BF 07487 Hwy 752 Over Clearwater River
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 55 m, h = 4.5 m, T_h = 90 m
Use AT Equation

At Bank Height : Y = 4.5 m, V = 2.3 m/s, Q = 750 cms
At Channel Capacity : Y = 5.5 m, V = 2.7 m/s, Q = 1100 cms

Historical Highwater Data :

HW was observed in 1915 (bridge washed out, Y ~ 6m), 1965 (Y ~ 4m), and 2005 (Y ~ 5.5m). The 1976 design estimates the 1915 event at Y ~ 6m (Q ~ 1100cms).

WSC Gauge 05DB001 (DA = 3220km^2, 1914 – 1931, 1944 - 1975) reports Q ~ 1350cms (June 1915). WSC Gauge 05DB006 (DA = 2230km^2, 1975 – Present) reports Q ~ 940cms (June 2005, gauged at Q ~ 820cms), and Q ~ 340cms (June 1990). WSC Gauge 05DB003 (DA = 1340km^2, 1959 – 1992) reports Q ~ 510cms (June 1965, gauged at Q ~ 180cms).

Basin Runoff Potential :

Gross DA = 3280 km^2 (beyond range of technique).

Conclusion :

Historic observations govern. Recommended parameters :

Y = 6.0 m, V = 2.8 m/s, Q = 1300 cms.
EL 964.0 m (7097-P)