

EMPLOYEE:

CLAIM #



## Job Analysis Form

ALTERNATE FORMAT AVAILABLE

---

**JOB TITLE** Transit Engineer IV **JOB CLASSIFICATION** Transit Construction Management IV

**DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER** 168.167-030

**DOT TITLE** Inspector, Building

**DEPARTMENT** Transportation

**DIVISION** Transit

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 5

**CONTACT'S NAME & TITLE** Sheldon Teel, Transit Engineer VI

**CONTACT'S PHONE** 206-684-2241

### ADDRESS OF WORKSITE

11911 East Marginal Way South, Bldg B  
Tukwila, WA 98168

**VRC NAME** Kyle Pletz

**DATE COMPLETED** 5/28/08

**Date Revised** 5/14/09

### WORK HOURS

7:30-4pm, Monday through Friday.

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

Required, on a rare basis. On call 24 hours per day.

### JOB DESCRIPTION

Performs lead duties for assigned staff involved in the administration, design and/or inspection of specific construction projects to public transportation capital and operating projects.

### 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**

### Education:

A bachelor's degree in engineering or related field or the equivalent combination of education and experience and six (6) years of engineering/construction experience which includes three years of field inspection are required

### **OR**

A bachelor's degree in engineering or related field or the equivalent combination of education and experience and six (6) years of facilities inspection experience which includes established expertise in specific inspection areas such as roofs, pavement, construction coating and caulking inspection programs, engineering drafting, construction survey or a combination is required.

### **AND**

A valid Washington State Driver's License is required.

### Knowledge/Skills:

The Transit Construction Management IV analyzes a variety of construction circumstances to determine whether they conform to King County Requirements and contract specifications. A thorough knowledge of current engineering principles and practices as well as familiarity with relevant regulatory laws, ordinances, codes, standard specifications and plans is necessary. A good knowledge of modern construction, practices, methods, materials and equipment is also required.

### Interpersonal Relations:

Contacts are maintained with King County staff to coordinate design review and monitoring of construction projects and facility inspection work. The incumbent also has contacts with officials of public agencies and the general public, representative of consulting engineering firms and contractors to assure that facilities are being constructed as required. Good communications skills are required to secure compliance with construction contracts. Must be willing to work with a diverse group of people.

### Supervision:

The Transit Construction Management IV will direct the work of lower level staff and assist the Transit Construction Management V with personnel actions such as initiating disciplinary actions and conduction performance evaluations.

### Responsibility:

The Transit Construction Management IV is responsible for the proper administration of specific construction projects. The incumbent organizes and directs the inspection program during construction and monitors the project budget to determine whether spending levels are consistent with approved budget. He/she conducts, in coordination with the proper operating department, a final review of the project prior to acceptance from the contractor.

The Transit Construction Management IV is responsible for developing and implementing the capital asset management program. The incumbent is responsible for the organizing and directing facilities

inspection staff, and providing quality control to consultant and engineer in the planning and design of King County Facilities.

## **ESSENTIAL FUNCTIONS**

1. Administer construction requirements and standards contained in plans and specifications for major complex public works construction projects.
2. Plan and supervise inspection of construction materials, facilities equipment and machinery installed in King County construction contracts.
3. Review plans and specifications being developed for specific projects to ensure compliance with established construction standards and objectives.
4. Review and coordinate the submission of field inspection reports prepared by assigned inspectors and the processing of progress payments. Develop reports and summaries of construction activities and supervise the preparation of "as built" plans.
5. Furnish legal staff with technical and contractual data in support of legal positions on contracts and claims.
6. Provide supervision and general guidance to inspectors during the course of a construction project.
7. Provide specific technical consultation in various engineering disciplines including instrumentation, controls and hydraulics.
8. Review plans and specifications being developed for specific projects to ensure compliance with established construction standards.
9. May organize, plan and supervise special inspection, installation and testing of equipment, systems, instrumentation and controls.
10. Develop work plans and specifications to ensure conformity to agency specifications and requirements.
11. Review proposals from equipment vendors.
12. Perform many of the duties of those assigned to construction inspection work.
13. Plan, organize and supervise the development and implementation of facilities inspection programs based on established expertise to ensure the timely non-routine maintenance, repair, rehabilitation, and replacement of selected facility components, building systems, building equipment, process systems, mechanical equipment and individual assets to maintain their reliability, efficiency and operational safety.
14. Perform or direct project management activities for various sized projects including scope, schedule and budget. Prepare contract specifications for bid proposals, attend pre-bid conferences and evaluate bid proposals. Procure equipment and supplies. Monitor the work performance of contractors and review progress payments.
15. Direct the work of lower level staff in the planning and coordination and required inspections for King County's Transit facilities.
16. Prepare or review inspection reports, rehabilitation and replacement recommendations and planning estimates based upon data collected from inspection and include the information in the annual facilities management plan.
17. Assist engineers, planners, and operating and maintenance staff with transit functions during the planning and design of facility extensions and modifications. Provide information regarding the locations, configuration, and characteristics of above-ground, underground and appurtenant facilities.

18. Provide technical review and timely response to local agency public works submittals to assure compliance with King County Council rules and regulations.
19. Monitor King County's facilities, such as underground pipeline, building roofs, pavement, building structures and underground tanks and report unusual events to supervisor.
20. Review engineering drawings to ensure compliance with King County standards.
21. Ensure right of way, easement and permit conditions and environmental protection requirements are adhered to in projects. Serve as the liaison between King County, public agencies and property owners.
22. Perform other duties as assigned.

### **PERSONAL PROTECTIVE EQUIPMENT USED**

Reflective vest, hard hat, fall protection, ear protection, eye protection, breathing protection and closed toe shoes/boots.

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

Computer, phone, fax, pen, pencil, printer, digital camera, various construction testing equipment (such tape measure and survey equipment), project drawings and specifications.

### **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.

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

Continuously & Highly Repetitive on all conceivable surfaces for up to 1 hour at a time for up to 6 hours total in a work shift. Most commonly occurs while inspecting, measuring, observing work, verifying materials etc. Commonly occurs while traversing construction sites that may have drop-offs or uneven ground. Uneven ground could include rebar, mud, pipes, lumber etc.

**Walking**

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

Frequently on all conceivable surfaces for up to 20 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while inspecting, measuring, observing work, verifying materials, traversing various work sites etc. Commonly occurs while traversing construction sites that may have drop-offs or uneven ground. Uneven ground could include rebar, mud, pipes, lumber etc.

**Sitting**

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

Frequently to continuously on an office chair or automobile seat for up to 1 hour at a time for up to 5 hours total in a work shift. Most commonly occurs while performing computer duties, driving a County vehicle, reviewing drawings and specifications, addressing contactor questions, reviewing documents etc.

**Climbing stairs**

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

Occasionally while climbing up to 4 flights at a time for up to 30 minutes total in a work shift. Most commonly occurs while inspecting job sites that may not have elevators installed yet.

**Climbing**

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

Occasionally on a ladder to heights of up to 20 feet for up to 2 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while climbing ladders to perform inspections.

**Balancing**

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

Continuously on uneven ground and slick surfaces for up to 2.5 hours at a time for up to 8 hours total in a work shift. Most commonly occurs while traversing construction sites that may have drop-offs or uneven ground. Uneven ground could include rebar, mud, pipes, lumber etc. The employee also balances on ladders up to 20 feet tall.

**Bending neck up**

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

Occasionally for up to 10 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while inspecting upper areas of construction sites such as wiring, scaffolding, plumbing, joists and ventilation systems.

**Bending neck down**

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. Most commonly occurs while reviewing plans, writing reports, taking pictures, measuring, utilizing reference materials, inspecting lower areas of job sites such as rebar, footings, trenches, pipes, foundations etc.

**Bending/Stooping**

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

Occasionally on all conceivable surfaces for up to 4 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while traversing areas with low ceilings (such as a utility room) or obstructions such as pipes or ventilation systems. The employee can alternate bending/stooping with kneeling or squatting on most occasions in accordance with personal preference.

**Kneeling**

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

Occasionally on all conceivable surfaces for up to 4 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while traversing areas with low ceilings (such as a utility room) or obstructions such as pipes or ventilation systems. The employee can alternate kneeling with bending/stooping or squatting on most occasions, in accordance with personal preference.

**Squatting**

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

Occasionally on all conceivable surfaces for up to 4 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while traversing areas with low ceilings (such as a utility room) or obstructions such as pipes or ventilation systems. The employee can alternate squatting with kneeling or bending/stooping on most occasions, in accordance with personal preference.

**Crawling**

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

Rarely on all conceivable surfaces for up to 1 minute at a time for up to 5 minutes total in a work shift. Most commonly occurs while inspecting the interior of pipes to make sure the joints are completed accordingly as well as when inspecting the interior of equipment or utility rooms.

**Operating Controls with Feet**

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

Occasionally for up to 1 hour at a time for up to 2 hours total in a work shift while driving various County vehicles.

**Reaching above shoulder height**

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

Occasionally for up to 2 minutes at a time for up to 30 minutes total in a work shift while measuring, climbing, securing a ladders and taking pictures.

**Reaching at waist to shoulder height**

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

Frequently & Highly Repetitive for up to 30 minutes at a time for up to 4 hours total in a work shift while reviewing plans, manipulating documents, performing computer duties, driving and completing reports.

**Reaching at knee to waist height**

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

Occasionally for up to 5 minutes at a time for up to 30 minutes total in a work shift while removing materials from boxes or trunk of car/back of van and pulling files from file cabinet.

**Reaching at floor to knee height**

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

Occasionally on all conceivable surfaces for up to 4 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while traversing areas with low ceilings (such as a utility room) or obstructions such as pipes or ventilation systems.

**Lifting 1-10 pounds**

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

Frequently & Highly Repetitive for up to 10 minutes at a time for up to 3 hours total in a work shift. Most commonly occurs with weights of 2-5 pounds while manipulating plans, boxes, test equipment, sample materials (such as brick), tape measure and level.

