

**MICHIGAN CIVIL SERVICE COMMISSION**  
**JOB SPECIFICATION**  
**ENGINEER MANAGER-LICENSED**

**JOB DESCRIPTION**

Employees in this job direct professional non-licensed and/or licensed subordinates in a specific area of specialized engineering work. The employee works within general methods and procedures, exercises considerable independent judgement to select the proper course of action, and is required to review the work of subordinate level employees to ensure conformance with established guidelines, methods, procedures, and policies.

There are five classifications in this job. The information provided under each position code title represents a general description of the classification concept. To determine the appropriate level of the manager position, application of the Professional Managerial Position Evaluation System is required.

**Position Code Title - Engineer Manager Licensed-1**

Engineer Manager-Licensed 12

The employee functions as a first-line professional manager of a professional position in a standard work area or a first-line professional manager of nonprofessional positions in a standard work area.

**Position Code Title - Engineer Manager Licensed-2**

Engineer Manager-Licensed 13

The employee functions as a first-line professional manager of professional positions in a standard work area, a first-line professional manager of a professional position in a complex work area, a first-line professional manager of nonprofessional positions in a complex work area, a first-line manager of a professional position in a standard work area receiving executive direction, or a first-line professional manager of nonprofessional positions in a standard work area receiving executive direction.

**Position Code Title - Engineer Manager Licensed-3**

Engineer Manager-Licensed 14

The employee functions as a first-line professional manager of professional positions in a complex work area, a first-line professional manager of professional positions in a standard work area receiving executive direction, a second-line professional manager of professional positions in a standard work area, a first-line manager of a professional position in a complex work area receiving executive direction, or a first-line professional manager of nonprofessional positions in a complex work area receiving executive direction.

**Position Code Title - Engineer Manager Licensed-4**

Engineer Manager-Licensed 15

The employee functions as a first-line professional manager of professional positions in a complex work area receiving executive direction, a second-line professional manager of professional positions in a complex work area, a second-line manager of professional positions in a standard work area receiving executive direction, or a third-line professional manager of professional positions in a standard work area.

## **Position Code Title - Engineer Manager Licensed-5**

### **Engineer Manager-Licensed 16**

The employee functions as a second-line professional manager of professional positions in a complex work area receiving executive direction, a third-line professional manager of professional positions in a complex work area, a third-line manager of professional positions in a standard work area receiving executive direction, or a fourth-line professional manager of professional positions in a standard work area.

### **JOB DUTIES**

**NOTE:** The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Selects and assigns staff, ensuring equal employment opportunity in hiring and promotion.

Coordinates activities by scheduling work assignments, setting priorities, and directing the work of subordinate employees.

Evaluates and verifies employee performance through the review of completed work assignments and work techniques.

Identifies staff development and training needs and ensures that training is obtained.

Ensures proper labor relations and conditions of employment are maintained.

Maintains records, prepares reports, and composes technical correspondence relative to the work.

Serves as responsible engineer in charge over the work of licensed and non-licensed subordinate personnel.

Writes contracts for labor, materials, and equipment for construction projects; prepares and authorizes partial and final payment to contractors.

Directs the establishment of cost records, charges, and accounting for construction projects.

Reviews engineering reports, plans, and specifications for engineering systems and equipment, new and/or modified construction, facilities, highway, bridge, equipment, etc, for conformance with accepted program standard.

Approves, reviews, and inspects materials and completed phases of work in connection with any structure, building, machine, highway, bridge, equipment, process, work or project as a final authority.

Maintains liaison with local units of government including contractors, federal and local governments, local health departments, public safety, occupational safety, and/or health organizations.

Determines specialized engineering program needs and opportunities in an assigned area and coordinates with programs in other districts, divisions, etc.

Analyzes and interprets laboratory and field data from investigations.

Reviews periodic progress reports from project engineers and architects on buildings under construction, and attends and participates in progress meetings.

Evaluates and makes recommendations concerning changes in contract documents and ensures that authorized changes are carried through.

Directs and participates in studies of specialized engineering problems in various locations.

Makes periodic inspections of equipment and system to observe and make recommendations on operational procedures.

Participates in pre-construction meetings with engineers and contractors to discuss construction scheduling, methods of construction, and problems which may be encountered on the project.

Advises and/or consults with architects, engineers, owners, and contractors regarding layout, design, code requirements for electrical or mechanical installation; or preliminary layout, construction procedures, and code requirements that apply to building projects.

Provides consultation for other licensed and non-licensed engineers for the purpose of maintaining federal, state, and local standards.

Performs related work as assigned.

## **JOB QUALIFICATIONS**

### **Knowledge, Skills, and Abilities**

**NOTE:** Considerable knowledge is required at the 12 level and thorough knowledge is required at the 13-16 levels.

Knowledge of the principles and practices of a specialized field of engineering.

Knowledge of mathematics and mathematical tables used in engineering work.

