BF 74745 Local Road Over Fox Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.005
B = 2 m, h = 1.2 m, T_h = 4 m
Use n = 0.05

At Bank Height : Y = 1.2 m, V = 1.1 m/s, Q = 4 cms
At Channel Capacity : Y = 1.8 m, V = 1.7 m/s, Q = 10 cms

Historical Highwater Data :

A 1965 report notes a HWM with Y = 2.1m behind culvert (not over grade) and estimates Q = 11cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1974, 1979, and 1997. The largest storms in the storm database are August 1982 and June 1990 with about 150mm of rainfall.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 22 km^2.
Q_p = 18 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 = 1.7 m/s, Q = 10 cms.