BF 73928 Hwy 49 Over Howard Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.007
B = 4 m, h = 1.8 m (low bank within ravine), T_h = 8 m
Use n = 0.05

At Bank Height : Y = 1.8 m, V = 1.8 m/s, Q = 20 cms
At Channel Capacity : Y = 2.7 m, V = 2.7 m/s, Q = 50 cms

Historical Highwater Data :

A 1966 report notes that water has been over the road (8m ponding u/s, Q ~ 10cms through pipe). The 1992 design was based on Y = 2.4m and Q = 28cms.

There are no gauges on Howard Ck. Gauges in the area suggest HW events in June 1990, April 1997, and July 1988. The largest storms in the database for this area are about 110mm in July 1987 and 95mm in June 1988. The June 1990 storm was very large just to the south of this area.

Basin Runoff Potential :

d = 60 - 80mm, T_p = 20hrs, use q = 1.0 cms/km^2.
Gross DA = 48 km^2.
Q_p = 50 cms.

Conclusion :

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

Recommended Parameters : Y = 2.7 m, V = 2.7 m/s, Q = 50 cms.