

**State of Michigan
Civil Service Commission**
Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code 1. TRNSTCHAB44R

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.	
2. Employee's Name (Last, First, M.I.)	8. Department/Agency TRANSPORTATION CENTRAL OFFICE
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Highway Operations
4. Civil Service Position Code Description TRANSPORTATION TECHNICIAN-A	10. Division Metro Region
5. Working Title (What the agency calls the position) Area Density Specialist	11. Section Construction Field Services
6. Name and Position Code Description of Direct Supervisor PUNJABI, ASHOK; ENGINEER MANAGER LICENSED-3	12. Unit Metro Region Soils & Materials
7. Name and Position Code Description of Second Level Supervisor MUELLER, ERIC; ENGINEER MANAGER LICENSED-4	13. Work Location (City and Address)/Hours of Work 35414 Mound Rd, Sterling Heights, MI 48310 / M-F 7:30am - 4:30pm (hours & days may vary)
14. General Summary of Function/Purpose of Position	
<p>This position serves as the recognized resource Density Technician responsible for the Nuclear Density and Radiation Safety program in the Metro Region. Duties include overseeing the program, conducting Independent Assurance Testing (IAT) and training staff to follow proper procedures for the use, storage and maintenance of nuclear gauges.</p> <p>This position requires possession of a valid driver's license to perform field reviews, testing and inspections.</p>	

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary: **Percentage: 50**

Serve as the recognized resource Density Technician. Oversee the Nuclear Density and Radiation Safety program in the Metro Region.

This duty requires possession of a valid driver's license to perform field reviews and inspections.

Individual tasks related to the duty:

- Provide guidance to density inspectors, project engineers, local highway agencies and contractors regarding density testing requirements.
- Troubleshoot density related field problems and provide recommendations.
- Review field density reports to evaluate proper report documentation and test frequency.
- Respond to nuclear gauge accidents and ensure appropriate notifications are made in accordance with the Nuclear Regulatory Commission (NRC) requirements.
- Perform storage cabinet survey inspections and provide findings.
- Assist with storage cabinet authorization.

Duty 2

General Summary: **Percentage: 25**

Conduct IAT.

This duty requires possession of a valid driver's license to perform testing.

Individual tasks related to the duty:

- Serve as point person responsible for conducting density IATs. Verify procedures and equipment are within specifications.
- Conduct concrete, aggregate and Hot Mix Asphalt (HMA) sampling IATs as needed.
- Schedule and ensure IATs for workers conducting work in Metro Region are completed as needed for all work types.
- Utilize AASHTOWare to enter in IAT documentation.
- Travel extensively throughout the Region to conduct IATs and monitor nuclear gauge usage.

Duty 3

General Summary: **Percentage: 10**

Conduct and assist with density testing and certification training sessions. Annually conduct Regional Density and Nuclear Safety Training sessions.

Individual tasks related to the duty:

- Train density testers in proper nuclear gauge usage, storage and transportation.
- Coordinate with instructors or examiners to schedule training sessions.
- Ensure staff is aware of upcoming training sessions.
- Assist other instructors with certification exam test-out.

Duty 4

General Summary: **Percentage: 10**

Responsible for annual calibration, maintenance, replacement and distribution of all density testing equipment within the Region.

Individual tasks related to the duty:

- Conduct routine maintenance of nuclear density gauges including cleaning, applying lubrication and leak testing.
- Ensure additional nuclear density gauge maintenance is completed by Lansing staff or service providers.
- Maintain density kits, scale and speedy moisture meters.
- Transport nuclear gauges as needed.

Duty 5

General Summary: **Percentage: 5**

Other duties as assigned.

Individual tasks related to the duty:

- Stay current on density control specifications and guidelines.
- Maintain strong relationship with Lansing experts through continuous communication and collaboration.
- Assist other work areas within the Metro Region lab as requested.
- Serve on various business teams or research panels.
- Other duties as assigned.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Nuclear accident response decisions - project staff. Setting priorities. Equipment Maintenance.

