BF 74819 Local Road Over Beaverhill Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0017
B = 2 m, h = 0.7 m, T_h = 4 m
Use n = 0.05

At Bank Height : Y = 0.7 m, V = 0.5 m/s, Q = 1 cms
At Channel Capacity : Y = 1.2 m, V = 0.8 m/s, Q = 3 cms

Historical Highwater Data :

A 1958 report notes a HWM over the grade (Y ~ 1 – 1.5m) and estimates Q = 7cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1971, April 1974, July 1983, and April 1997. The largest storms in the storm database are about 130mm of rainfall in July 1955, 120mm in June 1965, 110mm in September 1958, and 100mm in June 1983.

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2.
Gross DA = 12 km^2. (potential spill in and out of basin)
Q_p = 3 cms.

Conclusion :

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

Recommended parameters : Y = 1.2 m, V = 0.8 m/s, Q = 3 cms.