BF 76194 Hwy 2 Over Florida Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.011
B = 3 m, h = 1.6 m, T_h = 6 m
Use n = 0.06

At Bank Height : Y = 1.6 m, V = 1.7 m/s, Q = 12 cms
At Channel Capacity : Y = 2.4 m, V = 2.6 m/s, Q = 30 cms

Historical Highwater Data :

HW was over the highway in 1988 (Y ~ 3.5m u/s, Q ~ 15cms through pipe if not blocked plus flow over the road) with significant drift and siltation in highway ditches and large scour hole d/s. A HWM (drift just above the u/s crown) was noted in the 2000 BIM inspection (Y = 2.5m u/s, Q ~ 7cms). A d/s scour hole was repaired with rock in 1980 with more damage noted in 1985. A 2005 assessment recommends placement of rock at both ends to extend life of structure and estimates Y = 2.3m, V = 3m/s, and Q = 28cms).

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in July 1979, June 1983, July 1988, June 1993 and June 1996. The largest storms in the storm database are about 105mm in June 1968, July 1979, June 1983, and July 1988.

Basin Runoff Potential :

d = 90 mm, T_p = 20 hrs, q = 1.25 cms/km^2.
Gross DA = 20 km^2.
Q_p = 25 cms.

Conclusion :

Basin runoff potential governs and appears consistent with historic observations.

Recommended parameters : Y = 2.2 m, V = 2.4 m/s, Q = 25 cms.