# BF 75901 Local Road Over Updike Ck
# Hydrotechnical Summary

**Channel Capacity** :

S = 0.0015
B = 2 m, h = 1.0 m, $T_h$ = 5 m
Use n = 0.05

At Bank Height : Y = 1.0 m, V = 0.6 m/s, Q = 2 cms
At Channel Capacity : Y = 1.5 m, V = 0.8 m/s, Q = 5 cms

**Historical Highwater Data :**

A 1963 report notes that water has been over the grade. The 1991 design was based on Y = 0.8m and Q = 5cms. A 2003 BIM report notes a HWM with Y = 1.6m based on grass on a fence.

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in April 1974, June 1990, and April 1997. The storm database storms in June 1977 (165mm), and June 1964 and 1971 (115mm).

**Basin Runoff Potential :**

d = 60mm, $T_p$ = 20hrs, q = 0.83 cms/$km^2$.
Gross DA = 53 $km^2$.
$Q_p$ = 44 cms.

**Conclusion :**

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

Recommended parameters : Y = 1.5 m, V = 0.8 m/s, Q = 5 cms.