BF 74992 Hwy 35 Over Boyer River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0025
B = 2 m, h = 1.0 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.7 m/s, Q = 3 cms
At Channel Capacity : Y = 1.5 m, V = 1.1 m/s, Q = 6 cms

Historical Highwater Data :

A 1958 report notes water has been over the grade at the small culvert crossing, and estimates Q = 9cms (no blockage?). A 1997 BIM form reports Y = 1.5m, but it appears to have been based on beaver dam debris.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1979, July 1987, June 1991, and April 1997. The largest storms in the storm database are 135mm of rainfall in July 1987, 125mm in June 1991, and 115mm in July 1998.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 9 km^2.
Q_p = 5 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 = 1.1 m/s, Q = 6 cms.