ENGINEERING OCCUPATIONAL GROUP [158]

MECHANICAL ENGINEER

Duties and Responsibilities

This class of positions encompasses professional mechanical engineering work of varying degrees of difficulty and responsibility. There are various Assignment Levels within this class of positions. All personnel perform related work. The following are typical assignments within this class of positions.

Assignment Level I

Under general supervision, performs responsible supervisory work, or difficult and responsible work, in mechanical engineering, such as the following:

Is section engineer in charge of a major mechanical engineering section, or equivalent.

Plans, assigns, and reviews the work of subordinates, prepares progress reports, and may represent an agency, department head or top-level engineering or architectural officer or employee in relations with City agencies and departments, contractors and their representatives, damage claimants and their representatives, consultants, and the general public.

Engages in, or supervises the conduct of complex and important research, investigations, studies or examinations related to the engineering functions or activities of a department or agency.

R 12.12.1990

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MECHANICAL ENGINEER (continued)

Assignment Level I (continued)

Prepares, or supervises the preparation of, or examines and reviews the mechanical engineering portions or aspects of the basic design plan, or significant or complex portions of the basic design plan, for major projects for the construction, remodeling, operation, maintenance or repair of public works, structures or installations; prepares designs, plans, contract and working drawings, contract specifications and other technical specifications.

Supervises the conduct of construction inspection operations with particular reference to mechanical installations or apparatus, or in the inspection or testing in a laboratory, manufacturer's plant or on a job site of equipment or materials to be incorporated in public works, plants or structures or the inspection of premises, in connection with the issuance of requisite and pertinent permits and compliance with the provisions of law, rule and regulation.

Participates in the supervision of the operation, maintenance, and use of plant, machinery or apparatus.

In the Department of Buildings, examines the mechanical engineering aspects of plans for buildings or structures to secure adherence to the provisions of the Building Code and other pertinent laws, rules and regulations.

When assigned in writing, may sign and seal engineering and other official documents.

Assignment Level II

Under direction, with great latitude for the exercise of independent judgment or action, performs highly difficult and technically complex work as an engineering specialist in mechanical engineering, such as the following:

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MECHANICAL ENGINEER (continued)

Assignment Level II (continued)

Serves as a consultant on major engineering matters.

Conducts or directs a significant portion of research on very complex and important engineering projects.

Prepares original proposals and reports of a complex nature.

Serves as team leader on a project of great technical complexity or with potential impact on agency engineering operations and/or City infrastructure.

Signs and seals engineering and other official documents.

When necessary, performs the duties described under Assignment Level I, provided these do not represent the majority of job responsibility over an extended period of time.

Assignment Level III

Under direction, with very great latitude for the exercise of independent judgment or action, performs extremely difficult, responsible and technically complex work, as an engineering specialist in mechanical engineering, such as the following:

Serves as a consultant on extremely complex and highly specialized engineering matters.

Conducts or directs all aspects of research on extremely complex and important engineering projects.

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MECHANICAL ENGINEER (continued)

Assignment Level III (continued)

Oversees the preparation or review of proposals or reports of a complex nature. Reviews such proposals and reports and recommends appropriate action.

Coordinates multiple projects of great technical complexity with major potential impact on agency engineering operations and/or the City's infrastructure.

Presents and defends proposals on major engineering projects to high level agency and/or City officials.

Signs and seals engineering and other official documents.

When necessary, performs the duties described under Assignment Level I and II, provided these do not represent the majority of job responsibility over an extended period of time.

Qualification Requirements

A valid New York State Professional Engineer's License and four years of full-time experience in mechanical engineering. A master's degree in mechanical engineering from an accredited college will be accepted as equivalent to one year of the full-time experience in mechanical engineering.

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MECHANICAL ENGINEER (continued)

Qualification Requirements (continued)

Special Note:

In addition to above qualification requirements, to be eligible for placement in Assignment Levels II and III, individuals must have at least one year within the last three years of experience as a major contributor or a project leader on a complex project requiring additional and specific expertise in the disciplines needed to design or construct the project.

Direct Lines of Promotion

From: Assistant Mechanical Engineer <u>To:</u> Administrative Engineer

(20410) (10015)