BF 70289 Local Road Over Peace River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.007
B = 3 m, h = 1.2 m, T_h = 5 m
Use n = 0.055

At Bank Height : Y = 1.2 m, V = 1.3 m/s, Q = 6 cms
At Channel Capacity : Y = 1.8 m, V = 1.9 m/s, Q = 15 cms

Historical Highwater Data :

HW was noted in 1957 (Y = 1.5m), and 1958 (Y = 2.7m, overflow from Leith Ck, unlikely to recur due to channel improvements). A 1999 BIM report notes a HWM with Y = 1m.

There are no gauges on this stream. Gauges in the area suggest HW events in June 1977, April 1979, May 1984, June 1990, and April 1997. The largest storms in the storm database for this area are 110mm in April 1982, and 95mm in July 1935 and July 1957.

Basin Runoff Potential :

d = 50 mm, T_p = 20 hrs, q = 0.7 cms/km^2.
Gross DA = 72 km^2.
Q_p = 50 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 = 1.9 m/s, Q = 15 cms.