

## Who we are:

Transportation is so basic that many of us overlook its overwhelming importance in our daily lives. Practically everything used in our homes, offices, or schools across Tennessee – from furniture to food items to clothing – requires a large and complex transportation network. The Tennessee Department of Transportation provides citizens of Tennessee and travelers with one of the best transportation systems in the country. TDOT is a multimodal agency with responsibilities in building and maintaining roads, aviation, public transit, waterways, railroads, cycling and walking. Our involvement ranges from airport improvements to funding transit buses to planning for river ports. The Department of Transportation has approximately 3,500 employees with four statewide region facilities in Knoxville, Chattanooga, Nashville, and Jackson.



### Construction Engineering Technician

District Operations – Construction

\$43,140 - \$53,628 annually

#### **Job Overview**

The Construction Engineering Technician plays a crucial role in providing expertise and independent oversight to both Region Operations and construction, engineering, and inspection (CEI) personnel for the full spectrum of inspection required during TDOT infrastructure construction projects. This position must have a solid understanding of the methods and materials contractors are allowed to use in the construction of transportation infrastructure. The Construction Engineering Technician works to identify potential construction challenges, reduce variability in construction operations, and ensure the consistent delivery of TDOT's Work Program.

The Construction Engineering Technician ensures compliance with TDOT specifications, policies, technical guidance, and procedures during construction activities. This position must effectively work on project sites with contractors, subcontractors, utilities, and suppliers, while also contributing to the training and mentoring of junior staff. The Construction Engineering Technician supports quality management efforts by assisting with field inspections, material testing, and project documentation to meet federal and TDOT requirements, while also ensuring the health, safety, and welfare of TDOT employees and the public.

#### **Essential Job Responsibilities of the Engineering Technician 1, 2, and 3 include:**

Assist in resolving project issues from the perspectives of TDOT Construction, contractors, suppliers, and producers. Collaborate with Project Teams to ensure the efficient and timely delivery of TDOT's Work Program.

Oversee and conduct comprehensive field and laboratory testing of construction materials, including soil, asphalt, concrete, and aggregates, while verifying the suitability of samples and ensuring all test results comply with project specifications, state standards, and quality assurance protocols.

Maintain accurate records of daily project activities, including work progress, material usage, and contractor performance. Prepare detailed inspection reports, test results, and other required documentation to support effective project oversight and compliance with standards.

Integrate Quality Management into all deliverables to help ensure all independent project oversight is timely, accurate, and sufficient to meet both federal and TDOT requirements. Independently produce data, reports, and technical drawings ensuring consistency, quality, and desired accuracy.

Remain current on the broad array of construction methods, procedures and practices, and the appropriate specifications and contractual requirements. Remain current on the broad array of materials incorporated into TDOT transportation infrastructure projects.

Perform preventive maintenance and calibration of assigned lab and mobile testing equipment to ensure accurate functionality and adherence to project specifications. Provide guidance and technical support to field teams on the proper use and operation of testing and inspection equipment, promoting consistent and reliable application of testing standards across projects.

Safely operate both heavy and light-duty vehicles and equipment to support construction, maintenance, and roadway safety activities, including removing snow and ice from highways and bridges. Perform routine maintenance tasks, such as checking fluid levels, greasing service points, maintaining tire pressure, and conducting operator-level repairs to ensure equipment operates safely and efficiently.

Actively participate in the Construction Pro-Path Program to enhance professional knowledge and skills, ensuring alignment with industry standards and best practices. Pursue and maintain required certifications and training annually in areas relevant to the completion of assigned duties, such as material testing, field inspections, project documentation, and quality assurance. This commitment to continuous learning supports the employee's ability to perform tasks effectively while contributing to TDOT's mission of delivering safe, reliable, and high-quality transportation infrastructure.

Provide exceptional customer service to internal and external project stakeholders by facilitating the sharing of acquired knowledge. Ensure project site testing data is easily accessible and organized. Assist Project Teams and stakeholders in understanding oversight requirements by exercising effective listening skills and communicating effectively.

**Additional Job Responsibilities of the Engineering Technician 2 and 3 include:**

Monitor construction activities to ensure compliance with TDOT's Quality Assurance Process and inspect traffic control setups and erosion control measures to verify adherence to safety and environmental standards.

**Additional Job Responsibilities of the Engineering Technician 3 include:**

Provide on-the-job training, mentoring, and guidance to junior technicians and field personnel to ensure the consistent application of inspection and testing standards, in accordance with the Construction Proficiency Program. Assist in maintaining training schedules, tracking certifications, and facilitating employee development to support learning and professional growth.

Identify and report potential construction challenges, providing recommendations to mitigate risks and minimize project delays. Work with project teams to resolve field issues based on construction best practices, specifications, and equipment needs.

Perform comprehensive final inspections to ensure project completion aligns with approved plans, specifications, and quality standards. Document and report any discrepancies, deficiencies, or required corrections to facilitate timely resolution and final acceptance.

**Qualifications**

**TDOT Engineering Technician 1:**

- High School Education or equivalent

#### **TDOT Engineering Technician 2:**

- High School Education or equivalent
- Completion of the Proficiency Requirements for the Engineering Technician 1 level.

#### **TDOT Engineering Technician 3:**

- High School Education or equivalent
- Completion of the Proficiency Requirements for the Engineering Technician 1 and 2 levels.

**The Tennessee Department of Transportation reserves the sole right in determining the level of position based on the applicant's work experience, education, skill level, and all other appropriate factors, and based on business need. Within 6 months of hire, employees must demonstrate successful mastery of corresponding work competencies and skill blocks of the Technician Proficiency Program for the level of technician to which they were hired. If skills and competencies are not met during that period, the employee can be demoted to the level of technician for which he/she is qualified.**

#### **Necessary Special Qualifications**

- Possess and maintain a Class D driver's license valid to operate vehicles in the State of Tennessee.
- Possess and maintain, or obtain at their own expense and within 11 months of hire or promotion to this classification, a Class A Commercial Driver's License with an N endorsement (Code 52 restriction is allowable) that is valid in the State of Tennessee.

#### **Ideal Candidate**

The Construction Engineering Technician is a skilled and detail-oriented professional with expertise in construction methods, materials, and specifications for transportation infrastructure projects. They provide independent oversight to ensure compliance with TDOT standards, conduct accurate field and laboratory testing, and maintain comprehensive project documentation. Collaborative and proactive, they mentor junior staff, support quality management initiatives, and integrate safety and environmental standards into all deliverables. This position excels at identifying and resolving construction challenges, offering recommendations to enhance project outcomes, and providing feedback to improve design elements and processes. With a commitment to exceptional customer service and effective communication, they play a vital role in delivering high-quality projects and ensuring the success of TDOT's Work Program.