

City of Mission Job Description

Job Title: **Master Electrician**

Classification: **Non-Exempt**

Department: Facility Maintenance



Division:

Supervisor: Facility Maintenance Supervisor

Effective: 09/16/2019

I. JOB SUMMARY:

The individual is responsible for performing assigned activities toward maintaining assigned city building (s). Uses proper tools and material for building maintenance. Repairs plumbing fixtures. May install, maintain, and repair equipment used to heat and cool buildings. Follow blueprints or other technical instructions. May use hand tools, power tools, measuring devices, and diagnostic equipment. May clean parts, replace filters, adjust controls, assemble switches, cut and connect pipes. Measures, cuts, bends, threads, assemble, and installs electrical conduit, using such tools as hacksaw, pipe threader, and conduit bender. Installs control and distribution apparatus, such as switches, relays, and circuit-breaker panels, fastening in place with screws or bolts. May repair faulty equipment or systems. Isolates and analyzes phone system malfunctions and determines methods of repair. Work in cooperation with other disciplines to be utilized in the assigned maintenance projects such as: carpenters, plumbers, electricians, painters, and masons, etc. Prepares required reports/records on assignment (s) and submits the reports to the Facility Maintenance Supervisor. Performs all work activities in accordance with proper safety procedure in accordance with job. Performs all repair project assignment (s) to be in compliance with **All City**, county, and state building codes. This position has no supervisory responsibilities. Individual will perform other duties assigned by department director/supervisor when needed.

II. EDUCATION REQUIREMENTS:

- High school diploma or G.E.D required
- Must be certified as a Master Electrician
- Must have HVAC Certification
- Must have EPA Freon Certification.
- Must have specific vocational training or job training experience which adds up to at least four (4) years' experience.
- Must have working knowledge of electrical, air conditioning/heating, carpentry, and communication systems.
- Knowledge of proper sequence of activities for repairing commercial A/C units.
- Knowledge of general and specific city, county, and state building codes.



III. EMPLOYMENT REQUIREMENTS:

- Applicant will be subject to a complete background investigation. Incomplete, inaccurate and/or failure to report information will cause the applicant rejection from consideration.
- Applicant must take and pass a drug, physical, and pre-placement screening administered by the City of Mission doctor at the City's expense.
- Applicant must have a current valid class "C" driver license from the Department of Public Safety with no more than two (2) moving traffic violations within the past two (2) years.

IV. SKILL AND ABILITY REQUIREMENTS:

- Ability to establish and maintain effective working relationship with the general public, supervisor, and co-workers.
- Ability to follow a firm work schedule as directed by supervisor.
- Ability to interpret City policies and procedures as related to the job.
- Ability to perform independent of constant supervision.
- Ability to make decisions based on personal judgment. And/or verifiable criteria.
- Ability to deal effectively with the general public, supervisor, and co-workers.
- Ability to perform a variety of different types of tasks without the variety itself causing a loss of efficiency.
- Ability to produce work to precise tolerances or standards.
- Must have oral and written communication skills in English and Spanish
- Ability to follow both written and verbal instructions that require individual thought and/or study to complete the task or series of tasks.
- Possess required license(s) for job position as dictated by the City, County or State regulations.

V. EQUIPMENT/MATERIALS: Safety equipment/materials to include but not limited to the following:

- | | | |
|-------------------------------|-------------------------------------|-----------------------|
| • City vehicle | - Carpentry tools | - 2-way radio |
| • Plumbing tools | - Cell phone | - Uniform |
| • Electrician tools | - Blueprints | - Telephone |
| • Mechanical tool | - Pens & pencils | - Drills |
| • Safety glasses | - Raincoats | - Rain boots |
| • Safety orange vests | - Different size ladders | - Different size wire |
| • Tool pouch | - Power Tools | - Hard Hat |
| • Measuring devices | - Safety gloves | - Technical Manuals |
| • Policy & procedure handbook | - Electronic diagnostic instruments | |



