



# SENIOR ENGINEER SURFACE WATER & UTILITIES JOB DESCRIPTION

Job Title: **Senior Engineer**

Job Code: **EN115**

**Surface Water & Utilities**

Effective Date: **October 2007**

Pay Grade: **127**

Revision Date: **July 2022**

FLSA: **Non-Exempt**

## NATURE OF WORK

Under limited supervision, performs professional work of considerable difficulty in managing and coordinating design, engineering, development, flood control, stormwater drainage, river management, bridges, utilities, and infrastructure projects for the Public Works Department (PWD).

## ESSENTIAL FUNCTIONS:

*The following duties **ARE NOT** intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.*

- Directs and manages the overall operation and personnel of the County owned water and wastewater facilities (Utility) in compliance with all applicable federal, state, and local regulations; including but not limited to: writing and implementing Water System Plans, assisting in budget preparation and rate studies, and project management
- Ensures regulatory compliance by preparing water use efficiency reports, consumer confidence reports, discharge monitoring report, understands and reviews water treatment monthly report and water quality monitoring
- Writes grant applications, loan applications, permits, requests for proposals, scopes of work, and manages consultants for capital improvement projects
- Performs engineering calculations and analysis to troubleshoot Utility system issues
- Researches, develops, and implements policies and procedures, and projects for all Utilities
- Manages various ongoing water related projects in the County that may or may not be associated with the Utilities
- Reviews stormwater permits for compliance with the Lewis County Code
- Plans, coordinates, and manages PWD civil engineering projects to resolve surface water, stormwater, flood control, river management and utilities issues; analyzes issues, develops recommendations, and implements solutions.
- Reviews PWD project plans, specifications, estimates and development applications for conformance with original job instructions and accepted engineering practices;; monitors compliance with ecological and environmental laws and regulations.
- Assumes technical responsibility for completing and reviewing complete phases or major components of projects, including engineering reports, calculations, plans, contracts, and special assignments in accordance with PWD standards and codes.
- Coordinates the development of project design, plans and grant applications; coordinates the collection and compilation of field data for the design, layout, and construction of infrastructure projects.
- Makes technical engineering analysis of proposed projects; evaluates need for design changes and makes appropriate recommendations; reviews plans for conformity to uniform codes, local ordinances, and State and Federal regulations.

- Inspects and monitors assigned PWD projects; resolves discrepancies between field conditions and design plans; oversees contract administration, tracks and reports compliance and financial information; assures project deliverables meet scope, schedule, cost, and quality requirements.
- Supervises and trains assigned staff; prioritizes and assigns tasks and projects; provides direction and guidance in technical processes and procedures.
- Responds to questions from citizens and agencies.
- Coordinates projects, activities and information with other PWD staff, County Departments, contractors, and outside agencies.

**WORKING ENVIRONMENT / PHYSICAL DEMANDS:**

Work is performed in an office environment; work involves light physical demands and frequent use of a personal computer; occasional inspection work is performed outdoors at construction sites and County facilities. Occasional work within a Level 3 water treatment plant.

**DISTINGUISHING CHARACTERISTICS:**

This is the fully qualified senior level in the Registered Engineer job series. Incumbents independently perform the full scope of civil engineering duties, with extensive technical knowledge in surface water and utilities, and total responsibility for the completion of assigned civil engineering projects.

**EMPLOYMENT STANDARDS:**

Bachelor's Degree in Civil Engineering or related field; AND four (4) year's professional civil engineering experience.

A valid Driver's License is required. Must be registered as a Professional Engineer with Washington State Board of Registration.

**KNOWLEDGE AND SKILLS:**

**Knowledge of:**

- County policies and procedures.
- Fundamentals of civil engineering, mathematics and physics.
- Operations, services, regulatory requirements, and activities of water and wastewater utilities
- Principles of design, construction, and maintenance of public works projects, including water resources, hydraulics and hydrology, and land development.
- Methods, materials, and equipment used in public works construction, maintenance, and repair projects.
- Principles and practices of government project management and methods of evaluating construction contract compliance.
- Regional environmental protection and enforcement issues and regulatory agency evaluation processes.
- Contract and grant development and management principles.
- Computers and specialized engineering software applications and file management procedures.
- OSHA safety rules and regulations and safety standards applicable to hazardous environments.
- Principles of record keeping and records management.

**Skills in:**

- Analyzing technical issues, evaluating alternatives, and developing solutions based on findings.
- Managing staff, delegating tasks and authority, and assessing and prioritizing multiple tasks and projects.
- Interpreting and applying engineering standards and procedures, Federal and State rules and regulations, and County policies and procedures.
- Applying engineering theory and skills to solve PWD project issues and problems.
- Analyzing and evaluating technical engineering data and construction documentation.
- Checking designs, details, estimates, plans, and specifications of engineering projects.
- Reading, understanding, developing, manipulating, and analyzing engineering information in a variety of computerized data formats.

- Evaluating multidisciplinary environmental issues in a regulatory environment.
- Working effectively with others to develop solutions for public works issues.
- Operating a personal computer utilizing standard and specialized software.
- Establishing and maintaining effective working relationships with other County employees, public officials, and representatives from other local, State, and Federal agencies.
- Communicating effectively verbally and in writing.