BF 70398 Local Road Over Peno Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.005
B = 2 m, h = 1.0 m, T_h = 5 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 1.0 m/s, Q = 4 cms
At Channel Capacity : Y = 1.5 m, V = 1.5 m/s, Q = 9 cms

Historical Highwater Data :

HW was noted in June 1954 with water over the grade (Y = 2.1m u/s). A 1954 report estimates Q = 7cms.

There are no WSC gauges on Peno Ck. Gauges in the area suggest HW events in April 1971, April 1974, April 1979, July 1986, and April 1997. There are no storms in the storm database that exceed 100mm for this area.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 149 km^2.
Q_p = 82 cms.

Conclusion :

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

Recommended parameters : Y = 1.5 m, V = 1.5 m/s, Q = 9 cms.