BF 13893 Hwy 737 Over Cardinal Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0009
B = 3 m, h = 2 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 2.0 m, V = 0.6 m/s, Q = 6 cms
At Channel Capacity : Y = 3.0 m, V = 1.0 m/s, Q = 15 cms

Historical Highwater Data :

A 1955 report refers to a HWM with Y = 1.8m, and reports from 1982 and 1984 note HWM close to the bottom of the stringers (Y = 2.0m). A 1998 BIM report notes a HWM with Y = 1.0m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1968 and June 1990. The largest storm for this area in the storm database is about 100 mm of rainfall in July 1963.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 70 km^2.
Q_p = 40 cms.

Conclusion :

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

Recommended parameters : Y = 3.0 m, V = 1.0 m/s, Q = 15 cms.