



# Bock Consulting

## Job Analysis

Job Title	Carpenter and Pile Buck Crew Chief (MM)	Worker	
DOT Number	860.381-022 and 860.131-018	Claim Number	
Employer	Port of Seattle	Employer Phone #	(206) 787-3000
Employer Contact	Kathleen Moriarty	Date of Analysis	6/21/11; 9/23/16

- Job of Injury   
 Transferable Skills Job   
 New Job   
 40 Hours Per Week   
 4-5 Days Per Week

### Job Description, Essential Functions, Tasks and Skills:



The Port of Seattle is a municipal corporation created on September 5, 1911 by the voters of King County. The Port of Seattle is divided into operating divisions, plus other departments that support the divisions and the broad mission of the Port: 1) Aviation Division, 2) Maritime Division, and 3) Economic Development Division.

The Maritime Division owns and operates approximately 1,200 acres of moorage, cargo-related, and cruise ship facilities. The Maritime Division employs a maintenance staff, which is responsible for general facility upkeep, pier and moorage system repairs, and utility maintenance.

This job analysis is for a Carpenter and Pile Buck Crew Chief position in Marine Maintenance. The Carpenter and Pile Buck Crew Chief supervises and works with the Carpenters and Pile Bucks in Marine Maintenance to provide services to all of the various business groups within the Seaport Division.



### Essential Functions:

The Carpenter and Pile Buck Crew Chief is responsible for the supervision and organization of the Marine Maintenance Carpenters and Pile Bucks who complete a wide variety of tasks, from dock construction to detailed interior trim work. Carpenters and Pile Bucks may work in the shop (located at 25 S. Horton St. in Seattle), or may work in the field at one of the Port's Seaport properties. Pile Bucks may be assigned tasks to assist with repairing and maintaining pilings (made of wood, concrete, or steel) used for retaining walls, bulkheads, and foundations of structures. Carpenter and Pile Buck work may be performed on the land, various piers, or from a boat.

**11410 NE 124<sup>th</sup> Street #213, Kirkland, WA 98034**

Telephone: 425-823-7115 • Fax: 425-823-7125

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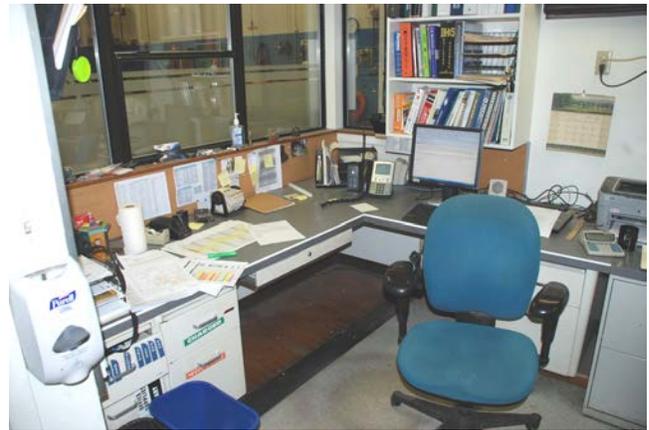
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The work performed by the Carpenter and Pile Buck Crew Chief can be categorized as follows:

Work Category	Estimated Time
Office/desk/administrative work (including meetings)	60%
Supervising work and personnel and providing assistance in and around shop	10-20%
Supervising work and personnel and providing assistance in the field	15-25%
Performing trade-specific work	5%
Total	100%

Tasks assigned to the Carpenter and Pile Buck Crew Chief may include:

