BF 74640 Local Road Over Jack Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.007
B = 2 m, h = 1.0 m, T_h = 4 m
Use n = 0.055

At Bank Height : Y = 1.0 m, V = 1.1 m/s, Q = 3 cms
At Channel Capacity : Y = 1.5 m, V = 1.6 m/s, Q = 8 cms

Historical Highwater Data :

A 1956 report notes a HWM with Y = 1.2m and estimates Q = 3cms. A 1958 report notes a HWM with Y = 1.1m and estimates Q = 4cms. A 2003 BIM report notes a HWM with Y = 1m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1974, April 1979, April 1984, June 1990, and April 1997. The largest events in the storm database are July 1987 and June 1988 with 100mm of rainfall.

Basin Runoff Potential :

d = 50mm, T_p = 20 hrs, q = 0.7 cms/km^2.
Gross DA = 23 km^2.
Q_p = 16 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 = 1.6 m/s, Q = 8 cms.