

EMPLOYEE:

CLAIM #



# Job Analysis Form

ALTERNATE FORMAT AVAILABLE

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**JOB TITLE** Facility Engineer II

**JOB CLASSIFICATION** Facility Engineer II

**DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER** 019.261-018

**DOT TITLE** Facilities Planner

**DEPARTMENT** Transportation

**DIVISION** Roads Services

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 3

**CONTACT'S NAME & TITLE** Alex Ho

**CONTACT'S PHONE** 206-296-8236

**ADDRESS OF WORKSITE**

155 Monroe Ave NE, Bldg. C  
Renton, WA 98055-4199

**VRC NAME** Kyle Pletz

**DATE COMPLETED** 6/1/2009

**WORK HOURS**

40 hours per week, with flexible hours, Monday through Friday.

**OVERTIME** (Note: Overtime requirements may change at the employer's discretion)  
Required, on occasion up to 20 hours per month, in accordance with business demand.

**JOB DESCRIPTION**

Design and inspect construction work required for the maintenance and construction of King County Facilities to ensure compliance with current building codes and standards. Prepare cost estimates for projects. Work with King County Procurement and Construction Crews to prepare scope of work, technical specifications, plans, and required documentation for both new construction and facility preventative maintenance and preservation contracts. Provide contract inspection for construction and maintenance projects on existing electrical systems, mechanical systems, plumbing systems, and HVAC. Update and maintain organized files, inspection records, work orders, and other related documents. Review pay request and invoices to contractors and approve payment to vendors. The employee spends approximately 50% of the duties in the field and 50% of the duties in an office setting.

**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**

- 4 years of experience in building maintenance, construction, inspections, permitting, design, code interpretation, and contract specification preparation.
- Knowledge of the International Building Code.
- Knowledge of engineering and project management techniques and principals.
- Knowledge of the current international building, Plumbing, Mechanical and Fire Codes.
- Knowledge of the ADA (Americans with Disabilities Act), and the Washington State Barrier Free requirements for accessible building design.
- Knowledge of County and local City building, zoning and comprehensive planning requirements and permitting needs.
- Knowledge of cost effective design, and product selection.
- Knowledge of Green Building, (LEED) requirements, and environmental friendly design.
- Knowledge and experience in the use of Microsoft Office Suite (Outlook, Word, Excel, Access and PowerPoint).
- Knowledge in the use of "Spec-Link" software.
- Knowledge of general government procurement process and procedures.
- Effective written and oral communication skills.
- Expert troubleshooting skills on HVAC, plumbing, mechanical and electrical systems.
- Skill in demonstrating a customer service attitude with diverse individuals and maintaining effective relationships.
- Skill in preparing user documentation and training materials.
- Skill in responding to frequently changing work responsibilities.
- Decision making skills.
- Ability to work in a team as well as a self supporting environment.

### **ESSENTIAL FUNCTIONS**

1. Review and/or prepare engineering plans and specifications for assigned work.
2. Prepare engineering cost and construction estimates, and scope of work for public bidding/Request for Proposal process and/or internal use. Conduct bid or qualification reviews. Administer contracts.
3. Plan and conduct construction, maintenance, and compliance inspections. Review contractor's compliance with construction procedures; check materials for proper approval, certification with contract specifications, building codes, and other contractual requirements and enforce requirements of the King County Maintenance standards.
4. Review contract plans and provisions; oversee the work of contractors on a daily basis and monitor work progress; take corrective action for non-compliance with contract requirements.
5. Assist or participate in the negotiation of contracts, change orders and recommendations for approval.
6. Plan and implement monitoring programs.
7. Prepare operations and maintenance documents and manuals.

8. Act as Project Manager for a specific task or assignment within a project such as the design of an HVAC system replacement.
9. Investigate and troubleshoot system failures and problems; recommend resolution.
10. Develop, implement or administer project scope of work, schedule, budget, contract requirements and the execution of plans for the design, procurement and construction phase of assigned projects.
11. Research and develop technical specifications for new or unique products.
12. Oversee project and discipline-appropriate testing, provide Quality Assurance/Quality Control (QA/QC) as required; analyze and evaluate results.
13. Interpret and evaluate codes and regulations; research and provide testimony
14. Acquire building permits, review construction plans, recommend changes to plans, and coordinate permitting process with other agencies and staff.
15. Direct the investigation of system failures and problems. Design improvements to resolve system failures and improve functionality. Develop and administer design-related systems/programs and supervise the production of drawings.
16. Provide technical quality assurance review of drawings and specifications.
17. Write the emergency response program for the investigations/inspection of King County Road Maintenance Facilities after major storms and earthquakes for damage assessment. Provide the needed training and forms to other King County Engineers so that they have the knowledge to determine if Buildings and/or Structures are safe to occupy.

