BF 08268 Local Road Over Beaverhill Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 2 m, h = 1 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.6 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 0.8 m/s, Q = 5 cms

Historical Highwater Data :

A 1968 report notes a HWM with Y = 1.5m (over the road) and estimates Q = 11cms. The 1997 design was based on Q = 9cms.

There are no gauges on this stream. Gauges in the area suggest HW events in April 1971, April 1974, July 1990, and April 1997. The largest storms in the database for this area are 130mm of rainfall in July 1955, 120mm in June 1965, and 115mm in September 1958.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 14 km^2.
Q_p = 4 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 0.8 m/s, Q = 5 cms.