BF 75445 Hwy 692 Over Notikewin River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 4 m, h = 1.5 m, T_h = 8 m
Use n = 0.045

At Bank Height : Y = 1.5 m, V = 0.9 m/s, Q = 8 cms
At Channel Capacity : Y = 2.3 m, V = 1.3 m/s, Q = 20 cms

Historical Highwater Data :

A 1961 report estimates Q = 28cms. A 1981 report notes that water has been over the grade (Y = 3m u/s of culvert, modelling suggests Q = 15 – 20cms if no blockage) and estimates Q = 31cms. A 1999 BIM report notes a HWM with Y = 3m (no description).

There are no WSC gauges on this stream. Gauges in the area indicate HW events in July 1963, May 1964, July 1972, June 1977, May 1978, August 1987, June 1990, June 1991, and April 1997. The storm database indicates that the largest rainfall events on record for this area are 115mm in July 1963 and 90mm in July 1987.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 97 km^2.
Q_p = 53 cms.

Conclusion :

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

Recommended parameters : Y = 2.3 m, V = 1.3 m/s, Q = 20 cms.