



POSITION DESCRIPTION
An Equal Opportunity Employer

Class Title:	Engineering Assistant I	FLSA Status:	Nonexempt
Dept./Div.:	Engineering	Civil Service Status:	Unclassified
Reports to:	Engineering Supervisor	Employment Status:	Full-time
EEO Status:	Professional	Normal Work Hours:	Day Shift
Employee Name:		DOT/O*Net Code:	005.261-014

GENERAL DESCRIPTION:

Under general direction, performs drafts of construction drawing, topographical profiles, related maps and specifications used in the planning and construction of engineering projects including but not limited to electric system, water system, communication systems, sewer systems and drainage.

POSITIONS DIRECTLY SUPERVISED:

None.

EQUIPMENT OPERATED: The following are examples only and are not intended to be all inclusive:

Computers and general office equipment, plotters, surveying equipment, underground utility locating equipment and GPS equipment.

JOB DESCRIPTION AND WORKER CHARACTERISTICS:

JOB DUTIES in order of importance

ESSENTIAL FUNCTIONS OF THE POSITION: For purposes of 42 USC 12101:

1. Apply skillful, sub-professional engineering principles and techniques to work performed in the planning and recording of electric, water and communication utilities. Use computer aided drafting (CAD) equipment. Prepare and update engineering drawings and schematics. Create rough field sketches, drawings, specifications, as-builts, and other engineering data as needed.
2. Compute basic algebraic, trigonometric and geometric formulas for estimations and operations that relate to electric, water and communication planning; prepare material and labor estimates for proposed utility projects; identify basic materials used by the electric, water and communications departments.
3. Assist in planning projects from start to finish with general direction. Inspect and log new and existing construction projects. Assist in staking and surveying land for proposed utility projects. Take accurate measurements that affect the installation and arrangement of utilities utilizing GPS and other equipment.
4. Prepare reports as assigned; create easements, letters, forms and agreements used in the operations of Bryan Municipal Utilities; keep detailed records of plans, as-built plans, billings and any other duties that arise in the construction and operations of all utility departments.

OTHER DUTIES AND RESPONSIBILITIES:

Perform other duties as assigned (i.e., assist other utility departments as needed; participate in required training as applicable; etc.).



MINIMUM ACCEPTABLE CHARACTERISTICS: (*indicates developed after employment)

Knowledge of: (200) drafting practices and techniques; (202) civil engineering; (204) water, electric and communication system designs; (205) surveying techniques; (257) applicable standards and regulations governing utility installations in the State of Ohio*; (263) department policies and procedures*; (422) records management; (477) proper safety practices; (531) local geographical area.

Skill in: (905) computer operation; (909) adding machine or calculator operation; (958) motor vehicle operation; (960) use or operation of CAD, word processors, spreadsheets, data base programs, and other software; (966) organization; (970) set up and operation of GPS equipment

Ability to: (601) carry out detailed written or oral instructions; (609) recognize unusual or threatening conditions and take appropriate action; (611) define problems, collect data, establish facts, and draw valid conclusions; (620) adapt to different tasks and working conditions during the course of the work shift; (634) calculate statistics; (635) apply concepts of algebra and/or geometry; (636) apply concepts of trigonometry; (652) complete routine forms; (653) prepare routine correspondence; (654) perform duties with accuracy; (656) prepare maps, charts, graphs, or plans; (657) compile and prepare accurate reports; (684) communicate verbally with a wide variety of people and resolve issues and concerns to achieve customer satisfaction; (671) generate GIS graphics, maps and statistical reports; (685) train or instruct others; (704) read and interpret documents such as operating and maintenance instructions, and procedure manuals; (708) read complex utility plans; (724) maintain records according to established procedures; (745) develop and maintain effective working relationships without close supervision and to communicate and cooperate effectively with associates, supervisors, officials, private contractors, engineers, businesses and general public; (756) be consistently at work and on time, follow instructions, respond to management direction, and solicit feedback to improve performance; (774) use survey equipment in the planning of utility projects; (781) work evenings, nights, holidays, and weekends.

QUALIFICATIONS: An example of acceptable qualifications:

Position requires a degree from an accredited college in civil, electrical or mechanical engineering or CAD; experience in the use of computers, including Microsoft Office and CAD software; or an equivalent combination of education and experience which provides the knowledge, skills and abilities needed to perform essential functions of position.

LICENSURE OR CERTIFICATION REQUIREMENTS:

Valid state driver's license.

WORKING CONDITIONS:

Facility and Work Area:

The work is performed in an office setting with good working conditions, however, is often exposed to noise, dust, heat and other elements when job duties require incumbent to do field work.

Physical and Environmental Characteristics:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. This is primarily an office position with employee working in a controlled office environment with employee periodically performing his/her duties in the field at work projects.

The employee:

- Is required to see color and distinguish letters, numbers and symbols. Frequently required to sit, stand, walk, talk, hear, bend and reach. Ability to reach with hands and arms.
- Usual office conditions
- Answers telephone calls and occasionally bends, reaches, and pushes and pulls file drawers to file records and reports.
- Moves within and outside of the building to collect, deliver, and copy data and documents.



- Uses a computer terminal to access, input, and retrieve data.
- Little or no physical demand; occasional lifting or moving of lightweight materials.
- May occasionally work around heavy equipment, overhead and underground construction and excavations.
- May occasionally work in inclement weather and around energized electrical equipment, noxious odors and fumes and noise.
- Flow of work and character of duties involve normal mental and visual attention along with manual coordination for at least 50% of the work period, or part-time concentrated attention and coordination with the remainder of the time involving only normal attention.
- Note: In accordance with the U.S. Department of Labor physical demands strength ratings, this is considered light work.
- In cases of emergency, unpredictable situations, and/or department needs, the employee may be required to lift, push, pull, and/or carry objects heavier than O.O.L. strength ratings recommend.