

Job Analysis

Job Title	Laborer (MM)		Work	er			
DOT Number	869.687-026		Claim	Number			
Employer	Port of Seattle		Empl	oyer Phone #	(206)	787-3000	
Employer Contact	Jim Kimball		Date	of Analysis	4/21/	10; 6/11; 12/23/16	
☐ Job of Injury [Transferable Skills Job	🗌 New	y Job	🔀 8 Hours Pe	r Day	🔀 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 was developed for the <u>Laborers</u> working for Marine Maintenance. Laborers generally perform tasks involving physical labor, which may include moving materials, operating hand and power tools of all types, and assisting other craft workers. Laborers primarily work during the day shift, although periodically projects may demand work during other shifts.

Tasks Assigned to Laborers

Laborers can perform various tasks on projects assigned to Marine Maintenance. Projects may be completed as preventative maintenance projects, planned projects, or on an emergency basis in response to a specific event.

Projects may include: repairing/patching walkways, parking lots, sidewalks, and curbs, cleaning roofs and gutters on buildings and other structures, cleaning out storm drains, boring holes in concrete, removing areas of concrete or asphalt, patching storm water collection boxes, patching concrete dock floats, scraping mussels and other mollusks from cables, cleaning out pipes, helping layout irrigation



systems, pressure washing walkways and docks, cleaning/preparing sites for work, performing demolition

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and project site clean-up work, and shoveling/removing snow and ice.

Specific tasks assigned to the Laborers may include:

- Meet/connect with Crew Chief on a daily basis.
- Request parts, supplies, and or materials needed for projects.
- Prepare and or review job hazard analysis for each project. Review job plan. Ensure work is performed in a safe manner.
- Lifting, carrying, and moving building materials, tools, and supplies, including bags of cement, bags of concrete, bags of sand, lumber, bales of hay, and fence parts, and other items.
- Digging holes for fencing (using shovel or power auger).
- Digging trenches in which pipe or electrical conduit will be placed.
- Setting up shoring to support the sides of trenches and excavations.
- Setting up traffic control cones and signs.
- Sweeping or shoveling rubble/debris.
- Moving dirt, gravel, or concrete using wheelbarrows or other types of wheeled carts.
- Erecting temporary fencing around project sites.
- Erecting permanent fencing. Repairing fences
- Digging, spreading, and leveling dirt and gravel, using pick and/or shovel.
- Mixing, pouring, and spreading concrete, asphalt, gravel, and other materials, using hands or hand tools.
- Placing sandbags on tarps used to control storm water runoff.
- Cleaning tools, equipment, and materials.
- Demolition of concrete forms.
- Filling expansion joints with asphalt.
- Placing culvert sections in trench.
- Removing old pipe and transporting new pipe into place for connection by Plumbers.
- Guiding/operating suction tube on Vactor truck to clean out manholes, vaults, and storm water boxes.
- Assist with the operation of the jetter used to clean out pipes.
- Assist with the operation of a Layton box used to spread larger quantities of asphalt.
- Use an asphalt lute to compact edges of freshly spread asphalt.
- Setting up pumps to move water out of holes and vaults, or









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off of roofs.

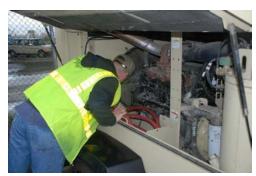
- Guiding objects, such as jersey barriers, trench boxes, or pipes into place when suspended by a lift or crane.
- Moving furniture as requested.
- Enter time by work order on a daily basis into job tracking system (Maximo).
- Enter description of work completed in work log.
- Send and respond to electronic mails.
- Attend periodic meetings during which training is provided and important safety issues are discussed.
- Assist other crafts as requested.
- Potentially supervise apprentices or mentor students.
- Complete all required forms and documents.

Worker's Skills and Traits

- Knowledge of materials, methods, and tools used on construction-type projects.
- Have the physical abilities to accomplish all of the tasks assigned to a Laborer. Many of the lifting

and carrying requirements would be categorized as heavy, and the workers must be able to stand and walk for extended periods of time. In addition, Laborers must be able to bend, stoop, and work in awkward positions to perform all aspects of this job.

- Good eyesight, hand-eye coordination, and manual dexterity.
- Ability to work independently, but also within a team as required.
- Ability to follow directions closely and be detail oriented while working.
- Must be flexible and be able to change assignments as dictated by work demands.
- Having the skills to problem solve, identify the best way to accomplish a task, and complete the assigned task(s) in a timely and efficient manner.
- Working knowledge of Windows-based computers and related accessories. Working knowledge of time tracking software, keyboarding and data input skills, and knowledge of electronic mail software.
- Able to work in a safe manner in any kind of weather. Rarely, work may be performed from a boat.





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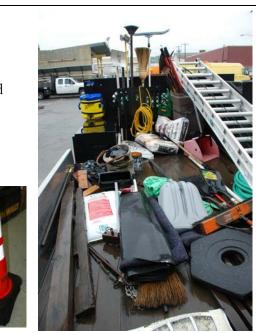
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Machinery, Tools, Equipment, Personal Protective Equipment

- Hand, pneumatic, and power tools, including shovels, picks, rakes, tampers, brooms, levels, measuring tapes, grinders, chipping guns, jack hammers, rock drills, chainsaws, reciprocating saws, concrete saws, post hole diggers, powered augers, concrete floats, and asphalt rakes and lutes.
- Power tamper.
- Wheelbarrows and carts.
- Manlifts or other personnel lifts.
- Ladders.
- Forklifts.
- Various kinds of pressure washers.
- Pumps.
- Vacuum cleaners.
- Vactor truck.
- Buckets.
- 2-way radios.
- Confined space detector ("sniffer").
- Computer, computer accessories, and project management software (Maximo). General office equipment, such as fax machine and telephones. General office supplies, such as pens/pencils, notepads, binders, and copy paper.

