INFORMATION SYSTEMS ANALYST

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

JOB OBJECTIVES

Under general supervision, provides lead and highly technical support for the City's information and communications systems, computers and users in a LAN/WAN environment; performs a variety of advanced hardware and software analysis, programming and maintenance, user support and training functions associated with the City's personal computers and network operations; provides assistance in developing and maintaining the City's network system and server environment; and to perform a variety of duties relative to assigned area of responsibility.

ESSENTIAL FUNCTION STATEMENTS

The following tasks are typical for positions in this classification. Any single position may not perform all of these tasks and/or may perform similar related tasks not listed here:

1. Perform upgrades and maintenance of server hardware and software; Install new servers and equipment; Troubleshoot network problems and issues. Regularly check for and conduct virus, spam, and malware updates and distribution to servers and workstations. Aid in disaster recovery planning and implementation, security software desktop/system; regularly monitor and maintain tape backup system and assist with data recovery for users. Support and maintain wireless infrastructure of the City.

2. Perform database design, development, and maintenance of the City's databases; work with programmers and developers contracted to work on database enhancements, specialized programming, database maintenance, special projects, report writing and other duties as assigned. Develop programs, analyze user needs and requirements, design system structures and make modifications or improvements to applications and programs.

3. Support and maintain web application servers; Provide E-Commerce and web application development. Consult with others to establish design and access standards and procedures that ensure continuity of web content and site availability for staff and the public. Oversee and perform scripting and programming of web site features and applications. Programs in languages appropriate for web browsing and transaction applications (ex: HTML, Java Script and ASP).

4. Provide computer support backup including hardware and software desktop support - answer intermediate to advanced user questions; Install/upgrade/patch hardware/software systems; Analyze and resolve complex software problems/error messages; Monitor help desk and work order priorities for user support.

5. Assist in maintaining user and application level instructional and support documentation. Update technical documentation, such as client and application specific installation configurations, problem fixes, and vendor support.

6. Assist in coordinating training programs, training computer end-users in using network and computer resources and in providing training on technology upgrades or new resources.

7. Perform network administration duties in the absence of other information systems staff.

8. Provide assistance in various information technology projects that affect the user environment.
9. Performs other duties as assigned that support the overall objective of the position.

SECONDARY FUNCTIONS

Install, configure and upgrade PC/workstation hardware and software and provide desktop support to users across the network.

Performing other functions in the Information Systems Technician classification as necessary or assigned by manager.

AUXILIARY FUNCTION STATEMENTS

Follow all safety rules and procedures established for work area.

Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Advanced knowledge of networking technologies, data and voice communications systems, image and data transmission, application development principles and database design, local area networks (LAN), and working knowledge of client/server applications, securities and internet/intranet applications.

Operational characteristics of various computer systems, databases, applications and peripheral equipment including client-server software. Maintenance and repair techniques.

Standard computer languages and advanced programming practices, relational database architecture and reporting; SQL, Progress, and HTML languages and others.

Advanced Web page development and programming.

Advanced Methods and techniques of troubleshooting hardware and software configurations and problems.

Principles and practices of network administration.

Basic principles and practices of training and instruction.

Data and voice communication and network security.

Modern office procedures, methods, troubleshooting and problem solving protocols.

Ability to:

Diagnose hardware and software problems in a complex network environment, identify solutions, make and implement recommendations.

Perform advanced network administration, engineering, and system monitoring.

Install, configure, troubleshoot and/or repair hardware and software in a complex network environment.

Support and maintain city databases, develop reports, forms and enhance the features for users.

Develop web applications (e-commerce, e-government, forms, applications, etc.) for continued enhancement to usability of the city's website for the public.

Participate in various information technology projects and computer support activities.

Develop and conduct training programs for client-server applications and programs.
Manage time and schedule activities effectively. Respond to requests and inquiries from network users and provide assistance as needed.

Operate personal computers, printers and other peripheral equipment.

Communicate clearly and concisely, both orally and in writing.

Maintain confidentiality of sensitive files and materials accessed, discussed or observed.

Establish and maintain effective working relationships with those contacted in the course of work.

**Education and Experience Guidelines**

*Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

**Education:** A four year degree in computer science or related field, and at least two years of network administration in a Windows & TCP/IP network environment, and database support, or a combination of equivalent skills and experience.

**Experience:**

Three years of increasingly responsible experience in programming and development including: experience in web development, programming and database management, SQL/Progress/Access, report writing, e-commerce, and intranet development in combination is preferable.

**Equipment used:** Personal computers, network servers, LAN and WAN hardware (bridges, routers, switches, etc.), network/phone diagnostic equipment, light hand tools, and general office equipment.

**Computer Skills:** Intermediate to advanced Windows (TCP/IP) network operating system and desktop support. Intermediate to advanced understanding of TCP/IP, DNS, Active Directory, Windows Servers, database design and administration. General firewall, VPN concepts and configuration, and understanding of VoIP telecommunications systems required. Advanced skills in database systems, database management, ODBC connectivity and reporting tools is required. Specific skills in Server 2003, MS SQL Server, Visual Studio, web development and design, and other related basic tools are highly desirable. Programming, scripting abilities such as HTML, Visual Basic, DOTNET and GUI APIs preferred. MS-SQL database administration and support preferred. Strong report writing skills required.

**Certifications:** Professional networking and/or programming certifications such as Microsoft Certified Systems Engineer (MCSE) and/or MCDBA, SQL Microsoft Certified Professional (MCP) is strongly desired. Other combinations of education, experience and other certifications and training will be considered.

Possession of an appropriate, valid Driver’s License is required.

**PHYSICAL DEMANDS AND WORKING CONDITIONS**

*The physical demands 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 these essential job functions.*

**Environment:** Office environment; exposure to computer screens.

**Mobility:** Sitting for prolonged periods of time; extensive use of computer keyboard.

**Vision:** Visual acuity to read computer screens.

**Other Factors:** Incumbents may be required to work extended hours including evenings and weekends. Incumbents may be required to travel outside City boundaries to attend meetings.