



Survey & Mapping Technician 3

Category: Classified/Excluded
Pay Grade: C24
Job Code: 16770

To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.

JOB SUMMARY

This is advanced technical lead work coordinating multiple survey parties or office staff engaged in design, control or construction surveying, automated mapping or preparing right of way maps and associated legal descriptions. Employees in this class are responsible for coordinating numerous surveys or mapping projects and performing technical calculations and minor field redesign to maintain designated project time frames. Work requires the exercise of a high degree of independent judgment and initiative.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Coordinates, leads, and directs all phases of land survey and is responsible for work results and progress of assigned survey parties, training subordinate personnel and reviewing survey procedures;
- Checks technical aspects of land survey procedures, ensures crews are functioning at a high performance level and supervises, coordinates and performs automated mapping functions or right of way mapping operations;
- Prepares and verifies accuracy of legal descriptions, maps and aerial photographs required for right of way maps and performs survey calculations to establish roadway alignments, survey closures and geodetic ties;
- Participates in the review of plans for water systems, sewerage, street, or subdivision construction, makes preliminary estimates for survey projects and technical surveying calculations, analyzes field data and prepares detailed recommendations;
- Checks contract drawings, computes quantity of waste, fill and construction material, investigates new construction, makes field inspections of drainage problems and checks proposed street grades and drainage plans;
- Renders engineering redesigns, creates difficult technical drawings, and prepares technical sketches and descriptions of property; and presents oral or written reports of same;
- Serves as a representative for the Survey and Mapping Division at project meetings;
- Provides technical assistance for less experienced personnel in performance of assigned tasks;
- Performs information processing related duties including using available statistical packages or programs, encoding data, data entry and retrieval, routine information terminal operations and programming/reprogramming;
- Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:

High School diploma or an acceptable equivalency diploma (GED); and four (4) years of experience in land survey work; or an equivalent combination of education, training and/or experience.

Special Qualifications (May be required depending on area of assignment):

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.

- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Other highly desirable knowledge, skills, abilities, and credentials required for a specific position.
- Candidate to demonstrate more advanced proficiency, competency and satisfactory completion of regularly assigned work in an independent manner. Appointing Authority retains discretion to employ an incumbent at this level or advance the incumbent non-competitively or competitively, after a candidate meets the minimum qualifications to an in-line career ladder position within the same organization or department.

Knowledge, Skills and Abilities:

- Knowledge of the principles, techniques and practices of land surveying;
- Knowledge of the principles, practices and instruments used in drafting;
- Knowledge of civil engineering principles and practices and construction specifications, plans and regulations related to public works construction;
- Knowledge of higher-level mathematical applications to survey computation;
- Skill in the use of land survey instruments and equipment;
- Ability to perform difficult technical computations, make estimates and compile routine engineering data and statistics;
- Ability to render engineering redesigns, make difficult technical drawings, perform geodetic surveys and prepare legal descriptions of property boundaries;
- Ability to program, operate and instruct subordinate personnel in the use of automated mapping equipment, supervise and coordinate the work of multiple survey parties or office personnel and train employees in survey work.

PHYSICAL/MENTAL DEMANDS

The work requires exerting up to 50 pounds of force occasionally, and up to 30 pounds of force frequently, and up to 10 pounds of force constantly to move objects. Additionally, the following physical abilities are required:

- **Balancing:** Maintaining body equilibrium to prevent falling while walking, standing or crouching on narrow, slippery, or erratically moving surfaces. The amount of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
- **Climbing:** Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs and/or hands and arms. Body agility is emphasized.
- **Crawling:** Moving about on hands and knees or hands and feet.
- **Crouching:** Bending the body downward and forward by bending leg and spine.
- **Feeling:** Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips.
- **Fingering:** Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- **Grasping:** Applying pressure to an object with the fingers and palm.
- **Handling:** Picking, holding, or otherwise working, primarily with the whole hand.
- **Hearing:** Perceiving the nature of sounds at normal speaking levels with or without correction. Ability to receive detailed information through oral communication, and to make the discrimination in sound.
- **Kneeling:** Bending legs at knee to come to a rest on knee or knees.
- **Lifting:** Raising objects from a lower to a higher position or moving objects horizontally from position-to-position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.
- **Mental acuity:** Ability to make rational decisions through sound logic and deductive processes.
- **Pulling:** Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion.
- **Pushing:** Using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
- **Reaching:** Extending hand(s) and arm(s) in any direction.
- **Repetitive motion:** Substantial movements (motions) of the wrist, hands, and/or fingers.

- Speaking: Expressing or exchanging ideas by means of the spoken word including the ability to convey detailed or important spoken instructions to other workers accurately and concisely.
- Standing: Particularly for sustained periods of time.
- Stooping: Bending body downward and forward by bending spine at the waist. Occurs to a considerable degree and requires full motion of the lower extremities and back muscles.
- Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
- Visual acuity: Have close visual acuity such as color differentiation, depth perception, and adequate field vision.
- Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

WORKING CONDITIONS

Work is typically performed in a dynamic environment that requires sensitivity to changing goals, priorities, and needs.