BF 13684 Local Road Over Maskwa Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 4 m, h = 1.2 m, T_h = 7 m
Use n = 0.045

At Bank Height : Y = 1.2 m, V = 0.6 m/s, Q = 4 cms
At Channel Capacity : Y = 1.8 m, V = 0.8 m/s, Q = 9 cms

Historical Highwater Data :

A 19948 design was based on Y = 1.6m and Q = 10cms.

WSC gauge 05FA014 (DA = 80km^2, 1972 – Now) reports Q = 9cms in April 1974 (stage rise = 1.3m, gauged), and Q = 5.5cms in April 1982. The largest storms in the storm database are July 1990 with 125mm of rainfall, June 1911 with 110mm and July 1982 with 105mm.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 84 km^2.
Q_p = 21 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 0.8 m/s, Q = 9 cms.