4GEOGRAPHIC INFORMATION SYSTEMS DEVELOPER

MAJOR FUNCTION

This is senior/lead level technical and professional geographical information system (GIS) work in the ISS Department designing, creating, coordinating, maintaining, and updating applications and data comprised of spatially correct graphic features and associated attribute data. Job class incumbents possess an extensive background in information management and GIS. Work is performed with considerable independence under the supervision of a Project Manager and is reviewed through observation, conferences, reports and results obtained.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

Essential Duties

Establishes, maintains, and promotes the GIS software systems across the organization through the design, creation and management of applicable data and applications. Supports existing GIS applications and the development and implementation of new GIS based applications, including spatial and non spatial database design, and the development of client-server and web-based user interfaces. Develops GIS software applications to extend and customize GIS tools for the analysis and presentation of GIS data and integrates GIS data with other information systems for business unit or organization-wide use. Coordinates development of application requirements for GIS services with technical, administrative, operational and engineering staff. Creates and documents standard procedures and application documentation necessary for GIS applications, databases and integrations. Uses the GIS to support infrastructure planning, modeling, mapping, statistical, operational, and administrative functions. Evaluates and recommends purchase of software and hardware for GIS and general information systems. Provides training in the use of the GIS and technical support to ISS personnel, and administrative, professional, operational and/or engineering staff throughout the organization. Defines standards for data use, storage and exchange between the GIS and other automated systems. May supervise technical staff. If supervisory responsibilities are assigned, recommends the selection, transfer, advancement, grievance adjustment, discipline and discharge of employees. Conducts performance appraisals and recommends the approval or denial of merit raises. Performs other related work as required.

Other Important Duties

Serves as a technical lead and consultant to ISS staff and department level GIS staff on development of GIS applications and integration with other technology solutions. Performs other related work as required.

DESIRABLE QUALIFICATIONS

Knowledge, Abilities and Skills

Considerable knowledge of geographic information systems. Understanding of both spatial and nonspatial database design in both Oracle and Microsoft SQL Server database platforms. Ability to communicate clearly and concisely both orally and in writing. Ability to use GIS tools such as ArcView, ArcGIS, ArcInfo, ArcSDE, ArcIMS, ArcEngine, ArcServer, AutoCAD, ArcPAD and GPS equipment. Ability to understand and adhere to an information systems applications development lifecycle process. Application development skills utilizing tools such as C++, Java, Visual Basic.Net, Visual Studio.NET or comparable application development skills.

Minimum Training and Experience

Possession of a bachelor's degree in geography, computer science, computer information management, engineering science, urban and regional planning or a related field and two years of technical or professional experience that includes database design and microcomputer application development or an equivalent combination of training and experience.

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<u>Necessary Special Requirement</u> A Class E State driver's license may be required at the Department Director's discretion.

Established: 09-19-05 04-04-18 Revised: