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|  |  | |  |  | | --- | --- | | |  | | --- | | 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)** | |  | Bureau of Development | | **4. Civil Service Position Code Description** | **10. Division** | | Transportation Engineer-E | Design Division | | **5. Working Title (What the agency calls the position)** | **11. Section** | | Geometric Traffic Engineer | Design Production | | **6. Name and Position Code Description of Direct Supervisor** | **12. Unit** | | GEDAOUN, IMAD R; ENGINEER MANAGER LICENSED-3 | Geometrics Unit | | **7. Name and Position Code Description of Second Level Supervisor** | **13. Work Location (City and Address)/Hours of Work** | | MILLER, NATHAN J; STATE ADMINISTRATIVE MANAGER-1 | 425 W. Ottawa Street, Lansing, MI 48933 / 7:30 a.m. - 4:30 p.m. M-F (Hours may vary) | | |  | | |  |
|  | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  | |  | | --- | | **14. General Summary of Function/Purpose of Position** | |  |  | |  |  |  |  | | |  | | --- | | Provide assistance to managers and senior level engineers in the evaluation and review of existing and proposed roadside barriers.  Perform capacity analyses as necessary to develop recommendations pertaining to the geometrics and operational characteristics of intersections, interchanges, and roadways.  This position will work under close supervision of the Supervising Engineer.  The purpose is to provide for the safest, most cost-effective, efficient, maintainable and functionally operational roadway design for motor vehicle operators on the Michigan state trunkline system. | | | |  | |  |  |  |  | | | |  |

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|  |  |  |  | |  |  |  | | --- | --- | --- | | |  | | --- | | **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:** | **45** | | Review of plans in all stages of the design process. This review will consider capacity, safety and conformance of AASHTO and departmental policies, practices, and guidelines. | | | | **Individual tasks related to the duty:** |  |  | | * Prepare engineering calculations and review geometric drawings of proposed designs. * Review plans and apply standard guides as requested by the Design Division. * Compile and analyze engineering data and convey recommendations to project managers for approval. * Provide technical assistance related to roadside barriers and roadside safety. * Participate in project scoping to assure traffic and safety enhancements are programmed into all department projects. | | | | **Duty 2** | | | | **General Summary:** | **Percentage:** | **40** | | Provide traffic engineering assistance in the department’s project development process. | | | | **Individual tasks related to the duty:** |  |  | | * Develop and make recommendations on alternatives for roadway improvements. * Perform data analysis of rural and urban intersections including signal systems on urban arterials. * Attend meetings with engineers and task group representatives to gain knowledge of troubleshooting and identifying preliminary deficiencies in the conceptual stage. | | | | **Duty 3** | | | | **General Summary:** | **Percentage:** | **10** | | Provide traffic engineering assistance to the department’s safety improvement projects. | | | | **Individual tasks related to the duty:** |  |  | | * Propose geometric designs and improvements that will minimize crash potential and improve capacity and operations at spot locations as requested. * Assist engineers with trunkline corridor investigations that may require geometric improvements. | | | | **Duty 4** | | | | **General Summary:** | **Percentage:** | **5** | | Provide assistance with congestion studies pertaining to geometric improvements. | | | | **Individual tasks related to the duty:** |  |  | | * Perform review of intersection sight distance, driveway spacing, left or right turn lanes, horizontal and vertical alignment, and ensure compliance with AASHTO and department guidelines. * Assist engineers with the review of site plans for major developments. * Review proposed sales of excess property. * Work in coordination with Region and Transportation Service Center (TSC )offices and the Bureau of Transportation Planning to address congestion affecting state trunklines. | | | | | | | | | | |  |
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|  |  |  |  | |  |  | | --- | --- | |  |  | |  | |  | | --- | | **16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.** | | |  |  | | |  | | --- | | The decisions made in this position use a combination of Michigan Manual of Uniform Traffic Control Devices (MMUTCD), existing department guidelines, engineering calculations, AASHTO guidelines, Highway Capacity Manual, and engineering judgment. | | | | | | | | |  |
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|  |  |  |  |  |  | |  |  | | --- | --- | |  |  | |  | |  | | --- | | **17. Describe the types of decisions that require the supervisor's review.** | | |  |  | | |  | | --- | | When accepted policies or procedures are not applicable to current design requirements.  Supervisor is asked for guidance on an as-needed basis. | | | | | | |  |
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|  |  |  | |  |  |  | | --- | --- | --- | |  | |  | | --- | | **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.** | | |  |  | | |  | | --- | | Requires the ability to perform outdoor work under heavy traffic conditions, exposure to weather and rough terrain.  Requires walking on side slopes and climbing over roadside barriers.  Ability to drive and travel statewide. | | | | | | | | | |  |
