BF 00174 Local Road Over Oldman Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.006
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 1.1 m/s, Q = 3 cms
At Channel Capacity : Y = 1.5 m, V = 1.7 m/s, Q = 8 cms

Historical Highwater Data :

The 1961 report notes that the bridge gets ½ full due to icing. A 1993 BIM report notes a HWM with Y = 1.0m. A d/s scour hole was observed in 2000, but this is likely due to the larger culvert invert being installed about 1.2m above the streambed.

There are some WSC gauges in the Pointe-Aux-Pins basin with the highest recorded flow in June 1983. Other longer record gauges in the area indicate that the spring 1974 event was the largest on record. The largest event in the storm database for this area was in June 1965 with rainfall coverage of about 140 mm.

Basin Runoff Potential :

d = 40mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 30 km^2.
Q_p = 17 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 1.7 m/s, Q = 8 cms.