BF 71729 Local Road Over Tawatinaw River
Hydrotechnical Summary

Channel Capacity :

S = 0.0015
B = 7 m, h = 3.0 m, T = 14 m
Use n = 0.04

At Bank Height : Y = 3.0 m, V = 1.5 m/s, Q = 50 cms
At Channel Capacity : Y = 4.0 m, V = 2.0 m/s, Q = 90 cms

Historical Highwater Data :

A 1965 report notes a HWM with water up on the stringers (Y = 3.0 – 3.3m). A 1956 report notes drift causing scour at the abutments.

There are no WSC gauges on the Tawatinaw River. Nearby gauges suggest large runoff events in April 1971, 1974, 1979 and 1997. The largest storms for this area in the database are July 1953 and June 1970 with about 100mm of rainfall.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 694 km^2.
Q_p = 380 cms.

Conclusion :

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

Recommended parameters : Y = 4.0m, V = 2.0 m/s, Q = 90 cms.