

POSITION TITLE:

Staff Civil Engineer

DEPARTMENT:

Civil

INCUMBENT:**REPORTS TO:**Director,
Civil Engineering**DATE:**

October 2021

GENERAL FUNCTION:

Under the direction of the Director of Civil Engineering, the Staff Civil Engineer will design, plan, and supervise the construction of infrastructure projects such as site developments, culverts, roads, dams, stormwater hydrology, storm sewer, water line, stormwater control, water quality control and site grading.

ESSENTIAL DUTIES & RESPONSIBILITIES:

- Consults with and provides guidance to project stakeholders and managerial staff regarding engineering requirements for construction of various designs, modifications, and structural repairs.
- Uses design software and drawing tools to accurately render and communicate designs; plans and designs other necessary and related systems and structures such as transportation or hydraulics.
- Assesses strength of foundations, concrete, asphalt, or steel by testing materials and soil.
- Sets design specifications by computing load and grade requirements, material stress factors, water flow rates, and similar parameters.
- Plans projects based on the analysis of relevant materials such as drawings, blueprints, aerial photography, survey reports, maps, and other geologic and topographical data.
- Drafts and presents reports on topics related to projects such as environmental impact statements and right-of-way descriptions.
- Estimates materials, equipment, and labor needed to determine project costs.
- Collaborates with architects and contractors to ensure projects progress properly.
- Collaborates with surveyors (or directs and participates in surveying) to establish installations or reference points, grades, elevations, and other factors that will affect construction.
- Monitors project progress and ensures design specifications, safety, and sanitation standards are met.
- On completion of a project, inspects, repairs, and maintains the structures as needed.
- Performs other related duties as assigned.

QUALIFICATIONS / SKILLS AND ABILITIES:

- Thorough understanding of civil engineering principles, practices, and tools.
- Proficient in computer-assisted design (AutoCAD Civil 3D) and other design, data recording, and analyzation software.
- Thorough understanding of materials, methods, and tools involved in the construction or repair of storm sewers, sanitary sewers, site grading, roads, and other related structures.
- Thorough understanding of safety regulations related to assigned projects.
- Ability to identify and solve complex problems.



- Excellent verbal and written communication skills.
- Ability to be both creative and analytical.
- Extremely detail-oriented and accurate.
- Bachelor’s degree in Civil Engineering required; Master’s degree preferred.

PHYSICAL DEMANDS:

The physical demands described are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

Employee is regularly required to use hands and fingers, handle, or feel; reach with hands and arms; climb or balance; and talk or hear. The employee frequently is required to stand, walk, stoop, kneel or crouch. The employee is required to sit. The employee must regularly lift and/or move up to 10 pounds, and occasionally move up to 50 pounds. Specific vision requirements include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to focus.

WORK ENVIRONMENT:

Characteristics of the work environment are representative of those that may be encountered by an employee while performing the essential functions of the job. Must be able to travel to various project sites. Must be able to access and navigate job sites and construction areas. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

We understand and mutually accept that the above description and supplement represent our agreements as to the job to be performed.

Employee *Date*

Supervisor *Date*

