

Date: xx/xx/2002

Memorandum to: Road Design Group Coordinator
Bridge Design Squad/Team Leader

Wilbur Smith

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From: Hydraulic Design Squad/Engineer Wilbur Smith

Subject: Hydrology Data for Bridge Over Calhoun Creek

County: Abbeville Rd/Rte.: SC 72 Const. Pin: 28268

Structure No.: TBA

Bridge Length: 150'-10" ft. Bridge Roadway Width: 46'-10" ft.

Beg. Station: 547+08.23 End Station: 548+59.06 Skew Angle: °

Bridge Span Configuration: 48'-11"-53'-48'-11"

Bridge Span Type: _____

Min. F. G. Elev.: 441.89 ft. Min. Low Steel: _____ ft.

End Fill Slope: 2 Riprap Req'd: Yes X To Elevation: 428.10 ft.

No

Comments: _____

Historical Highwater Elev. =

Maximum Backwater Elevation Upstream of the Bridge

50 Year H. W. Elev. = 425.06 including ft. Backwater

100 Year H. W. Elev. = 426.04 including 9 ft. Backwater

HYDROLOGY DATA:

D. A. = 32.0 sq. mi. = ac.

$$Q_{50} = \frac{100}{100 - 36.39} = 1.56 \text{ cfs}$$
$$\text{Vel.} = \frac{\quad}{5.1 \text{ ft/sec}}$$

50 Year W.S. Elev = 425.06 ft.

$$Q_{100} = 4207 \text{ cfs}$$
$$Vel. = \frac{\quad}{5.4 \text{ ft/sec}}$$

100 Year W.S. Elev = 426.04 ft.

OVERTOPPING FLOOD:

Q = cfs

Probability = < 0.002

cc: Program Manager Meetze