Knowledge of the standards, codes, and regulations pertaining to the construction and maintenance of structures and facilities.

Knowledge of the basic practices used in the maintenance, operation, and administration of utility companies.

Knowledge of scientific principles relative to transportation and/or environmental control.

Knowledge of the equipment, testing, and investigative methods and laboratory procedures related to the specific field of engineering.

Knowledge of the items involved in the establishment and operation of public utility rates and schedules.

Knowledge of state, federal, national, and local laws and building codes related to the work.

Knowledge of accepted practices followed in preparing plans, estimates, specifications, and contracts for engineering work.

Knowledge of modern materials, methods, and techniques of design, construction, installation, and maintenance of structures and facilities.

Knowledge of the principles of mechanics, hydraulics, and structures.

Knowledge of the elements of cost in construction and maintenance including the determination of unit cost records.

Knowledge of engineering design and related drafting practices.

Knowledge of building construction processes and procedures, equipment, tools, materials, and their application.

Knowledge of technical and administrative problems.

Knowledge of training and supervisory techniques.

Knowledge of equal employment opportunity policies and procedures.

Knowledge of employee policies and procedures.

Knowledge of labor relations.

Skill in the use of engineering instruments and tools, including computers and engineering work stations.

The legal ability to carry the embossed or printed seal of a licensed professional engineer.

Ability to perform specialized technical research work and studies and to make recommendations on engineering problems or prepare technical reports and articles.

Ability to make mathematical computations and to design engineering projects.

Ability to read, interpret, and/or prepare engineering plans, specifications, blueprints, and technical reports.

Ability to supervise and evaluate others.

Ability to make engineering designs and to prepare complete plans for projects.

Ability to organize and set priorities for work assignments, and to assign and explain them to subordinates.

Ability to collect and analyze engineering data.

Ability to determine if completed structures comply with specifications.

Ability to communicate effectively.

Ability to organize, evaluate, and present information effectively.

Ability to serve as an expert witness.

Ability to promote and maintain favorable public relations.

Ability to withstand vigorous and prolonged cross-examination in adversarial telephone rate proceedings.

Ability to maintain records, prepare reports, and conduct correspondence related to the work.

### **Working Conditions**

Work may be performed in an office or field locations and may require movement from one location to another, as well as exposure to working along busy highways and adverse weather conditions.

### **Physical Requirements**

*None*

### **Education**

Possession of a bachelor of science degree in engineering.

### **Experience**

#### **Engineer Manager-Licensed 12**

Three years of professional experience equivalent to an Engineer, including one year equivalent to an Engineer P11.

#### **Engineer Manager-Licensed 13**

Four years of professional experience equivalent to an Engineer, including two years equivalent to an Engineer P11 or one year equivalent to an Engineer 12, Engineer Manager 12, or Engineer Manager-Licensed 12.

#### **Engineer Manager-Licensed 14**

Five years of professional experience equivalent to an Engineer, including three years equivalent to an Engineer P11; two years equivalent to an Engineer 12, Engineer Manager 12, or Engineer Manager-Licensed 12; or, one year equivalent to an Engineer Manager 13, Engineer Manager-Licensed 13, Engineering Specialist 13, or Engineering Specialist-Licensed 13.

### Engineer Manager-Licensed 15

Six years of professional experience equivalent to an Engineer, including three years equivalent to an Engineer 12, Engineer Manager 12, or Engineer Manager-Licensed 12; two years equivalent to an Engineer Manager 13, Engineer Manager-Licensed 13, Engineering Specialist 13, or Engineering Specialist-Licensed 13; or, one year equivalent to an Engineer Manager 14, Engineer Manager-Licensed 14, Engineering Specialist 14, or Engineering Specialist-Licensed 14.

### Engineer Manager-Licensed 16

Seven years of professional experience equivalent to an Engineer, including three years equivalent to an Engineer Manager 13, Engineer Manager-Licensed 13, Engineering Specialist 13, or Engineering Specialist-Licensed 13; two years equivalent to an Engineer Manager 14, Engineer Manager-Licensed 14, Engineering Specialist 14, or Engineering Specialist-Licensed 14; or, one year equivalent to an Engineer Manager 15, Engineer Manager-Licensed 15, Engineering Specialist 15 or Engineering Specialist-Licensed 15.

### **Special Requirements, Licenses, and Certifications**

Michigan licensure as a registered professional engineer.

**NOTE:** Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

### **JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION**

#### **Job Code**

ENGLICMGR

#### **Job Code Description**

ENGINEER MANAGER-LICENSED

#### **Position Title**

Engineer Manager Licensed-1

Engineer Manager Licensed-2

Engineer Manager Licensed-3

Engineer Manager Licensed-4

Engineer Manager Licensed-5

#### **Position Code**

ENGLMGR1

ENGLMGR2

ENGLMGR3

ENGLMGR4

ENGLMGR5

#### **Pay Schedule**

NERE-199

NERE-200

NERE-201

NERE-202

NERE-203

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