BF 77311 Hwy 947 Over Iosegun River
Hydrotechnical Summary

Channel Capacity :

S = 0.005
B = 6 m, h = 1.8 m, T_h = 10 m
Use n = 0.045

At Bank Height : Y = 1.8 m, V = 1.8 m/s, Q = 25 cms
At Channel Capacity : Y = 2.7 m, V = 2.6 m/s, Q = 60 cms

Historical Highwater Data :

The current structure was designed for Q = 45cms in 1971, with Y = 3.3m u/s (headwater). A 1982 report refers to a HWM 2.7m below the crown (Y = 1.5 – 2m). A 1988 BIM report notes a HWM with Y = 1m.

Gauge 07GG003 (DA = 1950km^2, 1970 – Now) reports HW events in June 1996 and July 1971. The largest storms for this area in the storm database are about 110 mm of rainfall in July 1964 and June 1978.

Basin Runoff Potential :

d = 80 mm, T_p = 20 hrs, q = 1.1 cms/km^2.
Gross DA = 78 km^2.
Q_p = 85 cms.

Conclusion :

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

Recommended parameters : Y = 2.7 m, V = 2.6 m/s, Q = 60 cms.