NATURE OF WORK:

This is advanced technical and professional work in the administration and maintenance of departmental/division specific application software and hardware. Work involves production support of business software applications to include maintaining application configuration, documentation, reporting, interface maintenance, troubleshooting, and the coordination of upgrades, system implementation, and user acceptance testing. Work also involves coordinating with the City IT Coordinator, DOT.Comm, and other IT Service Providers and close coordination with other division and department leaders to ensure that standards in equipment, software, and systems are met. The incumbent in this classification exercises considerable independence in the performance of duties and receives general guidance from a supervisor.

ESSENTIAL FUNCTIONS: (Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)

Manages and participates in the maintenance and administration of departmental specific software applications. Develops technology strategies to meet the business objectives of the department/division including Request for Proposal (RFP) development.

Manages relationship with vendors, serves as primary point of contact for vendor or third party implementers, tracks outstanding service request, and manages the production and development environments for the application. Supervises or performs tasks necessary to assure successful deployment of complex and comprehensive application and database modifications (i.e., major software upgrades).

Develops, designs, tests, and deploys custom interfaces for end users. Designs code and tests business intelligence and reporting solutions for end users. Writes, maintains, and supports a variety of reports or queries utilizing appropriate reporting tools; assists in development of standard reports for ongoing departmental needs; manages data integrity in systems by running queries and analyzing data.

Determines the feasibility (research, design, and present business requirements analysis) of upgrading or converting systems to systems using current technology. Designs and recommends systems (hardware, software, connectivity, etc.) to accommodate the proposed plans ensuring compliance with methodologies and procedures established by the City IT Coordinator, DOT.Comm, and other IT Service Providers.
Implements, documents, and maintains the security policy for departmental specific computer applications and staff.

Monitors and manages the progress of department/division projects and compiles reports relating to project costs, time frames, resource utilization, and other pertinent factors.

Coordinates the implementation of new systems and enhancements of current systems with other City departments, the City IT Coordinator, DOT.Comm, other IT Service Providers, project committees, and other necessary personnel. Performs initial testing for applied code fixes and implemented upgrades in non-production environment. Coordinates user acceptance testing of complex and comprehensive implementations in both non-production and production environments. Provides support and trains users and peers on new functionality, explains impact of changes on affected applications, and ensures successful deployment of application modifications.

Leads functional and technical design reviews to ensure designs meet requirements and maximize performance efficiency at the lowest cost. Develop complex technical specifications that are efficient and effective and document the installation and integration of complex software changes or enhancements.

Plans, schedules, trains, and provides direction to subordinate personnel. Participates in the interview, selection, and evaluation process of subordinate personnel.

Performs workflow analysis of department/division applications to increase productivity and avoid duplication of efforts. Re-engineers or develops business processes and procedural requirements related to assigned systems. Works with City IT Coordinator to resolve redundancy of processes across applications.

Maintains knowledge of current technologies through research, periodicals, vendors, and user groups.

Participates in the installation of computer hardware, cabling, mobile data and mobile video equipment, other peripheral equipment, and software as required by the specific position held.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.

**REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of department specific processes and procedures for assigned department/division.

Knowledge of e-commerce, microcomputer operating systems, network operating systems, and the uses of application programs.
Knowledge of technical report writing using various tools (i.e., MS Access, Adobe, Crystal Reports, Accela Report Writer, Oracle ADI, Discoverer, and Oracle OBIEE) to enable reporting as required.

Knowledge of MS Access, tables, query tools, import/export specifications, macros, modules, reporting and basic SQL language, as well as HTML, Java and JavaScript, .Net, web utilities and tools, and web browsers.

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Knowledge of IP networking protocols, including IP, TCP/IP, NAT, TLS, etc. and knowledge of VoIP protocols including SIP, SDP, H.248, Diameter, and Lawful-intercept protocols.

Skill in the detection and timely resolution of software problems.

Skill in researching short-term software needs of the department/division and to plan for the accommodation of those needs.

Ability to learn and adapt to advances in computer and electronics device technology and software.

Ability to prepare and implement projects using standard project planning methodologies.

Ability to implement and maintain business processes and procedures required for coordination of efforts and expenditure of resources for the greatest benefit to the City.

Ability to convert technical program or system design specifications into application or system software (custom solution), or evaluating and utilizing previously developed application or system software (package solution), that is maintainable, well documented, and satisfies a business need.

Ability to analyze business processes and system technologies in order to develop, incorporate, and enhance systems and processes to meet department/division requirements while staying informed of emerging technologies.

Ability to perform assignments with accuracy and attention to detail; to implement decisions, recognizing precedents and practices.

Ability to prioritize and balance multiple tasks with stringent deadlines.

Ability of troubleshoot system/application related issues and determine appropriate and effective solutions.

Ability to develop and maintain project timelines, functional and technical specifications, requirements, documentation, test scripts, issues logs, database files, and tables. Ability to perform assignments with accuracy and attention to detail; to make decisions, recognizing precedents and practices.
Ability to communicate and coordinate with project committee members/leaders, City IT Coordinator, DOT.Comm personnel, departmental personnel, contractors, vendors, and the public.

Ability to develop, evaluate, and present conceptual solutions or alternatives for a problem or situation that satisfies an associated business need.

Ability to effectively identify customer priorities and align work and services accordingly.

Ability to perform various detailed tasks required to deploy application or system software into production status to ensure the resultant deliverables meet quality specification and satisfy the associated business need.

Ability to write database scripts, queries, and stored procedures. Ability to write program interfaces, data extracts, and custom reports.

Ability to create, modify, implement, and/or execute unit and system test plans/scripts to test the performance of an application to determine changes in functionality. Ability to develop, explain, implement and convey new processes and to make changes as needed.

Ability to conduct research to remain current on the ever-changing technologies.

Ability to establish and maintain effective working relationships with City employees, DOT.Comm staff, contracted IT staff, and the general public.

Ability to understand written or oral instructions.

Ability to adhere to safety policies, procedures and guidelines.

Ability to stand, walk, sit or type up to 75% of the time; and to reach, balance, bend, stoop, squat, or lift up to 25% of the time.

Ability to use up to ten (10) pounds of force to move objects up to 25% of the time, and lesser amounts from 26% to 75% of the time.

**EDUCATION AND EXPERIENCE:** (The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)

Bachelor of Science degree in Computer Science, Management Information Systems, Business Administration, or related field

AND

Six (6) years of progressively responsible experience in the management, maintenance, administration, development, support, and implementation of enterprise-wide business application software and associated hardware
OR

An equivalent combination of education and experience.

**WORKING CONDITIONS:** *(The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)*

Work is performed primarily in an office setting amid normal conditions of fumes, odors, dust, and noises; however, at times an incumbent in this classification may be required to work outdoors in all weather conditions or in an industrial building setting, with or near electrical currents and moving mechanical parts, in high places or confined spaces, amid above normal conditions of fumes, odors, dust, and noises.

**EQUIPMENT OPERATION:** *(Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)*

- Computer and Attached Hardware
  - Printer
  - Copier
- Computer Software Packages
  - Facsimile Machine
  - Telephone
- Printer/Multi-Function Printers
  - Scanner

Previous Revision Date(s): 1/10/95
  - 6/29/00
  - 7/27/00
  - 3/28/13
  - 6/29/17