17. Describe the types of decisions that require the supervisor's review.

Overtime usage. Procedural changes. Testing and/or sampling outside of specification guidelines.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Work involves traversing aggregate stockpiles and/or uneven terrain, transporting materials/items up to 60 lbs, remaining in a stationary position for extended periods of time, reaching/stretching to obtain samples, mixing/stirring samples and collecting samples from different positions in all weather conditions. Exposure to cement/fly ash dust, soil dust, heat, heavy equipment, high speed traffic, low level radiation sources and hazardous solvents. Position requires possession of a valid driver's license. Position may require availability outside normal working hours based on operational needs.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

N	Complete and sign service ratings.	N	Assign work.
N	Provide formal written counseling.	N	Approve work.
N	Approve leave requests.	N	Review work.
N	Approve time and attendance.	N	Provide guidance on work methods.
N	Orally reprimand.	N	Train employees in the work.

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes

23. What are the essential functions of this position?

This position serves as the recognized resource Density Technician responsible for the Nuclear Density and Radiation Safety program in the Metro Region. Duties include overseeing the program, conducting IAT and training staff to follow proper procedures for the use, storage and maintenance of nuclear gauges.

This position requires possession of a valid driver's license to perform field reviews, testing and inspections.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

Updated PD to reflect current duties.

25. What is the function of the work area and how does this position fit into that function?

The function of the work unit is to maintain compliance with Michigan Department of Transportation (MDOT) specifications. The Density Technician monitors and maintains regional density equipment and responds to MDOT nuclear density gauge accidents and incidents in accordance to NRC requirements.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of an Associate's degree in concrete technology, civil technology, construction technology, surveying technology, construction management, mathematics, or computer science.

EXPERIENCE:

Transportation Technician 11
 Three years of experience equivalent to a Transportation Technician, including one year equivalent to a Transportation Technician E10.

Alternate Education and Experience

Transportation Technician 8 - 12
 Possession of a Bachelor's degree or higher in an Applied Science or Science with 16 semester hours (24 term) credits in job specific or related course work qualifies for the Transportation Technician E10 level.

OR

Completion of 60 semester (90 term) credits including 24 semester (36 term) credits in any combination of course work in the following areas: structures, materials, soils, hydrology, surveying, design, drafting, bituminous, concrete, aggregate, chemistry, physics, geology, environmental science, computer science, highway or traffic technology, construction management, engineering, or mathematics may be substituted for the associate's degree.

OR

Four years of technician level experience consisting of quality control inspections, drafting, materials and testing, surveying, or traffic may be substituted for the Associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and one year of technician level field experience may be substituted for the associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and three years experience equivalent to a Transportation Maintenance Worker 9 may be substituted for the associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and two years experience equivalent to an Engineering Assistant may be substituted for the associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and completion of 16 semester (24 term) credits in any combination of course work in the following areas: structures, materials, soils, hydrology, surveying, design, drafting, bituminous, concrete, aggregate, chemistry, physics, geology, environmental science, computer science, highway or traffic technology, construction management, engineering, or mathematics may be substituted for the Associate's degree.

KNOWLEDGE, SKILLS, AND ABILITIES:

Ability to:

- Communicate effectively.
- Maintain records.
- Direct and work with people.
- Handle multiple assignments and constantly changing priorities.

Knowledge of:

- The application and enforcement of Highway Standards, Specifications and Construction methods.

CERTIFICATES, LICENSES, REGISTRATIONS:

- Possession of a valid driver's license is required and must maintain throughout employment in the position.
- Position requires the following certifications and must maintain throughout employment in the position:
 - Michigan Concrete Technician Level 1
 - Michigan Aggregate Inspector Level 1
 - Density Technology
 - Nuclear Density Safety
- Position requires the following certifications within 12 months from appointment into the position and must maintain throughout employment in the position:
 - 40 hours of Radiation Safety Officer Training
 - Concrete Strength Testing

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

None

I certify that the entries on these pages are accurate and complete.

ASHLEY PARSONS

2/4/2026

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date