BF 70526 Local Road Over Lalby Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.002
B = 4 m, h = 2.0 m, T_h = 8 m
Use n = 0.045

At Bank Height : Y = 2.0 m, V = 1.2 m/s, Q = 14 cms
At Channel Capacity : Y = 3.0 m, V = 1.7 m/s, Q = 35 cms

Historical Highwater Data :

A 1954 report notes a HWM with Y = 3m and estimates Q = 34cms. A 1994 BIM report notes a HWM with Y = 4m (no description). The 1985 design was based on Y = 3m and Q = 37cms.

WSC Gauge 07GJ005 (DA = 160km^2, 1978 – 1995) reports Q = 37cms (stage rise = 3.0m) in May 1979 (gauging info not available). There are no storms in the storm database with more than 100mm for this area.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 173 km^2.
Q_p = 144 cms.

Conclusion :

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

Recommended parameters : Y = 3.0 m, V = 1.7 m/s, Q = 35 cms.