BF 76953 Local Road Over Iroquois Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0014
B = 9 m, h = 3.0 m, T_h = 15 m
Use n = 0.04

At Bank Height : Y = 3.0 m, V = 1.5 m/s, Q = 55 cms
At Channel Capacity : Y = 4.0 m, V = 2.0 m/s, Q = 100 cms

Historical Highwater Data :

HW was noted in July 1983 with water over both approaches and about 0.3m below the deck (Y = 4.0m). The 1969 survey reports a HWM with Y = 3.5m and a 2000 BIM report notes a HWM with Y = 3.0m (drift on banks). HW was noted at BF73728 u/s in 1974.

Gauges 07BF003 (DA = 243 km^2) is on this stream but has no records. Other gauges in the area suggest HW events in June 1975, July 1979, July 1983, May 1991, June 1996, and April 1997. April 1971, April 1974, April and July 1982, July 1986, July 1990, and April 1997. The largest storms in the storm database are 145mm of rainfall in July 1983, 130mm in June 1993, and 90mm in June 1996.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.85 cms/km^2.
Gross DA = 130 km^2.
Q_p = 110 cms.

Conclusion :

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

Recommended parameters : Y = 4.0 m, V = 2.0 m/s, Q = 100 cms.