

EMPLOYEE:

CLAIM #



Job Analysis Form

ALTERNATE FORMAT AVAILABLE

JOB TITLE Parks Maintenance Electrician

JOB CLASSIFICATION Electrician

DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER 824.261-010

DOT TITLE Electrician

DEPARTMENT Natural Resources and Parks

DIVISION Parks

OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE

CONTACT'S NAME & TITLE Terry Brady, Supervisor

CONTACT'S PHONE 206-205-7526

ADDRESS OF WORKSITE

3005 NE 4th
Renton, WA 98056

VRC NAME Kyle Pletz

DATE COMPLETED 8/15/06

DATE REVISED 4/17/07

DATE REVIEWED 5/13/09

WORK HOURS

6:30am-3:30pm during summer and 7:00-4:00pm during winter months.

OVERTIME (Note: Overtime requirements may change at the employer's discretion)

Required on an emergency basis and optional approximately one shift per month.

JOB DESCRIPTION

Performs skilled journey level work to maintain, repair, and upgrade a wide variety of equipment ranging from low voltage to high voltage AC and DC distribution switchgear, and to perform a comprehensive preventive maintenance program. Meets all requirements of the National Electrical Code, state and local standards

ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS

1. Ability to demonstrate predictable, reliable, and timely attendance.
2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
3. Ability to read, write & communicate in English and understand basic math.
4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgment.
5. Ability to work independently or part of a team; ability to interact appropriately with others.
6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

JOB SPECIFIC REQUIREMENTS

Must have two years of industrial or utility control experience. Must have knowledge of Washington State Confined Space guidelines, national electrical codes, trade terminology and procedures, traffic control systems, principles of electrical distribution and generation, electrical troubleshooting and diagnosis, electrical test equipment, PLC/s motors and controls. Must have skill in preventative maintenance, skill in troubleshooting, running conduit and installing wire as well as using computers and computerized test equipment. Must possess a valid Washington State Driver's License, Washington State Journey Electrician Certificate, Washington State Lift Truck Certificate, Washington State flagging and Traffic Control Certificate and Seattle Fire Department Type FA-1 Fire and Line Safety Certificate. This position requires lifting and/or carrying objects up to 100 pounds with assistance.

ESSENTIAL FUNCTIONS

1. Maintains and repairs switchgear and relays. Also installs, maintains and repairs electrical systems and equipment at King County ball fields, parks and pump stations.
2. Maintains all electrical wiring on Parks properties in proper working order. Includes transformers, sewer pump controllers, stage lighting and audio, all types of single phase and three phase circuits for lighting and power with voltages up to 480 V DC.
3. Performs routine inspection and maintenance of sewer pump stations and their components, such as switches, transformers, diodes, fuses, relays, alternators, stationary batteries, charges etc.
4. Maintains and repairs emergency/auxiliary power plants, transfer switches and uninterrupted power supplies.
5. Maintains and repairs low voltage systems, such as security alarms, network wiring, intercom and public address equipment, etc.
6. Evaluates existing equipment and provides recommendations regarding future electrical demands and costs.
7. Adheres to all prescribed safety procedures; safely operates and maintains power tools and test equipment.
8. Attend various electrical code classes and safety meetings in order to maintain continuing education credits for electrician licensing.

PERSONAL PROTECTIVE EQUIPMENT USED

Gloves, knee protection, harnesses, ear protection, hard hat, steel toe safety shoes, respirator, gas monitoring unit, hearing protection, safety goggles and coveralls.

OTHER TOOLS & EQUIPMENT USED

Various hand tools, roto-hammer, hacksaw, pipe benders, tool belt, various electrical panels, shovel, forklift, batteries, breakers, light bulbs, electric motors, hardware such as screws and bolts, ladder, various lamps and fixtures, drill, spools of wire, bundles of conduit, boom truck, County van, tool bucket, power tools, cordless power tools, voltage sensors, shop vacuum, computer, junction boxes, various electrical parts, various electrical testing equipment, electric impact driver, hand truck, tri-stand, saws-all, cleaning solutions, extension lamp extractor, various two-way radios, telephone, meger for voltage leak or a good ground, fax machine, copy machine, voltage meter and boom lift/man lift.

PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED

Continuously = occurs 66-100% of the time

Frequently = occurs 33-66% of the time

Occasionally = occurs 1-33% of the time

Rarely = may occur less than 1% of the time

Never = does not ever occur (such demands are not listed)

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

This job is classified as

Medium—exerting 20 to 50 pounds of force occasionally, and/or 10-25 pounds of force frequently, and/or up to 10 pounds of force constantly.

Standing

Health Care Provider initials if restricted_____

Frequently on cement, dirt, gravel, linoleum, carpet and uneven surfaces for up to 2 hours at a time for up to 4-5 hours total in a work shift. Most commonly occurs while troubleshooting and wiring panels and electrical equipment.

Walking

Health Care Provider initials if restricted_____

Occasionally on cement, dirt, gravel, linoleum, carpet and uneven surfaces for distances for up to 200 yards for up to 15 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while traversing between buildings and work sites.

Sitting

Health Care Provider initials if restricted_____

Occasionally on an automobile seat or the ground for up to 1 hour at a time for up to 2 hours total in a work shift. Most commonly occurs while driving a County vehicle and working on equipment in low areas.

Climbing stairs

Health Care Provider initials if restricted_____

Occasionally for up to 2 minutes at a time while climbing up to 3 flights for up to 15 minutes total in a work shift. Most commonly occurs while inspecting electrical equipment in emergency stairwells. The employee may carry equipment and tools up and down stairs.

Climbing

Health Care Provider initials if restricted_____

Occasionally on a ladder or vehicle to heights of 12 feet for up to 1 minute at a time for up to 30 minutes total in a work shift. Most commonly occurs while entering and exiting a truck, re-lamping and working on electrical equipment in high locations.

Balancing

Health Care Provider initials if restricted_____

Continuously on uneven ground, booms, scissor lifts and ladders at heights of up to 85 feet for up to 2 hours at a time for up to 6 hours total in a work shift. Most commonly occurs while traversing on uneven ground and balancing on a ladder, scissor lift or boom truck when working on electrical systems and equipment. The employee needs to replace lights at ball fields which can be up to 85 feet high.

Bending neck up

Health Care Provider initials if restricted _____

Occasionally for up to 10 minutes at a time for up to 1.5 hours total in a work shift. Most commonly occurs while working on ceiling lights, ball field lights and elevated equipment.

Bending neck down

Health Care Provider initials if restricted _____

Occasionally for up to 20-30 minutes at a time for up to 1.5 hours total in a work shift. Most commonly occurs while reading work orders, schematics, blueprints, wiring diagrams, manuals and drawings as well when working on equipment in low locations.

Bending/Stooping

Health Care Provider initials if restricted _____

Frequently on cement, dirt, gravel, linoleum, carpet and uneven surfaces for up to 15 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while performing preventative maintenance, troubleshooting and working on electrical systems or equipment, such as outlets, control panels and junction boxes in lower locations. The employee also may need to work on heavy equipment as well in order to splice wires. The employee can alternate bending/stooping with kneeling or squatting as preferred on most occasions.

Kneeling

Health Care Provider initials if restricted _____

Frequently on cement, dirt, gravel, linoleum, carpet and uneven surfaces for up to 15 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while performing preventative maintenance, troubleshooting and working on electrical systems or equipment, such as outlets, control panels and junction boxes in lower locations. The employee also may need to work on heavy equipment as well in order to splice wires. The employee can alternate kneeling with bending/stooping or squatting as preferred on most occasions.

Squatting

Health Care Provider initials if restricted _____

Frequently on cement, dirt, gravel, linoleum, carpet and uneven surfaces for up to 15 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while performing preventative maintenance, troubleshooting and working on electrical systems or equipment, such as outlets, control panels and junction boxes in lower locations. The employee also may need to work on heavy equipment as well in order to splice wires. The employee can alternate squatting with bending/stooping or kneeling as preferred on most occasions.

Crawling

Health Care Provider initials if restricted _____

Occasionally on cement, dirt, gravel, linoleum, carpet and uneven surfaces for distances of up to 50 feet for up to 5-10 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while inspecting the underside of electrical systems or machinery as well as when inspecting ballasts, vent motors and relays in areas such as an attic/crawl space.

