

Title: Surveys Aide II	Effective Date: July 1, 2013	Grade: VII	Job Category: Technician
Prior Title: Surveys Aide	Prior Effective Date: October 11, 2012	Grade: VII	Page: 1 of 2

CHARACTERISTICS OF WORK

APPLICABLE TO SURVEYS FIELD POSITION:

Under direct supervision, this position is responsible for measuring distances and traversing across various terrains to gather accurate information detailing land characteristics. This position will assist and work with other members on a survey crew. Work will require contact with the public.

APPLICABLE TO SURVEYS OFFICE POSITION:

Under direct supervision, this position is responsible for the compilation of topographic, planimetric, and terrain data from field collected, photogrammetry, and LiDAR datasets using the Department's current computer-aided drafting and design (CADD) software.

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.

APPLICABLE TO SURVEYS FIELD POSITION:

- Clean and care of survey equipment.
- Clean and service survey vehicles.
- Use hand tools such as sledge, axe, chainsaw, kaiser blade, shovel, etc.
- Clear brush for view, climb trees to trim limbs.
- Set up safety equipment and flag traffic when necessary.
- Traverse rugged terrain including, but not limited to, bluffs, creeks and streams, brush and timber, fences, etc.
- Carry sign posts, reinforcing bars, and other materials.
- Use survey instruments, calculators, automated electronic data collectors, and GPS equipment.
- Keep track of expenses and prepare individual expense reports.
- Train in reading and plotting land descriptions and the use of computers.

APPLICABLE TO SURVEYS OFFICE POSITION:

- Operate current generation of computers, electronic data collector, and computer-aided design and drafting (CADD).
- Produce maps that conform to national accuracy standards.
- Interpret and utilize aerial imagery provided by the Department.
- Assist in the preparation of various types of maps, charts and graphs as needed.
- Use desktop computer for data processing, coordinate geometry computations, and computer-aided design and drafting (CADD).
- Compile survey field, photogrammetric, and LiDAR point cloud data into a combined topographic and digital terrain model (DTM) for Department design divisions.



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MINIMUM REQUIREMENTS

The educational equivalent to a bachelor's degree from an accredited college or university in surveying or related field OR

- A. A minimum of one year of experience at the Surveys Aide I level or above and the educational equivalent to an associate's degree from an accredited college or university in surveying or related field, OR
- B. A minimum of two years of experience, of which one year is at the Surveys Aide I level or above, and the educational equivalent to a diploma from an accredited high school.

The bachelor's degree is the preferred requirement. Survey Intern (SI) certification preferred.

Ability to perform mathematical calculations as they relate to control, engineering design, and land surveying, including trigonometry and geometry. Ability to adapt to evolving technology as it relates to surveying, including handheld field computers, desktop computer applications, and electronic surveying instruments. Proficient use of computers and technology as related to surveying. Working knowledge of the function of a survey crew, surveying instruments, survey terminology, and surveying principles and practices. Ability to read and understand highway plans and topographic maps. Ability to read and plot PLSS aliquot parts land descriptions. Working knowledge of survey data collection. Basic knowledge of survey measurement computations and analysis. Valid driver's license.

APPLICABLE TO SURVEYS FIELD POSITION:

Physical ability to work with hand tools. Ability to traverse at least two miles over rugged terrain, through water, and work in an outdoor environment. Ability to stand and operate surveying equipment for at least two hours without a break. Ability to carry 50 pounds of equipment and supplies for at least two hours without a break.

Constant statewide travel. Constant statewide travel for this position means overnight travel three or four nights per week, 52 weeks per year with reimbursement for expenses.

APPLICABLE TO SURVEYS OFFICE POSITION:

Basic knowledge of topographic and digital terrain models, map projections, aerial photography, and land surveying. Working knowledge of current computer-aided design and drafting (CADD) graphics design software. Familiarity with Microsoft Access, Excel and Word. Available for occasional overnight statewide travel.

("Accredited" means the educational institution or program is accredited by an accrediting organization recognized either by the United States Department of Education or by the Council for Higher Education Accreditation.)

