



# Civil Engineer I

Job Specification  
Classification: Competitive  
Series: Engineering  
Level: 1 of 3

**DISTINGUISHING FEATURES OF THE CLASS:** This is the first level of the Engineering series and is responsible for performing professional level engineering design and project management. Responsibilities include managing all aspects of construction projects by coordinating zoning, permits, and project steps; surveying; designing projects; preparing project specifications; preparing budget estimates; coordination with contractors, field inspections, and regulatory oversight. The incumbent does related work as required.

**EXAMPLES OF WORK ACTIVITIES:** (Illustrative only)

- Coordinates the planning and scheduling of construction and/or improvement projects; monitors project progress to ensure timelines and cost effectiveness of projects.
- Prepares documentation and materials for engineering projects, which includes: performing design calculations, preparing project specifications, developing cost estimates, conducting field investigations, writing bid specifications, and/or performing other related activities.
- Monitors compliance with applicable federal, state, and local laws, rules, practices, policies, and regulations; conducts field inspections of sites for conformation with plans and specifications.
- Responds to a variety of inquiries from City staff and the general public related to processes and procedures within assigned projects and plans.
- Confers with engineers, citizens, developers, and builders with applicable engineering issues for assigned projects.
- Conducts topographical surveys for various construction projects; decides what items are important to locate and most efficient method of locating them.
- Coordinates construction meetings with and between contractors, staff, external agencies/companies, citizen groups, and/or other applicable parties.
- Develop and maintain an inventory of primary building systems (i.e. HVAC, roofs, lighting, envelopes, etc); plans long term capital projects and budgets; create detailed reports and make presentations to City Council.

**FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of:

- Civil engineering principles, practices, and standards;
- Surveying practices and principles;
- Engineering, drafting, and estimating terminology, methods, practices, and techniques;
- Construction materials and calculations for total usage in assigned projects;
- Advanced mathematical principles;
- Project management principles;
- Applicable federal, state, and local laws, rules, and regulations.

Ability to:

- Use a computer and related software applications;
- Interpret and apply applicable laws, rules, and regulations;
- Read and interpret plans, specifications, and blueprints;

**FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES:**

Ability to: (continued)

- Organize, evaluate, and comprehend technical data;
- Analyze problems during design and construction process and make appropriate recommendations;
- Prepare construction related drawings;
- Develop and review engineering plans and specifications;
- Coordinate activities between multiple parties;
- Prepare estimates of various construction projects;
- Communicate using interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.
- Interpret and apply applicable laws, rules, and regulations for building, utility and street reconstruction projects.

Physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:** Either

- (A) Graduation from a regionally accredited college or university or one accredited by the NYS Board of Regents to grant degrees with a Bachelor's Degree or higher in Civil Engineering or closely related engineering field; or
- (B) Associate's Degree in civil engineering or closely related field and 4 years of practical experience in the civil engineering field; or
- (C) Successful completion of the Fundamentals of Engineering (FE) examination.

Licensing Requirements: Valid NYS driver's license.

**SPECIAL NECESSARY REQUIREMENT:**

- Any employee hired to this position must obtain FE certification within two (2) years of appointment. The City Manager has the purview/option to waive the FE requirement for the selected individual based upon the demonstrated level of experience.

**Classification history:**

Revised: 7/17/2007; 5/20/2008; 3/20/2012; 6/20/17