

## FACILITIES ENGINEER

### NATURE OF WORK

This is professional and administrative mechanical engineering work for building projects.

An employee in a position allocated to this class is responsible for developing and implementing the Facilities Management building commissioning, energy management and environmental programs. The employee reviews the mechanical aspects of designs for new and renovated buildings that are prepared by consulting engineers. Work involves developing specifications, budget planning, problem resolution, site inspections and contract monitoring. This employee administers the energy management program through renewal and replacement of equipment, tracking utility bills and energy usage, identifying and applying for grant funding and rebates, and waste reduction planning. The employee ensures efficiency of environmental (indoor air quality) systems. Work is complex and requires considerable contact with customers and consultants. Work requires both independent professional judgment and decision making of considerable difficulty. Assignments are received in the form of broad instructions or general program objectives. Work is reviewed for general adherence to established norms by the Director, Facilities Management.

### EXAMPLES OF WORK

Provides professional guidance and direction to consultants for the proper development of their projects.

Prepares manuals, reports and recommendations for the consideration of administrative superiors.

Serves as professional consultant and owner's representative in matters pertaining to mechanical aspects of building design and construction.

Evaluates, recommends and documents appropriateness of designs and vendor contracts.

Provides direction for building automation system installations and modifications.

Performs extensive design review and specification development.

Tracks utility billings and audits utility usage.

Establishes priorities and work plans.

Reviews proposed changes impacting regulatory issues to ensure environmental controls.

Provides budget input for building renewal and upgrades.

Performs related work as required.

### REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

Thorough knowledge of the principles and practices of mechanical engineering.

Thorough knowledge of modern developments, current literature and trends in the field of mechanical engineering.

Extensive knowledge of facilities preventative maintenance procedures and building automation control systems.

Knowledge of project management, building maintenance, funding and building environmental management practices.

Knowledge of building envelope concepts, automation system applications and installation, operations parameters for optimization of energy usage, service contracts, performance contracts and projects plans.

Knowledge of building equipment, systems, components and applications.

Knowledge of direct digital controls (DDC) design, installation and troubleshooting.

Knowledge of building automation system software.

**FACILITIES ENGINEER - CONT'D****REQUIRED KNOWLEDGE, SKILLS AND ABILITIES- CONT'D**

Knowledge of the State of Florida Energy Efficiency Code for Building Construction.

Ability to apply engineering knowledge to specific administrative and technical problems.

Ability to provide professional and technical review to a wide variety and large volume of engineering plans, specifications or related documents.

Ability to establish and maintain effective working relationships with consultants, contractors, vendors and County departments.

**MINIMUM ENTRANCE REQUIREMENTS**

Licensed as a Professional Engineer in the State of Florida; four (4) years of experience in professional engineering work related to air conditioning, electrical building systems and building automation OR graduation from an accredited college or university with major course work in Mechanical Engineering; four (4) years of experience in professional engineering work related to air conditioning, electrical building systems and building automation; ability to obtain registration within twelve (12) months of appointment; or any equivalent combination of related training and experience.

A Master's degree in Mechanical Engineering may be substituted for one (1) year of required experience.

**NECESSARY SPECIAL REQUIREMENT**

Licensed as a Professional Engineer in the State of Florida or must be licensed within twelve (12) months of appointment.

6/2006