BF 07552 Local Road Over Edson River
Hydrotechnical Summary

Channel Capacity :

S = 0.0035
B = 18 m, h = 2.2 m, T_h = 26 m
Use AT equation

At Bank Height : Y = 2.2 m, V = 2.2 m/s, Q = 110 cms
At Channel Capacity : Y = 3.2 m, V = 2.9 m/s, Q = 220 cms

Historical Highwater Data :

HW was noted in July 1965 with water 0.9m below the deck (Y = 3.3 - 3.6m) and scour through the opening. HW was also noted in August 1989 with Y = 1.6m and V = 1.7m/s. The 1996 BIM report notes a HWM with Y = 2.0m. A photo from June 1980 suggests water was relatively high.

There are no WSC gauges on this stream. Gauges in the area suggest HW events in June 1972, June 1980, July 1986, and July 1999. The largest storms in the database for this area are July 1939, June 1944, June 1958, July 1965, and June 1972 with about 105mm of rainfall.

Basin Runoff Potential :

d = 60 mm, T_p = 20 hrs, q = 0.83 cms/km^2
Gross DA = 605 km^2.
Q_p = 500 cms.

Conclusion :

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

Recommended parameters : Y = 3.2 m, V = 2.9 m/s, Q = 220 cms.