# MONTGOMERY COUNTY GOVERNMENT ROCKVILLE, MARYLAND CLASS SPECIFICATION

Code No. 004410 Grade 28

#### **CAPITAL PROJECTS MANAGER**

#### **DEFINITION OF CLASS:**

This is capital improvement project management work in the County involving project management, contract administration/control and/or quality assurance, and requiring a professional background. Contacts are with a wide variety of individuals, including but not limited to coworkers (professionals, administrators and support personnel), facility tenants/user agencies, architecture and engineering (A&E) firm professionals, staff of other agencies and firms (such as WMATA, WSSC, M-NCPPC and PEPCO), community groups, and public interest groups (preservationists, disability rights advocates, etc.). Contacts often involve non-routine matters, including controversial issues and multi-faceted problems, as well as routine, discrete matters. They range from exchange of technical and non-technical information to resolution of complex problems involving various stakeholders, within and outside County government, having divergent interests and perspectives. Exchanging information in a variety of setting with a variety of stakeholders is commonplace. Public service and assistance in this class are generally incidental and limited to exchange of routine information.

Employees in this class typically manage very large scale or very complex capital improvement projects, in planning, design and/or construction phases through completion, acceptance and close-out. Projects routinely attract public attention and require continuing adjustments due to such factors as technological advances, code/regulatory changes or inflation (or major materials/labor cost changes) during planning, design and construction phases over several years. The employee, serving as the owner's representative, performs or monitors feasibility studies, design reviews, constructability planning, construction contract management, administration and control, and quality assurance to ensure compliance with project budget, objectives, time lines, and many other factors. The supervisor makes assignments in terms of broadly defined functions or objectives, potential problem areas, time lines, budget considerations and similar factors for capital project management assignments typically covering very large scale, highly complex and important (including very high profile or potentially controversial) work. Typically, the supervisor and the Capital Projects Manager develop a mutually acceptable plan that, upon approval, the Capital Projects Manager carries out independently within a framework of regular reporting and review. In all work, the Capital Projects Manager balances functions, aesthetics, budget and schedules on his/her own. Results of the work are expected to be technically authoritative and are normally accepted without significant change. When work is highly controversial or involves potential for major modifications to critical project, division or departmental plans or goals, it is subject to close review. Complexity is characterized by extensive project scope (including the need to establish critical project criteria), project management responsibilities, including the need to monitor and guide various professionals (employees and non-employees) working on it, and various challenges, such as the site (size, shape, elevation, etc.), environmental issues, phasing and staging (tenants may need to occupy it while work is done, for example) and stakeholders (including their nature, interests, perspectives and forcefulness). Guidelines include standard and generally-accepted capital improvement project management principles, engineering standards, building, fire and life safety codes, accessibility rules and other federal, state and

local regulations (such as the County's manual for planning, design and construction of sustainable buildings) to ensure that designs, building plans, specifications, and as-built features comply with regulatory requirements. Other important guides cover zoning, procurement and project management. The Capital Projects Manager exercises a high degree of independent judgment (typically based on extensive experience), resourcefulness and creativity in selecting, adapting and applying or devising the appropriate guides because some of them are rather general and some projects require new approaches. The employee must make critical trade-offs in large scale projects by balancing facility appearance, functionality, durability, maintainability, sustainability and other factors, including competing demands or desires of varied stakeholders. The scope and effect of work include identification and resolution of significant design and construction problems and issues (including budget, schedules and quality) for major capital projects. They affect facility tenants, citizens and others using the facility or serviced by the tenants, the surrounding community, taxpayers, etc. The employee works mainly in offices, meeting rooms and other places that are adequately heated, lighted and ventilated. However, there is also field work, such as field surveys and construction project visits, where there is dust, dirt, grease and exposure to adverse weather. The Capital Projects Manager spends ten (10) percent of the work time or more at work sites where a hard hat, steel-toed safety shoes, hearing protection or other personal protective equipment and caution are required. Risks may result from construction activity as well as general site conditions, including but not limited to street traffic, moving equipment, uneven terrain or constructed spaces and possibility of falling materials. Occasionally, the Capital Projects Manager moves on rough or uneven terrain, be it a proposed building site or a construction site. There is also some kneeling, stooping or bending and reaching or use of ladders to view restricted spaces or access building mechanical systems and the like. The project management function performed by Capital Project Managers is non-supervisory; although some employees in the class may, on occasion, lead lower grade coworkers in broad scope projects.