Operating Controls with Feet

Health Care Provider initials if restricted _____

Frequently for up to 45 minutes at a time for up to 5 hours total in a work shift while driving a County van, boom truck or vehicle with an automatic transmission.

Reaching above shoulder height

Health Care Provider initials if restricted _____

Frequently for up to 5 minutes at a time for up to 5 hours total in a work shift while re-lamping or rewiring ceilings or upper areas such as lighting systems as County pools and ball field lighting.

Reaching at waist to shoulder height

Health Care Provider initials if restricted _____

Frequently for up to 45 minutes at a time for up to 5 hours total in a work shift while driving a County vehicle and working on electrical systems and equipment as well as when reviewing documents and reference materials.

Reaching at knee to waist height

Health Care Provider initials if restricted _____

Occasionally for up to 15 minutes at a time for up to 2 hours total in a work shift while troubleshooting, repairing or maintaining electrical systems as well as pulling wire, replacing outlets, digging and working on junctions boxes.

Reaching at floor to knee height

Health Care Provider initials if restricted _____

Occasionally for up to 5 minutes at a time for up to 2 hours total in a work shift while troubleshooting, repairing or maintaining electrical systems as well as pulling wire, replacing outlets and working on junctions boxes.

Lifting 1-10 pounds

Health Care Provider initials if restricted _____

Frequently for up to 30 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs with weights of 1-4 pounds while using various hand tools such as wire cutters, electrical testers and crimpers.

Carrying 1-10 pounds

Health Care Provider initials if restricted _____

Occasionally for distances of up to 150 yards for up to 15 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 1-4 pounds while transporting hand tools to and from work sites and the County van.

Lifting 11-20 pounds

Health Care Provider initials if restricted _____

Occasionally for up to 10 minutes at a time for up to 1.5 hours total in a work shift. Most commonly occurs with weights of 12-16 pounds while moving various pieces of electrical equipment, manipulating fixtures and moving large spools of wire.

Carrying 11-20 pounds

Health Care Provider initials if restricted _____

Occasionally for distances of up to 50 feet for up to 15 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 12-16 pounds while moving various pieces of electrical equipment, fixtures, spools of wire and power tools.

Lifting 21-50 pounds

Health Care Provider initials if restricted _____

Occasionally for up to 10 seconds at a time for up to 10 minutes total in a work shift. Most commonly occurs with weights of 30-40 pounds while using and manipulating pipe benders, tri-stand, motors, ballasts and power tools.

Carrying 21-50 pounds

Health Care Provider initials if restricted_____

Occasionally for distances of up to 150 feet for up to 5 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs with weights of 30-40 pounds while transporting power tools, pipe benders, motors, ballasts, tri stand and various pieces of electrical equipment to and from work sites and the County van.

Lifting 51-100 pounds

Health Care Provider initials if restricted_____

Rare for up to 5 seconds at a time for up to 20 seconds total in a work shift. Most commonly occurs with a two-person lift of objects with weights of 51-70 pounds while loading or unloading various pieces of electrical equipment from a County van, hand truck or utility cart. Assistance is available for heavy lifting as is a come-along to reduce the amount of lifting.

Carrying 51-100 pounds

Health Care Provider initials if restricted_____

Rare for distances of up to 10 feet for up to 30 seconds at a time for up to 1 minute total in a work shift. Most commonly occurs with a two-person lift of objects with weights of 51-70 pounds while loading or unloading various pieces of electrical equipment (exhaust and supply fans with motors) from a County van, hand truck or utility cart. Assistance is available for heavy lifting as is a come-along to reduce the amount of lifting.

Lifting 100+ pounds

Health Care Provider initials if restricted_____

Rare for up to 3 seconds at a time for up to 6 seconds total in a work shift. Most commonly occurs with a two-person lift while lifting exhaust and supply fans with motors on to a dolly or utility cart.

Pushing and Pulling

Health Care Provider initials if restricted_____

Occasionally for up to 15 minutes at a time with a force of up to 120 pounds for up to 30 minutes total in a work shift while pulling up to 200 feet of wire through conduit.

Handling

Health Care Provider initials if restricted_____

Frequently for up to 2 hours at a time for up to 4 hours total in a work shift while using various hand tools and pulling wire.

