

# NEW CASTLE COUNTY GOVERNMENT

Number 08/23/11

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Date 0217

## CLASS SPECIFICATION

Title: SEWER SYSTEM ANALYST

Approved:



GENERAL STATEMENT OF DUTIES: Performs all phases of work involving the design, implementation and maintenance of the County's sewer system model(s); compiles and analyzes flow metering data; does related work as required.

DISTINGUISHING FEATURES OF THE CLASS: Responsibilities include the maintenance of an information system to record infrastructure capacities to facilitate decisions concerning sewer system management. This employee may also supervise staff. An employee in this class performs technical work in the design, configuration and programming of application software in support of the County's sewer system model(s) and overall management of County's sewer system infrastructure.

EXAMPLES OF WORK: (Illustrative only)

- Develops and maintains County-wide sewer capacity information system;
- Provides technical guidance through advice and consultation regarding sewer management, planning and sewer meter program;
- Makes engineering calculations related to infrastructure management and planning;
- Evaluates, installs, tests and maintains assigned application software;
- Develops or modifies designated application software systems and coordinates programming, conversion and testing of new programs;
- Performs detailed systems design, database design and develops program specifications;
- Coordinates training of new personnel (Engineering, Software, Meter data);
- Provides information, assistance and technical resources to users and department staff with regard to sewer system models and flow metering interpretation;
- Designs, develops, tests, debugs and documents computer programs;
- Builds add-ins to extend the ArcGIS Desktop interface;
- Integrates desktop ArcObjects with add-in buttons and tools;
- Provides information for various projects handled through vendor contracts pertaining to metering, modeling and data acquisition, and implementations;
- Provides timely and accurate reports in support of management;

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Date 0217

**Title:** SEWER SYSTEM ANALYST

**Approved:**



- Builds Hydraulic Models to support sewer system analysis and planning; evaluates performance of flow metering network data; manages and updates sewer capacity model;
- Facilitates the application of the Sanitary Sewer Overflow Analysis and Planning (SSOAP) Toolbox;
- Promotes an ongoing attitude of dedication to excellent public service and ensures that external and internal customers are provided with the highest quality of service;
- Operates a personal computer and other related equipment in the course of the work.

**REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:** Thorough knowledge of the principles and practices of engineering as applied to the design and planning of sewer and sewer related projects; ability to adapt to systems development and computer database management products utilized by the County in order to develop and maintain the sewer capacity management information systems; ability to utilize, manage and coordinate a geographic information system (GIS) with other departments; good knowledge of the principles and techniques of systems design and analysis; ability to analyze methods and procedures accurately and logically; ability to reason logically, draw valid conclusions and develop effective solutions to system problems; ability to supervise others; ability to prepare comprehensive reports; ability to communicate effectively, both verbally and in writing.

**MINIMUM QUALIFICATIONS:** Possession of an Associates Degree from an accredited college or university with major course work in civil engineering or related field and at least five (5) years systems and design experience with hydraulic modeling and application development; or an equivalent combination of education, experience and training directly related to the required knowledge, skills and abilities.

**PREFERRED QUALIFICATIONS:** Possession of a Bachelor's Degree from an accredited college or university with major course work in civil engineering with knowledge of hydraulic modeling and application development and at least three (3) years experience in a related field.

**ADDITIONAL REQUIREMENTS:** Ability to pass a Class III County physical examination and background check.