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|  |  |  |  |  | |  |  |  |  | | --- | --- | --- | --- | | |  | | --- | | **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** | | |  | |  |  |  | |  | |  | | --- | |  | |  | |  |  |  | | | | | |  |
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|  | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | **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 | |  |  |  | |  | |  | | --- | | N | |  | |  | | --- | | Approve leave requests. | |  |  | |  | | --- | | Review work. | |  | |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  | |  | | --- | | N | |  | |  | | --- | | Approve time and attendance. | |  | |  | | --- | | N | |  | |  | | --- | | Provide guidance on work methods. | |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  | |  | | --- | | N | |  | |  | | --- | | Orally reprimand. | |  | |  | | --- | | N | |  | |  | | --- | | Train employees in the work. | |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | | | | | | | | | |  |
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|  | |  |  |  | | --- | --- | --- | | |  | | --- | | **22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?** | | | |  |  | |  | |  | | --- | | Yes | | | | | | | | | | |  |
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|  | |  |  |  | | --- | --- | --- | | |  | | --- | | **23. What are the essential functions of this position?** | | | |  |  | |  | |  | | --- | | Duty 1 and Duty 2. | | | | | | | | | | |  |
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|  |  |  | |  |  |  | | --- | --- | --- | | |  | | --- | | **24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.** | | | |  |  | |  | |  | | --- | |  | | | | | | | | |  |
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|  |  | |  |  |  | | --- | --- | --- | | |  | | --- | | **25. What is the function of the work area and how does this position fit into that function?** | | | |  |  | |  | |  | | --- | | This unit is responsible for ensuring that the most up-to-date traffic engineering and geometric design principles are applied to project planning and development to provide a safe and operational efficient trunkline system. This includes attending meetings and reviewing design plans. The individual in this position will be responsible for performing these duties under close supervision. | | | | | | | | | |  |
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|  |  | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | **26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.** | | | | | | |  | |  |  |  |  |  |  |  | | |  | | --- | | **EDUCATION:** | | |  |  |  |  |  | |  |  |  |  |  |  |  | | |  | | --- | | Possession of a bachelor of science degree in engineering. | | | | | | | | |  |  |  |  |  |  |  | | |  | | --- | | **EXPERIENCE:** | | |  |  |  |  |  | |  |  |  |  |  |  |  | | |  | | --- | | **Transportation Engineer 9** No specific type or amount is required.  **Transportation Engineer 10** One year of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer 9.  **Transportation Engineer P11** Two years of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer, including one year equivalent to a Transportation Engineer 10.  **Alternate Education and Experience**  **Transportation Engineer 9 - 12** Possession of a registered professional engineer license as required by the State of Michigan may be substituted for 6 months of experience at the Transportation Engineer 9-12 levels. This substitution may only be used once for any employee for qualification of appointment or early reclassification. | | | | | | | | |  |  |  |  |  |  |  | | |  | | --- | | **KNOWLEDGE, SKILLS, AND ABILITIES:** | | | |  |  |  |  | |  |  |  |  |  |  |  | | |  | | --- | | Knowledge and experience in the traffic engineering field.  Ability to communicate effectively and present ideas or positions to others.  Skills with written and verbal communications; the ability to make calculations; and read and interpret engineering plans, specifications, and technical reports are essential.  Ability to drive and travel statewide. | | | | | | | | |  |  |  |  |  |  |  | | |  | | --- | | **CERTIFICATES, LICENSES, REGISTRATIONS:** | | | | |  |  |  | |  |  |  |  |  |  |  | | |  | | --- | | Possession of a valid driver’s license. | | | | | | | | |  |  |  |  |  |  |  | |  | |  | | --- | | ***NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.*** | | | | |  |  | |  |  |  |  |  |  |  | | | | | | | | |  |
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|  |  | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  | |  | | --- | | ***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** | |  | |  |  |  |  |  | | | | | | | | |  |
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|  |  |  |  |  |  |  |  | |  | | --- | | **TO BE FILLED OUT BY APPOINTING AUTHORITY** | |  |  |
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|  |  |  |  |  |  |  | |  |  |  | | --- | --- | --- | |  |  |  | |  | |  | | --- | | **Indicate any exceptions or additions to the statements of employee or supervisors.** | |  | |  |  |  | |  | |  | | --- | | None | |  | |  |  |  | | | |  |
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