BF 02356 Local Road Over Dogpound Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.003
B = 10 m, h = 2.5 m, T_h = 16 m
Use AT equation

At Bank Height : Y = 2.5 m, V = 2.0 m/s, Q = 65 cms
At Channel Capacity : Y = 3.5 m, V = 2.7 m/s, Q = 130 cms

Historical Highwater Data :

The 1951 report notes a HWM with Y = 2.3m, and the 1959 report notes a HWM with Y = 3.3m and water over the grade on both sides. A note in 1977 suggests that water has been over the grade to the west. The 1998 BIM report noyes a HWM with y = 3.6m based on grass near the bottom chord u/s.

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 = 315 km^2.
Q_p = 260 cms.

Conclusion :

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

Recommended parameters : Y = 3.5 m, V = 2.7 m/s, Q = 130 cms.