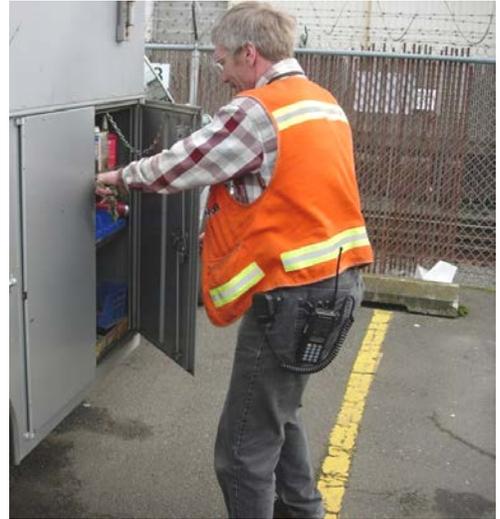
- Receive notifications of new work orders/work requests (via telephone, email, or job tracking system).
- Develop plans for completing requested projects. Plan for material, equipment, PPE, and staffing needs.
- Order parts, supplies, and or materials needed for projects. Work with Purchasing to ensure correct products and items are ordered and available when needed. Periodically work with vendors related to parts, supplies, and or materials needed.
- Prepare and or review site-specific safety plan for each project/work task. Prepare job plans and supporting documentation as needed.
- Prepare personnel schedules and assign work tasks.
- Reviewing drawings, plans, and schematics for potential projects.
- Coordinate scheduling with other trades to ensure materials, equipment, and workers from other trades are available as needed to complete assigned work orders/projects. Coordinate with outside vendors/contractors/entities.
- Coordinate scheduling with Port Facility Maintenance Managers and tenants.
- Assist crew in choosing tools, equipment and materials.
- Enter time by work order on a daily basis into job tracking system (Maximo). Review daily time entered by crew and approve.
- Ensure description of work completed is available and or correct in work log.
- Send and respond to electronic mails.





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- Provide training to one or more crew members to cover duties of Crew Chief when Crew Chief is off work or unavailable.
- Visit project sites and oversee/inspect completed work. Ensure work is being performed in a safe manner.
- Meet/connect with crew daily to manage workflow, address issues, and reassign personnel based on work demands.
- Lead periodic meetings to provide training and discuss important safety issues.
- Attend periodic meetings with supervisors and other entities.
- Coordinate work priorities with supervisors.
- Assist crew members with technical input, answer questions from crew, and provide troubleshooting advice as needed.
- Respond to requests for bids. Review work scope, materials, equipment, and staffing needs, and prepare an estimate related to the requested work.
- Ensure crew has current certifications and or training as required by law or ordinance.
- Potentially supervise apprentices or mentor students.
- Complete all required forms and documents.
- Completing tenant improvements for property lessees. Framing and installing panels of drywall.
- Building cabinets. Adjusting doors. Installing windows in doors.
- Fabricating, installing, or repairing fixtures.
- Re-keying locks on Port property. Maintaining a record of locks and keys.
- Installing drop-ceiling tiles.
- Constructing concrete forms.
- Installing bollards/cleats on docks to tie up vessels ranging from cruise ships to kayaks.
- Constructing docks and piers on pilings. [Note: Carpenters do not do drive piles unless they have obtained the training necessary to be a Pile Buck.]
- Patching flooring surfaces.
- Assembling/constructing platforms, decking, walkways, and other supporting structures to protect workers and structures in and around project sites.
- Demolishing items/structures when no longer needed.
- Completing annual inspections of Port properties. Taking digital pictures and preparing preventative maintenance (“PM”) reports.





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- Assisting team members with installing, positioning, moving, repairing, and maintaining pilings used for retaining walls, bulkheads, and foundations of structures, such as building foundations, bridges, and piers located within the Port of Seattle Seaport Division.
- Reading provided documentation such as detailed instructions, drawings, or specifications to understand the piling construction/repair/maintenance project.
- Operating or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, or water craft to complete required construction and repairs.
- They also may operate and maintain air compressors, pumps, and other power equipment at construction sites.
- Inspecting pilings, retaining walls, bulkheads, and foundations of structures, such as buildings, bridges, and piers to identify the cause of problems or defects and potential maintenance issues.

Necessary skills and abilities may include:

- Working knowledge of Windows-based computers, related accessories, time tracking software, keyboarding, data input skills, and knowledge of electronic mail software
- Identifying the best methods to correctly complete the assigned task. Having the skills to complete the assigned tasks, and ability to read blueprints or sketches.
- Measuring boards, timbers, plywood, or drywall panels using square or measuring tape, and marking cutting lines on materials.
- Using hand and power tools to perform assigned tasks.
- Using nails and screws to fasten materials.
- Ability to drive forklift.
- Having the physical abilities to perform all of the tasks assigned to a Carpenter and Pile Buck.
- Being able to follow directions and being detailed.
- Being able to work independently, but also within a team environment.
- Being able to work in any kind of weather, including working from a boat or float.

