

## **SENIOR DRAFTING TECHNICIAN**

Code No. 3-13-004  
COMPETITIVE

**DISTINGUISHING FEATURES OF THE CLASS:** This position provides technical support involving drafting working plans and drawings from rough sketches or notes, for engineering purposes. Work is performed utilizing computer-aided drafting techniques and 3D laser technology. Assignments typically involve drafting plans and updating and modifying drawings for various physical structures, buildings, roadways, sewer, and drainage structures. This position may involve field work at construction job sites. This position differs from Drafting Technician by virtue of its higher technical skill and independent performance. The employee reports directly to, and works under general supervision of, a senior-level staff member. Supervision may be exercised over subordinate staff, or the employee may coordinate specific projects. Does related work as required.

**TYPICAL WORK ACTIVITIES:** (All need not be performed in a given position. Other related activities may be performed although not listed.)

Develops preliminary layouts based on information provided including dimensions, orientations, site studies, project types, etc.;

Studies existing drawings of structures and/or utilities in relation to proposed repairs, renovations or modifications and drafts project drawings based on information, data and directions provided by the engineer in charge of the projects;

Keeps current with various computer-aided drafting and 3D laser scanning technology;

Completes working drawings for various projects of diverse degrees of difficulty with close supervision from the engineer in charge of the project;

Prepares "as-built" drawings of projects by modifying project work drawings using information, data, and directions provided by the engineer in charge of the project;

Updates computerized file drawings at the conclusion of renovation or modification projects;

Prepares profile and cross-section drawings by utilizing various sources of elevation data, such as Light Detection and Ranging (LiDAR);

Maintains existing electronic drawing files and paper record drawings for accuracy, including taking field measurements using 3D laser scanning technology and verifying construction, prior to making changes to computerized master drawings;

Reviews the drawing file systems and develops revisions to improve file maintenance system;

Maintains a digital records management system and hardcopy records archive;

### **When assigned to the Monroe County Department of Transportation:**

Drafts field edited highway plans, designs guide rail plans, and inspects highway rehabilitation and guide rail improvement projects.

**FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES, AND PERSONAL CHARACTERISTICS:** Good knowledge of the basic concepts, terminology, and proper procedures used when creating technical drawings utilizing computerized drafting software; good knowledge of the fundamentals of algebra, plane geometry and trigonometry used in drafting; working knowledge of the physical sciences as they relate to drafting activities; ability to read and interpret project drawings and specifications; ability to conduct technical surveys; ability to read, analyze, and solve technical-level written problems involving addition, subtraction, multiplication, division, algebraic equations, geometric concepts and figures and basic trigonometric functions; ability to maintain digital records management systems; ability

to establish and maintain effective professional relationships; good judgment in resolving drafting problems; physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:** Graduation from high school or possession of an equivalency diploma, plus EITHER:

- (A) Two (2) years paid full-time or its part-time equivalent experience in computer-aided drafting or computer-aided mechanical or architectural drawing; OR,
- (B) Graduation with an Associate's degree in Drafting, Architectural Drafting, Architecture, or Civil or Construction Technology, with at least six (6) college semester credits in coursework that involved computer-aided drawing\*; OR,
- (C) An equivalent combination of education and experience as defined by the limits of (A) and (B) above.

\*Candidates who meet the minimum qualifications under (B) above must submit a student or official copy of the college transcript or itemized list of course work and credits received, and course descriptions of the computer-aided drawing coursework, at the time of application.

**NOTE:** Your degree must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education. If your degree was awarded by an educational institution outside the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the Internet at <http://www.cs.ny.gov/jobseeker/degrees.cfm>. You must pay the required evaluation fee.

**SPECIAL REQUIREMENT:** If you are appointed, you will be required to possess a valid license to operate a motor vehicle in New York State or otherwise demonstrate your capacity to meet the transportation needs of the job.

**REVISED:** December 19, 1985  
**REVISED:** September 17, 1992  
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