GEOGRAPHIC INFORMATION SYSTEMS (GIS) TECHNICIAN

SUMMARY/PURPOSE

To provide support and maintain Geographic Information Systems (GIS) data. Direction within the GIS environment comes from Geographic Information Systems Specialists.

ESSENTIAL DUTIES AND RESPONSIBILITIES (other duties may be assigned)

- 1. Use automated methods to update GIS computer data records.
- 2. Provide custom maps for City divisions and external agencies.
- 3. Train City staff on GIS software, data formats, and standards.
- 4. Work with City staff to create data standards for GIS data.
- 5. Participate in planning and oversight of City staff working on GIS data entry and map editing to ensure correct data entry and project schedule completion.
- 6. Develop standards for data capture through GPS equipment to provide data from field staff to GIS staff for record updates.
- 7. Participate in setting GIS priorities for City staff.
- 8. Prepare graphic representations of Geographic Information Systems using GIS software.
- 9. Review existing or incoming GIS data for accuracy, quality, and completeness.
- 10. Receive and respond to requests for GIS support.

JOB REQUIREMENTS

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, skills, and abilities required.

- 1. Education & Experience Requirements
 - A. Associates Degree in GIS, Geography, Cartography, Computer Science, Engineering Technology or related field of study with course work in mapping, surveying, computer science and spatial analysis, and
 - B. One year of full-time verifiable work experience with Geographic Information Systems, or
 - C. A combination of education/experience determined to be equivalent.
- 2. Knowledge Requirements
 - A. Knowledge of algebra, geometry, and trigonometry.
 - B. Knowledge of surveying techniques and methods.
 - C. Knowledge in use of interpreting aerial and ortho photography.
- 3. Skill Requirements
 - A. Skill in the use of various computer peripherals, data acquisition tools and output devices. These would include printers, scanners, plotters, and GPS equipment.
 - B. Skill in effectively communicating and maintaining working relationships with employees of the City of Duluth, other agencies and the general public.
 - C. Skill in preparing written materials such as procedures, policies, plans and recommendations.
 - D. Skill in using ESRI ArcGIS software environment to display, edit, query and manipulate GIS data.
 - E. Skill in making printed maps, publishing maps and exporting data using ESRI ArcGIS software.
- 4. Ability Requirements
 - A. Ability to communicate effectively in oral and written forms.

- B. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
- C. Ability to provide training to staff.
- D. Ability to assist in oversight and training of non-permanent employees.
- 5. Physical Ability Requirements
 - A. Ability to frequently sit, type, talk, see and hear.
 - B. Ability to occasionally stand and walk.
 - C. Ability to work outdoors year round.
 - D. Ability to walk for long distances.
 - E. Ability to transport and erect survey equipment weighing up to 25 pounds.
 - F. Ability to work at a computer for extended periods.
 - G. Ability to attend work on a regular basis.
 - H. Ability to transport oneself to, from, and around sites of projects, tests, and other assignments.

HR: MC	Union: Basic	EEOC:	CSB:	Class No:
WC:	Pay:	EEOF:	CC:	Resolution: