BF 72802 Local Road Over Riviere Qui Barre
Hydrotechnical Summary

Channel Capacity :

S = 0.0012
B = 4 m, h = 1.4 m, T_h = 8 m
Use n = 0.045

At Bank Height : Y = 1.4 m, V = 0.7 m/s, Q = 6 cms
At Channel Capacity : Y = 2.1 m, V = 1.1 m/s, Q = 15 cms

Historical Highwater Data :

HW was noted in 1951 to 0.3m below top of bank. A 1952 report notes a HWM with Y = 1.8m and estimates Q = 11 – 14cms. A 1984 report estimates Q = 10cms. A 1994 BIM report notes a HWM with Y = 1.5m. Drop structures were installed in 1953 following channel realignment work and resulting channel adjustments.

There are no WSC gauges on this stream. Gauges in the area report HW events in April 1971, 1974, 1982, and 1997. The largest storms in the database for this area are July 1953 with about 160mm of rainfall, and July 1937 and June 1922 with about 110mm of rainfall.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 26 km^2.
Q_p = 14 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 1.1 m/s, Q = 15 cms.