

Title: Hydraulic Engineer	Effective Date: September 17, 2008	Grade: XVIII	Job Category: Professional
Prior Title: Hydraulic Engineer	Prior Effective Date: August 24, 2007	Grade: XVIII	Page: 1 of 1

CHARACTERISTICS OF WORK

Under general supervision of the Section Head, this position is responsible for supervising, coordinating hydraulic design studies, designing hydraulic structures and reviewing the work of other professional employees engaged in broad and complex hydraulic engineering studies required in connection with the design of hydraulic structures for design Divisions and Districts.

EXAMPLES OF WORK

The following examples are intended only as illustrations of various types of work performed. No attempt is made to be exhaustive. Related, similar, or other logical duties are performed as assigned. The Department may require employees to perform functions beyond those contained in job descriptions. The Department may modify job descriptions based on Department needs. The Arkansas State Highway and Transportation Department is an "at will" employer.

- Conduct independent hydrologic analyses of design floods and flood profiles for establishing high way grades and hydraulic structures.
- Make independent studies for design and operational hydraulic solutions of which precedent, data, criteria, techniques, and methods of solution are inadequate.
- Derive practical means and methods for the solution of hydraulic problems through the application of advanced principles of hydraulics and higher mathematics.
- Plan, initiate, guide, and coordinate computer model studies required for various alternate hydraulic structures.
- Review design Divisions' plans for hydraulic design content.
- Coordinate hydraulic design with other Divisions; consult with and provide counsel on hydraulic characteristics and criteria in connection with the point of interest, and design hydraulic structures.
- Prepare and supervise the preparation of analytical reports in connection with hydraulic studies.
- Provide expert testimony in highway drainage litigation.

MINIMUM REQUIREMENTS

Possession of a current *Arkansas* license to practice professional engineering. Knowledge and experience in computer technology and all phases of hydrologic and hydraulic engineering. Supervisory and technical writing capabilities.