BF 81826 Hwy 510 Over Oldman River
Hydrotechnical Summary

Channel Capacity :

S : Oldman Dam Spillway
B = 100 m, h = 19 m, T_h = 200 m (spillway approach channel)

Historical Highwater Data :

Reservoir elevation at time of peak inflow in 1995 was just below 1118.0m. Estimated total peak inflow into dam was estimated to be Q ~ 3500cms (DA ~ 4400km^2), with peak outflow routed to Q ~ 2700cms. Dam FSL = 1118.6m.

WSC Gauge 05AA023 (DA ~ 1450km^2, 1950 – Now) reports Q ~ 1320 in 1995 (max gauging at Q < 500cms, stage rise to peak ~ 5.5m), Q ~ 450cms in 1953 and 2005, and Q ~ 370cms in 1975. Gauge 05AA001 (DA ~ 1940km^2, 1908 – 1931, 1944 – 1949) reports Q ~ 950cms in 1923 and Q ~ 500cms in 1929. Gauge 05AA024 (DA = 4400km^2, 1966 – Now, 1995 peak missing) reports Q ~ 1600cms in 1975 and Q ~ 1100cms in 2005.

Basin Runoff Potential :

Gross DA = 1900 km^2, runoff potential is not applicable.

Conclusion :

Dam design and operation governs (1995). Recommended parameters :

Y = 13 m, V = 1.1 m/s (Q/A), Q = 3000 cms.
HW EL 1118.6m (Dwg. 14869)