BF 75907 Highway 63 Over Hangingstone River
Hydrotechnical Summary

Channel Capacity :

S = 0.0045
B = 8 m, h = 2 m, T_h = 20 m
Use n = 0.040

At Bank Height : Y = 2 m, V = 2.1 m/s, Q = 60 cms
At Channel Capacity : Y = 3 m, V = 3.0 m/s, Q = 145 cms

Historical Highwater Data :

The 2010 design was based on Q~160cms (V=3.2m/s). Ice concerns are noted on downstream sites (1933, 1958).

WSC gauge 07CD004 (operating 1965-present, DA=960km^2) is located downstream and reports high flow events in 1970 (Q~135cms), 1976 (Q~130cms), and 1995 (Q~110cms).

The storm on basin tool reports large rainfall events in July 1960 (150mm), August 1980 (125mm), August 1976 (115mm), September 1960 (110mm), and August 1995 (105mm),

Basin Runoff Potential :

d=40mm, Tp = 20 hrs, q = 0.56 cms/km^2
Gross DA= 335 km^2
Qp= 190 cms

Conclusion :

The channel capacity values are within the basin runoff potential :

Y=3.0m, V=3.0m/s, Q=145cms