

TRENCH EARTH

DI 0-1.5m

4.5m x 1.5m

= 6.8cm

DI over 1.5m

1.5m x 55m (ave D) = 2.5m x 1.5

= 3.8cm

CULVERT

From Inlet 0-1.5m

$\left[ \frac{225}{1.5 \times 1.5} + \frac{189}{\left(\frac{1.5+0.6}{2}\right) \times 1.8} + \frac{0.54}{\left(\frac{0.6+0.0}{2}\right) \times 1.8} \right] \times 1.72m$

= 42.9cm

From Inlet over 1.5m

$\left[ \frac{525}{\left(\frac{0.4+1.1}{2}\right) \times 1.7} + \frac{575}{\left(\frac{1.1+1.3}{2}\right) \times 1.6} + \frac{238}{\left(\frac{1.4+0.0}{2}\right) \times 3.4} \right] \times 1.72m = 23cm \times 1.5$

= 34.5cm

Stone Fill Exc.

2.4m x 0.9m x 0.6m

=  $\frac{1.3cm}{89.3cm}$

GRANULAR BACKFILL STRUCTURES

DI

3.05m x 2m

= 6cm

Culvert

18.5m (AVE LENGTH) x 1.72m (w) x 0.72m (d)

=  $\frac{22.9cm}{28.9cm}$

EARTH BORROW

$\left(\frac{11.6+12.7}{2}\right) \times 1.72m \times 1.8m (ave D) = 44.6cm \times 1.15 = 51.3cm$

WRF JWS  
12-15-06 1-23-7  
To Bk ZA, P<sub>0</sub> 100

