City of Bellingham
Classification Specification

CLASS TITLE	**Public Works Surveyor**
DEPARTMENT	**Public Works\Engineering**
UNION:	**1937**
SG:	**113**
CS:	**Entry**
FLSA:	**Y**
EE04/SOC CODE:	**TE/17-1022**

NATURE OF WORK:

Performs a full range of skilled technical field surveying assignments including traversing, leveling, Global Positioning System (GPS) localization work, GPS as-built surveying, survey monitoring projects, topographic surveying, construction staking, property surveying, cadastral mapping, monumentation, research, computations, and survey records management. Uses a variety of surveying equipment and programs including GPS, Computer Aided Drafting and Design (CADD), and other survey related resources to establish, check, and correct cadastral base maps and utility locations for the City's Geographical Information System (GIS). Performs computational tasks to accurately determine construction layout and boundaries for design and construction. Prepares and maintains complete and accurate survey records.

DISTINGUISHING CHARACTERISTICS:

The Surveyor classification specification is distinguished by its performance of skilled technical civil engineering tasks in land surveying working with advanced tools such as GPS, CADD, and GIS software to gather and process accurate data. Comprehensive knowledge, precision, 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 while maintaining a thorough understanding of legal and regulatory standards surrounding land use.

SUPERVISORY RELATIONSHIPS:

Reports to the Real 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. May receive oversight and work direction from the Survey Services Coordinator. May provide day-to-day direction to staff assigned to provide assistance to large projects.

ESSENTIAL FUNCTIONS:

1. Conducts a full range of skilled field surveys including traversing, leveling, Global Positioning System (GPS) localization work, GPS as-built surveying, survey monitoring projects, topographic surveying, construction staking, property surveying, cadastral mapping, monumentation, computations, and survey records management. Measures and maps using specialized tools and equipment such as GPS, CADD, GIS, and other survey related sources to establish, check, and correct cadastral base maps and utility locations for project base mapping and the City's GIS.

2. Keeps survey instruments and equipment calibrated, adjusted, maintained, and in good working condition. Researches and recommends the purchase of new equipment and software. Maintains inventory of survey equipment and accessories.

3. Performs field operations using real-time networked GPS receivers, total stations, digital levels, and related survey equipment. Prepares survey data for CADD and GIS applications. Performs complex field calculations and maintains accurate field notes.

4. Performs computational tasks to accurately determine construction layout and boundaries for design and construction. Implements field solutions for unforeseen conflicts.

5. Communicates and coordinates with Survey Services Coordinator, project engineers, GIS technicians, consultants, inspectors, contractors, and Real Property Manager for problem solving of survey-related matters. Ensures that survey field work is performed in a timely, accurate, and safe manner.

6. Prepares detailed drawings of existing conditions and topographic information for support of engineering designs and City projects.

7. Determines approach, methods, and instruments required according to nature of assignment and results required.

8. Searches legal and property records to determine City rights of ownership.

9. Performs the retracement, reestablishment, and perpetuation of City owned real property, right-of-way, and easement locations

10. Monitors, inspects, and verifies monuments to prevent disturbance during capital, private, and in-house City construction projects and coordinates monument replacement or new installation when necessary. Inspects and documents new monuments set for subdivisions, plats, and other projects.

11. Updates City monument application and records through GIS. Updates coordinates, histories, structure types, dates, pictures, forms, reports, permits (including Washington Department of Natural Resources permits), projects, and Records of Survey.

12. Locates as-built City utilities (e.g., water, sewer, stormwater, traffic, roads) on City projects and private development (Public Facilities Contracts- PFCs). Downloads information and submits files to GIS for mapping.

13. Prepares and maintains complete and accurate records and documents for permanent files that are available to the City and public. Integrates records into the computerized file management system.

ADDITIONAL WORK PERFORMED:

1. May perform survey work for other City departments as needed.
2. Performs other related work of a similar nature and level as assigned.

PERFORMANCE REQUIREMENTS (KNOWLEDGE, SKILLS, AND ABILITIES):

Knowledge of:
- Current land surveying principles, practices, standards, methods, instruments, equipment, terms, concepts, techniques, and procedures.
- Applicable local and state laws and standards related to land surveying.
- Error analysis, adjustments, calibration, and GPS localizations.
- Computer applications and programs used in surveying work and other related fields.
- Map projections, coordinate systems, and datums.

Skill in:
- Utilizing computers and software appropriate to the position including Microsoft Office, GIS (Esri products), CADD (Autodesk products).
- Prioritizing tasks, time, and resources.
- Implements creative problem-solving techniques.
- Utilizing surveying tools and instruments like real-time networked GPS receivers, total stations, and digital levels.

Ability to:
- Interpret engineering plans, survey field notes and records, and legal descriptions.
- Prepare technical materials and reports.
- Make accurate mathematical calculations using scientific calculators.
- Research, analyze, and interpret data.
- Communicate effectively, both orally and in writing.
- Establish and maintain effective working relationships with diverse groups including employees, contractors, developers, and general public.
- Follow established safety rules and procedures and independently recognize hazards at the work site.
- Operate jackhammers, core drills, reciprocal saws, roto-hammers, and similar equipment to replace or install monuments.
- Maintain consistent and punctual attendance.
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Physical ability to perform the essential functions of the job including:
    - Frequently operate a computer and other office machinery such as a keyboard, mouse, phone, printer, and fax machine;
    - Frequently communicate accurate information and ideas with others;
    - Frequently exposed to outdoor weather conditions;
    - Continuously bend, stoop, stand, walk, climb, cut brush, and set stakes.
    - Frequently lift and transport materials weighing 30-60 lbs. Occasionally lifts heavy objects of approximately 100 lbs. with mechanical assistance.

WORKING ENVIRONMENT:

Work is performed in field environments (including developed and undeveloped areas) and in an office setting with extensive work at a computer workstation. Field environment work exposes the employee to inclement weather and conditions associated with a construction environment and traffic hazards. Employees are required to use appropriate safety equipment and follow standard safety practices.

EXPERIENCE AND TRAINING REQUIREMENTS:

- Associate degree in surveying technology or related course of study.

AND

- Three years of experience in land and construction surveying including experience performing survey calculations, conducting boundary and corner research and preparing using property descriptions.

OR

- Five years of experience in land and construction surveying including experience performing survey calculations, conducting boundary and corner research and preparing using property descriptions.

NECESSARY SPECIAL REQUIREMENT:

- Valid Washington State driver's license and good driving record. Candidates must submit a three-year driving abstract prior to hire.
- Employment contingent upon passing a criminal convictions check, child and adult abuse records check, and local background check.
- Ability to secure and maintain Flagging/Traffic control certification within six (6) months of hire
- Ability to secure and maintain Land Surveyor In-Training (LSIT) certificate within one (1) year of hire.

Failure to obtain and maintain the required certification within the timeline specified will result in termination.

PREPARED BY: Reed/Sellin
2/94

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COMMISSION ADOPTION: 12/11/2024