BF 71136 Local Road Over Beavertail Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0014
B = 9 m, h = 2.5 m, T_h = 18 m
Use n = 0.04

At Bank Height : Y = 2.5 m, V = 1.4 m/s, Q = 45 cms
At Channel Capacity : Y = 3.5 m, V = 1.8 m/s, Q = 100 cms

Historical Highwater Data :

HW was observed in June 1990 over the curb and road to both sides (Y = 3.3m). A 1967 report refers to a HWM over the deck (Y = 3.0 – 3.3m), and refers to a large drift jam u/s. A 1998 BIM report notes a HWM with Y = 1.5m.

WSC Gauge 07GD002 (DA = 662km^2, 1983 – Now) located d/s reports Q = 123cms in June 1990, (gauged at Q = 35cms), followed by Q = 50cms in April 1997. The largest storms for this area in the storm database is about 100mm of rainfall in June 1964 and 1990.

Basin Runoff Potential :

d = 70 mm, T_p = 20 hrs, q = 1 cms/km^2.
Gross DA = 617 km^2 .
Q_p = 617 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 = 1.8 m/s, Q = 100 cms.