



**JULY 2012**  
**FLSA: EXEMPT**

## **PRINCIPAL PROJECT CONTROLS ANALYST**

*This class specification indicates, in general terms, the type and level of work performed as well as the responsibilities of employees in this classification. The job functions described are not to be interpreted as being all-inclusive to any specific employee.*

### **DEFINITION**

Under general direction, provides the highest level of oversight, review, and support to ensure operational availability, performance, and security of the proprietary Primavera-based Project Controls System in managing major Capital Improvement Programs (CIP); manages the design, configuration, and support of the Primavera database to ensure logic is compatible with the District's enterprise-wide platform; maintains and ensures data integrity on all CIP projects; reports on the capital improvement program progress; provides guidance to Engineering staff and other departments across the District on the functions and data integrity of the database; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from assigned supervisory and/or management staff. Exercises no direct supervision of staff. May exercise functional and technical leadership in assigned workgroups or teams and coach and/or mentor less experienced staff.

### **CLASS CHARACTERISTICS**

This is the advanced journey-level class in the professional Project Controls Analyst series responsible for the daily oversight of, and participation in, the maintenance, modification, process customization, training, and report development for the proprietary Primavera-based Project Controls System. Employees perform the most difficult and responsible assignments, projects, analyses, and programs assigned to classes within this series requiring advanced knowledge of the concepts, practices, procedures, and policies of project controls systems. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility and provide leadership to lower-level project controls analyst staff. Responsibilities may include the oversight of programs and/or projects and leads by example. This class is distinguished from the Principal Information Technology Analyst in that the latter is the lead, advanced journey-level in the professional IT class series and serves as a Business Analyst for one or more other departments.

### **EXAMPLES OF ESSENTIAL JOB FUNCTIONS** (Illustrative Only)

*Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.*

- Develops, implements, and maintains Capital Improvement Program (CIP) execution processes and standards; ensures efficient and accurate project reporting, cost estimating, planning/scheduling, cost control and forecasting, and change management; ensures associated comprehensive and complex risk analyses are conducted effectively.
- Provides functional oversight to staff responsible for planning/scheduling, cost estimating, and project control activities on capital improvement projects; provides guidance, direction, and specialized assistance in the resolution of difficult and complex project control problems.

- Analyzes, evaluates, and forecasts project costs, as well as performance against established schedules with critical milestones; defines project baselines and ensure controls systems are effectively tracking and forecasting the construction schedule relative to the baseline.
- Conducts trends analyses based on data from the cost reporting control systems, including overseeing project baseline management, updating baselines for approved changes, functionally overseeing project schedule updates, and tracking and preparing adjustments to actual payments between work packages.
- Performs comprehensive and complex systems analyses to manage the design, configuration, and support of the Primavera database to ensure logic is compatible with the District's enterprise-wide platform; ensures operational availability, performance, and security; establishes procedures for database operation, control, and recovery.
- Consults, confers, and coordinates activities with users, staff from various departments, outside agencies, and vendors to resolve program, system, operational, and procedural problems; analyzes problems and recommends corrective action; recommends and oversees database customization activities to meet specific project requirements.
- Creates single program portfolios to ensure data accuracy; produces program reports in looking for trends, earned cost, and earned value for comparison to program report; conducts review with project engineer and project manager to clarify discrepancies/variances and correct data.
- Integrates construction schedules, financials, cost reports, facilities engineer projects, cash flow reports, and milestone reports into the Program Controls System.
- Implements and administers strategies, policies, and procedures for the projects controls proprietary Primavera database to ensure tools used provide data accuracy.
- Prepares analytical and statistical reports on operations and activities.
- When assigned to programs and/or projects, provides leadership and guidance to others. As a program and/or project leader, may direct, assign, train, monitor and review the work activities of team members; determines work priorities; oversees quality and quantity of work performed and ensures adherence to established procedures by instructing employees accordingly; is a reference to employees by possessing specialized skills; develops and implements work improvements.
- Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of project controls systems.
- Performs related duties as required.

