DATE: 1/11/2001

MEMORANDUM TO ROAD DESIGN GROUP LEADER: M. SHUFORD (GROUP 9)

FROM: HYDRAULIC ENGINEERING SQUAD SUPERVISOR RAY VAUGHAN

Abberille G. SUBJECT: Hydraulic Engineering Data for Bridge over LITTLE RIVER

Rt./Rd. S.C. ROUTE 201

Bridge Length 250' (60' x 60' x 70' x 60') Bridge Roadway Width 44'

Beg. Sta. 292+77 End Sta. 295+27

Skew Angle N/A Minimum F.G. Elev. <u>509.80'</u> (Min. L.C. Elev. <u>504.70'</u>)

End Fill Slope 2:1 Riprap Required Yes

To Elev. 493.36' It. & 495.23' rt.

Comments: The information contained in this memo is in addition to the previous memo that was submitted on 12/14/00.

## High Water Data:

50-year H.W. Elev. = including ft. backwater 502.83 0.13

100-year H.W. Elev. = 503.41 including 0.16 ft. backwater

Highwater Elev. =

Highwater Elev. =

## Hydraulic Engineering Data:

D.A. = <u>73.37</u> sq. mi.

Q(50) =6138 cfs

Area furnished under

Elev. 502.51' = 1702.50 sq. ft. Vel. = 3.61 ft./sec.

7097 Q100 =cfs

Area furnished under

Elev. 503.05' = 1814.35 sq. ft.

Vel. = 3.91 ft./sec.

Overtopping Flood:

Q = N/A cfs

Probability <0.002