



Job Title: Engineer I	Reports to: City Engineer
Department: Engineering	Job Grade: Non-Exempt
Revision Date: 12/04/2020	Fair Labor Standards Act (FLSA)

Position Summary

Under direct supervision of the City Engineer, performs a variety of paraprofessional engineering field and office duties. Typical assignments involve the following: GIS (Geographic Information System), computer aided drafting (CAD), construction inspection, basic engineering calculations and analysis, plan submittal coordination and review, reports and graph preparation, research, locating, and technical advice to the City staff, public and developers.

Essential Job Functions

- Assists in reviewing private project development plans for compliance with codes, regulations, standards, adequacy of applications for permits, and compliance with approved plans.
- Assists in the preparation of sanitary sewer, water, storm drainage, and street system maps, data bases, and comprehensive plans.
- Performs engineering duties related to construction and improvement of public works projects including research, design, estimates, field layouts, assisting in surveying, inspections, and sampling and testing.
- Assists in maintaining the engineering library and infrastructure records.
- Assists in project management for the construction of municipal public works projects.
- Reviews utility, excavation, construct and repair, and other permits as assigned. Assists with implementing and updating the City's permit program.
- Assists in coordinating the civil inspection work within the city construction projects and permitted work.
- Inspects streets, curb and gutter, sidewalk, storm pipe/outlets, water and sanitary lines, meters, hydrants, service lines and various structures throughout the City.
- Maintain a list of ongoing construction and permitted projects in the City; documents construction activities, issues and their resolution.
- Prepare, collect and organize inspection reports. Read and interpret construction plans, specifications and technical reports.
- Attend and participate in pre-construction and progress meetings, and monitor construction schedules and milestones.
- Meets with contractors, property owners, and others to resolve complaints and problems.
- Operate GPS and/or surveying equipment to locate existing facilities and infrastructure.
- Maintains the City's GIS Datasets by inputting pertinent information for existing and/or new physical features. Implements and designs new GIS Datasets.
- Prepares reports and graphics from the GIS software.



- Conducts field surveys and records measurements and other data for “as-built” plans when construction is completed.
- Assists in the training of other City personnel in public works design and construction techniques.
- Performs other duties and activities as assigned.

Requirements

- Engineering principals in the areas of transportation, fluid dynamics, hydrology and the civil design of municipal infrastructure will be necessary.
- Common engineering, surveying, and GIS software programs and equipment will be essential.
- ArcMap, ArcPro, GIS, AutoCAD and Microsoft Office equivalent to 6-months of working experience.
- Completion of a technical course, certification, or an acceptable combination of these is required.
- Developing and interpreting data.
- Standards and specifications of the City of Watford City, North Dakota Department of Health, North Dakota Department of Transportation, and the 10 States Standards for Water and Wastewater Facilities.

Judgment/Decision Making

- Apply engineering principals to resolve technical issues.
- Independent judgment on day-to-day work and decisions.
- Frequently challenged to solve complex problems while reviewing end results with supervisor.
- Ability to evaluate multiple solutions for economic, timing, and political constraints to determine the optimum choice.
- Make field decisions to resolve discrepancies between plans and field conditions.

Relation to Others

- May handle sensitive and/or complex information as supervisor allows.
- Assess and diffuse problem situations and requires influencing others to reach consensus and explores alternative and creative solutions.
- Work with contractors and equipment operators in a working environment to ensure the construction adheres to the approved plans and specifications while minimizing delays and interruptions to the project.
- Ability to represent the interests of the City and public safety in communication (both written and oral) when dealing with design professionals, developers, the general public or agency representatives.
- Works with the City staff and elected officials as requested to provide information and/or advice within specific time constraints.
- Offers suggestions to improve the activities of the department and the operation of the City in general. Exhibits a positive image and outlook when interacting with coworkers and/or the public. Serves as a positive role model for others.



Education/Experience

- Graduation from an ABET accredited, four-year college or university with a degree in civil engineering or a closely related field.
- Minimum of one year previous professional civil engineering experience in surveying, drafting, construction inspection, or related work.
- Any equivalent combination of education and experience.
- A valid driver's license or evidence of equivalent mobility is also required.

Preferred Certifications

- NDDOT Erosion and Sediment Control Certification
- NDDOT Asphalt Pavement Inspection Certification
- ATSSA Traffic Control Technician

Working Conditions/Physical Demands

- Physical demands include moderate physical activity that includes prolonged standing and/or walking.
- Ability to operate the City of Watford City vehicles, standard office equipment (computer, copier, plotter), GPS equipment, survey equipment.
- Work may require routine travel.
- Ability to lift 40 lbs. and to exert up to 20 pounds of force occasionally and/or a negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects, including the human body.
- The duties of this job usually require the employee to work approximately 75% of the time in outside conditions and 25% of the time in indoor conditions during the summer. During the winter the employee works approximately 25% of the time in outside conditions and 75% of the time in indoor conditions.

NOTE: This job description is not intended to be all-inclusive. Employee may perform other related duties as negotiated to meet the ongoing needs of the organization.

Some requirements in this job description may exclude individuals who pose a direct threat or significant risk to the health and safety of themselves or other employees.

All requirements are subject to modification to reasonably accommodate individuals with disabilities.

Requirements are representative of minimum levels of knowledge, skills, and experience required. To perform this job successfully, the worker must possess the abilities and aptitudes to perform each duty proficiently.

This document does not create an employment contract, implied or otherwise, other than an "at will" employment relationship. The City Administrator retains the discretion to add duties or change the duties of this position at any time.