BF 80836 Hwy 2A Over Waskasoo Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0008
B = 4 m, h = 1.8 m, T_h = 9 m
Use n = 0.045

At Bank Height : Y = 1.8 m, V = 0.7 m/s, Q = 8 cms
At Channel Capacity : Y = 2.7 m, V = 1.0 m/s, Q = 20 cms

Historical Highwater Data :

A 1994 BIM report notes a HWM with Y = 1.5m. The 1985 design was based on Y = 2.5m and Q = 38cms.

WSC gauge 05CC011 (1985 – Now, DA = 494km^2) reports Q = 29cms in April 1996 (gauged at Q = 25cms, stage increase = 1.9m), with other events over 20cms in June 1990, and April 1997. The largest storms in the database are about 120mm in July 1937 and June 1970 and about 100mm in August 1938, June 1970, and July 1999.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 264 km^2.
Q_p = 145 cms.

Conclusion :

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

Recommended Parameters : Y = 2.7 m, V = 1.0 m/s, Q = 20 cms.