



BOONE COUNTY JOB DESCRIPTION

JOB TITLE: <u>Engineering Technician</u>	NEW: <u>X</u>	REVISED: _____ <small>(Please check one)</small>
REPORTS TO: <u>Manager, Design & Construction</u>	FLSA: <u>Non-Exempt</u>	DATE: <u>03/2016</u>
DEPARTMENT: <u>Resource Management – Engineering Division</u>	JOB CODE: <u>204</u>	

SUMMARY:

Under general supervision, the Engineering Technician performs a variety of engineering and technical support functions such as drafting, computer aided design drawings and updates, surveying, data collection, plan review, and project record keeping of projects for the Engineering Division of the Resource Management Department.

ESSENTIAL FUNCTIONS:

*Essential functions, as defined under the Americans with Disabilities Act, may include the following tasks, knowledge, skills, and other characteristics. This list of tasks is ILLUSTRATIVE ONLY, and is **not** a comprehensive listing of all functions and tasks performed by incumbents of this class.*

Prepares, produces, and revises construction plans and documents for preliminary and final phases of road, bridge, drainage, sewer and site improvement construction; reviews plats, administrative surveys, easements, and road plans; surveys land; drafts plans; researches information and generates reports as needed; assesses and ensures compliance and safety of projects; assists department surveyor with field measurements and other fieldwork as needed.

Utilizes appropriate equipment and computer applications such as computer aided design and drafting, spreadsheet, word processing, database, internet programs, and other software to carry out assigned work; performs drafting by hand; checks for errors and omissions; creates construction details for projects and layouts, and organizes information to be included in bidding documents.

Creates, compiles, and maintains files for plans and does background research such as deeds, easements, right of way and mapping information; compiles, downloads, corrects and edits GPS mapping information; draws construction plans and bid sketches.

Makes graphic art presentations and charts for project meetings and public information purposes; creates special purpose maps of projects and relevant areas for Boone County; responds to email, phone and in-person informational requests from general public and contractors as needed; performs minor office administration tasks such as copying, faxing, and scanning as needed.

Performs all other duties as assigned.

KNOWLEDGE AND SKILL:

1. Knowledge in principals, procedures, and equipment involved in drafting and survey work.
2. Knowledge of State and local requirements for construction plans.
3. Knowledge of construction standards and specifications.
4. Knowledge of English grammar, punctuation, and spelling; advanced skill in communicating effectively using the English language, both orally and in writing.
5. Knowledge of computer aided design and drafting systems, GIS software, and other specialized software.
6. Skill in mathematics sufficient to accurately calculate numbers and perform calculations using addition, subtraction, multiplication, and division.
7. Skill in communicating orally and in writing, and in establishing and maintaining cooperative working relationships with other departments, contractors, and the public.
8. Ability to learn and apply policies, procedures, documents and terminology affecting assigned functions.
9. Ability to read, interpret and explain maps, deeds, plats and other survey documentation.
10. Ability to work independently and follow instructions.
11. Ability to maintain a high level of accuracy and attention to detail.

PHYSICAL DEMANDS:

The majority of work is performed in a general office setting and outside. Position-holder must possess vision to read printed materials and a computer screen, and hearing and speech to communicate in person and over the telephone. Must have clarity of vision at 20 feet or more, 20 inches or less, three-dimensional vision, precise hand-eye coordination, and ability to identify and distinguish colors. May be required to work in hazardous traffic conditions or high/dangerous places.

Position requires CONTINUOUS sitting, upward and downward flexion of neck; fine finger dexterity and light to moderate finger pressure to manipulate keyboard, equipment controls, and other office equipment; pinch grasp to manipulate writing utensils. FREQUENT grasping to manipulate objects; side-to-side turning of neck; walking, standing, bending, stooping, kneeling, and reaching; heavy lifting of up to 75 lbs when moving objects or equipment and transporting distances up to 50 yards; pushing/pulling, twisting at waist, and moderate wrist torque to twist equipment knobs and dials; driving. OCCASIONAL reaching above and at shoulder height.

WORK ENVIRONMENT:

This job operates in a variety of settings that include: a professional office, construction sites, and outside locations. This position routinely uses office equipment such as computers, calculators, multi-line telephones, photocopiers, large format printers and scanners, filing cabinets, and fax machines. May be exposed to wet/humid conditions, inclement outdoor weather, vibration, extreme temperatures, airborne particles/fumes, moving mechanical parts, very loud noise levels, or potentially hazardous materials. May be required to drive a County-owned vehicle to off-site locations and drive in inclement weather. This position is routinely in contact with the public and members of other entities. May be required to work additional hours outside of a normal business day.

MINIMUM QUALIFICATIONS:

Two years of college or vocational/technical training in Engineering, Surveying, CAD, or a related field and three years appropriate experience in construction, engineering, CAD or surveying. Directly related work experience may be substituted for the education requirement. Must possess a valid Missouri Motor Vehicle Operator's License.

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time with or without notice.