#### **PERSONAL PROTECTIVE EQUIPMENT USED**

Safety boots, gloves, ear protection, eye protection, hard hat, safety vest, harness/fall protection, rain gear and knee pads.

#### **OTHER TOOLS & EQUIPMENT USED**

County vehicle, computer, telephone, fax machine, copy machine, thermometer, basic hand tools, ladder, documents, plans, specifications, boom/man lift, reference materials, contracts and flashlight.

#### **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**

Light to Medium. The job is mostly in the light category, however there are days that the lifting/carrying requirements reach the medium level approximately twice per month.

Light—exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently and/or a negligible amount of force constantly. A job is light if involves less than or up to the indicated pounds of force and one or more of the following apply; walking and standing to a significant degree, sitting and

pushing/pulling of arm or leg controls, or constant pushing and pulling to maintain a production rate even when weight is negligible.

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 \_\_\_\_\_

Occasionally on dirt, gravel, cement, construction sites, concrete, wet, slick, frozen and uneven ground surfaces for up to 10-15 minutes at a time for up to 1-1.5 hours total in a work shift. Most commonly occurs while performing field investigations, construction troubleshooting and site inspections as well as when observing concrete pours and watching vendors on ladders.

**Walking**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently on dirt, gravel, construction sites, cement, concrete, wet, slick, frozen and uneven ground surfaces for up to 10-15 minutes at a time for up to 5 hours total in a work shift. Most commonly occurs while performing field investigations, construction troubleshooting, site inspections and fire alarm inspections.

**Sitting**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously on an automobile seat or office chair for up to 1 hour at a time for up to 8-8.5 hours total in a work shift (during 10 hours shifts). Most commonly occurs while writing plans and contract specifications as well as driving and performing computer duties. The employee may need to drive to locations such as Skykomish and Vashon Island which can take as long as two hours, but the employee has the ability to break up the drives to reduce continuous sitting.

**Climbing stairs**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely while climbing up to 20 steps at a time for up to 2 times total in a work shift. Most commonly occurs while conducting field investigations, entering/exiting job trailers or attending meetings at various King County locations.

**Climbing**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 20-22' at a time for up to 2-3 times total in a work shift. Most commonly occurs while using ladders (regular and extension) to access rooftops. Boom or man lifts are available for use on some occasions to reduce climbing.

**Balancing**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently on dirt, gravel, construction sites, cement, concrete, wet, slick, frozen and uneven ground surfaces for up to 10-15 minutes at a time for up to 5 hours total in a work shift. Most commonly occurs while performing field investigations, construction troubleshooting, site inspections and fire alarm inspections.

**Bending neck up**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 5-10 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while observing cranes and rolling doors as well as looking at upper areas at construction sites. The employee also bends the neck up when obtaining items on upper shelves.

**Bending neck down**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently to continuously for up to 1 hour at a time for up to 5-8 hours total in a work shift. Most commonly occurs while performing field inspections as well as reviewing/drafting plans and typing specs.

**Bending/Stooping**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 5 minutes at a time for up to 20 minutes total in a work shift. Most commonly occurs while reaching for low files as well as performing inspections of HVAC, plumbing and electrical systems. The employee can alternate with kneeling or squatting in accordance with personal preference.

**Kneeling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 5 minutes at a time for up to 20 minutes total in a work shift. Most commonly occurs while reaching for low files as well as performing inspections of HVAC, plumbing and electrical systems. The employee can alternate with bending/stooping or squatting in accordance with personal preference.

**Squatting**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 5 minutes at a time for up to 20 minutes total in a work shift. Most commonly occurs while reaching for low files as well as performing inspections of HVAC, plumbing and electrical systems. The employee can alternate with kneeling or bending/stooping in accordance with personal preference.

**Crawling**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 1 minute at a time for up to 5 minutes total in a work shift. Most commonly occurs while traversing crawl spaces once per year or less.

**Operating Controls with Feet**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 1 hour at a time for up to 4 hours total in a work shift while driving a County vehicle to various locations in King County such as Vashon Island and Skykomish. These drives can take as long as two hours, but the employee has the ability to break up the drives to reduce continuous sitting.

**Reaching above shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 10-15 seconds at a time for up to 2-3 minutes total in a work shift while reaching for items on upper shelves.

**Reaching at waist to shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 1 hour at a time for up to 8 hours total in a work shift while driving, typing, writing, manipulating documents and writing/reviewing plans. On a rare occasion the employee may need to reach at waist to shoulder height for up to 1 hour at a time for up to 4 hours total in a shift while driving to Skykomish.

