BF 06535 Local Road Over Lasthill Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 4 m, h = 1.8 m, T_h = 8 m
Use n = 0.045

At Bank Height : Y = 1.8 m, V = 0.9 m/s, Q = 10 cms
At Channel Capacity : Y = 2.7 m, V = 1.4 m/s, Q = 25 cms

Historical Highwater Data :

HW was noted in July 1982 (0.5m < u/s crown, scour hole d/s, Q = 10cms), July 1990 (0.2m > u/s crown, 0.7m < d/s crown, erosion of d/s bank), and July 1999 (Y = 2.1m based on grass on fence). A 1964 report notes a HWM with Y = 2.4m.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1972, July 1982, July 1986, July 1990 and July 1999. The largest storms in the storm database are August 1925, June 1972, and July 1986 with about 110mm of rainfall.

Basin Runoff Potential :

d = 50mm, T_p = 20hrs, q = 0.7 cms/km^2.
Gross DA = 57 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 = 2.7 m, V = 1.4 m/s, Q = 25 cms.