CITY OF BELLINGHAM

JOB DESCRIPTION

JOB TITLE: **Utility Operations Engineer** **UNION:231**
SG:6
DEPARTMENT: **Public Works, Engineering** **CS:N**
FLSA:N
EEO4CODE:PR

JOB SUMMARY

Responsible for a variety of civil engineering duties for the City's water and sewer management systems. Develops engineering guidelines and standards and identifies, analyzes and resolves system issues and needs. Assists and facilitates new development planning and design to meet system demands through modeling and by reviewing plans and specifications. Completes complex technical reports and studies and reviews studies conducted by private engineers. Works directly with other engineers and provides guidance and technical information to the Department, consultants and general public in the field of water and sewer system management.

SUPERVISORY RELATIONSHIPS:

Reports to the Development Manager. Works under general supervision and the guidance of applicable local, State, and federal laws; City regulations, policies, and guidelines; and appropriate utility engineering standards.

ESSENTIAL FUNCTIONS OF THE JOB:

1. Assists Development Section in computer modeling for proper water and sewer main sizing for any new development and/or future development. Facilitates the design of water and sewer systems through modeling.

2. Creates, modifies and uses both the water and sewer hydraulic computer models. Updates both models with the addition of new pipes that are added to the systems each year and corrects modeling parameters as necessary.
3. Sits on the City's Public Utilities Replacement Committee (PURC). Analyzes each system using both the hydraulic models and rating criteria and develops a recommended list for the City's annual water and sewer replacement program.

4. Meets with consultants, engineers and citizens to answer questions or concerns regarding the City's water and sewer system. Assists in new development planning to determine the required pipe sizing that will meet system demands.

5. Assists in the review of technical memos completed by consultants and engineers for City projects related to the City's wastewater system and water systems.

6. Provides computer model fire flow information to consultants, engineers and sprinkler design companies to assist in the design of their projects. Reviews studies completed by private engineers and assures accuracy using hydraulic models.

7. Reviews construction plans submitted to the City and verifies that the water and sewer plans meet City standards and requirements and that water and sewer pipe sizing will meet system demand for future development on the system.

8. Coordinates and maintains data for annual fire flow testing program. Develops and implements annual unidirectional flushing program.

9. Maintains the City's eight permanent sewer flow meters with the collection of data along with coordinating the quarterly conformations to maintain the operation of those meters. Assists in locating sites for new meter locations.

10. Installs, maintains, operates and collects data on the operation of the City's four portable sewer flow meters.

11. Makes presentations at public hearings and meets with the public, as needed. Works with citizens who have questions or concerns regarding water and/or sewer issues.

12. Assists in calculating flows from water and sewer main breaks to determine the amount of water lost or the amount of sewage that spilled so that it can be reported to the appropriate agencies.

ADDITIONAL WORK PERFORMED:

1. Performs other related work of a similar nature and level.

PERFORMANCE REQUIREMENTS (Knowledge, Skills, and Abilities):

Knowledge of:
- Thorough knowledge of, and technical skills in, water and sewer engineering principles, practices, standards and methods.
- Working knowledge of applicable local, State, and federal laws and standards related to water and sewer systems management.
- Working knowledge of a variety of engineering-related computer equipment, hardware, and software applications, including spreadsheet, database and word processing applications.

Skill in:
- Strong oral and written communication skills to make public presentations, to communicate with confidence, tact, courtesy and good judgment and to prepare technical materials and reports.

Ability to:

- Read, interpret and apply a variety of written regulations, standards and instructions.

- Conduct studies and analyze various types of information related to water and sewer systems management.
- Establish and maintain effective working relationships with other employees, contractors and developers, community groups and the general public.
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Maintain consistent and punctual attendance.
- Physical ability to perform essential functions of the job, including:
  - Occasional lifting of moderately heavy objects up to fifty (50) lbs.;
  - Move between worksites;
  - Correctable visual acuity to read a computer screen and a typset page;
  - Fine finger dexterity to manipulate computer keyboard and mouse.

WORKING ENVIRONMENT:

Work is performed in an office setting with extensive work at a computer work station, and occasionally outdoors in all weather conditions. Outdoor working environments include working on City streets and right-of-ways in close proximity to roadway traffic, near noxious fumes, around heavy equipment and occasionally in confined spaces. Work may also require occasional lifting of moderately heavy objects up to 50 lbs. Some travel to attend professional meetings is expected.

EXPERIENCE AND TRAINING REQUIREMENTS:

- Bachelor's degree in civil or related engineering required. Additional coursework in hydraulics/hydrology or related areas preferred.
- Three years of experience in utility operations, creating and maintaining hydrology or other mathematical models, or other directly related experience.
- Engineer in training (E.I.T.) Certificate preferred.
- An equivalent combination of education and experience sufficient to provide the applicant with the knowledge, skills and ability to successfully perform the essential functions of the job will be considered.

NECESSARY SPECIAL REQUIREMENTS:

- Valid Washington State driver's license and good driving record required. Candidates must submit a three-year driving abstract prior to hire.
- Must be willing and able to work long and/or unusual hours in emergency situations.
- Employment contingent upon passing criminal convictions check and child and adult abuse records check.

PREPARED BY: G. Smyth
L. Klemanski

REVIEWED BY: _____
Ted Carlson

J. Bergner
2/08

Asst. Director of Public
Works, Operations

Richard E. McKinley
Director of Public Works