SNOHOMISH COUNTY JOB DESCRIPTION

GEOLOGIST II

Spec No. 3036

BASIC FUNCTION

To perform mid-level geological, geotechnical, hydrogeological, environmental, and materials engineering studies using applicable geologic and engineering principles and methods. Assists Senior Geologists, manages smaller projects and project components in the areas of geological, geotechnical, hydrogeological, environmental, and materials engineering.

STATEMENT OF ESSENTIAL JOB DUTIES

1. Conducts, reviews or directs the preparation of geotechnical and geological studies and prepares technical reports for various types of projects.

2. Performs environmental studies to determine potential impacts of toxic and hazardous materials on county property or property being considered for purchase by the county.

3. Acts as a technical consultant for Public Works divisions and other Snohomish County departments within authorization and available resources in dealing with geological, geotechnical, hydrological, and environmental issues.

4. Reviews independent environmental and geotechnical consultant reports for Snohomish County projects to determine if scope has been met and to insure that the recommendations are consistent with site investigation findings, design calculations; project requirements; or county, state or federal regulations.

5. Develops scope of work and cost estimates for geotechnical, geological and environmental studies.

6. Plans field reconnaissance and subsurface explorations; and coordinates field drilling and backhoe test pit excavating operations.

7. Contacts utility locators, obtains authorization for entry on private property where appropriate from Right-of-Way agents, sets up and schedules personnel for field investigations; researches county files, publications, reference manuals, aerial photos, and other resources for background data on project site or surrounding area.

8. Acts as a coordinator between the county and WSDOE on Environmental Site Assessment issues.

9. Initiates laboratory testing programs; correlates and reduces data; performs calculations for the determination of engineering characteristics of materials and their impacts upon structures; performs calculations for slope stability, permeability, pavement design and retaining wall design; develops recommendations for project design and construction.

10. Assists with the preparation of contract specifications for geological, geotechnical, hydrogeological, and environmental work,
11. Assists with the review of construction plans to determine if contract specifications are complete and in agreement with previously prepared recommendations and calculations.

12. Analyzes and creates new construction and design technologies to improved methods and practices.

13. Coordinates and reviews the work of other geologists and technical staff as it relates to assigned project; provides training in related work as required.

14. Performs related duties as required.

MINIMUM QUALIFICATIONS

A Bachelor of Science degree in geology, engineering geology, hydrogeology or related geoscience field; AND two (2) years’ experience in engineering geology or geotechnical engineering. The criteria for appropriate education and experience is defined in WAC 308-15-040.

SPECIAL REQUIREMENTS

A Washington State Geologist-in-Training certificate is required.

A valid Washington State Driver's License is required for employment.

Certification of Completion of a 40-hour OSHA 29 CFR 1910.120 certified health and safety program may be required.

KNOWLEDGE AND ABILITIES

Knowledge of:

- principles, practices and techniques of geology relating to geological, geotechnical, hydrogeological, and environmental engineering
- federal, state and local laws, rules and regulations relating to geological, geotechnical, and environmental engineering methods and techniques used in conducting geotechnical studies and site assessments
- principles and practices of report writing, contract negotiation and contract administration
- literature, trends and developments in the areas of geological, geotechnical, and environmental engineering
- operations of environmental, geotechnical and material testing equipment
- engineering plans, specifications and drafting procedures
- word processing, spreadsheets, databases, GIS.
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• characteristics and properties of soils found in the Snohomish County area

Ability to:

• interpret and assess field data used for the design, construction and maintenance of road, bridge, trail, and other projects
• prepare engineering plans, specifications and estimates
• direct and evaluate the inspection and appraisal of the condition of soil and civil structures
• allocate and make effective use of available resources
• assess the relative advantages and disadvantages of alternative course of action
• gather, analyze, and evaluate a variety of data including statistical data
• read, interpret and apply federal, state and local laws, rules and regulations governing environmental and geotechnical practices in Washington State
• analyze and evaluate operations and take effective action to correct deficiencies and resolve problems
• establish and maintain effective working relationships with elected officials, department heads, associates, subordinates, representatives of other agencies and with the general public
• communicate effectively, both orally and in writing
• prepare a variety of correspondence, reports, and other written materials and documents
• plan, schedule and coordinate work assignments of staff and subordinates
• use and care for instruments and equipment employed in geotechnical and environmental practices

PHYSICAL REQUIREMENT

Field work requires walking in difficult and uneven terrain, manual augering for field explorations, and assisting with drilling operations. Must be able to lift up to 50 pounds.

SUPERVISION

Assignments are generally broad in scope with opportunity for the use of experience, initiative, considerable independent judgment and discretion in developing and achieving work unit goals and objectives. Assistance from professional supervisors is available when especially difficult problems are encountered. Work is periodically evaluated by a professional supervisor.

WORKING CONDITIONS

The work performed is in the office environment with frequent trips to work sites throughout the county.

Snohomish County is an Equal Employment Opportunity (EEO) employer. Accommodations for individuals with disabilities are provided upon request.
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EEO policy and ADA notice

Class Established: June 1993
Previous Spec No. 420438
Revised: April 2015, February 2022
EEO Category: 2 - Professionals
Pay Grade: 243 - Classified Pay Plan
Workers Comp: 1501 Hazardous