Mackin Engineering Company Job Description

Job Title: Highway Designer or Engineer

Employer Information

Organization Name: Mackin Engineering Company
Website: www.mackinengineering.com

Founded in 1960, Mackin is a medium sized, family-owned multi-disciplinary engineering and consulting firm. Our clientele includes both public and private sector clients throughout Pennsylvania, and in parts of Ohio, Maryland, and West Virginia. Using a partner-oriented approach, our diverse team of professionals work closely with clients to realize and achieve their vision and objectives. Providing the most comprehensive and efficient service possible is crucial to successful projects. Passionate about our core values of Integrity, Quality, and Excellence, we are committed to providing our clients with innovative solutions that address their needs and surpass their expectations.

About Our Organization:

Department: Highway Engineering
Reports To: Manager – Highway Engineering
Job Location: Pittsburgh, PA
Hours/Week: 40 (Full-time)
Salary: $60,000-$70,000 USD/Year

Company Benefits

- Roth & Traditional 401(k)
- Company Match of 50% of first 5%
- Immediate Vesting
- Medical, Dental, & Vision Insurances
- Paid Holidays
- Personal Paid Leave (i.e., Vacation & Sick Leave)
- Medical Opt Out Credit, Paid Basic Life Insurance
- Educational Assistance, Disability Insurances, and more

FLSA Status: Exempt (Salary)
Prepared By: Director – Human Resources & Administration
Prepared/Revised: January 13, 2020
Approved By: Vice President – Strategic Planning
Approved Date: January 13, 2020

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Position Summary

This position is responsible for performing engineering tasks in the transportation and highway engineering field through application of relevant and established design criteria, standards, and processes. Assists with the design and development of highway plans, specifications, and estimates from preliminary to final design. Works on multiple design projects and assists in the preparation of various engineering documents.

Essential Duties & Responsibilities

- Design or prepare highway plans, under the direction of senior engineers – including construction, right-of-way, erosion and sediment pollution control, signing, stormwater, highway lighting, pavement marking, and maintenance protection of traffic
- Review highway plan designs, design calculations, or cost estimates to ensure completeness, accuracy, and conformity to engineering standards and practices
- Establish horizontal and vertical alignments, drainage design, and develop contract documents
- Coordinate utility conflicts and relocations and communicate all aspects of design that may affect directly or indirectly affect the project
- Execute or assist with statements of interest (SOI) or letters of interest preparation and technical and price proposals
- Review submissions, prepare reports, cost estimates, specifications, tabulation of quantities and marketing field views/presentation figures for RFP’s and SOI’s, as needed
- Conduct field views, as needed
- Provide direction and review for CADD design and drawings
- Support internal departments with highway engineering services required to execute projects
- Advise management of new developments which may affect profit, schedule, costs, client relations, and/or inter-departmental relations
- Contribute to the overall success of Mackin by supporting internal departments, providing exemplary service to clients, and striving to meet on-going initiatives to grow and develop the company
- Duties, responsibilities, and activities may change or be assigned at any time with or without notice

Supervisory Responsibilities

Supervisory Responsibilities: N/A

System or Specialized Knowledge

To perform this job successfully, an individual might have knowledge of:
- PennDOT’s engineering and construction management system (ECMS)
- PennDOT’s project collaboration center (PPCC)
- Familiarity with all PennDOT design and construction publications
- MicroStation
- Inroads
- Deltek Ajera
- Microsoft Office – Word, Excel, and Outlook
- Computers, Printers, and Electronics
Preferred Qualifications

**Years of Experience:** Minimum of 3+ years’ experience in the highway field or equivalent combination of education and experience

**Education:** BA or BS Degree required

**Degree or Formal Training:** Civil Engineering or a related discipline

**License, Certificate or Registration:** EIT/FE is required, and a PE is preferred

Work Demands/Conditions

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. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel; and talk or hear. The employee is frequently required to stand, walk, sit, and reach with hands and arms. The employee is occasionally required to stoop, kneel, crouch, crawl, taste, and/or smell. 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, depth perception, and ability to adjust focus.

Working Conditions

This position normally works first shift, however, may require the ability and availability to work extra hours in the evenings associated with the demands of our business. Some travel may be required.

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate. While performing this job the employee is most commonly in a combined field and office environment setting.

Field Environment

Although infrequent, when the employee is located within a field environment setting, adherence to Mackin safety standards and/or agency safety standards is required.
Work Activities

- Interact with computers
- Make decisions and solve problems
- Update and use relevant knowledge
- Communicate with supervisors, peers, subordinates, and/or with individuals outside of Mackin employees
- Coordinate the work and activities of others (if applicable)
- Get and process information
- Organize, plan, and prioritize work
- Develop objectives and strategies
- Think creatively

Skills

Basic Skills
- Critical Thinking, Speaking, Active Listening, Reading Comprehension, Active Learning

Social/Problem Solving Skills
- Coordination, Persuasion, Social Perceptiveness, Problem Solving

Technical/System Skills
- Trouble shooting, Resource Management, Judgment and Decision Making

Desktop Computer Skills
- Databases, Internet, Navigation, Spreadsheets, Word Processing, Research

Equal Opportunity Employer

Mackin is committed to increasing diversity in our community and actively pursues individuals from all backgrounds. Additionally, Mackin complies with all applicable federal, state, and local laws. Valuing the contributions of a diverse workforce, Mackin is an Equal Opportunity Employer and does not discriminate in employment opportunities or practices on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, protected veteran status, gender identity, or any other characteristic protected by law.

Team Member’s Signature: ____________________________ Date: ____________
Manager’s Signature: ____________________________ Date: ____________
HR’s Signature: ____________________________ Date: ____________