

 <b>JOB DESCRIPTION</b>	<b>DEPARTMENT: ENGINEERING</b> <b>OCCUPATIONAL GROUP: AFSCME</b>			
	<b>TITLE:</b> <b>Engineering Technician – Permits</b>	FLSA STATUS Non-Exempt	PAY GRADE 5/6/7	APPROVAL DATE 10/20/2017

### SUMMARY

An employee in this position oversees a variety of quality control inspection activities, participates in review of plans and permit applications in accordance with Washtenaw County Road Commission procedures and regulations and Michigan Department of Transportation specifications as related to permit activities and the construction of roadways and bridges within Washtenaw County, Michigan.

### JOB CLASSIFICATIONS

There are three (3) classifications in this position. Employees generally progress through this series of classifications based on satisfactory performance and possession of the required experience.

**Technician I (Pay Grade 5)** – This is the entry level. The employee works in a training capacity performing a range of transportation construction quality control inspection assignments, review of plans and permits while receiving close supervision. Other work may include working in a training capacity performing a variety of commercial vehicle inspection and enforcement activities.

**Technician II (Pay Grade 6)** – This is the intermediate level. The employee works in a developing capacity with increased responsibility for performing a range of transportation construction quality control inspection assignments, review of plans and permit applications. Other work may include an increased responsibility for performing commercial vehicle inspection and enforcement activities.

**Technician III (Pay Grade 7)** – This is the experienced level. The employee performs a full range of transportation construction quality control inspection assignments, review of plans and permit applications using independent judgment in making decisions in order to apply guidelines with considerable latitude to a variety of work situations. Other work may include a full range of commercial vehicle inspection and enforcement activities and imparting knowledge of job responsibilities, including applicable procedures, specifications and documentation requirements to lower-level technicians.

### SUPERVISION RECEIVED

Reports to and works under the direct supervision of the Assistant Director of Engineering.

### SUPERVISION EXERCISED

This position has no supervisory responsibilities.

## **ESSENTIAL DUTIES AND FUNCTIONS**

The job duties listed are typical examples of the work performed by an employee in this position. These examples do not include all of the duties which the employee may be expected to perform. Individuals seeking advancement may be given opportunities to perform at a higher level of responsibility to assess the individual's potential for advancement.

1. Ensures that permit activities and public road development conform to Road Commission procedures and regulations, approved plans, specifications and permits.
2. Performs field reviews and conducts sight distance studies.
3. Reviews permit applications and plans and prepares permits for issuance.
4. Prepares correspondences and reports related to work.
5. Provides appropriate and timely responses in areas of responsibility including permit applications, requests for services and inquiries from external contacts.
6. Meets with the public, contractors, representatives of private industry, local organizations, governmental agencies and internal staff to discuss permit activities and/or proposed road construction activities.
7. Responds to questions and complaints from local officials, contractors, applicants and citizens.
8. Inspects and ensures that transportation construction activities, including the construction of roadways and bridge structures, conform to Road Commission and/or Michigan Department of Transportation procedures and regulations, approved plans and specifications.
9. Considers project budgetary constraints; facilitates the efficient completion of tasks and site work; evaluates the cost of alternative construction techniques in providing suggested avenues of resolving jobsite complications.
10. Performs recordkeeping duties including but not limited to the drafting and review of daily inspection reports, site logs, sketches and the computation of areas and volumes, and sets up and maintains engineering file systems to facilitate the timely processing of contractor payments and to provide accurate documentation to ensure compliance with federal and/or state funding requirements.
11. Reviews and prepares transportation construction plans and specifications, contract documents and estimates.
12. Prepares correspondence as necessary to document and facilitate the completion of tasks.

13. Inspects utility construction as related to transportation construction activities.
14. Assists the project engineer/manager with the effective scheduling of construction project personnel, including but not limited to contractor, surveying and testing personnel, to facilitate the timely completion of jobsite tasks.
15. Provides appropriate and timely written and/or verbal response in areas of responsibility, responding to the inquiries and/or concerns of project stakeholders, including but not limited to Road Commission staff, governmental representatives, contractors, project consultants, utility owners, business owners, residents and motorists.
16. Attends meetings with project stakeholders to review, discuss and/or resolve issues related to transportation construction activities.
17. Analyzes and interprets laboratory and field data from investigations.
18. Effectively utilizes Road Commission equipment, including but not limited to surveying and measurement instruments, office supplies, personal computers, jobsite office trailers and assigned vehicles in a responsible and appropriate manner.
19. Inspects commercial vehicles for proper tax licenses, permits, registrations, authorities, vehicle safety equipment and requirements, driver licenses, medical certificates, duty state requirements and other driver qualifications.
20. Inspects commercial vehicles for mechanical safety to insure compliance with established state and federal laws, rules and regulations.
21. Weighs commercial vehicles to determine weight and issues violation citations on overweight, improperly loaded or over-dimension vehicles.
22. Participates in in-service training programs for commercial vehicle enforcement.
23. Examines freight bills, bills of lading, manifests, leases and other required documents to determine illegal moves of commodities of regulated carriers.
24. Inspects commercial vehicles carrying hazardous material to enforce procedures, rules and regulations for proper hauling.
25. Enforces state laws relative to weight, dimensions, registration and safety of commercial vehicles.
26. Operates a patrol vehicle and stops commercial vehicles to enforce procedures and regulations of the Road Commission; as well as pertinent state laws in the Michigan Vehicle Code.
27. Perform other duties as assigned.

