



CIVIL ENGINEER II

JOB DESCRIPTION

Department: Public Works	Division: Engineering
Work Location: Urbana Public Works Department	Percent Time: 100%
Job Type: Civil Service	FLSA Status: Exempt
Reports To: City Engineer	Union: Non-Union

JOB SUMMARY:

Designs improvements and prepares construction plans for municipal infrastructure projects; conducts field investigations; prepares technical reports; monitors construction work; supervises work of regular and part-time staff.

Defining Characteristics of the Class

This is the full journey level class within the Civil Engineer series. Employees within this class are distinguished from the Civil Engineer I by the performance of the full range of duties as assigned. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the division. Positions in this class are normally filled by advancement from the I level, or when filled from the outside, have prior experience.

This job description reflects the general concept and intent of the classification and should not be construed as a detailed statement of all of the job requirements that may be inherent in the position.

JOB DUTIES:

- Collects and analyzes field data; researches property histories and old project plans; prepares technical reports and cost estimates, and recommends improvements;
- Designs, prepares plans, specifications, contract documents and estimates of cost and monitors construction and maintenance of municipal infrastructure projects;
- Monitors construction of contract work to ensure work is performed in compliance with contract plans and specifications and required quality is obtained; measures quantities and prepares pay estimates;
- Supervises work of survey parties, observing and recording data, establishing line and grade control;
- Prepares documentation and facilitates acquisition of easements and rights-of-way;
- Maintains files on correspondence and documentation on projects;

- Maintains effective relations with governmental officials, community leaders, citizens, Illinois Department of Transportation (IDOT), Illinois Environmental Protection Agency, Village of Savoy, City of Champaign, University of Illinois, Champaign County, adjacent rural townships, the Urbana Park District, Urbana School District 116, Illinois American Water, Ameren, various communication utility companies, engineering consultants, citizens, contractors, and other City departments;
- Provides technical support to various City departments;
- Handles requests for information, service or complaints over the phone, via electronic or regular mail and in person, or makes referrals to appropriate staff in a concerned manner that reflects an effort to be helpful while at the same time acting responsibly on behalf of the City of Urbana; all calls are promptly returned;
- Serves as a Public Works Department/Engineering Division representative, when necessary, on special intergovernmental and interagency committees;
- Investigates problems, designing improvements, and preparing construction plans;
- Monitors construction of municipal infrastructure type projects;
- May supervise the work of Engineering Technicians and/or Engineering part-time personnel in the absence of the City Engineer and Assistant City Engineer;
- Performs other related duties as assigned.

JOB REQUIREMENTS:

In addition to the qualifications for Civil Engineer I:

EDUCATION & EXPERIENCE:

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

- Bachelor of Science degree in Civil Engineering or related engineering field from an Accreditation Board for Technology, Inc.(ABET)/Engineering Accreditation Commission (EAC) accredited program.
- A minimum of four (4) years of increasingly responsible professional engineering experience. Previous experience in municipal, county, state, or federal engineering or engineering consulting is preferred.
- A Master's Degree in Civil Engineering from an Accreditation Board for Technology, Inc. (ABET)/Engineering Accreditation Commission (EAC) accredited program is preferred and may substitute for one (1) year of experience.

PREFERENCES

- Familiarity with gravity sewer design and function.
- Familiarity with sewer televising and manhole inspection software.

- Familiarity with site planning and development
- Familiarity with traffic control means and methods
- Familiarity with the design of transportation infrastructure.
- Familiarity with documentation required for federal and state funded projects.

LICENSES AND CERTIFICATIONS:

- Active Illinois Professional Engineer (P.E.) license, or active registration in another state with the ability to reciprocate to Illinois within six months of beginning employment, or ability to obtain license within 12 months of employment.
- Possess or obtain a valid State of Illinois Class D driver's license within fifteen (15) days of employment.

SKILLS:

- Proficient in Microsoft Office applications, including Word, Excel, Access, PowerPoint, and Outlook; AutoCAD or Microstation; and the Internet.
- Familiar with ArcGIS

KNOWLEDGE OF:

- Knowledge of investigation, design, construction, and documentation phases of engineering projects.
- Knowledge and skill in the use of field survey instruments and knowledge of operation of construction machinery.
- Knowledge of Americans with Disabilities Act (ADA) regulations and experience with design of ADA sidewalk facilities.
- Knowledge and experience with stormwater and wastewater regulations.
- Obtain Pipeline Assessment Certification Program (PACP) and Manhole Assessment Certification Program (MACP) certifications is preferred.

ABILITY TO:

- Apply strong verbal and written skills required for the preparation of technical reports and the presentation of recommendations orally and in writing;
- Demonstrated ability to apply principles and practices of civil engineering toward the completion of projects.
- Learn and interpret IDOT design and construction manuals, standard specifications and highway standards as well as American Association of State Highway and Transportation Officials (AASHTO) design manuals Standard Specifications of Water and Sewer Construction in Illinois, and Manual on Uniform Traffic Control Devices (MUTCD) standards;

- Work effectively with others, monitor contractors, and supervise work of technical and paraprofessional staff;
- Manage work to conform to project scope, schedule, and budget;
- Facilitate public meetings to gather input from various shareholders;
- Work with confidential information; and
- Make public presentations to City Council, government agencies, and other organizations.

CONTACTS: INTERNAL/EXTERNAL

- Daily contact with construction contractors and general public.
- Frequent contact with other Public Works employees, other City departments, City Council, utilities, businesses, and government agencies.

WORK ENVIRONMENT:

- Works indoors and out-of-doors year round.
- Works around traffic and automobile fumes.

SUPPLEMENTAL INFORMATION:

WORKING ENVIRONMENT:

The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The work will occur in an office and field environment. Incumbents may be subjected to dusts, fumes, extreme temperatures, inadequate lighting, and intense noises. Typical work schedule: Monday - Friday, 8:00 a.m. - 5:00 p.m. with flexibility depending upon the needs of the department. May be required to work in excess of 40 hours a week and/or work irregular hours, particularly during construction projects or emergency situations.

PHYSICAL REQUIREMENTS:

The physical demands described herein 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.

- Sit for extended periods, frequently stand and walk;
- Have manual dexterity and eye-hand coordination needed to use a variety of office equipment such as computers, telephones, calculators, copiers, and topographic surveying equipment;
- Have corrected vision in order to review plans and specifications and perform other essential functions of the job; and
- Occasionally walk on uneven terrain at construction sites, etc.

VISION AND HEARING

See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; visually inspect work in progress. Ability to hear in the normal audio range with or without correction.

Equivalent American Society of Civil Engineers (ASCE) Grade: IV

The physical demands described herein 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.

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Class Specification History

Revised definition, minimum qualifications, and add distinguishing characteristics: December 10, 2014

Revised definition, minimum qualifications, and add distinguishing characteristics: 09/03/2014.

General revision: 08/31/2022

For HR/Finance Use

Title Code 109	Pay Grade
EEO Category 2- Professionals	