

**CLASS SPECIFICATION**  
**MAPPING AND GIS SUPERVISOR**

**PAY GRADE: 58**  
**CLASS CODE: 30003084**  
**EFFECTIVE: December 13, 2018**

**CLASSIFICATION SUMMARY**

Reports to a Manager or other management-level position. Under general direction, plans, organizes, and supervises the work of professional and technical staff responsible for the development and conversion of engineering maps and records to digitized and electronic formats to be used in geographical information systems (GIS) and various programs and projects, including database administration.

Responsibilities include: managing the workload of GIS-related activities; assigning work and ensuring the tasks and duties assigned to subordinate staff are completed; leading structured query language (SQL) database administration, software, and application testing; developing complex GIS applications for use by Bureau/Office engineering and maintenance staff; leading the development of Bureau/Office user applications related to land use and zoning, facilities, and infrastructure information.

**DISTINGUISHING CHARACTERISTICS**

Mapping and GIS Supervisor is a supervisory classification.

Mapping and GIS Supervisor is distinguished from the Supervisor series in that the former is responsible for supervising staff performing specialized GIS-related activities, and requires specialized education, training, and/or experience, and the latter has responsibility for ensuring broad program, project, or task implementation throughout an organizational unit.

**ESSENTIAL FUNCTIONS**

Depending on the assignment, the incumbent may perform a combination of some or all of the following duties, and perform related duties as assigned.

General Duties:

1. Develop practices, policies, and procedures for day-to-day operations of GIS programs and projects; establish goals and direction and communicate expectations to staff.
2. Direct, supervise, and participate in the development, management, and evaluation of GIS and information systems' programs and activities; supervise the development, maintenance, and enhancement of engineering maps; direct priorities and schedules and oversee production of standard and specialized maps; perform database analyses and create reports.
3. Supervise and participate in the development, modification, and upgrading of integrated mapping systems, applications, and databases; perform and monitor tests for deployment of software upgrades and configuration; review and test applications developed by Bureaus/Offices to provide feedback.
4. Provide database administration; perform software upgrades; maintain database security and user access; design, create, and maintain physical objects including tables, files, libraries, and indexes to support computer applications; monitor database performance and troubleshoot

problems; ensure all database servers have replication plans to meet emergency recovery objectives.

5. Research and implement new technology; prepare cost estimates and justifications for new or enhanced system modifications; prepare requests for proposals for new mobile technologies and related projects and vendor services; evaluate bids and make recommendations for vendor selection.
6. Manage unit programs and projects; develop scope, budget, and schedule; prepare cost estimates; coordinate with internal and external stakeholders.
7. Recruit, hire, schedule, assign work to, and supervise staff including interns, part-time staff, consultants, and casual/seasonal employees.
8. Set and evaluate performance requirements and personal development targets; provide instruction for performance improvement and development; evaluate performance and complete annual performance reviews; recommend discipline as necessary; organize and lead staff meetings.
9. Provide ongoing assistance, direction, and leadership, and create a positive and supportive work environment; promote an equitable workplace that demonstrates an environment respectful of living and working in a multicultural society.

#### Specific Duties:

In addition to the General Duties, the incumbent may perform a combination of some or all of the following duties specific to the position.

1. Support information technology (IT) system services and activities of assigned unit; assist with the planning, implementation, and testing of IT systems and software; troubleshoot IT issues and lead technical training.

### **SUPERVISION RECEIVED AND EXERCISED**

The work of this classification is performed under general direction by a Manager or other management-level position.

Directly supervises a minimum of four (4) employees.

### **KNOWLEDGE/SKILLS/ABILITIES REQUIRED**

1. Knowledge of principles, practices, methods, and techniques relevant to the implementation, management, and enhancement of GIS user applications, including functionalities, analytic tools and techniques, operation, and quality control and assurance.
2. Knowledge of principles and practices of database design, administration, disaster recovery planning, computer-aided mapping, and attribute data conversion, manipulation, and analysis.
3. Knowledge of project management methods, tools, and techniques, including project cost accounting and project change management and control.
4. Knowledge of principles and practices of leadership, business communication, public administration, program evaluation, and fields related to the mission and purpose of the organizational unit and Bureau/Office.
5. Knowledge of principles and standards of employee supervision, including training, scheduling, and performance evaluation.
6. Ability to plan, organize, integrate, and supervise the work of professional and technical staff, interns, and consultants.
7. Ability to establish and maintain effective working relationships with Bureau/Office staff, consultants, and others encountered in the course of work.
8. Ability to supervise a multicultural workforce, promote an equitable workplace environment, and apply equitable program practices to diverse and complex City services.

9. Ability to assess user and unit productivity requirements, set priorities and allocate resources.
10. Ability to consult with other units or Bureaus/Offices to integrate Citywide information and mapping services.
11. Ability to assess user business needs and development requirements, specifications, and design to deliver GIS mobile solutions.
12. Ability to perform complex system analysis, advanced programming, and database management, administration, and modification.

### **MINIMUM QUALIFICATIONS REQUIRED**

Any combination of education and experience that is equivalent to the following minimum qualifications is acceptable.

**Education/Training:** Bachelor's degree from an accredited college or university with major course work in engineering, computer science, GIS, or related field;

AND

**Experience:** Five (5) years of progressively responsible experience developing, administering, managing, and enhancing GIS systems based on current database technology, and one (1) year of experience in a supervisory role.

### **Special Requirements and/or Qualifications:**

Knowledge of and ability to apply the principles, practices, and techniques of information technology and systems analysis, including system service, hardware and software support, and associated equipment may be required for certain positions.

### **Preferred Qualifications:**

None.

Bargaining Unit: Non-represented

FLSA Status: Exempt

HISTORY

Revision Dates: