# City of Bellingham

# **Classification Specification - Civil Service or AFSCME**

CI	LASS TITLE	Senior Surveyor
DE	EPARTMENT	Public Works\Engineering
	UNION:	114

UNION: SG:

CS: Entry FLSA: Y EE04CODE: TE

#### **NATURE OF WORK:**

Performs a full range of skilled surveying assignments including preliminary, construction and land surveying, cadastral mapping, monumentation, and survey records programs. Accurately fixes the location and boundaries for design and construction. Performs complex field calculations and maintains accurate field notes. Uses a variety of surveying equipment and programs including Global Positioning Systems (GPS), AutoCADD and other survey related sources to establish, check and correct Cadastral base maps, and utility locations for the City's Geographical Information System (GIS). Provides direction to engineering technicians and extra labor staff assigned to assist with large surveying projects and summer work crews.

# **DISTINGUISHING CHARACTERISTICS:**

Performs highly skilled technical civil engineering tasks in land surveying. Comprehensive knowledge and latitude for independent decision making are required to evaluate and interpret data, to apply and adapt a wide variety of established methods under a variety of circumstances, and to assist in the development of standard procedures to accomplish complex tasks.

### **SUPERVISORY RELATIONSHIPS:**

Reports to the Survey and Property Manager who assigns and reviews work. Works independently under general supervision and in accordance with applicable City regulations, policies, guidelines and applicable land surveying standards. As a Senior Surveyor, provides direction to engineering technicians and extra labor staff assigned to provide assistance to large projects and summer crews.

#### **ESSENTIAL FUNCTIONS:**

- 1. Responsible for a variety of skilled field surveys including construction, topographic, and cadastral. Performs complex field calculations and maintains accurate field notes.
- 2. Performs field operations using GPS receivers and collectors. Prepares raw GPS data information for GIS mapping applications using differential correction.

- 3. Performs computational duties to determine construction layout, locate boundary lines, etc. Prepares field notes, work sketches and maps, as required.
- 4. Provides direction and assistance to Project Engineers regarding unforeseen design conflicts and develops and implements field solutions.
- 5. Prepares field designs for streets, water mains, sewers, ditches and other related projects.
- 6. Determines approach and methods and instruments required, according to nature of assignment and results required.
- 7. Searches legal and property records to determine City rights of ownership.
- 8. Performs the retracement, reestablishment, and perpetuation of City owned real property, right-of-way and easement centerline locations. Prepares accurate reference records and documents for permanent monument control files.
- 9. Prepares and maintains complete and accurate activity and work reports and related files.
- 10. Keeps the Survey & Property Manager informed of problems areas during construction, necessary field adjustments, or design changes. Ensures that survey field work is performed in a timely, accurate, and safe manner.
- 11. Maintains surveying records, indexing cross referencing and integrating records into the computerized file management system.

# **ADDITIONAL WORK PERFORMED:**

12. Performs related duties and assists in other areas of engineering as assigned.

### PERFORMANCE REQUIREMENTS (KNOWLEDGE, SKILLS, AND ABILITIES):

- Comprehensive knowledge of current land surveying principles, terms, concepts, techniques and procedures.
- Comprehensive knowledge of surveying instruments and equipment.
- Considerable knowledge of applicable local and state laws and standards related to land surveying.
- Thorough knowledge of computer applications and programs used in surveying work and other related fields. Ability to make accurate mathematical calculations using scientific calculators.
- Ability to interpret engineering plans, survey field notes and records, and legal descriptions.
- Ability to prepare technical materials and reports.
- Ability to communicate effectively, both orally and in writing.
- Ability to provide guidance, direction and training to survey technicians.
- Ability to establish and maintain effective working relationships with diverse groups including employees, contractors, developers and general public.

- Ability to follow established safety rules and procedures, and to independently recognize hazards at the work site.
- Physical ability to perform essential functions of the job:
  - Agility and endurance to continuously bend, stoop, stand, walk and climb, to chain measurements, cut brush and set stakes.
  - Frequently lift and transport 30-50 lbs. of equipment. Occasionally lifts heavy objects of approximately 100 lbs with mechanical assistance.

## **WORKING ENVIRONMENT:**

Survey work is performed at field sites and in an office setting with extensive work at a computer workstation. Outdoor work exposes the employee to inclement weather and conditions associated with a construction environment and traffic hazards. Drives a motor vehicle to work locations. Frequently lifts and carries moderately heavy surveying equipment weighing approximately 30 to 50 lbs. over uneven terrain, and on occasion, through dense underbrush. Occasionally must lift heavy objects such as manhole covers and catch basin rims (with tools) weighing up to approximately 100 lbs. Employees are required to use a full range of appropriate safety equipment and follow standard safety practices.

# **EXPERIENCE AND TRAINING REQUIREMENTS:**

Associate degree in surveying technology or related course of study.

AND

- A minimum of three years of experience in land and construction surveying.

OR

- A combination of education and experience which provides the applicant with the required knowledge, skills and abilities will be considered.

### **NECESSARY SPECIAL REQUIREMENT:**

- Valid Washington State driver's license and good driving record. Candidates must provide a three year driving record abstract prior to hire.
- Valid WDLI Flagging/Traffic control certification is required.

COMMISSION ADOPTION:

- Must pass a job-related physical capacities evaluation prior to hire.
- Must pass a drug and alcohol test prior to hire.

PREPARED BY:	Reed/Sellin 2/94	REVIEWED BY:  Tom Rosenberg, Assistant Director Public Works for Engineering	
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	5/96	Jack Garner, Director Public Works	