

# Project Engineer & Construction Manager

## **DEFINITION:**

Working under limited direction of the Engineering Manager, administers and manages construction projects, and performs engineering, planning, and processing work in support of: capital projects, master planning, operating documents, regulatory requirements, and District processes and/or requests.

#### SUPERVISION RECEIVED/EXERCISED:

Receives general direction from the Engineering Manager. Exercises independent and direct supervision to contractors and consultants. May provide temporary direction and technical review of the work product of technical and administrative support staff.

## **CLASS CHARACTERISTICS:**

This is a senior level confidential position in the Engineering Division. This position performs a wide variety of engineering and construction related duties and functions of varying complexity. Responsible for overseeing and administering multiple complex construction projects. Assignments are general and of a continuing nature, requiring the exercise of independent judgment and initiative in scheduling, assigning, and coordinating work with other units and external contractors and construction firms.

Assists the Engineering Division in the: research, preparation, administration, management, and maintenance of: plans, specifications, contract documents, special projects, master planning documents, capital construction programs, maintenance/improvement programs, and others related to the District.

Must have excellent communication and organizational skills. Works closely with District staff to maintain an in-depth awareness and understanding of District's: infrastructure, issues, philosophies, and objectives. Supervises and reviews the work of consultants and contractors and may provide temporary direction and technical review of the work product of technical and administrative staff. Provides support to staff, management, contractors, and consultants. Incumbents work independently, seeking assistance only as new or unusual situations arise. The Project Engineer and Construction Manager receives direction from the Engineering Manager. Duties may require the direction from other District staff as applicable.

## EXAMPLES OF ESSENTIAL FUNCTIONS: (Illustrative Only)

- 1. Plans, organizes, controls, integrates and evaluates for technical accuracy the work of a unit or project team of professional and technical staff.
- 2. Technical assistance, planning, and document preparation for: operation, maintenance, repair, and/or construction of District infrastructure.

- 3. Manages, monitors, develops, implements, prepares, and coordinates with staff the review of contract documents for the District's capital improvement projects for constructability and to achieve goals and objectives of project.
- 4. Administers, evaluates, tracks, prepares, and reports to management the construction and preparation of multiple capital projects utilizing external contracting and/or consulting firms.
- 5. Administers contracts, bidding, and close-out for District capital and operational projects.
- Performs investigations/analysis of facilities inefficiencies and offers design solution alternatives.
- Supervises and participates in developing, implementing and evaluating plans, work processes, systems and procedures to achieve annual goals, objectives and work standards.
- 8. Performs calculations in support of generalized engineering analysis.
- 9. Prepares costs estimates, establishes the scope, schedule and budget for construction projects; negotiates and manages construction contracts.
- Participates in the development and preparation of operating budgets; authorizes the
  purchase of materials, and monitors work activities and expenditures to control costs and
  monitor performance.
- 11. Provides day-to-day leadership and works with assigned team to ensure a highperformance, customer service-oriented work environment which supports achieving the Division's and the District's mission, strategic plan, objectives and values.
- Reviews construction specifications for compliance with District standards; interprets
  specifications and District policies and initiates or reviews change orders; prepares periodic
  project status reports.
- 13. Coordinates District construction and planning activities with all departments and outside agencies; makes authoritative interpretations of applicable laws, regulations, policies and construction standards; revises and approves construction documents.
- 14. Provides monitoring and onsite inspections for special projects.
- 15. Reviews contract documents for conformance with District standards prior to bid, including specification requirements associated with contract insurance, policies, contract bonds, safety program, construction schedules and technical specifications.
- 16. Prepares specifications, related contract documents and Requests for Proposals, evaluates and selects consultants and contractors, performs project management including developing budgets and schedules.
- 17. Serve as the liaison and represents the District with consultants and/or contractors. Oversees the day-to-day progress of consultants and contractors. Prepares monthly progress payments, contract change orders; interpretation of project plans and specifications and coordinates final inspection(s).
- 18. Manages and participates in the: development, preparation, maintenance, updating, and data entry of District's asset management, SCADA, and GIS. Utilizing software platforms as applicable.
- 19. Organizes District plans, files, records and other documents.
- 20. Performs and/or participates in the District's plan review and inspection process for residential and commercial development projects in the District's service area.
- 21. Performs and/or participates in other District Ordinance compliance programs and processes including sewer pressure tests, waste pretreatment, and main line extensions.
- 22. Gathers pertinent data and performs analysis in support of report preparation.
- 23. Coordinates and/or consults with and utilizes data from specialized consultants.

