BF 77024 Local Road Over Iron Ck Tributary
Hydrotechnical Summary

Channel Capacity :

S = 0.0006
B = 3 m, h = 1.2 m, T_h = 7 m (assumed – slough)
Use n = 0.045.

At Bank Height : Y = 1.2 m, V = 0.5 m/s, Q = 3 cms
At Channel Capacity : Y = 1.8 m, V = 0.7 m/s, Q = 7 cms

Historical Highwater Data :

HW was noted in April 1969 with water to top of the road (Y = 1.5 – 1.8m, estimated Q = 7cms) and a washout of one pipe. A 1997 design was based on Q = 10cms.

There are no gauges on this stream. Gauges in the area suggest large runoff events in April 1974, July 1990, and April 1997. The largest storms in the database for this area are 130mm of rainfall in July 1962 and 115mm in June 1970 and June 1973.

Basin Runoff Potential :

d = 35mm, T_p = 40hrs, q = 0.25 cms/km^2.
Gross DA = 327 km^2.
Q_p = 82 cms.

Conclusion :

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

Recommended parameters : Y = 1.8 m, V = 0.7 m/s, Q = 7 cms.