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, Q records 1950 – 2008) reports
Q ~ 450 cms in 1953
Q ~ 370 cms in 1975
Q ~ 1320 cms in 1995 (max gauging at Q < 500cms, stage rise to peak ~ 5.5m)
Q ~ 450 cms in 2005

Gauge 05AA001 (DA ~ 1940km^2, 1908 – 1931, 1944 – 1949) reports
Q ~ 630 cms in 1923
Q ~ 420 cms in 1929

Gauge 05AA024 (DA = 4400km^2, 1966 – Now, 1995 peak missing – est. dam outflow Q ~ 2700 cms by AENV) reports
Q ~ 1560 cms in 1975
Q missing record in 1995
Q ~ 1110 cms in 2005
Q ~ 1330 cms in 2013

Basin Runoff Potential:

Gross DA = 4350 km^2, runoff potential is not applicable.

Conclusion:

Dam design and Oldman Dam operation govern (1995). Recommended parameters:

Y = 13 m, V = 1.1 m/s (Q/A), Q = 2700 cms.
HW EL 1118.6m (Dwg. 14869)