

# Mackin Engineering Company Job Description

## Job Title: Transportation Construction Inspector Supervisor (District 10 - Indiana County)

### Employer Information

**Organization Name:** Mackin Engineering Company

**Website:** [www.mackinengineering.com](http://www.mackinengineering.com)

#### About Our Organization:

Join a team where your voice is heard, your opinions matter, and your ideas are valued. Founded in 1960, Mackin is a multidisciplinary engineering and consulting firm. Our clients include both public and private sector clients throughout Pennsylvania, and in parts of Ohio, Maryland, and West Virginia. Our diverse team of professionals work closely with clients to realize and achieve their vision and objectives. We are passionate about our core values of Integrity, Quality, and Excellence, and we are committed to providing our clients with innovative solutions that address their needs and surpass their expectations.

**Department:** Construction Services

**Reports To:** Manager – Construction Services

**Job Location:** Pittsburgh, PA

**Hours/Week:** Full-time and/or Part-time

**Salary:** \$65,520 - \$68,640 USD/Year

### Company Benefits

- Roth & Traditional 401(k)
  - All fees paid for by Mackin
- Immediate Vesting of Funds
- Company Paid Basic Life Insurance
- 8 Company Paid Holidays
- Company Match of 50% of 1<sup>st</sup> 5%, then 25% of next 10%
  - An equivalent 5% match when you contribute 15%
- Medical, Dental, & Vision Insurances
- Paid Time Off (i.e., Vacation & Sick Leave)
- Educational Assistance, Disability Insurances, and more

**FLSA Status:** Non-Exempt (Hourly)

**Prepared By:** Director – Human Resources & Administration

**Prepared/Revised:** February 14, 2022

**Approved By:** Vice President – Strategic Planning

**Approved Date:** February 14, 2022

## Position Summary

Mackin is currently looking for a Transportation Construction Inspection Supervisor (TCIS – level 1 or 2) for a bridge project in Indiana County on a PennDOT District 10 project.

This position is responsible for performing roadway and bridge construction inspection and monitoring contractor progress with respect to contract requirements, plans, specifications, and cost estimates. This position requires the ability to work with a team, as well as independently, on various types of inspection projects at various stages.

## Essential Duties & Responsibilities

### Essential Duties

- Inspect any or all phases of roadway and bridge construction such as grade elevations, stakeout of roadway and structures, bituminous or concrete, drainage, signing, traffic control devices, and excavation
- Make mathematical calculations, interpret plans, draw sketches, measure and calculate quantities, review quality control plans, check material certifications, and prepare reports
- Perform project documentation, such as recording measured quantities and test results
- Provide assistance for or perform quality assurance testing of materials and inspection of work on roadway and bridge construction projects
- Witness or perform tests relating to aggregate gradations, compaction control, specific gravities, absorptions, air entrainment, slump, and so on that may occur at a concrete or bituminous plant, on a construction project or at an aggregate source
- Assure that materials conform to contract agreements, design criteria, and required plans and specifications
- Prepare material samples for shipping and prepare documentation to support materials sampling and testing
- Determine geological and engineering properties of soils and rock encountered during core boring operations, determine moisture content, consistency of density of soil samples, classify and determine top and bottom elevations of soil samples from core borings
- Determine rock type, rock quality designation, strength of rock, degree of brokenness and weathering characteristics of rock core samples
- Ensure that core samples are handled properly and are boxed in accordance with Department specifications
- Maintain engineer's log of activities
- Review and prepare documentation to authorize payments to contractors and consultants
- Operate nuclear gauge and perform compaction control inspection on projects
- Inspect construction work and make decisions as to whether the operations and workmanship is in compliance with construction contract, plans, specifications, standards, quality control plans, traffic control plans, erosion and sedimentation plans, and other environmental regulations
- Inspect and test construction materials and make decisions as to whether they are in compliance with contractual requirements and specifications
- Check grades, elevations, alignments, thicknesses, application rates, etc. to determine compliance with plans, contract and specifications

### Non-Essential Duties

- Support internal departments with inspection 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  
(May direct other consultant inspectors assigned to the project).

## System or Specialized Knowledge

**To perform this job successfully, an individual might have knowledge of:**

- Electronic Construction Management System (ECMS) and PennDOT Project Collaboration Center (PPCC)
- Familiarity with all PennDOT design and construction publications
- Deltek Ajera
- Microsoft Office – Word, Excel, and Outlook
- Computers, Printers, and Electronics

## Education and/or Experience

### Preferred Qualifications

**Years of Experience:**

Minimum of 1 year experience as a TCI-3 or higher, and possesses the appropriate combination of education/training and experience on PennDOT or PA Turnpike projects to qualify as TCIS

**Education:**

High School Diploma required, AS or BS Degrees desired

**Degree or Formal Training:**

Civil Engineering, Construction Management, or a related discipline

**License, Certificate or Registration:**

Having any of the following are desired: EIT/FE, PE, NICET Highway Construction, NECEPT Bituminous, PennDOT Concrete/ACI, CDS NextGen, Nuclear Densometer (Nuke Gage)

## 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 taste or smell; and stoop, kneel, crouch, or crawl. The employee must occasionally lift and/or move up to 50 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 frequently require the ability and availability to work extra hours in the evenings or night shifts associated with the demands of our business. Travel will frequently 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 field environment setting.

### Field Environment

As it will be very frequent, 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: \_\_\_\_\_