VI. ESSENTIAL JOB FUNCTIONS:

- Performs functions at Facility Administration Office, city maintained parks, public buildings and other city locations as well as provides maintenance assistant at city sponsored or supported special events.
- May be required to work holidays, weekends and evenings. Must be available to be on call.
- Install/repair wiring, electrical fixtures, apparatus and control equipment.
- Review electrical plans and/or specifications for proposed city facilities.
- Observe all rules, regulations, codes and other agency requirements in the normal everyday functions of his/her duties.
- Test continuity of circuits to insure electrical compatibility and safety of components by using testing instruments, such as a volt/ohmmeter.
- Monitors equipment or systems to detect hazards and need for adjustments, relocation or replacement.
- Comply with safety and hazardous laws and regulations in the performance of his/her job.
- Assist in examining city facilities on a regular basis for the purpose of performing preventive maintenance.
- Assist in determining which maintenance tasks may be performed by city employees and which maintenance tasks must be performed by outside contractors.
- Assist in estimating costs of repair projects in terms of labor, material and overhead.
- Assist supervisory staff in preparation of annual budget to identify major capital improvements or significant maintenance issues anticipated.
- Assist in maintaining the safe conditions and safe operation of all electrical fixtures owned or operated by the city.
- Must attend electrical seminars as made available subject to budgetary constraints.
- Work outside of regular assigned work schedule to repair and/or replace needed facilities to include night and/or weekend duty as requested.
- Assists the parks supervisory and maintenance staff by performing electrical related work activities as assigned.
- Attend meetings as required or directed by supervisors.
- Install, service and repair heating/air conditioning units in City owned buildings.
- Lay out reference points for installation of structural and functional components.
- Use measuring instruments such as transit, plumb bob levels, square and tape measure.
- Screws, bolts, rivets, welds, and brazes parts to assemble structural and functional components such as motor controls, switches, gages, wiring harnesses, valves, pumps, compressors, condensers, cores, and pipes.
- Cuts, threads, and connects pipe to functional components and water or power system.

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- Pumps specified gas or fluid into system.
- Starts system, observes operation, read gages and instruments, and adjusts mechanisms such as valves, controls, and pumps to control level of fluid pressure and temperature in system.
- Dismantles malfunctioning systems and tests components using electrical, mechanical and pneumatic testing equipment.
- Replace or adjust defective or worn parts to repair systems.
- Insulate shells and cabinets of system.
- Installs wiring to connect components to electric power source.
- Follows blueprints, engineering plans, and/or diagrams.
- Drain oil and pump gas from units so they can be worked on.
- Test lines, units, and connections for gas leaks.
- Plan layout, install, and repair wiring, electrical fixtures, apparatus, and control equipment.
- Plans new or modified installations of electrical service to minimize waste or materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring.
- Measures, cuts, bends, threads, assembles, and installs electrical conduit.
- Splices wires by stripping insulation from terminal leads with knife or pliers, twisting or soldering wires together, and applying tape or terminal caps.
- Installs control and distribution apparatus, such as switches, relays, and circuit-breaker panels.
- Test continuity of circuit to insure electrical compatibility and safety of components.
- Repair faulty electrical equipment or system.
- Remove and replace defective electrical switches and other fixtures.
- Determine proper tools and materials necessary for work to be performed on assigned maintenance projects.
- Repair wood surfaces as directed.
- Paint structures or areas as directed.
- Removes, replaces, or repairs plumbing fixtures as directed.
- Follows directed sequence of work activities for smooth and correct integration of all disciplines to be working on project(s).
- Prepares report/records of work performed on each project assigned and submit to supervisor as directed.
- Interprets City policy and procedures as related to assigned job.
- Perform activities on project (s) to be in compliance with **ALL CITY**, county, and state building and safety codes.
- Perform **all** job functions with special attention to good public relations, safety, and proper procedures.
- Put up Christmas lights through-out the City.
- During weather emergencies individual will be doing sand bags and any other duties assigned by the supervisor.