#### **EXAMPLES OF DUTIES: (Illustrative Only)**

- Meets with user agency, consultants, citizen organizations, public interest groups and others to identify and resolve conflicting views regarding the design, construction, acceptance and/or close-out of capital improvement projects, including major buildings, parking garages and other facilities.
- Coordinates new project development or major renovation with user agency to ensure that facility meets user requirements.
- In multiple projects running concurrently, directs, coordinates and monitors all phases of construction management activities.
- Inspects and monitors new construction in progress and upon completion, and recommends approval or disapproval of work on the bases of adherence to contract specifications, industry standards and project design intent.
- Arranges for submission of construction progress reports, reviews reports for adequacy and accuracy of
  services performed, construction schedules, laboratory reports, etc.; reviews/approves shop drawings,
  material lists, catalog samples, etc.; and confers with designers on contractor submitted items to ensure
  that design intent is accomplished in construction.
- Reviews engineering designs and contract documentation prepared by others to enhance project constructability, so that construction activities may proceed expeditiously with the fullest achievement of County project objectives.
- May make suggestions to improve the contract documents to better meet the owner's or user's needs, to improve the economy and efficiency of construction, to ensure the application of modern/practical

- construction techniques, to eliminate potential contractor claims, to minimize inconvenience to tenants and users, and to ensure, as pertinent, that the facility remains operational during construction.
- Reviews consultant submittals during all design phases for compliance with contract and design criteria to assure that the County's best interests are achieved.
- Provides overall management of design Architecture and Engineering (A&E) firm's provision of construction phase services.
- Develops or directs the development of requests for proposals, scopes of services, bid packages, contracts, amendments and other documents for the selection and contracting of design and construction services.
- Negotiates design/construction contracts with A&E consultants and/or construction contractors.
- Establishes evaluation criteria, convenes and leads selection committee in reviewing proposals and developing recommendations of the best qualified consultant for referral to the Contract Review Committee.
- Maintains liaison with procurement officials before and throughout construction to provide input toward
  accomplishing goals of the County's special emphasis programs (such as minority participation), and to
  control change orders, invoicing and program budgets.
- Develops special contract provisions including estimated quantities of individual construction items, methods of construction, origin of technical specification, estimated construction costs, and allowable length of time for construction.
- Conducts meetings with consultants, contractors, other County agencies, utility companies, state and
  federal agencies or special purpose agencies (such as M-NCPPC and WSSC) on matters essential to
  expedite design and construction of projects and assure that work complies with program
  requirements, contract documents, schedule, budget, regulations and other requirements.
- Files for necessary permits for project or assists consultant or contractor to prepare documents to file.
- Directs changes be made to design and construction efforts by processing contract amendments, and change orders; issues field orders or otherwise provides instruction for change; reviews and recommends approval of costs of changes.
- Directs or oversees the inspection of, or personally inspects, buildings, roads or other projects to assure that approved design was executed and that construction meets regulations, specifications and standards.
- Ensures that construction operations are safe and that contractors are complying with safety and security requirements.
- Makes periodic and special site visits during all phases of construction to verify safety and security compliance.
- Directs or oversees quality control (processes, materials, etc.), or personally performs quality assurance activities, to evaluate and ensure project quality.
- Participates in commissioning building systems prior to completion of project.
- Coordinates as required to ensure that user(s) are prepared to take over the operation and maintenance of completed projects.
- Keeps abreast of the latest developments in construction management and related disciplines by review of technical literature, attending conferences or professional society meetings and discussion with industry representatives.

