BF 06733 Local Road Over Willow Creek
Hydrotechnical Summary

Channel Capacity :

S = 0.00065
B = 30 m, h = 4.5 m, T_h = 55 m
Use AT equation

At Bank Height : Y = 4.5 m, V = 1.7 m/s, Q = 300 cms
At Channel Capacity : Y = 5.5 m, V = 2.0 m/s, Q = 500 cms

Historical Highwater Data :

HW was observed in June 1953 (Y ~ 5.5m), and June 1995 (Y ~ 5m). The 1955 design was based on Y ~ 5.5m.

WSC gauge 05AB021 (DA ~ 1180km^2, 1944 – Now) reports Q = 700cms (June 2005, gauged at Q ~ 440cms but inconsistent flow area, stage rise ~ 4.5m at peak) and Q ~ 500cms (June 1995).

Basin Runoff Potential :

Gross DA = 1700 km^2, exceeds range of technique.

Conclusion :

Historic observations govern. Recommended parameters :

Y = 5.5 m, V = 2.0 m/s, Q = 500 cms.
EL 303.0 m (1491-P)