BF 00494 Local Road Over Driedmeat Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0006
B = 5 m, h = 1.8 m, T_h = 10 m
Use n = 0.045

At Bank Height : Y = 1.8 m, V = 0.6 m/s, Q = 8 cms
At Channel Capacity : Y = 2.7 m, V = 0.9 m/s, Q = 20 cms

Historical Highwater Data :

HW was noted at this site in May 1982 with Y = 1.6m. A 1902 cross section shows a HWM at 2.6m above low water, a 1966 report notes a HWM to the bottom of girders and over the road to the south (Y = 2.4 – 2.7m), and a 2002 BIM report notes a HWM with Y = 2.7m (grass deposited on a cap).

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 = 1148 km^2.
Q_p = 290 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 = 0.9 m/s, Q = 20 cms.