VII. NON-ESSENTIAL JOB FUNCTIONS:

- None

VIII. WORK ENVIRONMENT:

Exposure to the following environmental conditions are required for this job.

	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Wet humid conditions (non-weather)		X		
Work near moving mechanical parts			X	
Work in high, precarious places		X		
Extreme cold (non-weather)		X		
Extreme heat (non-weather)	X			
Fumes or airborne particles		X		
Outdoor weather conditions				X
Toxic or caustic chemicals		X		
Risk of electrical shock			X	
Work with explosives	X			
Risk of radiation	X			
Vibration	X			

IX. MANUAL DEXTERITY:

Gross and fine finger dexterity is required to perform essential job functions. Gross hand manipulation is performed to grip carpentry, plumbing, and electrical tools. Fine finger dexterity is required to hand write notes and repair buildings.



X. PHYSICAL DEMAND ANALYSIS:

MATERIAL HANDLING ACTIVITIES

Task	Weights	Frequency	Performance
LIFTING	Up to 5 lbs	C	Pick up tool pouch, hammer, drills, screw drivers,
	6-10 lbs	C	Tool box,
	11-20 lbs	F	Tool box, tool pouch, ladder, step ladder
	21-25 lbs	F	Tool box, tool pouch, step ladder, ladder
	26-50 lbs	F	Pick up freon tank
	51-75 lbs	O	Pick up concrete bags, park benches
	76-100 lbs	N	
	Over 100 lbs	N	
CARRYING	Up to 5 lbs	F	Carry tool pouch, hammer, drills, screw drivers,
	6-10 lbs	F	Maintenance tools
	11-20 lbs	F	Tools
	21-25 lbs	F	Maintenance tools
	26-50 lbs	F	Ladders and roll of electric wire and tools.
	51-75 lbs	O	Carry concrete bags
	76-100 lbs	N	
	Over 100 lbs	N	
PUSH/PULLING	Up to 5 lbs	F	Chairs, furniture
	6-10 lbs	O	Furniture
	11-20 lbs	F	Furniture, benches, equipment
	21-25 lbs	F	Janitor supplies
	26-50 lbs	O	Janitor supplies
	51-75 lbs	N	
	76-100 lbs	N	
	Over 100 lbs	N	

N-Never O-Occasional 1-33% F-Frequent 34-66% C-Constant 67-100%



NON-MATERIAL HANDLING ACTIVITIES

BALANCE	F	Balance on partial structure of frame.
STOOPING (bending at waist)	F	To check plumbing and while repairing A/C unit.
KNEELING (one or both knees)	F	To check plumbing and while repairing A/C unit.
CROUCHING (bending at hips/knees)	F	To check trenching and wiring of building.
CRAWLING	F	To check trenching and wiring of building.
REACHING	F	Reach from ground level to overhead with up to 25 pounds of weight for plumbing, A/C, and electrical wiring maintenance and repairs on city buildings.
TWISTING/TURN (rotation)	C	Up to 180 degrees and waist to shoulder, need to be level to perform inspections as needed to do job.
HANDLING (manipulated objects)	C	Tools during repairs and maintenance
STANDING	F	During inspections and while doing repairs.
WALKING	F	Up to 3 to 4 miles per day inspecting and doing repairs
SITTING	F	While driving city vehicle
FINGERING (finger dexterity)	F	Work orders and reports and handle tools, materials, and equipment necessary to perform work activities which have been assigned.
GRASPING (whole hand activities)	F	Work orders and reports and handle tools, materials, and equipment necessary to perform work activities which have been assigned.

N-Never O-Occasional 1-33% F-Frequent 34-66% C-Constant 67-100%

I have read the Master Electrician job description and understand that I am responsible for performing all duties of the Master Electrician and all other duties as assigned.

Signature

Date