

SENIOR ENGINEERING AIDE

Code No.: 4-14-001
COMPETITIVE

DISTINGUISHING FEATURES OF THE CLASS: This is a technical position responsible for assisting in a variety of engineering duties related to highway construction projects. Duties involve drafting, including computer aided drafting (CAD), project inspection, assisting in surveying, conducting project and permit reviews, and outdoor field work. The employee reports directly to, and works under the general supervision of an Engineer or other higher level staff member. 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.)

Assists engineering staff in the preparation of topographical highway and traffic plans by field review, computer aided drafting (CAD) and performing quantity takeoffs;

Assists engineering staff in reviewing plans, specifications, and highway improvements for residential and commercial development;

Assists engineering staff by conducting field identification of the location of utilities in the highway right-of-way;

Conducts daily inspections of approved projects to verify work is performed in accordance with plans, specifications, and county standards;

Assists engineering staff in performing engineering surveys;

Researches departmental records for reference data required to conduct permit reviews;

Gathers and records engineering data;

Conducts project and permit reviews for proposed highway projects;

Prepares narrative reports and maintains and updates records and logs of work performed;

Conducts sewer stakeouts by marking the locations of sewer mains and laterals;

Reads and interprets plans, maps, and specifications;

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Good knowledge of the methods and materials used in the construction and maintenance of roads; good knowledge of drafting and surveying including computations; good knowledge of computer aided drafting (CAD) technology; working knowledge of engineering mathematics including algebra, geometry and trigonometry; working knowledge of state and local laws governing the construction and installation of highways and storm drainage systems; ability to review and interpret maps, plans and specifications; ability to understand and interpret technical instructions and dimensional drawings; ability to write narrative reports and maintain records; ability to express engineering concepts in drawings and specifications; ability to utilize a computer to maintain and update a database; ability to establish and maintain effective working relationships;

ability to work outdoors and in extremes of weather conditions; good judgment; physical condition commensurate with the demands of the position.

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

- (A) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's degree in Civil Engineering, Civil Engineering Technology, Engineering Science or a closely related field; OR,
- (B) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in one of the fields mentioned in (A) above plus one (1) year paid full-time or its part-time equivalent experience in engineering or construction involving either engineering, drafting, surveying, or project inspection all of which must have involved interpreting plans and specifications; OR,
- (C) Three (3) years paid full-time or its part-time equivalent experience as defined in (B) above; OR,
- (D) Certification from the National Institute for Certification in Engineering Technologies (NICET) as a Level II in Highway Design or Construction*; OR,
- (E) An equivalent combination of education and experience as defined by the limits of (A), (B) and (C) above.

*Candidates applying under option (C) must submit a copy of the certification with their application.

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

REVISED: June 28, 1979
REVISED: June 17, 1982
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