BF 13748 Local Road Over Little Paddle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.009
B = 1.5 m, h = 0.7 m, T_h = 3 m
Use n = 0.055

At Bank Height : Y = 0.7 m, V = 1.0 m/s, Q = 2 cms
At Channel Capacity : Y = 1.2 m, V = 1.7 m/s, Q = 5 cms

Historical Highwater Data :

A 1994 BIM report notes a HWM with Y = 4.8m u/s based on landowner comment (Q ~ 7cms if no blockage). A 2004 assessment was based on Y = 1.5m and Q = 8cms.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1965, June 1972, April 1974, June 1980, July 1986, and August 1989. The largest storms in the storm database are about 145mm in June 1965 and 125mm in August 1957.

Basin Runoff Potential :

d = 50 mm, T_p = 20 hrs, q = 0.7 cms/km^2.
Gross DA = 10 km^2.
Q_p = 7 cms.

Conclusion :

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

Recommended parameters : Y = 1.2 m, V = 1.7 m/s, Q = 5 cms.