**Carrying 1-10- pounds**

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

Frequently & Highly Repetitive for up to 10 minutes at a time for up to 3 hours total in a work shift. Most commonly occurs with weights of 2-5 pounds while transporting plans, boxes, test equipment, sample materials (such as brick), tape measure and level.

**Lifting 11-20 pounds**

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

Occasionally for up to 5 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs with weights of 13-19 pounds while manipulating survey equipment

**Carrying 11-20 pounds**

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

Occasionally for up to 5 minutes at a time for up to 45 minutes total in a work shift. Most commonly occurs with weights of 13-19 pounds while transporting survey equipment

**Lifting 21-50 pounds**

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

Rarely for up to 3 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while manipulating plans (30 pounds)

**Carrying 21-50 pounds**

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

Rarely for up to 3 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while transporting plans (30 pounds)

**Lifting 51-100 pounds**

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

Rarely for up to 30 seconds at a time for up to 2 minutes total in a work shift. Most commonly occurs while lifting office furniture, a case of paper (52 pounds) and jug of water (40 pounds).

**Carrying 51-100 pounds**

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

Rarely for up to 30 seconds at a time for up to 2 minutes total in a work shift. Most commonly occurs while transporting office furniture, a case of paper (52 pounds) and jug of water (40 pounds).

**Pushing and Pulling**

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

Occasionally with a force of 3-50 pounds for up to 10 seconds at a time for up to 5 minutes total in a work shift while popping manhole covers, drainage grates, opening drawers/doors, adjusting ladders and manipulating construction equipment.

**Handling**

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

Occasionally for up to 5 minutes at a time for up to 30 minutes total in a work shift while manipulating samples, survey equipment, plans and reference materials.

**Operating Controls with Hands**

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

Frequently & Highly Repetitive for up to 1 hour at a time for up to 4 hours total in a work shift. Most commonly occurs while performing computer duties, driving a County vehicle and using survey equipment.

**Fingering**

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

Frequently & Highly Repetitive for up to 30 minutes at a time for up to 4 hours total in a work shift while keyboarding, dialing the telephone, using survey equipment, writing and manipulating documents.

**Feeling**

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

Occasionally for up to 1 minute at a time for up to 20 minutes total in a work shift while inspecting finish work, identifying vibration from HVAC systems, identifying heat from boilers etc. This Varies based upon projects.

**Talking**

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

Continuously & Highly Repetitive for up to 30 minutes hour at a time for up to 6 hours total in a work shift while coordinating multiple aspects of the building process as well as conversing with contractors, supervisors and coworkers.

**Hearing**

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

Continuously & Highly Repetitive for up to 2 hours at a time for up to 8 hours total in a work shift while coordinating multiple aspects of the building process as well as conversing with contractors, supervisors and coworkers. The employee also utilizes hearing for safety purposes while at construction sites to identify any potentially dangerous situations or moving machinery.

**Seeing**

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

Continuously & Highly Repetitive for up to 2 hours at a time for up to 8 hours total in a work shift while coordinating multiple aspects of the building process as well as inspecting sites. The employee also utilizes vision for safety purposes while at construction sites to identify any potentially dangerous situations or moving machinery and equipment.

**Working with Heightened Awareness**

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

Continuously & Highly Repetitive for up to 2 hours at a time for up to 8 hours total in a work shift while identifying any potentially dangerous situations or moving machinery at construction sites.

**ENVIRONMENTAL FACTORS**

Work is performed in an office and construction site setting. Work pressure and frequent disturbances are to be expected. Majority of work is performed at construction sites around heavy operating equipment and in all kinds of weather conditions. Exposure to construction site activities, potentially hazardous chemicals, street traffic, large industrial rotating assemblies, and electrical installations is part of the normal working conditions.

**The noise level is**

HCP Initials if Restricted

Approximately 135 decibels. The noise is caused by blowers, machinery etc.

--

**Work environment may include the following exposure(s):**

HCP Initials if Restricted

Outside weather: Continuously

Non-weather related temperatures below 55 degrees: Occasionally

Non-weather related temperatures above 75 degrees: Occasionally

Wet: Occasionally


KING COUNTY JOB ANALYSIS COMPLETED ON: 5/28/08  
JOB TITLE: Transit Engineer IV  
EMPLOYEE:

DOT #: 168.167-030  
CLAIM #

Humidity/dampness: Occasionally  
Fumes: Frequently  
Odors: Frequently  
Dusts: Occasionally-Frequently  
Mists: Occasionally  
Gases: Rare  
Moving mechanical parts: Occasionally  
Vibration: Frequently  
Working in high, exposed places: Occasionally  
Working with explosives: Rare  
Toxic or caustic chemicals: Occasionally  
Confined spaces: Occasionally


**POTENTIAL MODIFICATIONS TO JOB:**  
None identified.

## 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.

\_\_\_\_\_  
Kyle Pletz, BA, VRC, Vocational Consultant  
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