BF 00664 Hwy 642 Over Little Egg Ck
Hydrotechnical Summary

Channel Capacity :

S = 0.0005
B = 6 m, h = 2.0 m, T_h = 14 m
Use n = 0.04 (enhanced channel)

At Bank Height : Y = 2.0 m, V = 0.7 m/s, Q = 15 cms
At Channel Capacity : Y = 3.0 m, V = 1.0 m/s, Q = 35 cms

Historical Highwater Data :

HW was noted in April 1974 with the 1.5 x 2.1m culvert running full. A 1958 design was based on Q = 6cms and Y = 1.5m (prior to AENV enhancement in 1974). AENV design based on Q = 15cms. The 2001 design was based on Y = 2.3m and Q = 42cms.

There are no WSC Gauges on this stream. Gauges in the area suggest HW events in April 1974, 1982, and 1997. The largest storms in the storm database are 160mm of rainfall in July 1953, and about 100mm in 1937, 1952, 1965, and 1986.

Basin Runoff Potential :

d = 40 mm, T_p = 20 hrs, q = 0.55 cms/km^2.
Gross DA = 232 km^2 (133km^2 u/s of Manawan Lake)
Q_p = 125 cms.

Conclusion :

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

Recommended parameters : Y = 3.0 m, V = 1.0 m/s, Q = 35 cms.