BF 76005 Hwy 2 Over Mooney Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 7 m, h = 3.5 m, T_h = 14 m
Use n = 0.045

At Bank Height : Y = 3.5 m, V = 1.7 m/s, Q = 60 cms
At Channel Capacity : Y = 4.5 m, V = 2.1 m/s, Q = 110 cms

Historical Highwater Data :

HW was noted in July 1988 (to deck, Y ~ 5m u/s, drift jam), August 1989 (1.9m below deck), June 1993 (1.9m < curb, drift), June 1996 (close to deck, Y ~ 4.5m, east headslope washed out, drift removed during flood), and September 2004 (report of water over road, drift removed during event).

There are no WSC gauges on this stream. Gauge 07BK009 on Sawridge Ck (1976 – Now, DA = 230km^2) reports large runoff events in July 1988 and June 1996. The largest storms in the database for this basin are about 130mm in July 1988, and 100 - 110mm in June 1961, July 1979, and June 1983.

Basin Runoff Potential :

d = 90 mm, T_p = 20 hrs, q = 1.2 cms/km^2.
Gross DA = 126 km^2.
Q_p = 150 cms.

Conclusion :

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

Recommended Parameters : Y = 4.5 m, V = 2.1 m/s, Q = 110 cms.