Machinery, Tools, Equipment, Personal Protective Equipment:

- Computer, computer accessories, and project management software (Maximo).
- General office equipment, such as desk, chair, fax machine, telephones, and calculator.
- General office supplies, such as pens/pencils, notepads, binders, file folders, and copy paper.
- Hand tools and power tools, including hammers, drills, circular saws, reciprocating saws, roto-hammers, nail guns, sanders, wrenches, squares and levels, chisels, hand saws, tape measures, utility knives, and routers.
- Tool boxes or tool buckets. Work/tool belts.
- Nails, screws, and other hardware. Containers holding fasteners.
- Table saw. Chop saw. Chain saw. Drill press. Planer.
- Burke bars. Pry bars.



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- Portable generators. Air compressors.
- Work trucks with storage boxes and hoists.
- Scissor lifts and boom lifts. Forklifts.
- Work skiffs/boats (14 and 16 foot boats) with outboard engines (larger boat has center console steering). Floating platforms (ranging from 4'x8' to 8x16' on Styrofoam billets/floats).
- 2-way radios. Cell phone/digital device.
- Nylon straps and ropes.
- Oxyacetylene torch.
- Concrete core drilling machines.
- Job boxes. Wheeled carts.



Approved safety boots are required at all times. Workers are required to wear safety vests any time they are outside the main shop. Eye and ear protection, hard hats, and respirators are worn as needed when working. Carpenters may also wear gloves, kneepads, chainsaw chaps, fall arrest harnesses, and rain gear.

When working within 6 feet of an edge of the water, Carpenters and Pile Bucks must wear personal floatation devices (“PFDs”).

**Education / Training:**

A Carpenter and Pile Buck Crew Chief would be a Journeymen level worker with significant experience in the trade.

A Carpenter and Pile Buck Crew Chief must complete training as required by Marine Maintenance, which may include subjects such as computer training and/or project management. Carpenter and Pile Buck Crew Chiefs must also complete the Front Line Supervisor Training as a Port of Seattle requirement. This training is offered once a year, and must be completed during the first year as a Crew Chief.

A Boater’s Education Card is required for all employees who perform work while in a boat or standing on a work float.

Carpenters and Pile Bucks are represented by either the Carpenters’ or the Pile Drivers’ unions.

**Per the Dictionary of Occupational Titles (DOT):**

**860.131.018 Supervisor, Carpenters:** Specific Vocational Preparation (SVP): 8 (Highly Skilled - From four to ten years)

**860.381-022 Carpenter:** SVP: 7 (Skilled - From two to four years)



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**COGNITIVE AND BEHAVIORAL ELEMENTS/DEMANDS**

Frequency Definitions:	
<b>Continuously</b> = Occurs 66-100% of the time.	<b>Occasionally</b> = Occurs 1-33% of the time
<b>Frequently</b> = Occurs 33-66% of the time.	<b>Rarely</b> = May occur less than 1% of the time.
<b>Never</b> = Does not ever occur.	
<b>Comprehension</b>	
Articulating and comprehending information in conversations.	Continuously
Reading, comprehending, and using written materials.	Frequently
Understanding and solving problems involving math and using the results.	Occasionally
Using technology/instruments/tools & information systems.	Continuously
Working with two and three dimensional formats.	Frequently
<b>Remembering</b>	
Remembering spoken instructions.	Continuously
Remembering written instructions.	Continuously
Remembering visual information.	Continuously
Recalling information incidental to task at hand.	Continuously
Memorizing facts or sequences.	Frequently
Remembering simple instructions.	Continuously
Remembering detailed instructions.	Continuously
<b>Learning &amp; Processing</b>	
Effectively learning and mastering information from classroom training.	Occasionally
Effectively learning and mastering information from on-the-job training.	Continuously
Learning from past directions, observations, and/or mistakes.	Continuously
Using common sense in routine decision making.	Continuously
Recognizing and anticipating potential hazards and taking precautions.	Continuously
Thinking critically and making sound decisions.	Continuously
Integrating ideas and data for complex decisions.	Occasionally
Determining and following precise sequences.	Frequently
Coordinating and compiling data and information.	Frequently
Analyzing, synthesizing data and information.	Frequently
<b>Tasking and Planning</b>	
Performing repetitive or short-cycle work.	Frequently
Working under specific instructions.	Frequently
Completing complex tasks.	Frequently
Directing, controlling, or planning for others as necessary for basic tasks.	Frequently
Directing, controlling, or planning for others as necessary for complex tasks.	Frequently
Multi-tasking.	Continuously
Planning, prioritizing, and structuring daily activities.	Continuously



