BF 71468 Local Road Over Big Gully Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 4 m, h = 1.4 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.4 m, V = 0.7 m/s, Q = 5 cms
At Channel Capacity : Y = 2.1 m, V = 1.1 m/s, Q = 12 cms

Historical Highwater Data :

HW was noted in 1965 with water 0.6m over the grade at small culvert crossing. A 1960 report notes a HWM with Y = 1.2m and estimates Q = 4cms. A 1981 report estimates Q = 18cms.

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

Basin Runoff Potential :

d = 35 mm, T_p = 40 hrs, q = 0.25 cms/km^2.
Gross DA = 208 km^2.
Q_p = 52 cms.

Conclusion :

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

Recommended parameters : Y = 2.1 m, V = 1.1 m/s, Q = 12 cms.