

## Champaign County Job Description

**Job Title:** Engineering Technician

**Department:** Highway

**Reports To:** County Engineer and Project Engineer

**FLSA Status:** Non-exempt

**Employment Status:** Bargaining Unit - AFSCME General Unit

**Prepared Date:** February 2025

**SUMMARY** Prepares complete sets of construction plans and specifications for highway projects using available software and represents the county as resident inspector/engineer on construction jobs.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. Other duties may be assigned.

Completes preliminary design and construction surveys.

Performs NBIS bridge inspections on county and township bridges.

Performs construction inspection of projects which may include hot mix asphalt, aggregate subgrade, concrete paving, railroad crossings, pile driving, concrete substructures, concrete superstructures, precast concrete bridge decks and culverts.

Prepares plans, specifications, estimates, and other reports and documents under the direction of the Engineer using software such as Bentley Microstation, Bentley Open Road Designer, Carlson Civil and Survey, AutoDesk AutoCAD, and Trimble VRS.

**SUPERVISORY RESPONSIBILITIES** This job has no supervisory responsibilities in the department, but has some responsibility over the contractor during the inspection of projects.

**QUALIFICATIONS** To perform this job successfully, an individual must be able to perform each essential function satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

**EDUCATION and/or EXPERIENCE** Associates degree (A. A.) or equivalent from a two-year college or technical school in an engineering related field or equivalent experience in highway design and construction. Requires proficiency in drafting techniques including the use of design software. Experience in field inspection of construction techniques and materials is desired, but not required.

**LANGUAGE SKILLS** Ability to read, analyze, and interpret plans, specifications, technical procedures, or governmental regulations. Ability to write reports and business correspondence. Ability to effectively present information and respond to questions from groups, contractors and employees of the organization.

**MATHEMATICAL SKILLS** Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

**REASONING ABILITY** Ability to solve practical problems and deal with a variety of variables in situations where standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

**CERTIFICATES, LICENSES, REGISTRATIONS** Certification by the Illinois Department of Transportation, which can be obtained after employment by attending IDOT certification classes as scheduled and paid for by Champaign County. NBIS Bridge Inspection certificate after the prescribed apprenticeship under the county NBIS Program Manager.

**PHYSICAL DEMANDS** The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. While performing the duties of this job, the employee is frequently required to sit; use hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee is occasionally required to stand; walk; climb or balance; and stoop, kneel, crouch, or crawl. The employee must occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, and ability to adjust focus.

**WORK ENVIRONMENT** The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee is frequently exposed to moving mechanical parts. The employee is occasionally exposed to high, precarious places; and outside weather conditions. The noise level in the work environment is usually quiet to moderate.

**Note: This job description contains wording of a general class of positions within the Champaign County salary administration program. The description contains examples of duties and responsibilities which may or may not be considered to be "essential functions" to a particular job or position within this job class. "Essential functions" are to be determined at the position or job level within each department.**