BF 78680 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 :

HW was noted in 1964 with water over the road u/s. The 1978 design was based on Y = 1.98 – 2.4m and Q = 28cms.

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.