BF 02456 Local Road Over Whelp Brook
Hydrotechnical Summary

Channel Capacity:

S = 0.0008
B = 5 m, h = 1.4 m, T_h = 10 m
Use n = 0.045

At Bank Height : Y = 1.4 m, V = 0.6 m/s, Q = 7 cms
At Channel Capacity : Y = 2.0 m, V = 1.0 m/s, Q = 15 cms

Historical Highwater Data:

There is no known historical highwater data.

There are no WSC gauges on this stream. The largest storm in the area occurred in July 1990 with about 95mm of rainfall. A nearby WSC gauge on the Battle River reports the highest flow rates in 1990 and 1974.

Basin Runoff Potential:

d = 40mm, T_p = 20hrs, q = 0.56 cms/km^2.
Gross DA = 140 km^2
Q_p = 78 cms.

Conclusion:

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

Recommended parameters : Y = 2.0 m, V = 1.0 m/s, Q = 15 cms.