BF 72123 Hwy 16 Over Bench Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.003
B = 3 m, h = 1.8 m, T_h = 6 m
Use n = 0.05

At Bank Height : Y = 1.8 m, V = 1.1 m/s, Q = 10 cms
At Channel Capacity : Y = 2.7 m, V = 1.7 m/s, Q = 25 cms

Historical Highwater Data :

A 1954 report notes a HWM with Y = 1.5 – 1.8m. A 1975 report notes that water has been close to the girders (Y ~ 2m), and estimates Q = 11 – 17cms.

There are no WSC gauges on this stream. Gauges in the area suggest large runoff events in July 1982 and July 1986. The storm database notes July 1965 (120mm) and June 1944 and June 1958 (105mm).

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2.
Gross DA = 57 km^2.
Q_p = 47 cms.

Conclusion :

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

Recommended parameters : Y = 2.7 m, V = 1.7 m/s, Q = 25 cms.