

**MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION**

**Class Code: 004060
Grade: 19
FLSA: N**

SURVEY CREW LEADER

DEFINITION OF CLASS:

Under direction, leads a crew in the County's land surveying functions, and the correction of missing property boundaries and monuments; supervises and aids reestablishing existing right of way and boundary lines, and to locate topographic features, both for the design and construction of County roads and associated structures.

DISTINGUISHING CHARACTERISTICS:

This is a lead- level skilled labor classification in the Department of Transportation, accountable for supervision of survey functions of the field survey crew by organizing daily assigned work and directing movements of the crew in the field.

MAJOR DUTIES:

Organizes, coordinates, and monitors surveying activities and functions for conformance to State laws, regional ordinances, public records, and property boundary data.

Participates in the work of a land surveying crew involved in measuring field locations of objects, the dimensions, and boundaries of land areas, and the position of points, lines, and grades.

Provides guidance regarding the principles and practices of land surveying. Trains survey crew members.

Meets with agency management to review survey project assignments.

EXAMPLES OF DUTIES: (Illustrative Only)

- Stakes out land boundaries and right of ways; conducts topographic surveys and construction stake-out; modifies procedures to accommodate field conditions such as heavy vehicular traffic, steep grades, obstructed sight, stream crossing, etc.
- Sets permanent points using iron pins, cross-cut, or nails in concrete or pavement to establish right-of-way control.
- Verifies accuracy or inaccuracy of contract survey work.
- Performs mathematical calculations in the field.
- Operates - total station, level, data collector, GPS equipment, and terrestrial Lidar scanners with the required level of accuracy.
- Accurately and neatly records field information.
- May direct traffic around the job site or cut brush which is in the line of sight.
- Instructs crew members on the use of equipment and procedures of field surveys.
- Provides recommendations on personnel actions for subordinate employees.
- Researches deeds at the Land Records.
- Computes traverse data, deeds, and plats.
- Performs related duties as required

KNOWLEDGE, SKILLS, AND ABILITIES:

(The knowledge, skills, and abilities listed in this specification are representative of the class but are not an all-inclusive list.)

WORKING KNOWLEDGE OF:

- Detailed methods, equipment, and techniques of land surveying.
- Federal and state statutes, rules, ordinances, standards, and codes governing land surveys.
- Operation, calibration, and maintenance of a variety of specialized surveyor equipment.
- Advanced mathematics such as trigonometry, algebra, and geometry necessary to perform calculations in the field.
- Techniques and practices for efficient and cost-effective management of resources.
- County geography, traffic patterns, streets, landmarks and boundary locations.
- Management and supervisory principles and practices.

SKILL IN:

- Precise calibration, operation, and maintenance of survey instruments such as – total station, level, data collector GPS equipment, terrestrial Lidar scanning.
- Applying algebra, geometry, and trigonometry to complex mathematical problems.
- Reviewing technical engineering data and construction documentation.
- Reading and interpreting project plans, maps, diagrams, legal descriptions, and technical specifications.

ABILITY TO:

- Operate a personal computer utilizing standard and specialized software, including GIS, GPS, and other specialized engineering software applications.
- Establish and maintain cooperative working relationships with co-workers.
- Communicate effectively verbally and in writing.

SUPERVISORY CONTROLS:

Work is conducted independently from assignments received from the supervisor and is reviewed for accuracy of data obtained.

GUIDELINES:

Guidelines consist of Maryland Professional survey principles and practices; equipment operating procedures and specifications; Federal, State and County regulations and Department procedures. An employee in this class adapts and modifies guidelines and redirects team effort based on varying field conditions.

COMPLEXITY:

The complexity of the work is characterized by the analysis required to organize survey work, assess field conditions, and determine proper survey course and procedures.

SCOPE AND EFFECT:

The work of this class directly affects the accuracy of locating the right-of-way, construction stake-out and property boundaries.

CONTACTS:

Contacts include agency engineers, subordinates, contractors, utility companies and property owners to exchange information and explain projects.

PUBLIC SERVICE /ASSISTANCE:

An incumbent in this class offers limited direct service or assistance to the public.

WORK ENVIRONMENT:

Outside work. Ability to tolerate inclement weather including rain, cold, heat, humidity. Exposure to fumes, odors, noise and vibration, dust, water, and insects.

HAZARDS:

An employee is exposed to some risks such as vehicular traffic, noise and exhaust fumes, and working around open trenches and construction areas which involve the use of safety equipmentsuch as reflective vests and safety shoes.

PHYSICAL DEMANDS:

Light to Medium work. Ability to lift, see, carry, push, pull, stand, walk, climb, crouch, crawl, kneel, reach, handle, finger. Ability to traverse uneven, undeveloped, wet terrain. Visual acuity (peripheral vision, depth perception) necessary to operate a motorized vehicle. Frequent bending, crouching or stooping; occasional lifting of objects up to 50 pounds; and precise use of hands or fingers to operate survey equipment.

MINIMUM QUALIFICATIONS:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Five (5) years of experience in the procedures, practices, use of equipment, and conduct of land and construction survey work.

Education:

Graduation from high school or High School Certificate completion recognized in the State of Maryland.

Equivalence:

Additional experience may be substituted on a year-for-year basis for the required education.

LICENSE REQUIREMENT:

Possession and maintenance of:

- Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence.

PROBATIONARY PERIOD:

Individuals appointed or promoted to this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL PROTOCOL: Core II Exam.

PROMOTION POTENTIAL:

This is the budget level classification

SUPERVISION EXERCISED:

Employees in this class may lead the work of lower level staff.

CLASS SPECIFICATION HISTORY:

Class Established: August, 1992

Revised: August, 2013

Revised: January 2018