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<b>Use Appropriate Behavior for Professional Work Environment</b>	
Receiving criticism and accepting limits appropriately.	Frequently
Maintaining emotional control and organization under increased stress.	Continuously
Maintaining socially appropriate affect, temperament, and behavior.	Continuously
Monitoring own quality of performance and altering behaviors to correct mistakes or improve outcome.	Continuously
Working independently and/or unsupervised.	Continuously
Adapting to frequent interruptions, changes in priorities, or changes in work location.	Frequently
Responding effectively to emergency situations.	Rarely

Frequency Designations: <b>Required Beneficial Not Necessary</b>	
<b>Maintaining Attendance and An Assigned Work Schedule</b>	
Maintaining predictable and reliable attendance each work shift.	Beneficial
Being punctual.	Beneficial
Taking rest periods at set times or only at times determined by breaks in job responsibilities.	Not Necessary
Adjusting to a flexible schedule of work days and or shifts.	Beneficial



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**PHYSICAL DEMANDS**

**N/A:** Not Applicable

**S:** Seldom (1-10% of the time)

**O:** Occasional (10-30% of the time)

**STRENGTH:**  Sedentary  Light

**F:** Frequent (30%-70% of the time)

**C:** Constant (Over 70% of the time)

**WNL:** Within Normal Limits (talking, hearing, etc.)

Medium  Heavy  Very Heavy

Frequency

Comments

Sitting	<b>F-C</b>	Interchange with standing and walking. While working on computer, using the telephone, processing paperwork, or participating in meetings. While driving to job sites or driving a forklift.
Standing	<b>O</b>	Interchange with sitting and walking. Frequency will depend on assigned tasks, and whether worker is in the shop or in the field.
Walking	<b>O-F</b>	Interchange with standing and sitting. Frequency will depend on assigned tasks, and whether worker is in the shop or in the field. May be over uneven, slippery surfaces/terrain – dirt, mud, pieces of lumber, and rebar.
Lifting (up to 10 pounds)	<b>F</b>	Radio, phone, and office supplies. Hand and portable power tools. Hardware and partial/smaller boxes of fasteners. Small pieces of material.
Lifting (10 to 25 pounds)	<b>O</b>	Portable power tools. Small to medium pieces of material (or multiple pieces of material). Tool bag/box/bucket.
Lifting (25 to 100 pounds)	<b>S</b>	Tool box/bucket. Medium to large pieces of material (or multiple pieces of material). Whole sheets of plywood (depending on thickness, 4x8 sheets weigh 40-60 pounds). Boxes of fasteners/nails weigh 40-60 pounds. Portable air compressors weigh 60 pounds. Timbers, doors, large pieces of wood, and multiple pieces of lumber. Cabinets (est. 40-80 pounds). Portable generators (est. weight of a generator unit is approx. 100 pounds). Assistance from other workers is typically available to lift heavy items. NOTE: Heavy items can generally be lifted/moved using a forklift or hoist.
Carrying (up to 10 pounds)	<b>F</b>	Radio, phone, and office supplies. Hand and portable power tools. Hardware and partial/smaller boxes of fasteners. Small pieces of material.
Carrying (10 to 25 pounds)	<b>O</b>	Portable power tools. Small to medium pieces of material (or multiple pieces of material). Tool bag/box/bucket.
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Pushing/Pulling (Up to 10 pounds of force).	<b>O</b>	Opening file cabinet drawers, and drawers on copy and fax machine. Opening doors on buildings and vehicles.
Pushing/Pulling (10 to 50 pounds of force).	<b>S</b>	Hammering, holding wood in place to nail, pulling nails with a claw hammer or nail bar, pushing wheeled cart loaded with material, using Burk bar to separate items, pushing/pulling forms into place, and opening and closing shop drawers.



