

Title: Advanced Bridge Design Engineer	Effective Date: September 17, 2008	Grade: XVI	Job Category: Professional
Prior Title: Advanced Bridge Design Engineer	Prior Effective Date: August 24, 2007	Grade: XVI	Page: 1 of 1

CHARACTERISTICS OF WORK

This position is accountable for the design of bridge projects to provide construction plans meeting state and federal requirements under general supervision of staff and senior design engineers.

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.

- Evaluate survey, soil and hydraulic data and conceive, design and evaluate the commonly used bridge types at most locations and recommend type or types for inclusion in the project plans.
- Conceive and produce layouts, structural details and related technical drawings using computer-aided design and drafting (CADD).
- Assemble design drawings, specifications and bid quantities and make cost estimates for completed bridge projects.
- Analyze existing bridge structures for load capacity as part of states' continuing bridge inspection and rating program.
- Coordinate and supervise work of structural detailers in plan preparation of projects which they have designed.

MINIMUM REQUIREMENTS

Possession of a current *Arkansas* license to practice professional engineering or graduation from an EAC of ABET approved engineering curriculum or equivalent as judged by the Arkansas Board of Registration for Professional Engineers and Land Surveyors. Engineer Intern certification required. Bridge design experience and general working knowledge of the design and construction specifications and materials for all types of bridges commonly constructed by the Department.

("EAC of ABET" means Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.)