BF 71477 Hwy 28 Over Kehiwin Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.013
B = 2 m, h = 0.8 m, T_h = 4 m
Use n = 0.055

At Bank Height : Y = 0.8 m, V = 1.4 m/s, Q = 3 cms
At Channel Capacity : Y = 1.3 m, V = 2.1 m/s, Q = 9 cms

Historical Highwater Data :

HW was noted in April 1952 (to u/s crown, Y = 1.5m u/s), and in April 1990 (0.4m below u/s crown, Y = 1.4m u/s). The 1951 design was based on Q = 4cms. A 1966 report notes a HWM with Y = 1.5m and estimates Q = 4cms. A 1999 BIM report notes a HWM with Y = 1.8m (no description).

There are no WSC gauges on this stream. Gauges in the area suggest HW events in April 1974, 1979, 1985, 1996, and 1997. The largest storm in the database for this area is June 1962 with about 120mm of rainfall.

Basin Runoff Potential :

d = 40mm, T_p = 20hrs, q = 0.55 cms/km^2.
Gross DA = 16 km^2.
Q_p = 9 cms.

Conclusion :

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

Recommended parameters : Y = 1.3 m, V = 2.1 m/s, Q = 9 cms.