BF 70946 Hwy 619 Over Grizzly Bear Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0006
B = 5 m, h = 1.8 m, T_h = 10 m
Use n = 0.045

At Bank Height : Y = 1.8 m, V = 0.6 m/s, Q = 8 cms
At Channel Capacity : Y = 2.7 m, V = 0.9 m/s, Q = 20 cms

Historical Highwater Data :

Reports between 1955 and 1965 note HW over the grade to the west (Y ~ 2 – 2.5m) and estimate Q = 14 – 20cms. The 1990 design was based on Q = 29cms and Y = 2.3m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1973, April 1974, April 1979, April 1990, and April 1997. The largest storms in the database for this area are 120mm in August 1931 and 110mm in June 1973.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 485 km^2.
Q_p = 120 cms.

Conclusion :

Channel capacity estimate is consistent with historic observations and within the basin runoff potential.

Recommended parameters : Y = 2.7 m, V = 0.9 m/s, Q = 20 cms.