



Land Surveyor

JOB DESCRIPTION

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

JOB SUMMARY

The Land Surveyor is a professional level class requiring a high degree of professional skill and knowledge to measure, collect, map, assess, and interpret information about land features. This position interprets title and survey data and assists in the design and preparation of right-of-way plats and plans, legal descriptions, related documents, and drawings concerned with acquisition and condemnation. Incumbent is also responsible for the review of such plats, plans, and descriptions prepared by consultants in order to facilitate the timely acquisition of required right-of-way. Work requires the consistent exercise of discretion and judgment.

Work will cover a wide range of items including: researching and providing engineering and property information in response to inquiries from the public, City staff and outside agencies; leading field survey work; processing survey data; preparing legal descriptions and plats for annexations, right-of-way vacations, right-of-way dedications, and easements; reviewing subdivision plats; and the development, implementation, and maintenance of the City's geographic information system (GIS) databases and mapping.

ESSENTIAL FUNCTIONS

1. Reviews subdivision plats submitted to the City for content, accuracy and conformance with the City of Urbana Subdivision and Land Development Codes and Illinois Compiled Statutes (the Plat Act).
2. Prepares legal descriptions and plats, or reviews those prepared by others, for proposed permanent and temporary easements for various City projects.
3. Provides review of plats and legal descriptions for all annexations and right-of way vacations.
4. Reviews legal descriptions provided from other City departments and outside resources for content and accuracy.
5. Performs research of plats, deeds and other real estate documents at the Recorder's Office and private land surveyors' offices.
6. Provides expert testimony for annexations, right-of-way condemnations and right-of-way vacations requiring court action, as needed.
7. Affixes professional seal and signature to all plats and other documents, for various City concerns, requiring preparation by a Licensed Professional Land Surveyor.

8. Surveys, calculates, prepares and affixes professional seal and signature to plats and legal descriptions for right-of-way acquisitions
9. Collects and processes field data such as topographical data and existing property line data utilizing a total station or Global Positioning System (GPS) survey instrument.
10. Performs boundary surveys using a GPS survey equipment or total station with a data collector, prepares plats of survey, subdivision plats and replats, and prepares legal descriptions from data acquired by field measurements.
11. Prepares requests for proposals and accompanying specifications for surveying/GIS related contracts in the City.
12. Performs calculations utilizing a personal computer with coordinate geometry (COGO) software and/or a scientific calculator.
13. Orders surveying supplies, such as nails, flagging, survey stakes, paint, etc., as needed.
14. Performs equipment maintenance of total station, GPS survey equipment, data collector, theodolites and levels.
15. Plans and schedules surveying related work for various City projects and contracts, as needed.
16. Supervise and run survey crew operations for boundary surveys, topographic surveys, construction staking and other City infrastructure projects.
17. Performs quality control and quality assurance review of all City collected survey data.
18. Counsels Engineering Division Staff on proper surveying techniques and on the use of survey instruments (total station, GPS survey equipment, data collector, etc.)
19. Maintains and updates GIS databases and drawing records concerning City geographic and utility records, including: sanitary and storm sewer locations, line sizes, service locations, and depth; benchmark elevations; street lighting locations; corporate limits and other related data.
20. Processes right-of-way vacation requests; determines status of rights-of-way; communicates with property owners; accommodates the City's and utility companies' easement information requests; assists Legal Division in preparing right-of-way vacation ordinances; and prepares plats and accompanying legal descriptions for right-of-way vacation ordinances.
21. Assigns all new addresses following the Champaign County Street Addressing Standards for Incorporated Areas and communicates addressing information with the Champaign County GIS Consortium, METCAD, University of Illinois and utility companies.
22. Produces maps, plans and records for the public, other City departments and outside agencies utilizing GIS databases.

JOB REQUIREMENTS

Education & Experience

- Must have current and active license as an Illinois Professional Land Surveyor.
- A Bachelor of Science degree in Land Surveying or a related science concentration meeting Illinois Professional Land Surveyor requirements, including at least 24 semester hours of land surveying courses. If candidate has an active Illinois Professional Land Surveyor license that obtained prior to January 1, 1998 an Associate of Applied Science degree in Land Surveying, Mapping Sciences, Surveying Technology, or a similar degree from an accredited college or university can be substituted for the bachelor's degree.
- A minimum of four years of increasingly responsible experience as a Land Surveyor.

- Demonstrated experience determining efficient and effective survey methods used for obtaining topographic data, positions on boundary evidence, construction staking, and monumentation.

Knowledge of

- Modern principles and practices of surveying as related to the preparation of plans, boundary surveys, easements, plats, and vacations for a wide variety of public works projects.
- ESRI GIS mapping software.
- Basic principles, practices and terminology of engineering and real estate; and basic principles and practices of surveying and mapping.
- Municipal codes and zoning ordinances.

Skills

- Proficient in Microsoft Office or equivalent, GIS, Outlook, and the Internet.
- AutoCAD-based drafting and mapping; fluency with AutoCAD Civil 3D software preferred.
- Excellent facilitation, presentation, and communication skills, both written and oral.
- Proficiency in the use of survey equipment, software, and technology.

Ability to

- Operate surveying equipment such as total station with data collector, GPS with data collector, level, metal detector, computer, and scientific calculator.
- Perform complex coordinate geometry calculations utilizing calculator and computer software (COGO).
- Write legal descriptions from data acquired by field measurements.
- Research property and engineering records in various City, County and State Offices, both manually and electronically.
- Prepare technical reports and present recommendations orally and in writing.
- Read maps and drawings.
- Perform field survey work.
- Strong time and project management skills, including prioritization and multi-tasking ability.
- Work with the public, professional, consultants, and staff, with sensitivity to their needs, priorities, schedules and commitments.
- Prepare neat and accurate computations, measurements and notes.
- Work under tight deadlines and be adaptable to changing assignments.
- Take initiative to solve problems in an innovative manner
- Prepare accurate survey drafting work from field notes and other data.
- Work with confidential information.
- Negotiate mutually acceptable solutions and build consensus through compromise.

Licenses, Certifications and Memberships Required

- Current and active Illinois Professional Land Surveyor’s license.
- Must possess or obtain within fifteen (15) working days of employment a valid State of Illinois Class D driver’s license and safe driving record.

Contacts: Internal/External

- Frequent contact with Township and County Assessor Staff; County Recorder Staff; County Addressing Coordinator; Champaign County GIS Consortium Staff; City Staff; consultants; contractors; utility companies; suppliers; surveyors, attorneys, real estate agents and title companies regarding property related work and the public.
- Represents City on Champaign County Geographical Information System Technical Committee.

Supplemental Information

Working Environment: Work typically involves light to moderate work in an office setting, although some fieldwork in inclement weather may be necessary.

Physical Requirements: There is a frequent need to sit and an infrequent need to stand, walk and to lift objects up to 50 pounds.

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

Hearing: Hear in the normal audio range with or without correction.

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 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

- Class created: 1/31/2018

For HR/Finance Use

Title Code	Pay Grade 41
EEO Category 2–Professionals	