

**CLASS SPECIFICATION****01-12-17 UNDERGROUND DISTRIBUTION CONSTRUCTION MECHANIC, 3812**

Summary of Duties: Entry-level Underground Distribution Construction Mechanics receive extensive instruction and training on-the-job and in a classroom setting, and work under close supervision assisting journey-level Underground Distribution Construction Mechanics in various phases of underground construction; or as a journey-level Underground Distribution Construction Mechanic, constructs, maintains, and repairs underground ducts, maintenance structures, vaults, concrete curbs, gutters, and sidewalks, or may act as a lead worker in such work; performs concrete work in and around hazardous working conditions such as energized duct lines and vaults, including locating, breaking, and chipping of concrete that encases energized cables up to and including 34.5kV circuitry; and performs related work.

Class Characteristics: Employees initially employed as Underground Distribution Construction Mechanics are appointed to positions designated as temporary training positions under Civil Service Rule 5.30. As trainees, they receive extensive on-the-job and classroom instruction and training to learn the trade sufficiently well to advance to the journey level. Employment as a trainee is limited to 30 months during which time the trainee is expected to successfully complete an extensive course curriculum and qualify for promotion to a journey-level Underground Distribution Construction Mechanic position.

At the journey level, an Underground Distribution Construction Mechanic performs a variety of semi-skilled tasks, including rough carpentry, tying and setting reinforcing steel, building electrical conduit lines for the installation of electrical cables, and concrete work related to the construction of underground facilities used to house electric equipment. Although the installation of electric equipment is the responsibility of employees of other crafts, Underground Distribution Construction Mechanics are required to work near, in, and around the same hazardous energized facilities and equipment as journey-level craft employees such as Electric Distribution Mechanics. An Underground Distribution Construction Mechanic normally follows well-defined, established procedures. However, the work requires the application of special skills and knowledge in such areas as carpentry, woodworking, cement masonry, asphalt placement, and pre-cutting wooden concrete forms. In addition, an Underground Distribution Construction Mechanic may act as a lead worker for a small group of Underground Distribution Construction Mechanics and Maintenance Laborers in constructing either a small part of a large construction project or a small job which does not require continuous supervision by an Underground Distribution Construction Supervisor. A lead worker in this classification may also locate and mark the location of the Department's underground water and power facilities for contractors' excavations in public streets or inspect street excavation work to prevent damage to, or interference with, other underground installations.

Examples of Duties:

- Measures and marks lines for excavation;
- Breaks or tunnels under pavement;
- Excavates and trims trenches, maintenance structures, and vaults to specified dimensions;
- Installs cribbing or shoring in accordance with State requirements;
- Installs electrical conduit and spacers, and prepares the conduit to be encased in concrete;
- Checks consistency or ready-mix concrete for water content;
- Conducts slump tests of concrete;
- Places concrete and tamps concrete over and around duct lines and vaults;
- Places concrete when maintenance structures or vaults are poured in place;
- Aids in setting pre-cast maintenance structures or vaults in excavation when delivered to a job site;
- Protects concrete from dirt contamination;
- Inspects duct lines for complete encasement;
- Removes cribbing or shoring prior to backfilling excavation;
- Backfills excavations;
- Places temporary and permanent asphalt paving;
- Tests newly installed duct lines for lack of obstructions;
- Installs pull cord in conduit to aid cable crews to pull cable in conduit lines;
- Builds wooden or steel forms for maintenance structures or vaults on specially built holes when pre-cast units cannot be used;
- Sets and ties reinforcing steel for walls and roof structure;
- Sets bolts, pulling irons, and associated equipment;
- Sets vaults or maintenance structure castings to street grades and finishes concrete in maintenance structure and vault floors when necessary;
- Clears debris from streets;
- Enlarges and rebuilds energized maintenance structures and vaults;
- Remodels trenches in existing vaults;
- Patches cement work;
- Mixes, places, and uses concrete to repair and replace concrete broken by construction activities;
- Locates, breaks, and chips concrete that encases energized and de-energized cables for transmission and distribution lines;
- May act as lead worker for a small group of employees engaged in various phases of underground construction;
- May operate power shears for cutting reinforcing steel to length;
- Pre-cuts wooden concrete forms for maintenance structures and vaults;
- Drives and operates automotive and other equipment as required;
- May operate portable power driven hand and table saws and drills, and pneumatically operated tools such as air spades, tampers, pavement breakers, and pneumatic pumps;
- May operate pavement cutting saws and pavement rollers;
- Occasionally operates air compressors, concrete mixers, and automotive equipment, including dump trucks and a small power take-off hoist and bucket to remove dirt and debris from excavations;
- Locates the Department's underground water and power facilities through the operation of electronic locating equipment, maps, and drawings;

- May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications: Incumbents must have the following knowledge and abilities:

Knowledge of:

- The hazards of working in and around maintenance structures, vaults, excavations, and near energized power cables or equipment in substructures, stations, and on pads, power poles, and the proper placing of approved warning devices;
- Methods, materials, and hand and power tools used in performing rough carpentry, form building, and maintenance and repair of underground ducts, maintenance structures, and vaults;
- Construction, assembly, and setting of forms for placing, pouring, and tamping of concrete.

Ability to:

- Use and properly care for tools used in conduit work;
- Follow written and oral instructions and make routine reports;
- Read and interpret plans and diagrams related to non-electrical phases of underground constructions;
- Communicate tactfully and effectively

Minimum Requirements:

1. One year of full-time paid experience as a Maintenance Laborer, Maintenance and Construction Helper, or Electrical Craft Helper with the City of Los Angeles; **or**
2. One year of full-time paid experience performing maintenance and construction work involving pipeline construction, asphalt work, electrical conduit construction, or concrete and cement work or carpentry; **or**
3. One year of full-time paid experience as a Utility Pre-Craft Trainee with the Los Angeles Department of Water and Power, which includes six months' experience working in the Underground Construction Mechanic trade or with Water Distribution performing duties such as trenching, shoring, and/or installing conduit or pipe or working on a district crew in Power Distribution overhead or underground assisting in the construction and maintenance of electrical distribution systems.

License:

A valid California driver's license and good driving record is required.

Physical Requirements:

Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; body agility and equilibrium involved in activities such as climbing and balancing under precarious conditions; back and leg coordination involved in activities such as stooping, kneeling, crouching, and crawling to an unusual extent; good hearing and speaking ability; and good eyesight.

Because the class of Underground Distribution Construction Mechanic has been designated as Safety Sensitive, a drug and alcohol screening test may be required prior to appointment in accordance with City policy.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to reasonable accommodate the limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative code, this specification is descriptive, explanatory, and not restrictive. It is not intended to declare what the duties and responsibilities of any position shall be.