**Reaching at knee to waist height**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 30 seconds at a time for up to 2-3 minutes total in a work shift while opening and closing drawers, obtaining laboratory equipment and filing. The employee can utilize a chair when filing.

**Reaching at floor to knee height**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 5 minutes at a time for up to 20 minutes total in a work shift. Most commonly occurs while reaching for low files as well as performing inspections of HVAC, plumbing and electrical systems.

**Lifting 1-10 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 20 seconds at a time for up to 5 minutes total in a work shift. Most commonly occurs with weights of 3-6 pounds while manipulating plans, blue prints, specifications and reference materials.

**Carrying 1-10 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 1 minute at a time for up to 10 minutes total in a work shift. Most commonly occurs with weights of 3-6 pounds while transporting plans, specifications, hand tools and specification book (1.5 pounds).

**Lifting 11-20 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 20 seconds at a time for up to 2-3 minutes total in a work shift. Most commonly occurs with weights of 15-20 pounds while manipulating a 6 foot fiberglass ladders.

**Carrying 11-20 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 30 seconds at a time for up to 10 minutes total in a work shift. Most commonly occurs with weights of 15-20 pounds while transporting a 6 foot fiberglass ladder.

**Lifting 21-50 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 20 seconds at a time for up to 2 minutes total in a work shift. Most commonly occurs with weights of 28 pounds while manipulating ladders approximately twice per month. Employee also manipulates extension ladders via a two person lift; 50-65 pound extension ladders (25-32.5 pounds per person) approximately once per year or less. There are two 50-pound extension ladders and one 65-pound ladder available for use.

**Carrying 21-50 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 20 seconds at a time for up to 2 minutes total in a work shift. Most commonly occurs with weights of 28 pounds while transporting a ladder approximately twice per month. The employee also transports up to 50-65 (25-32.5 pounds) pounds while moving extension ladders via a two person lift 50-65 (27-32.5 pounds) approximately once per year or less. There are two 50-pound extension ladders and one 65-pound ladder available for use.

**Pushing and Pulling**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely with a force of 5-13 pounds for up to 20 seconds at a time for up to 5 minutes total in a work shift while opening and closing drawers and doors as well as when manipulating ladders. On a rare occasion when performing fire inspections, the employee may need to open and close up to 150 doors in a shift.

**Handling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 1 hour at a time for up to 4 hours total in a work shift while driving as well as manipulating equipment flashlight, thermometer, ladder and hand tools. On a rare occasion the employee may need to drive for up to 1 hour at a time for up to 4 hours total when going to Skykomish or Vashon Island.

**Operating Controls with Hands**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 1 hour at a time for up to 4 hours total in a work shift while driving as well as using a computer mouse, hand tools and temperature gun. On a rare occasion the employee may need to drive for up to 2 hours at a time for up to 4 hours total when going to Skykomish or Vashon Island.

**Fingering**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 1 hour at a time for up to 8 hours total in a work shift while typing, writing and manipulating documents.

**Feeling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 30 seconds at a time for up to 1 hour total in a work shift while feeling materials smooth finish and moisture. The employee also feels equipment for vibration and heat in order to identify malfunction.

**Talking**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 5-10 minutes at a time for up to 2 hours total in a work shift while conversing with clients, vendors, crews, supervisors, inspection authorities coworkers and contractors.

**Hearing**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 2.5 hours at a time for up to 10 hours total in a work shift while working in safety sensitive environments such as construction sites. The employee also utilizes hearing when explaining recommendations, attending meetings as well as conversing with the supervisors, coworkers, vendors, inspection authorities and contractors.

**Seeing**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 1 hour at a time for up to 10 hours total in a work shift while working in safety sensitive environments such as construction sites. The employee also utilizes vision when reviewing and completing reports, specifications and plans as well as inspecting fans, electrical systems, rooftops and problematic equipment.

**Working with Heightened Awareness**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 1 hour at a time for up to 10 hours total in a work shift while working in safety sensitive environments such as construction sites. The employee also heightened awareness when inspecting fans, electrical systems, rooftops and problematic equipment.

**ENVIRONMENTAL FACTORS**

Work is performed in an office as well as construction settings. The employee is exposed to construction equipment, moving machinery (such as heavy equipment, power doors etc), varying temperature, electric equipment, faulty machinery, etc.



### 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.

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Printed name & title of VRC evaluator

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Signature of VRC evaluator

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Date

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Printed name & title of contact

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Signature of contact

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Date

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Printed name & title of employee

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Signature of employee

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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