BF 02378 Local Road Over Dogpound Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.003
B = 9 m, h = 2.3 m, T_h = 15 m
Use n = 0.04

At Bank Height : Y = 2.3 m, V = 1.9 m/s, Q = 55 cms
At Channel Capacity : Y = 3.3 m, V = 2.6 m/s, Q = 110 cms

Historical Highwater Data :

A 1958 report notes a HWM with Y = 3.0m, and a 1964 report notes a HWM with Y = 3.6m. The east abutment was restored in 1978, and a 2000 BIM report notes a HWM with Y = 1.2m.

There are no WSC gauges on Dogpound Ck. Nearby gauges with longer records show a wide variety of flood responses, with some of the more common being in June 1990 and May 1967. The largest storms in the database for this area are June 1970 and June 1928 with about 120mm of rainfall. There are many other storms with rainfall in the 90 to 100 mm range.

Basin Runoff Potential :

d = 60mm, T_p = 20hrs, q = 0.83 cms/km^2.
Gross DA = 250 km^2.
Q_p = 210 cms.

Conclusion :

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

Recommended parameters : Y = 3.3 m, V = 2.6 m/s, Q = 110 cms.