#### MINIMUM QUALIFICATIONS:

Any combinations of the below which provides the required: education, experience, knowledge, skills, and abilities to perform the essential functions of the position. A typical combination includes:

## **EDUCATION AND EXPERIENCE:**

- A. Graduation from an accredited four-year college or university with a degree in: civil engineering, construction management, or a closely related field, and a minimum of four (4) years' experience; or
- B. A minimum of at least eight (8) years of increasingly responsible project related experience in Public Works, engineering, or construction management or closely related field.

#### KNOWLEDGE OF:

- ➤ Civil engineering & construction: principles, practices, and materials & their applications as related to District facilities design, construction, and operations.
- Modern & current developments, methods, techniques literature, and sources of information used in the construction of wide variety of utilities, building, and other Public Works capital projects.
- Principles and practices of construction management, scheduling, and change order resolution as applied to utilities, buildings, and other Public Works projects.
- Applicable laws and regulatory codes related to development and construction of utilities, buildings, and other Public Works projects.
- > Engineering mathematics, economics, and research practices.
- The District's infrastructure, operating documents, practices, procedures, specifications, and ordinances & management thereof.
- Principles and practices of customer service.

#### **ABILITY TO:**

- Make complex construction contract computations and review plans and specifications for a wide variety of utilities, buildings, and other Public Works capital projects.
- Ability to plan, design, layout and prepare accurate construction plans.
- Conduct independent project administration and manage contracted construction firms.
- Identify needs and assignments and exercise sound independent judgment in carrying them out within general policy guidelines.
- Monitor and maintain schedule on individual project tasks, multiple projects, and project and departmental budgets.
- > Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of the work. Contact includes other District personnel, Board of Directors, regulatory agencies, other public agencies, outside consultants and contractors, and general public.
- > Utilize standard engineering, mathematics, economics and research practices.
- Under direction, prepare clear and concise engineering reports, maps, plans, contracts, design drawings, specifications and documentation.
- Proficiently use software platforms as applicable for task(s).

- Perform technical research and make detailed analysis.
- Keep accurate records.
- Be able to follow oral and written directions.
- Oversee and direct the work of consultants and contractors.

#### LICENSES:

- Valid Class C State of California or Nevada driver's license; acceptable driving record at the time of appointment and throughout employment.
- > Optional: State of California Professional Engineer (PE) in Civil Engineering.

#### TOOLS AND EQUIPMENT USED:

Personal computer, including word processing, spreadsheet, database, project scheduling, computerized maintenance management system software, geographic information system (GIS) software, phone, mobile device, copy machine, and other modern office equipment; motor vehicle.

# PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job in compliance with the American with Disabilities Act (ADA) requirements. Reasonable accommodations, on a case-by-case basis, may be made to enable individuals with disabilities to perform the essential functions.

Work is performed mostly in office setting. Some outdoor work is required in the inspections of various land use developments, construction sites, or District facilities; must be physically able to move about on construction work sites, up and down ladders, and under adverse field conditions. Hand-eye coordination is necessary to operate computers and various pieces of office equipment; use fingers to write or type. While performing the duties of this job, the employee is occasionally required to stand; walk; use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms. The employee must possess the ability required to sit; climb or balance; stoop, bend, kneel, crouch, or crawl; talk or hear; and smell. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus. The employee will occasionally be required to lift, carry, push, and pull materials and objects weighing up to 50 pounds

## **ENVIRONMENTAL CONDITIONS:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this position.

Employees work mainly in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures. Employees occasionally work in outside weather conditions exposed to hot, cold, wet and/or humid conditions. The employee occasionally works around moving mechanical parts, and in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic, or caustic chemicals, risk of electrical shock, and vibration.