Operating Controls with Hands

Health Care Provider initials if restricted_____

Frequently for up to 45 minutes at a time for up to 4 hours total in a work shift while driving a county vehicle with an automatic transmission, using a computer mouse, operating testing equipment, utilizing switches and using power tools.

Fingering

Health Care Provider initials if restricted_____

Frequently for up to 3 minutes at a time for up to 3 hours total in a work shift while using small hand tools, manipulating wires, performing CET 5 wiring, performing testing/troubleshooting, using wire nuts and writing.

Feeling

Health Care Provider initials if restricted_____

Rare for 30 seconds at a time for up to 2 minutes total in a work shift while locating obscured wires as well as identifying overheating equipment or excessively vibrating machinery, such as an off balance electrical motor.

Talking

Health Care Provider initials if restricted _____

Occasionally for up to 5 minutes at a time for up to 1 hour total in a work shift while conversing with co-workers and superiors when performing troubleshooting, using a 2-way radio and participating in meetings.

Hearing

Health Care Provider initials if restricted _____

Continuously for up to 2.5 hours at a time for up to 8 hours total in a work shift while listening for proper machine operation, radio transmissions, alarms, and training. The employee also utilizes hearing when troubleshooting with coworkers.

Seeing

Health Care Provider initials if restricted _____

Continuously for up to 2.5 hours at a time for up to 8 hours total in a work shift while looking for lamps in need of replacement and as well as driving a County vehicle, wiring and trouble shooting electrical equipment systems and machinery. The employee also uses vision to identify color of wires and sodium lamps as well as identify potential hazards such as electrocution potentials and moving machinery.

Working with Heightened Awareness

Health Care Provider initials if restricted _____

Continuously for up to 2.5 hours at a time for up to 8 hours total in a work shift while identifying potential dangerous situations such as electrocution potential. Heightened awareness is also used when working at heights.

ENVIRONMENTAL FACTORS

Work is performed outside in a variety of weather conditions or in confined areas. The worker is exposed to high voltage. The worker is also exposed to high and exposed places such as lift equipment up to 85 feet above the ground.

The noise level is

HCP Initials if Restricted

Approximately 50-110 decibels. The noise is caused by, mechanical rooms,
pool equipment, diesel trucks.

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Work environment may include the following exposure(s):

HCP Initials if Restricted

Outside weather: Frequently
Non-weather related temperatures above 75 degrees: Occasionally
Wet: Occasionally
Humidity/dampness: Occasionally
Fumes: Occasionally
Odors: Occasionally
Dusts: Occasionally
Mists: Rare
Gases: Occasionally
Moving mechanical parts: Frequently
Vibration: Frequently
Working in high, exposed places: Occasionally

KING COUNTY JOB ANALYSIS COMPLETED ON: 8/15/06, revised 4/17/07

JOB TITLE: Parks Maintenance Electrician

EMPLOYEE:

DOT #: 824.261-010

CLAIM #

Confined spaces: Occasionally

POTENTIAL MODIFICATIONS TO JOB

A cart to reduce carrying.

Lifting assistance is available for heavy lifting.

SIGNATURES

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

Printed name & title of VRC evaluator

Signature of VRC evaluator

Date

Printed name & title of contact

Signature of contact

Date

Printed name & title of employee

Signature of employee

Date

HEALTH CARE PROVIDER SECTION

Check all that apply

- ☐ The employee is released to perform the described duties without restrictions on performance or work hours as of _____.
- ☐ The employee is released to perform the described duties on a reduced schedule as of _____. The recommended schedule is: _____
☐ Temporary until _____ ☐ Permanent as of _____
- ☐ The employee is released to perform the described job with the following modifications: _____

☐ Temporary until _____ ☐ Permanent as of _____
- ☐ The employee is not released to perform the described duties due to the following job functions: _____

☐ Temporary until _____ ☐ Permanent effective _____
- ☐ The employee is unable to work in any capacity.
A release to work is: ☐ anticipated by _____ ☐ Not expected

The limitations are due to the following objective medical findings:

Printed or typed name and phone number of Health Care Provider

Signature of Health Care Provider

Date