- Evaluates new materials and design or construction processes and techniques, recommending the
  adoption of those that would provide more efficiency or economy or other payoffs and to keep up
  with changing requirements.
- Leads lower grade coworkers (professionals and support personnel) in broad-scope projects.
- As a technical representative to the County Attorney's office in defending against contractor
  construction claims, advises on technical issues and assists in developing overall case strategy. This
  includes interpretations of technical issues and recommendations on expert witnesses, technical reports
  and forensics.
- As assigned, assists management officials in establishing or revising County policies, procedures and guidelines for construction management by studying systems for construction planning, cost control, scheduling, quality control, progress reporting and safety. Based on analysis, develops options and recommendations for improvement.
- Uses a computer (at times a programmed calculator) for communication, planning, word processing and spreadsheet applications, to make engineering calculations and to perform similar functions.
- Drives a vehicle to and from work sites, consultant offices and other places.
- Performs related duties as required.

## KNOWLEDGE, SKILLS AND ABILITIES:

- Thorough knowledge of commercial construction management concepts, principles and practices, various fields of engineering and design (such as civil engineering, structural engineering and interior design), building systems (such as mechanical, electrical and fire protection systems), building requirements and codes (such as life-safety requirements for commercial structures, accessibility standards for public facilities and infrastructure under the ADA, and Occupational Safety and Health Administration regulations) to review designs in the design phase, manage projects in the construction phase, and help ensure proper acceptance and hand-off in commissioning and closeout. This includes skill in value engineering to balance aesthetics, functionality, maintainability, sustainability and other factors within budgets and schedules.
- Thorough knowledge of County (self-insured) insurance requirements, County permitting and other Federal, State, County or municipal (such as City of Rockville) regulations, requirements or guidelines to manage construction projects and administer construction contracts.
- Thorough knowledge of state-of-the-art building materials and processes (such as space age adhesives and composites for structural integrity, maintainability and aesthetics) as well as tried-and-true materials, materials testing processes, and traditional trade practices to assure quality during construction and proper acceptance and hand-off in commissioning and closeout.
- Thorough knowledge of special building considerations (such as security, continuity of operations and acoustics, resulting in need for redundant controls, back-up generators, etc.) to plan and quality assure projects.
- Skill in problem solving to develop or review designs and specifications of moderate to high complexity, develop options when faced with construction problems, analyze cost estimates, and perform related functions.
- Skill in oral communication to exchange technical and non-technical information with various people having different interests and perspectives so that they will understand and, at times, be convinced or persuaded. This includes skill in exchanging information with personal contacts and the ability to encourage verbal communication by others, including the general public in open meetings and the daily exchange of progress information with contractors and coworkers.

- Skill in written communication to exchange technical and non-technical information with various people having different wants, needs and perspectives so that they will understand and, at times, be convinced or persuaded. This includes skill in reviewing the written work of others. Examples include preparation of contract amendments and progress reports.
- Interpersonal skills to interact effectively with personal contacts in a business-like, customer service oriented manner.
- Skill in using a computer, modern office software suites and specialized architectural and engineering software to communicate, plan, schedule, word process, manipulate data, etc.

### MINIMUM QUALIFICATIONS:

**Experience:** Five (5) years of professional experience in design/construction project management, contract administration and quality control.

**Education:** Graduation from an accredited college or university with a Bachelor's degree in Architecture, Civil/Structural Engineering, Construction Management or a related field. **Equivalency:** An equivalent combination of education and experience may be substituted.

#### LICENSE:

• Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence.

**PROBATIONARY PERIOD:** Individuals appointed to a position in this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

**MEDICAL EXAM PROTOCOL:** Medical History Review.

Class Established: June 1969

**Revised:** August 1987

Classification Study: October 1994 (M) Classification Study: May 2008 (M)

> August 2013 January 2015