BF 08899 Local Road Over Driedmeat Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0002
B = 4 m, h = 1.8 m, T_h = 10 m
Use n = 0.05

At Bank Height : Y = 1.8 m, V = 0.3 m/s, Q = 4 cms
At Channel Capacity : Y = 2.7 m, V = 0.5 m/s, Q = 10 cms

Historical Highwater Data :

There are no direct HW observations at this site. A 1972 report notes that the 2 existing culverts had run full (Q = 5cms).

WSC Gauge 05FA018 (DA = 1150km^2, 1976 – 1995) located d/s reports Q = 16cms in July 1983. Other nearby gauges suggest possible HW for this site in April 1974. The storm database indicates that the largest storms were June 1970 and June 1973 with about 100mm of rainfall.

Basin Runoff Potential :

d = 35mm, T_p = 20 hrs, q = 0.25 cms/km^2.
Gross DA = 433 km^2.
Q_p = 110 cms.

Conclusion :

The channel capacity estimate is consistent with historic observations and is within the basin runoff potential.

Recommended parameters : Y = 2.7 m, V = 0.5 m/s, Q = 10 cms.