

ENGINEERING DEPARTMENT SUMMER INTERN

SUMMARY

The Engineering Summer Intern assists the City Engineer, the Assistant City Engineer, and the Construction Manager on a variety of tasks including but not limited to computer aided design and drafting, GIS related work, preparation of contract documents, engineering computations and budget estimates, survey field work, sidewalk and construction inspection, and general administration duties. The Engineering Summer Intern position is a part-time, summer position typically filled with a college student or a high school graduate pursuing a Bachelor of Science degree in Civil Engineering, GIS or Construction Technology.

SUPERVISION RECEIVED

Works under the general supervision of the City Engineer.

SUPERVISION EXERCISED

None.

RESPONSIBILITIES AND ESSENTIAL DUTIES AND FUNCTIONS

An employee in this position may be called upon to do any or all of the following essential duties: (These examples do not include all of the duties which the employee may be expected to perform.)

1. Assists in the inspection, preparation of plans and contract documents, bid administration and construction inspection and administration of a Sidewalk Replacement Program.
2. Assists in the preparation of reports, documentation and recommendations concerning utility service issues, ongoing projects and capital needs.
3. Assists in the design and inspection of construction projects focusing on streets, sewers, water mains, sidewalks and other infrastructure.
4. Assists the in the preparation of grant application and the administration of grants for City construction projects or studies.
5. Assists in the surveying and mapping of City utilities, property boundaries, easements and other maps.
6. Assists in creating maps from and editing data in the City's GIS.
7. Performs other duties as assigned by the City Engineer.
8. Performs related duties as required.

ESSENTIAL FUNCTIONS, QUALIFICATIONS AND KSA'S FOR EMPLOYMENT

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and ability (KSA's) required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Engineering Department Summer Intern Position, Cont.

Solid understanding of computer software and hardware. Intermediate to advanced proficiency with Microsoft Office (Word, Excel, Access, Publisher and Power Point), email programs (Outlook), and Internet browsers (Edge/Chrome/Mozilla Firefox).

Familiarity with computer-aided design (AutoCAD) and ESRI ArcGIS software a plus.

Familiarity with construction materials and procedures, construction documents a plus.

Aptitude to read basic civil engineering and architectural drawings.

Ability to accurately measure and calculate such items as grade, area and volume.

Skill in communicating effectively with city employees, contractors and the general public.

Skill in using office machines such as a copier, scanner, facsimile machine and calculator.

Physical ability to work out-of-doors and in most construction environments.

Required education and experience includes a high school diploma, or the equivalent. Enrollment in a recognized curriculum at an institution of higher education in Civil Engineering, GIS, Construction Technology is desired.

A valid Michigan driver's license is required.

PHYSICAL DEMANDS

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.

While performing the duties of this job, the employee is regularly required to stand, talk or hear, and use hands to finger, handle, or feel. The employee frequently is required to walk. The employee is occasionally required to reach with hands and arms; climb or balance; and stoop, kneel, crouch, or crawl and have the ability to use a hammer to complete survey staking. The employee must occasionally lift and/or move up to 50 pounds. Specific visual abilities required by this job include close vision and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here 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.

An employee in this position works in both an office and outside environment. The noise level in the office work environment is usually quiet and noise related to construction activities will be typical in the outside environment. While performing the duties of this job the employee is occasionally exposed to fumes or airborne particles, outside weather condition, open excavations, construction machinery and moving mechanical parts requiring adherence to appropriate safety precautions.