BF 74072 Hwy 2A Over Battle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.005
B = 2 m, h = 0.8 m, T_h = 4 m
Use n = 0.05

At Bank Height : Y = 0.8 m, V = 0.9 m/s, Q = 2 cms
At Channel Capacity : Y = 1.3 m, V = 1.4 m/s, Q = 6 cms

Historical Highwater Data :

A 1953 report notes a HWM with Y = 1.2m and estimates Q = 4cms.

There are no gauges on this stream. Gauges in the area suggest HW events in April 1974, April 1982, July 1990, and April 1997. The largest storms in the database for this area are 125mm of rainfall in June 1970 and 105mm in June 1911 and June 1973.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 14 km^2.
Q_p = 8 cms.

Conclusion :

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

Recommended parameters : Y = 1.3 m, V = 1.4 m/s, Q = 6 cms.