



Survey & Mapping Technician 1

Category: Classified
Pay Grade: C17
Job Code: 16750

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

Performs technical field and office work assisting in land survey projects; operates various land survey instruments while office duties include a variety of technical and clerical tasks.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Sets up, adjusts, and operates a transit or theodolite to measure angles of surface features and operates automatic levels;
- Performs subsurface utility and feature location, assists in utilizing equipment to locate topographical features, and provides survey-grade project control;
- Interprets construction plan drawings to compute proposed grade elevations for roadway and drainage layouts;
- Assumes lead of the crew during the absence of the party chief;
- Prepares drawings from field notes, reduces cross section notes, and uses planimeter to determine areas;
- Performs minor adjustment and calibration of instruments and operates electronic measuring devices;
- Prepares maps and notes and performs mathematical calculations to establish location of surface features;
- Performs a variety of office tasks including preparation of project packages for field crews, preliminary review of survey calculations, release of technical data to the public, abstracting and writing legal descriptions;
- Trains team members;
- May perform 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:

One (1) year 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.
- 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 within the same organization or department.
- Other knowledge, skills, abilities, and credentials required for a specific position.

Knowledge, Skills and Abilities:

- Knowledge of general construction principles and practices;
- Knowledge of the techniques and practices of land surveying;
- Knowledge of some advanced mathematics;
- Skill in the use of land surveying instruments;
- Ability to read and interpret specifications, maps, and construction drawings;
- Ability to make routine surveying computations quickly and accurately and prepare and trace routine survey drawings with neatness and accuracy;
- Ability to swim and use hand and power tools;
- Ability to operate motorized equipment and possession of sufficient physical stamina to work long hours outdoors under various field conditions and exposure to traffic, extreme heat, and rainfall;
- Ability to use small office equipment, computers, and highly technical computer applications;
- Ability to use or repair small, medium, and heavy equipment and machinery;
- Ability to oversee capital improvement plans and major instruction projects.

PHYSICAL/MENTAL DEMANDS

The work is heavy work which requires exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 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.
- **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.
- **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.
- **Visual ability:** sufficient to effectively operate office equipment including copier, computer, etc.; and to read and write reports, correspondence, instructions, etc.
- **Hearing ability:** Sufficient to hold a conversation with other individuals both in person and over a telephone; and to hear recording on transcription device.
- **Speaking ability:** Sufficient to communicate effectively with other individuals in person and over a telephone.
- **Mental acuity:** Ability to make rational decisions through sound logic and deductive processes.
- **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.
- **Repetitive motion:** Substantial movements (motions) of the wrist, hands, and/or fingers.
- **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.
- **Walking:** Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

WORKING CONDITIONS

Work is performed in an environment where errors can lead to significant physical or mental consequences for self or others.