



## BOONE COUNTY JOB DESCRIPTION

<b>JOB TITLE:</b> <u>Professional Civil Engineer</u>	<b>NEW:</b> <u>Y</u>	<b>REVISED:</b> <u>      </u> <small>(Please check one)</small>
<b>REPORTS TO:</b> <u>Manager, Design &amp; Construction</u>	<b>FLSA:</b> <u>Exempt</u>	<b>DATE:</b> <u>07/09</u>
<b>DEPARTMENT:</b> <u>Public Works: D &amp; C</u>	<b>JOB CODE:</b> 3014	

### **DEFINITIONS:**

With general supervision, this position requires the application of a general knowledge of the physical sciences and mathematics underlying engineering, and specialized knowledge of the mechanics of solids (particularly soils), hydraulics, theory of structure, strength of materials, engineering geology and surveying to the management of one or more of the following areas of responsibility: Infrastructure Management, Stormwater Management, or Project Management.

**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.)*

Assists in the management, supervision, or performance of planning, designing, constructing and/or maintaining structures that support transportation systems and control natural resources; investigating, measuring, surveying and mapping the land's physical features: and/or research and development activities pertaining to the above. Evaluate, select and apply standard engineering techniques, procedures and criteria, using judgment in making some substantial engineering adaptations and modifications to assigned aspects of storm drain, road or bridge construction plans.

Plan, design, monitor and/or manage projects and programs for construction, renovation and improvement to insure; 1) compliance with applicable regulatory requirements such as National Pollutant Discharge Elimination System (NPDES) Phase II, Army Corps of Engineers, OSHA , and 2) coordination with entities such as utilities, property owners, and other governmental entities who are affected by the project or program.

Participate in planning and budgeting process by providing cost estimates for projects and recommending priority funding levels to achieve the greatest overall long-term benefit within available resources.

Be alert to safety hazards in the field. Review consultant-prepared design drawings, indicating basic design corrections, prepare technical specifications, review engineering plans for compliance with regulatory acts and Boone County standards. Assist in the evaluation of contract bids, make recommendations to higher-level engineers regarding feasibility studies and assist in the management of large-scale construction projects. May be responsible for recommending/approving payment of contractors utilizing construction inspection data.

Manage all activities specific to particular area of responsibility as indicated below:

- Infrastructure Management: Development and maintenance of infrastructure/asset database to include regular condition ratings for use in the development of infrastructure preservation programs, identification of potential projects and/or budget needs, and comprehensive long term transportation plans.
- Stormwater Management: Implement and enforce (with staff assistance) policies to ensure compliance with Stormwater manual and ordinances.
- Project Management: Manages all phases of consulting jobs; project inception and cost estimates, controlling project scope, development of technical bid specifications, plan review/modification, field adaptation as necessary and project close-out.

**MINIMUM QUALIFICATIONS:**

1. Considerable knowledge of civil engineering, and highway and bridge design, construction and maintenance.
2. Considerable knowledge of County, State and Federal statutes, codes and regulations related to highway and bridge maintenance and construction.
3. Good knowledge of stormwater design and State and Federal regulations regarding stormwater issues.
4. Knowledge of surveying principles and practices related to construction plans.
5. Skill in communicating orally and in writing, and in establishing and maintaining cooperative working relationships with other departments and the public.
6. Knowledge of governmental procurement procedures helpful.

Bachelor’s Degree in Civil Engineering, or closely related field; certificate as Missouri Registered Professional Engineer; and five years experience in engineering design, construction management or contracting field.

**APPROVALS:**

Department Director: \_\_\_\_\_ Date: \_\_\_\_\_  
(signature)

HR Director: \_\_\_\_\_ Date: \_\_\_\_\_  
(signature)