

TRUCK EARTH

DI - 0.15m

$4.5m \times 1.1m (\text{ave } b) = 50cm$

DI - Over 1.5m

Negligible

CULVERT

From DI 0.15m

$\left[\left(\frac{0.5 \times 1.5}{2} \times 2.07 \right) + \left(1.5 \times 1.1 \right) + \left(\frac{1.5 \times 0.3}{2} \times 3.9 \right) + \left(\frac{0.3 \times 0.2}{2} \times 2 \right) \right] \times 1.72m = 36.5cm$

Over 1.5m

$\left[\left(\frac{0.0 \times 0.6}{2} \times 4.9 \right) + \left(\frac{0.6 \times 0.9}{2} \times 3.2 \right) + \left(\frac{0.9 \times 0.9}{2} \times 2.9 \right) \right] \times 1.72m = 8.9cm$

Stone Fill Exc.

$\left(\frac{0.75 \times 0.65}{2} \times 2.4m \right) \times 0.9m = 51.9cm$

Granular Backfill for Structures

$16.5m (\text{ave length}) \times 1.72m (w) \times 0.72m (b) = 20.4cm$

Earth Backfill

Field Measurement

$\left(\frac{8m + 13m}{2} (w) \right) \times 1.5m (b) \times 1.72m (w) = 271cm \times 1.15 = 31.2cm$

WRF
12-15-06
T. Bx 2A, 86
SW's
1-22-7

