BF 76594 Hwy 754 Over Willow River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0035
B = 1 m, h = 1 m, T_h = 2 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.7 m/s, Q = 1 cms
At Channel Capacity : Y = 1.5 m, V = 1.2 m/s, Q = 3 cms

Historical Highwater Data :

The 2003 design was based on Y = 0.9m and Q = 5cms.

There are no WSC gauges on this stream. Gauges in the area suggest a HW event in July 1988. The largest storms in the database are June 1970 (140mm) and July 1988 and June 1993 (110mm).

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 13 km^2.
Q_p = 7 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 1.2 m/s, Q = 3 cms.