MINIMUM QUALIFICATIONS:

Graduation from a regionally accredited or New York State registered four year college or university with a Bachelors degree in Civil Engineering AND four years full time paid broadly based management or supervisory experience in the design and/or construction of building projects and/or heavy highway projects, two years of which must have been in a management or supervisory capacity.

SPECIAL REQUIREMENTS:

The successful candidate must possess a valid New York State class D drivers license at the time of appointment and maintain such license for the duration of employment.

Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

DISTINGUISHING FEATURES OF THE CLASS:

This is a management and engineering position focused on highway and bridge project planning, design, management, and construction. The maintenance of high standards of quality assurance and control is a significant element of the position. The incumbent is responsible for the efficient utilization of Highway staff, consultants, contractors, materials, and equipment in coordinating the planning, inspection, design, engineering, surveying, construction, and maintenance of county highways and bridges. The position involves a great deal of contact with design/engineering consultants, contractors, state and federal highway officials and funders, vendors, and members of the public. The project coordination and public communication components of this job require the employee to be an efficient and effective communicator. The work is under the general supervision of the Highway Director with a high level of autonomy and independent judgment exercised in the planning and methods of activities within established policies. General supervision is exercised over the work of the Division’s engineering staff, with extensive interaction with Senior Highway Crew Supervisor and with Highway Crew Supervisors and crews as needed. The incumbent will perform all related duties as required.

TYPICAL WORK ACTIVITIES:

Develops and manages annual and long-range plans for the maintenance and upgrade of the highway network for review and approval by the Highway Director; Interacts with state and federal highway officials and funding agencies to maximize opportunities to secure state and federal financial participation in highway and bridge projects; Utilizing in-house staff and outside engineering consultants, coordinates the design of specific highway and bridge improvements in accordance with the annual and long-term plans; Originates and prepares project designs, proposals, specifications, estimates, and contract proposals for engineering services and construction contracts; Works with consulting engineers to implement and enforce the County’s Road Preservation Law; Establishes and implements project management systems and processes to ensure project completion within budget and on schedule, and in conformity to contract requirements including the quality of construction in adherence to predetermined schedules. Construction management activities include, but are not limited to, bidding processes, proposal requests, change orders, pay applications, monitoring construction testing, design interpretations, field inspections, job meetings, progress schedule updates, submittal reviews and approvals, and certifying project completion; Supervises the Division’s engineering staff and interacts with Senior Highway Crew Supervisor to plan and undertake road and bridge repairs in accordance with Division plans, specifications, and standards; Assigns, oversees, coordinates, and inspects projects undertaken by staff and consultants; Develops and implements quality-control requirements and quality-assurance programs, and standard practices based
on engineering and construction principles;
Makes regular visits to work sites to check progress and assist in resolving problems;
Inspects roads to determine condition and maintenance needs and utilizes a computerized pavement management system to record, track and prioritize road conditions and required maintenance strategies and costs;
Develops work/service orders for roadside signage to include repair and installation, construction work zones and detours in accordance with the NYS Manual of Uniform Traffic Control Devices;
Provides technical advice to Highway Crew Supervisors on difficult and complex projects;
Gathers input from field and supervisory staff to incorporate into road and improvement projects and plans;
Analyzes budget resources and constraints to develop the most cost-effective use of highway dollars;
Interacts with the public to identify problems, concerns, and interests involved with highway maintenance and construction;
Assists the County Highway Director in the development of specifications for highway materials;
Develops and implements standard practices based on engineering principles for maintenance and construction projects;
Prepares reports and information for the Highway Director and Legislative oversight committee(s);
Provides highway engineering design and survey services for specific construction projects;
Attends job-related training/seminars as determined by the Highway Director;
Writes work/service orders for construction and maintenance projects;
Promotes the most cost-effective use of labor and equipment resources by planning efficient maintenance and construction processes;
Plans for and implements the use of a geographic information system (GIS) based pavement management system in the management of the highway infrastructure;
Oversees the use of the job costing software to track and manage operational expenses and to see that projects stay within the cost targets and objectives set by the Highway Director;
Conducts surveys to obtain data on pavements, drainage structures and watersheds, guardrail systems, traffic signing, etc.

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of the methods, materials and terminology used in the construction and repair of roads and adjacent areas including snow and ice control;
Thorough knowledge of safety precautions used in highway construction and maintenance work;
Thorough knowledge of construction and Civil Engineering Practices;
Working knowledge of State and Federal highway and Bridge aid programs;
Working knowledge of and the ability to use spreadsheet, word processing, CADD, database, and project management related software;
Working knowledge of the NYS Manual of Uniform Traffic Control Devices (MUTCD) to include, but not limited to, warning, regulatory, construction and detour signage;
Skill in the use of and the ability to operate a variety of surveying instruments;
Ability to effectively communicate with staff, superiors, consultants, legislators, and the general public;
Ability to manage multiple complex projects;
Ability to generate, read, interpret, and understand engineer drawings, specifications, sketches, blueprints and related road construction and maintenance plans;
Ability to plan, coordinate and supervise the work of the Senior Highway Crew Supervisors;
Ability to carry out oral and written directions;
Ability to maintain budgetary, cost and material records and prepare reports with various computer software programs;
Ability to prepare narrative reports on projects proposed and in progress;
Ability to perform basic highway/bridge related engineering analysis and design;
Ability to establish and maintain cooperative and effective working relationships with the public, contractors, consultants, vendors, co-workers, other departments within the county, and officials of other municipalities;
Ability to develop knowledge about use and application of hot mix, cold mix, and asphalt emulsion products and stabilization materials and techniques;
Ability to distinguish/recognize when construction materials appear to be out of specification;
Willingness to respond to emergencies and work overtime;
Dependability, initiative, resourcefulness and good judgment are required;
Physical condition commensurate with the demands of the position.

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