BF 77233 Hwy 743 Over Peace River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.013
B = 1.5 m, h = 1.0 m, T_h = 3 m.
Use n = 0.06

At Bank Height : Y = 1.2 m, V = 1.4 m/s, Q = 4 cms
At Channel Capacity : Y = 1.8 m, V = 2.2 m/s, Q = 10 cms

Historical Highwater Data :

A 1999 BIM report notes a HWM with Y = 2m (no description). The 2000 design was based on Y = 1.3m and Q = 15cms. A d/s scour hole was observed in 1986.

There are no gauges on this stream. Gauges in the area suggest large runoff events in June 1990 and April 1997. The largest storm in the storm database is 100mm of rainfall in August 1982.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 35 km^2.
Q_p = 19 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 = 2.2 m/s, Q = 10 cms.