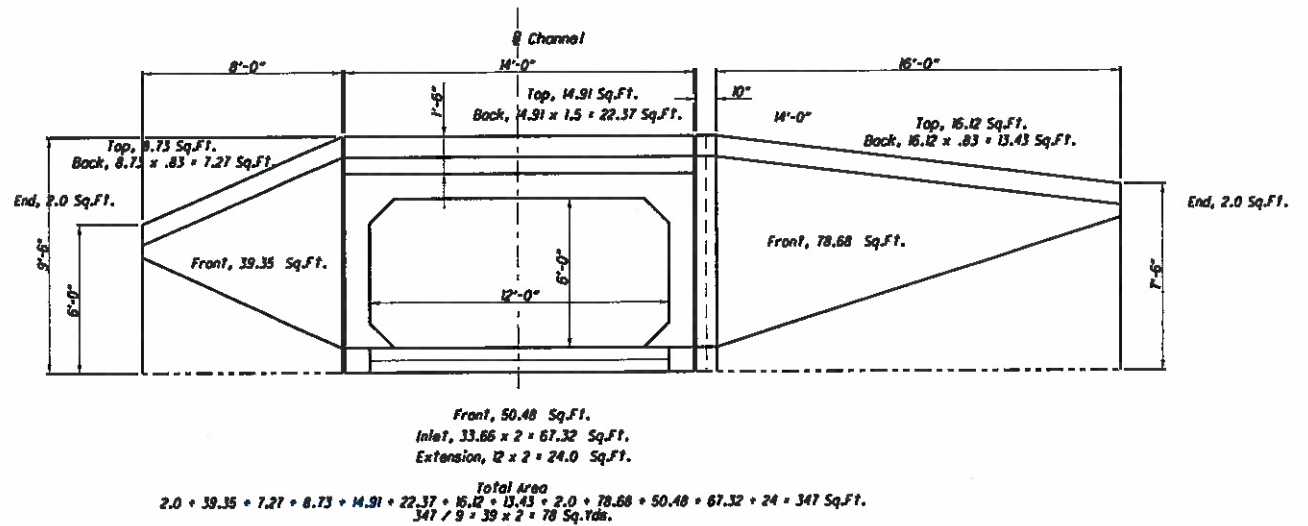
Type 2 Waterproofing
Total = $(75 \times 8 / 9) \times 2 = 133.33$ or 134 Sq.Yd.

State Route 324
SLM 3.20



SECTION VIEW

Porous Backfill with Geotextile Fabric
 1.) $13.5 \times 1.5 \times 8 / 27 \times 2 = 3.11 \text{ Cu.Yd.}$
 2.) $13.5 \times 1.5 \times 17.87 / 27 \times 2 = 6.95 \text{ Cu.Yd.}$
 Total = 10 Cu.Yd.



WINGWALL ELEVATION

State Route 324
SLM 3.20