



## **JOB DESCRIPTION**

**TITLE:** APPLICATIONS ANALYST

**DEPARTMENT:** Information Technology

**LEVEL:** 12

**Position Last Evaluated: Dec 2014**

**Job Desc. Last Updated: Feb 2021**

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### **JOB SUMMARY**

Under the direction of the Manager, IT Application Services or work group supervisor, the Applications Analyst develops, designs, implements, and supports the City's mission critical business applications. While focusing on one or more areas of specialization, the incumbent participates as a member of development teams in other specialty areas.

The City of Nanaimo business applications encompass traditional information management as well as spatial projects. This position has the following areas of specialization:

- Desktop, web-based, and other programming applications
- Geospatial applications
- Database analysis and administration
- Application Sustainment

### **TYPICAL DUTIES AND RESPONSIBILITIES**

1. Performs business analysis. Determines user needs and makes recommendations regarding development, implementation, alterations, or refinement of business applications to meet City requirements. Investigates and evaluates options for developing applications initiatives and prepares a plan that defines the scope, schedule, consulting costs, and product delivery. Consults with users about information requirements, and provides advice and solutions. Identifies software and hardware solutions in order to create, manage, and share data to reduce costs, increase efficiencies, and address e-government demands and public expectations.

**TYPICAL DUTIES AND RESPONSIBILITIES cont.**

2. Performs project management. Develops, coordinates, and performs work on a variety of projects. Develops project specifications, develops/obtains pricing estimates, provides accurate project task completion estimates, assesses and monitors project tasks and deliverables, provides technical guidance, and coordinates the work of project staff.
3. Performs business system sustainment. Implements, sustains, and upgrades business applications. Notifies and maintains liaison with the system vendor and equipment service companies. Carries out test procedures on systems modifications, documents systems changes, procedures, and problems. Provides guidance to City staff as required on product functions and features to meet customers and business objectives with emphasis on implementation and maintenance.
4. Performs enterprise application troubleshooting. Provides support to clients and systems staff by identifying problems with system software components, primarily as they relate to application programming and business application upgrades and enhancements, and secondly to general operational needs. Refines issue priorities and implements timely remedial and long-term solutions to resolve day to day operational production problems.
5. Performs application configuration, development, and reporting. Depending on the area of specialization, this may include application design, database model development, report development, application configuration, and development and testing.
6. Provides specialist documentation and guidance. Writes presentation-quality system documentation and user instructions for business applications. Writes departmental systems policies and procedures for management of corporate data and business applications. Develops documents and maintains corporate standards for the storage, retrieval, and interoperability of tabular and spatial data. Maintains and improves staff productivity through development of training materials and training delivery for established applications and also for new applications as a function of project delivery.
7. Performs other duties as required.

**REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES**

Considerable knowledge of all aspects of the project life cycle and business applications delivery.

Considerable knowledge of problem definition and solution escalation techniques.

Sound knowledge of supporting a production environment.

**REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES cont.**

Some knowledge of the functions of the City departments and their requirements.

Ability to establish and maintain effective working relationships with a variety of internal and external contacts.

Ability to learn and adapt to new and changing technology to meet the goals and objectives of clients and the organization.

Ability to plan and prioritize operational, project tasks, perform under pressure, and meet deadlines.

Ability to analyse and evaluate data and information required for applications and develop logical solutions for assigned projects.

Ability to communicate with tact and discretion when dealing with or settling requests, complaints, or clarifying information to customers.

Good verbal and written communication skills. Ability to effectively document systems and prepare client documentation.

Work may involve constant handling of somewhat awkward and/or medium weight objects or tools/equipment and/or climbing structures. Core work activities may require sitting or standing for prolonged periods throughout the workday, with limited opportunity for relief.

***FOR PROGRAMMING SPECIALIZATION***

Considerable knowledge of structured, event driven, and object oriented programming (such as ASP.NET).

Considerable knowledge of client and server side scripting, including proficiency in JavaScript.

Considerable knowledge of the protocols and techniques used to deliver spatial and tabular data over the web, for example, HTTP, SOAP, REST, WMS, XML, KML, JSON.

Sound knowledge of standards-based semantic HTML and CSS.

Some knowledge of web servers and their operating systems, for example, IIS, Apache, NGINX, Windows, Linux.

***FOR GEOSPATIAL SPECIALIZATION***

Considerable knowledge of advanced geographic information concepts, systems, and applications.

Considerable knowledge of spatial database development, functionality, and applications, for example, ArcSDE.

Considerable knowledge of web-based geospatial delivery software, for example, ArcGIS Server, ArcGIS Portal, Geocortex Essentials.

Considerable knowledge in the use of GIS analytical software, for example, Esri ArcMap.

Some knowledge of software and computer techniques used for the maintenance of spatial data as related to departmental applications, for example, Safe Software FME, Autodesk Map 3D, MapInfo.

***FOR DATABASE SPECIALIZATION***

Considerable knowledge of relational database design.

Considerable knowledge of database development, including writing structured SQL queries (SQL), database analysis/modeling, data migration, and reporting.

Sound knowledge of database administration, including configuration, maintenance, and performance tuning.

***FOR APPLICATION SUSTAINMENT SPECIALIZATION***

Considerable knowledge of administration and support of municipal software systems such as Microsoft Power Platform/Azure/M365 Apps Suite, Asset Management Systems, cloud integrations, ERP systems, Tempest Land Management, EDRMS systems such as Laserfiche and SharePoint/SharePoint Online.

Considerable knowledge of business analysis and reporting.

Considerable knowledge of municipal departmental business processes.

Understanding of servers, operating systems, backups, and disaster recovery principles.

**MINIMUM TRAINING AND EXPERIENCE REQUIRED**

University degree in Computer Science, GIS, or directly-related area of study.

Minimum of 3 years' experience in one of the areas of specialization: programming, geospatial, database, or application sustainment.

**MINIMUM TRAINING AND EXPERIENCE REQUIRED cont.**

Or an equivalent combination of education and experience.

Possession of a valid Class 5 BC Driver's Licence.

Satisfactory Criminal Record Check.

**GENERAL STANDARDS**

All employees shall take reasonable care to protect their health and safety, and the health and safety of other persons by becoming familiar with the Occupational Health & Safety (OH&S) Program, following established safe work procedures, using protective equipment, and asking for training if unfamiliar with work requested to perform.

**GENERAL STANDARDS cont.**

Contributes in maintaining a respectful, safe, and supportive work environment that embraces diversity and where everyone is treated with courtesy, dignity, and fairness.

Adheres to City policies and objectives.