BF 13214 Local Rd over Tributary to North Sask. River
Hydrotechnical Summary

Channel Capacity :

S = 0.006
B = 2 m, h = 1.0 m, T_h = 5 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 1.5 m/s, Q = 10 cms

Historical Highwater Data :

There are consistent reports of HW 4' -6' above stream bed. A note in 1968 Bridge Report indicates that water is up to deck in flash floods (unjustified and questionable). Past designs have been based on Q of 10 cms.

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in June 1965, June 1970, and June 1972. The largest storms in the storm database are 123mm of rainfall in Aug 1982, and about 110mm in July 1963.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 30 km^2.
Q_p = 25 cms.

Conclusion :

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

Recommended parameters : : Y = 1.5 m, V = 1.5 m/s, Q = 10 cms