ENGINEERING TECHNICIAN

GENERAL STATEMENT OF DUTIES:

Assists and/or performs field surveys, project management, inspection, drafting, and design for municipal projects; acquires, prepares, and submits a variety of field operating data for program management and control of street right of way infrastructure, underground utilities and other asset management tasks, in support of regulatory and non-regulatory program requirements.

SUPERVISION RECEIVED:

This position reports to the Deputy Director of Public Services.

TYPICAL EXAMPLES OF WORK: An employee in this class may be called upon to do any or all of the following (these examples do not include all of the tasks which the employee may be expected to perform):

- Assists department staff to provide oversight and technical support for municipal projects such as city sidewalk restoration and street patch rehabilitation programs, to include preparation of scope of work specifications, construction plans, and contractor documents for contract bidding.
- Assists department staff with traffic control studies, using traffic counters to gather data for some 72 miles of streets of varying classification.
- Performs inspections for construction and repair of utilities and other infrastructure for compliance with plans and specifications.
- Performs construction management including organizing pre-construction meetings, reviewing submittals, generating change orders, approving pay applications, and preparing record drawings.
- Self manages, organizes, and coordinates the pass-through of asset management data from field crews and contractors to the appropriate departmental staff and/or database for recording and accounting.
- Assists city staff in the inspection and operation of the city's sanitary sewer collection system, storm water management, and water distribution system.
- Prepares reports on project activities, as required, to the Deputy Director of Public Services.
- Utilizes asset management and/or geodatabase filing systems to view/collect/edit data as required.
- Utilizes GPS locater equipment and field tablets and/or laptops to access and gather infrastructure data.
- Assists in managing Asset Management Programs under general supervision of the Deputy Director of Public Services.
- Assists with the preparation of Capital Improvement Plans (CIP) and budgets for municipal projects.
- Performs other work as apparent or as directed by the Deputy Director of Public Services.

DESIRABLE QUALIFICATIONS FOR EMPLOYMENT:

- Knowledge and skill in using Excel spreadsheets, Word software, and Access databases.

- Familiarity and/or working knowledge of GPS/GIS equipment and geodatabases.

- Familiarity and/or working knowledge of computerized drafting (AutoCAD) software and RoadSoft software.

- Familiar with public works practices as applied to street construction and maintenance, underground utilities, concrete, and the methods and use of appropriate materials and equipment.

- General knowledge of federal, state and local codes and ordinances relative to civil engineering and construction work.

- Comprehensive skill and knowledge in planning, scheduling and effectively communicating the directives of the Deputy Director of Public Services to personnel and public work contractors.

- Adaptive problem solving skills.

An employee in this classification shall have the equivalent of the following qualifications:

- Two-year vocational certification or Associates degree in civil engineering, engineering technician/technology, construction management, environmental science, geography, public or business administration. Appropriate relevant working experience may be substituted for educational requirements.

- Possess a State of Michigan S-4 Water Supply Certification or ability to obtain in 30 months from date of hire. Training paid for by employer.

- Valid Driver's License

- Effectively communicate, in both verbal and written form, engineering principles and practices relative to public works projects; to general work force, other technical agencies, and general public.

- Any of the following certifications is a plus, but not required:
    - Michigan Concrete Field Testing
    - MDOT Bituminous Paving or Bituminous Paving Operations
    - Michigan Certified Aggregate Technician
    - Soil Erosion and Sedimentation Control
    - Storm Water Certification

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 frequently required to walk, sit, talk, hear and traverse uneven terrain and enter excavations down to 15' depth. The employee is occasionally required to use hands to operate, finger, handle, or feel objects, tools, or controls; reach with hands and arms; and work in noisy, dusty, wet and unsanitary field conditions.

The employee may occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

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 office work environment is usually quiet in the office and noisy in the field.

Created September, 2019.
Modified October 2026.