BF 13616 Local Road Over Paddle River Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0065
B = 2 m, h = 1.4 m, T_h = 4 m
Use n = 0.05

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

Historical Highwater Data :

HW was noted in July 1965 with water over the grade (H = 8.2m, Q = 22cms if no blockage). A 1953 report notes a HWM with Y = 1.8m and estimates Q = 9cms.

There are no WSC gauges on this stream. Gauges in the area indicate HW events in July 1965, July 1971, April 1974, and August 1989. The storm database indicates that the largest rainfall events on record for this area are 150mm in June 1944 and 135mm in late June 1965.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
DA = 24 km^2.
Q_p = 20 cms.

Conclusion :

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

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