



**JULY 2012**  
**FLSA: NON-EXEMPT**

## **SENIOR CONSTRUCTION INSPECTOR**

*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 direction, inspects highly complex plant and collection facilities construction work performed by contractors to ensure contractual compliance with plans, specifications, codes, regulations and District safety requirements; coordinates construction requirements with District process control requirements; and performs research for and completes special projects.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives direction from assigned supervisor or management staff. Exercise technical and functional direction over and provides training and guidance to lower-level construction inspection staff as assigned.

### **CLASS CHARACTERISTICS**

This is the advanced journey-level class in the Construction Inspector series that performs the full range of duties related to inspecting the workmanship and materials used in a variety of construction projects, ensuring conformance with plans, specifications and District regulations, and directing and guiding contractors to achieve quality control and proper use of materials. Responsibilities include reviewing plans, conducting inspections of construction sites, enforcing compliance with regulatory codes, laws, and ordinances, and ensuring conformance with approved plans, specifications, standards, permits, and licensing. This class is distinguished from Construction Inspector in that it provides technical and functional direction and training to lower-level construction inspection staff and has special expertise in highly complex plant and collection facilities that may require additional training and certification. This class is further distinguished from the Construction Inspection Supervisor in that the latter is the full supervisory-level class in the series responsible for organizing, assigning, supervising, and reviewing the work of assigned staff involved in construction inspection.

### **EXAMPLES OF ESSENTIAL JOB FUNCTIONS**

The following essential job functions are typical for this classification. Incumbents may not perform all of the listed job functions and/or may be required to perform additional or different job functions from those set forth below to address business needs and changing business practices.

- Assist consultants, contractors, and project managers with highly complex construction and building rehabilitation projects; research completed District construction jobs and advise design consultant on possible conflicts with existing installations; identify problems and suggest solutions to contractors and project managers.
- Assist safety representatives with job hazard analysis; observe contractors work safe environment and traffic control plans and devices; work with contractor to establish and maintain a safe construction project for employees, customers, and the public; suggest or make appropriate changes regarding safety and traffic control plans and devices; ensure that all construction work is completed within the requirements of the District 'Owner Controlled Insurance Program'; inspect and monitor contractor's responsibilities to implement environmental management practices and maintain compliance.

- In assigned area of expertise, review plans and specifications of complex construction and rehabilitation projects including complex mechanical and structural design drawings, electrical design schematics, and programmably controlled ladder logic diagrams; review plans and specifications for accuracy, constructability, compatibility, errors and omissions.
- Provide cost estimates of design changes forced by construction; review contractors cost proposals prior to approval; research and provide time and material breakdown costs per industry standards.
- Coordinate construction isolation requirements and scheduled shutdowns with other departments; advise supervisor, project manager, and other departments and divisions of construction impacts on plant maintenance and the waste treatment process.
- Serve as lead inspector; plan, train, and review the work of assigned employees in their areas of work including construction and inspection methods, procedures, and techniques; supervise the use, care, and operation of inspection and testing equipment including electrical test equipment and concrete sampling equipment; verify the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications; ensure adherence to safe work practices and procedures.
- Provide input to project manager on matters regarding complex change orders, pay estimates and submittals; after consulting with project manager, plan and formulate complex field change orders and supplemental instructions.
- Assist in the maintenance of accurate contract drawings; verify contractor as-built drawings are correct; assist Project Manager on field change orders, plan clarifications, and plan changes; submit final drawings to construction project manager for the preparation of record drawings; accurately monitor and document time and material change orders as required.
- Prepare and maintain necessary construction inspection records and reports as a means of formal documentation including daily inspection reports, photo-logs, field test results, force account reports, extra work requests, project submittal files, and individual project logs; assist project manager in preparing monthly progress reports; control and monitor the use of third party inspection for accuracy of work and payment.
- Attend construction meetings; work with contractors, regulatory agencies, utilities, District officials and the general public throughout construction project to coordinate work to be accomplished and ensure satisfactory project completion with minimum impact on the public or District facilities.
- Start-up and test new and existing systems.
- May be assigned special projects; research, formulate and write reports; research existing inspection budgetary requirements for development of new budget; research existing construction management reporting methods and participate in the development of new forms to increase efficiency; develop and administer tracking methodologies.
- Attend Factory Demonstration Tests of equipment to ensure compliance with plans, specifications, approved submittals and good workmanship.
- Review submittals for compliance with plans and specifications.
- Perform related duties as required.

## **QUALIFICATIONS**

### **Knowledge of:**

- Operations, services, and activities of a wastewater construction, maintenance, and inspection program.
- Advanced methods and techniques used in mechanical, electrical, HVAC, civil, and structural construction installations.
- Principles, practices, terminology, and procedures of modern construction installations.
- Equipment, tools, and apparatus used in construction.
- Methods and techniques of construction materials and soil testing.
- Operational characteristics of a variety of specialized construction inspection and test equipment, tools, and apparatus.

- Principles and practices of engineering as applied to construction inspection.
- Mathematic principles.
- Occupational hazards and standard safety practices.
- Methods and techniques of traffic control.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Principles of lead supervision and training.
- Corrosion principles, substrate preparation, application and testing of coatings and linings.
- English usage, grammar, spelling, vocabulary, and punctuation.
- 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:**

- Conduct highly complex construction inspections.
- Independently perform the most difficult inspections.
- Lead, organize, and review the work of staff.
- Apply technical knowledge and follow proper inspection techniques.
- Ensure construction is in compliance with established regulations.
- Detect and locate faulty materials and poor work quality and determine the stage of construction during which defects are most easily found and remedied.
- Interpret and explain District construction policies and procedures.
- Interpret applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Read and interpret construction plans, schematics, blue prints, and P&ID drawings.
- Read, analyze, interpret, and update complex contract and construction drawings related to assigned area of expertise.
- Relate contract drawings to contract installations.
- Document data regarding construction inspection activities.
- Prepare technical reports.
- Operate a variety of construction inspection equipment in a safe and effective manner.
- Test and calibrate equipment.
- Operate office equipment including computers and supporting software.
- Don SCBA equipment and enter confined spaces.
- Make sound, independent decisions within established policy and procedural guidelines.
- 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 English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective 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. High school diploma or equivalent supplemented by college level course work or trade school training in engineering technology or construction inspection; AND

2. Four (4) years of increasingly responsible experience performing construction inspection work at a level comparable to a Construction Inspector with the District. Experience in the construction industry supervising craft workers is highly desirable.

**License or Certificate:**

- Possession of a valid California class C driver's license.
- Possession of, or the ability to obtain, ICC, NACE, ACIA, ACI, and APWA C certification(s) is desirable.

**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 inspect District construction sites, including traversing uneven terrain, climbing ladders, stairs, and other temporary or construction access points, 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 field classification and standing in work areas and walking between work areas and to conduct inspections is 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 40 pounds, or heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees partly work in the office and partly in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.