BF 07051 Local Road Over Kilini Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0005
B = 5 m, h = 1.5 m, T_h = 8 m
Use n = 0.05

At Bank Height : Y = 1.5 m, V = 0.5 m/s, Q = 4 cms
At Channel Capacity : Y = 2.3 m, V = 0.7 m/s, Q = 10 cms

Historical Highwater Data :

A report in 1954 notes a HWM with Y = 2.0m and a design Q = 14cms. A report in 1977 notes a HWM with Y = 1.5m. The 1998 design was based on Y = 1.7m and Q = 17cms. HW has been reported u/s at BF13905 in June 1954, 1965, and July 1986.

There are no WSC gauges on this stream. Gauges in the area report HW events in April 1971, April 1974, July 1986, and July 1990. The largest storms in the database for this area are June 1944 with about 150mm of rainfall, and July 1982 with about 120mm of rainfall.

Basin Runoff Potential :

d = 50mm, T_p = 20hrs, q = 0.7 cms/km^2.
Gross DA = 100 km^2.
Q_p = 70 cms.

Conclusion :

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

Recommended parameters : Y = 2.3 m, V = 0.7 m/s, Q = 10 cms.