BF 01253 Hwy 864 Over Oldman River
Hydrotechnical Summary

Channel Capacity :

S = 0.0007
B = 140 m, h = 8 m, T_h = 220 m
Use AT equation

At Bank Height : Y = 8 m, V = 2.7 m/s, Q = 3900 cms
At Channel Capacity : Y = 9 m, V = 3.0 m/s, Q = 5000 cms

Historical Highwater Data :

HW has been observed at this site in 1902, 1908, 1953 (Y ~ 8m), 1975 (Y ~ 7m), 1986 (Ice, Y ~ 6.5m), 1995 (Y ~ 8.5m), and 2002.

WSC Gauge 05AD007 (DA ~ 17000km^2, 1911 – Now) reports Q ~ 4600cms (1995, Y ~ 8.5m), and Q ~ 3000 – 3500cms (1923, 1942, 1948, 1953, and 1975, Y ~ 7 – 7.5m). WSC Gauge 05AG006 (DA ~ 27530km^2, 1964 – 1968, 1982 – Now) reports Q ~ 4600cms in 1995 (highest gauging at Q < 2000cms).

Basin Runoff Potential :

Gross DA = 24880 km^2, runoff potential is not applicable

Conclusion :

Historic observations govern. Recommended parameters :

Y = 9.0 m, V = 3.0 m/s, Q = 5000 cms.
HW EL 755.0m (Dwg. 18238)