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Climbing Stairs/Ladders	O	Workers may encounter stairs when working in the field. Carpenters climb ladders when necessary (ladders can range from stepstools to 20'+ extension ladders).
Working at Heights/ Balancing	S	While climbing ladders and walking on elevated scaffolding, walkways and decking. Carpenters in Marine Maintenance are also required to work from boats, which can take a significant amount of balancing.
Bending at Waist	O	Building and installing items, placing and securing materials and fixtures, and gathering materials and supplies.
Bending Neck	C	All of the assigned tasks involve neck movement: building items, placing and securing materials, climbing ladders, constructing forms, placing supports, gathering lumber and supplies, cutting material, and entering information in a computer.
Twisting at Waist	O	While working at desk. While maneuvering in tight areas, gathering materials, or placing materials or fixtures to install, and cutting materials.
Crouching/Kneeling	S	While inspecting or working below waist level.
Crawling	S	While inspecting or working below waist level.
Stooping	S	While inspecting or entering/exiting from tight areas.
Reaching (up to Shoulder Height)	F	In general, most of the assigned tasks involve reaching movements: building items, placing and securing materials, constructing forms, placing cabinets, gathering lumber and supplies, and cutting material.
Reaching (Above Shoulder Height)	S	Gathering items stored above shoulder height, climbing ladders, working under a dock.
Driving	O	Driving work trucks and forklifts.
Foot Controls	O	Driving work trucks and forklifts, and using safety switches on boom lifts and drill press.
Repetitive Motion	O	While using hand tools (e.g., screwdrivers), hammers/nail guns, shop tools (when producing multiple units of a required item).
Handling/Grasping	C	50 % Pinch Grasp 50 % Whole Hand Grasp
Fine Finger Manipulation	O	Using measuring tape, marking tools, holding nails and other fasteners, using wrenches, pulling triggers on power tools, and entering data in a computer.
Keyboarding	F	While entering time and work performed on a daily basis, creating and responding to electronic mail. Placing orders for materials.
Talking	C	Communicating with supervisors and other co-workers.
Hearing	C	Communicating with supervisors and other co-workers.
Seeing	C	Within normal limits, with or without correction.
Writing	O	While taking notes, documenting completed tasks and inspections, and marking measurements.
Normal Job Site Hazards	F	Carrying large and/or heavy objects, working at heights, falling objects, striking head on overhead objects, moving/mechanical equipment, slippery walkways and decking, saws and other sharp tools, fumes, dust, noise, odors, vibrations, and capsizing while working in a boat.
Expected Environmental Conditions	C	Work may be performed inside a shop environment, temperature controlled office space, or outside exposed to the weather. Worker may be exposed to noise, wood dust, and fumes. May work in tight spaces (although not trained for working in confined spaces).



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The above job analysis represents the requirements of a specific job based on personal observations, discussions with employer representatives, and/or workers. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective quantifiable data. For this reason, a "best estimate" may have been used when reporting physical demand frequencies.

Analysis was done on the job site?       Yes       No

Job Analysis Reviewed By:	Kathleen Moriarty and Dan Fitzgerald
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Completed by Vocational Provider Brice York, B.A., CDMS

Date September 13, 2017      Signature of Vocational Provider \_\_\_\_\_



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**FOR PHYSICIAN'S/EVALUATOR'S USE ONLY**

- The injured worker can perform the physical activities described in the job analysis and can return to work on \_\_\_\_\_
- The injured worker can perform the physical activities described in the job analysis on a part-time basis for \_\_\_\_\_ hours per day. The worker can be expected to progress to regular duties in \_\_\_\_\_ weeks/months.
- The injured worker can perform the described job, but only with the modifications/ restrictions in the attached report and/or listed below. These modifications/restrictions are (check one):
  - Temporary for \_\_\_\_\_ weeks \_\_\_\_\_ months
  - Permanent
- The injured worker cannot perform the physical activities described in the job analysis based on the physical limitations in the attached report and/or listed below. These limitations are (check one):
  - Temporary for \_\_\_\_\_ weeks \_\_\_\_\_ months
  - Permanent

COMMENTS:

Date \_\_\_\_\_ Physician's/Evaluator's Signature \_\_\_\_\_

Physician's/Evaluator's Name Printed \_\_\_\_\_

**PLEASE RETURN COMPLETED FORM VIA FACSIMILE TO:**

**Port of Seattle Employee Health & Safety Department at (206) 787-3406**

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