## **EDUCATION**

Possession of an Associate's degree in Civil Engineering Technology, Construction Technology, Surveying Technology, or its equivalent.

## **EXPERIENCE**

Technician I – No specific type or amount of experience is required.

Technician II – A minimum of three years' experience as a Technician I or equivalent required; performing technical quality control inspection activities, review of plans and permit applications related to permit activities. Additional experience may include performing commercial vehicle inspection and enforcement activities.

Technician III – A minimum of five years' experience as a Technician II or equivalent required; performing technical quality control inspection activities, review of plans, review of permit applications and related documents. Additional experience may include performing commercial vehicle inspection and enforcement activities.

## **OTHER REQUIREMENTS**

Possession of a valid Michigan Driver's License.

The following certifications may be required and/or preferred, depending upon the specific assignments to which an employee is assigned at a given time:

- MDOT Density Technology
- MDOT HMA Paving or HMA Paving Operations Michigan Concrete Field Testing – Level 1 (MCA or MCPA)
- Michigan Certified Aggregate Technician
- Soil Erosion and Sedimentation Control
- Storm Water Operator
- Certification training for Weighmaster activities

## **WORKING CONDITIONS**

Duties require sufficient mobility to work in a normal office setting and use standard office equipment including a computer, vision to read printed materials and a computer screen and hearing and speech sufficient to communicate in person or over the telephone. Duties may require employee to exert up to 50 pounds of force occasionally, or a negligible amount of force frequently to lift, carry, push, pull or otherwise move objects.

Construction site duties frequently necessitate exposure to weather conditions including high and low temperatures, rain and snow showers, and resultant jobsite conditions including dirt, dust as well as hazardous working conditions (working in traffic and on construction sites). Often duties will include standing for long periods of time and walking over rough terrain of construction sites.

## **KNOWLEDGE, SKILLS AND ABILITIES**

All of the following, qualifications, knowledge, skills, and abilities (KSA's) are essential. An employee in this class, upon appointment, should have the equivalent of the following:

**Knowledge** of terminology used in engineering, with particular focus on the terminology employed in transportation construction activities and commercial vehicle transportation.

**Knowledge** of the principles and practices of road, drainage and utility construction.

**Knowledge** of the equipment, testing and investigative methods and laboratory procedures related to the field of transportation engineering.

**Knowledge** of source documents such as proposals, plans, specifications, standard plans, supplements, memorandums and manuals.

**Knowledge** of mathematics including algebra, geometry and trigonometry.

**Knowledge** of proper use of survey equipment, grade and line, survey accuracy requirements, documentation requirements and field notes requirements.

**Knowledge** of the proper use of a variety of testing equipment used in transportation construction.

**Knowledge** of personal and construction safety practices on roadway construction projects.

**Knowledge** of state and federal laws related to commercial vehicle operations and the trucking industry.

**Knowledge** of procedures, rules and regulations established by the Road Commission.

**Knowledge** of inspection commercial vehicle inspection techniques and procedures.

**Ability** to read and interpret plans and drawings.

**Ability** to compute areas and volumes.

**Ability** to carry equipment and materials; walk about rough terrain of construction projects and stand for long periods of time.

**Ability** to inspect selective clearing and topsoil removal.

**Ability** to inspect aggregate yield, shaping, placing and compacting.

**Ability** to inspect PCC forming, density, joint sealing and finishing, concrete curb and gutter, HMA surfacing and shoulders.

**Ability** to inspect traffic control devices placement including signs, barricades and pavement markings.

**Ability** to inspect landscaping, seeding, sodding, slopes, soil erosion and sedimentation control and ditches.

**Ability** to inspect utilities.

**Ability** to inspect and identify project safety requirements.

**Ability** to oversee work in progress.

**Ability** to communicate effectively.

**Ability** to maintain favorable public relations.

**Ability** to use personal computers.

**Ability** to maintain records and prepare reports.

**Ability** to work effectively in a stressful environment.

**Ability** to plan and organize work activity effectively.

**Ability** to place and remove 50-pound portable scales into and from the assigned patrol vehicle and to carry and relocate them as required.

**Ability** to understand and apply complex written laws, rules and regulations relative to the work.

**Ability** to understand and apply the details of plans, specifications and related documents relative to the work.