## **QUALIFICATIONS**

### **Knowledge of:**

- Operations, services, and activities of a comprehensive project controls system.
- Advanced principles and practices of system design, development, analysis, testing, and security administration.
- Advanced principles and applications of critical thinking and analysis.
- Methods and techniques of evaluating project requirements and developing controls systems solutions.
- Principles and practices of programming languages, job control languages, and executive control command.
- Operations, services, and activities of a comprehensive construction management program.
- Advanced principles and practices of cost estimating, scheduling, phasing and logistics, earned value engineering, document review of work packages, and constructability reviews.
- Principles of methods, materials, and techniques used in the design and construction of wastewater projects.
- Principles and practices of developing and managing construction schedules, processes, methods, and operations analysis.
- Principles and practices of project management.

- Construction management systems, including time, material, and labor cost estimates, budgets, job costs, cost codes, contracts, change orders, purchase orders, and various construction progress reports.
- Financial concepts for financial planning and control; financial plans, trended future requirements and operating forecasts.
- Operations, services, and activities of a comprehensive database administration program.
- Programming techniques including integrated database management applications.
- Advanced principles of database design, administration, management and integrity.
- Technical report writing and preparation of correspondence.
- Principles and procedures of record keeping.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Principles of mathematics and their application to project controls systems work.
- Modern office practices, methods, and computer equipment and applications related to the work, including word processing, database, and spreadsheet applications.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Basic principles and practices of employee supervision.
- Techniques for effectively representing the District in contacts with governmental agencies, community groups, various business, professional, educational, and regulatory organizations, and with property owners, developers, contractors, and the public.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

**Ability to:**

- Plan, schedule, assign, and oversee activities of assigned workgroups or teams.
- Oversee programs and/or projects and by example promote the individual professional growth and development of less experienced staff.
- Inspect the work of others and maintain established quality control standards.
- Train others on proper work procedures and lead by example.
- Demonstrate safe work practices and procedures in the workplace.
- Resolve conflict through workable solutions and alternative approaches.
- Apply critical thinking and analysis to a broad range of situations.
- Identify and implement effective course of action to complete assigned work.
- Serve as technical advisor in assigned systems area.
- Provide advanced-level technical support for the implementation and maintenance of project control systems.
- Apply advanced-level principles of construction project control techniques and methods.
- Apply advanced-level principles and practices of project management.
- Provide advanced-level analysis, evaluation, and forecast of capital improvement project costs.
- Produce and provide program reports to include milestones, cash flow, cost financials, and staffing.
- Provide complex future requirement trends and operating forecast budgets for capital improvement projects.
- Maintain confidentiality and be discreet in handling and processing confidential information and data.
- Apply earned value management on engineering and construction projects.
- Manage and maintain large scale mission critical software database systems.
- Provide high-level evaluation of database needs and develop database models to meet project control needs.
- Plan and oversee quality assurance and security procedures for project control systems.
- Research and monitor technical trends.
- Prepare clear and concise technical reports and documentation.
- Identify problems, research and analyze relevant information, develop and present recommendations and justification for solution.
- Make sound, independent decisions within established policy and procedural guidelines.

- Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, rules, and regulations.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Use critical thinking techniques and advanced methods in reaching independent decisions.
- Operate modern office equipment including computer equipment and software programs.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

### **Employment Standards:**

Any combination of education and experience that provides the required knowledge, skills, and abilities may be qualifying as determined by OCSD.

1. Possession of a bachelor's degree from a college or university which is accredited by the US Department of Education, with major coursework in business or public administration, engineering, construction management, information systems, or a related field; AND,
2. Eight (8) years of increasingly responsible project controls-related experience in developing, managing, and/or executing all components of a project controls program to include planning/scheduling and cost analysis.

### **License or Certificate**

- Possession of, or ability to obtain, a valid California Driver's License by time of appointment.

### **Disaster Service Workers:**

All Orange County Sanitation District employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employment with the Orange County Sanitation District requires the affirmation of a loyalty oath to this effect. Employees are required to complete all related training as assigned, and to return to work as ordered in the event of an emergency.

### **PHYSICAL DEMANDS**

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing in and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

### **ENVIRONMENTAL ELEMENTS**

Employees work 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.