

## INTEROFFICE MEMORANDUM

**DATE:** August 6, 1971

**TO:** Bridge Design Personnel  
**FROM:** Veral Pinkerton, Bridge Engineer  
**SUBJECT:** Hydraulic Information on Bridge Layouts

The following hydraulic information shall be shown on all bridge layouts of stream crossing when available.

On the Elevation:

Historical high water; from survey data or other sources.

Note: This high water should be used to set the minimum bridge deck elevation unless the 50 year discharge occurs at a higher elevation. Show clearance to this high water line.

Under the Elevation:

Drainage Area  
Design discharge  
Frequency of design discharge  
Stage elevation of design discharge  
Backwater increment at design discharge

Example: Drainage area 10.0 sq. mi.

$Q_{50} = 3000$  cfs at Elev. 431.6    Backwater = .4'.