Workers are required to wear a safety vest, approved safety boots, and eye and ear protection. Hard hats, respirators, and protective suits are required as necessary. Fall protection equipment is required if a worker is within six feet of an elevated edge. Laborers may also wear gloves, rain gear, and kneepads.











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Education / Training

Laborers are represented by the Laborers Local 242. In general, the Laborers working for Marine Maintenance are Journeymen level Laborers. Journeymen have successfully completed the apprenticeship program offered through the Laborers' union.

The purpose of the apprenticeship program is to develop a qualified, versatile and safe Laborer work force, and the training during the apprenticeship includes both classroom training and on the job experience. The apprenticeship program consists of 4,000 hours of on the job experience, and a minimum of 320 hours off the job related training. It can take an individual from 2 to 4 years to complete the apprenticeship program. A core curriculum is provided to Apprentices, consisting of basic construction skills, the correct use of tools and equipment, and knowledge of safety and health procedures. The remainder of the curriculum consists of specialized skills training in three of the largest segments of the construction industry: building construction, heavy/highway construction, and environmental remediation (cleaning up debris, landscaping, and restoring the environment to its original state). At the completion of the training, Laborers have fundamental knowledge of materials, methods, and the tools involved in construction work, knowledge of the machines, tools, and equipment used on the job, and knowledge of the practical application of engineering science and design techniques involved in the construction industry.

Laborers are also forklift certified.

Training and or enough hands-on experience with computers to have a working knowledge of Windowsbased computers and related accessories, time tracking software, keyboarding, data entry, electronic mail software.

Per the Dictionary of Occupational Titles (DOT): 869.687-026 Construction Worker Specific Vocational Preparation (SVP): 2 (Thirty days or less)



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COGNITIVE AND BEHAVIORAL ELEMENTS/DEMANDS

Frequency Definitions:				
Continuously = Occurs 66-100% of the time. Occasionally = Occurs 1-33% of the time				
Never = Does not ever occur.				
Comprehension				
Articulating and comprehending information in conversations.	Continuously			
Reading, comprehending, and using written materials.	Occasionally			
Understanding and solving problems involving math and using the results.	Occasionally			
	Occasionally			
Using technology/instruments/tools & information systems.	J			
Working with two and three dimensional formats.	Continuously			
Remembering				
Remembering spoken instructions.	Continuously			
Remembering written instructions.	Frequently			
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			
Learning & Processing				
Effectively learning and mastering information from classroom training.	Rarely			
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. Continuous				
Thinking critically and making sound decisions. Occasionally				
Integrating ideas and data for complex decisions. Occasiona				
Determining and following precise sequences.	Frequently			
Coordinating and compiling data and information.	Occasionally			
Analyzing, synthesizing data and information.	Occasionally			
Tasking and Planning				
Performing repetitive or short-cycle work.	Continuously			
Working under specific instructions.	Occasionally			
Completing complex tasks. Occasionally				
Directing, controlling, or planning for others as necessary for basic tasks.	Rarely			
Directing, controlling, or planning for others as necessary for complex tasks.	Rarely			
Multi-tasking.	Continuously			
Planning, prioritizing, and structuring daily activities.	Occasionally			



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Use Appropriate Behavior for Professional Work Environment				
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	Continuously			
improve outcome.				
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: Required Beneficial Not Neces	sary			
Maintaining Attendance and An Assigned Work Schedule				
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	Not Necessary			
responsibilities.				
Adjusting to a flexible schedule of work days and or shifts.	Beneficial			



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PHYSICAL DEMANDS					
N/A: Not Applicable		F: Frequent $(30\%-70\% \text{ of the time})$			
S: Seldom (1-10% of the time	e)	C: Constant (Over 70% of the time)			
O: Occasional (10-30% of th	/	WNL: Within Normal Limits (talking, hearing, etc.)			
STRENGTH: Seder		Light Medium Heavy Very Heavy			
	Frequenc				
Sitting	S-O	While driving to and from work sites, driving a water truck, or while on			
ontaing	00	break.			
Standing	F	Interchange with walking.			
Walking	F	Interchange with standing.			
Lifting (up to 10 pounds)	F	Power and hand tools, shovels/picks, buckets, boards, lengths of pipe, traffic cones, up to 3 steel studs, PPE.			
Lifting (10 to 25 pounds) O		Power tools, lengths of pipe, building materials, partial bags of sand or concrete, lifting handles on wheelbarrow, traffic barriers, moving furniture or office equipment.			
Lifting (25 to 75 pounds)	S	Moving building materials, sandbags used to weight down tarps (35 lbs.), whole bags of sand (50 lbs.), bags of concrete (60 lbs.), smaller jack hammer (60 lbs.), sheets of plywood or drywall (50-60 lbs.), rolls of chain link fencing (to 75 lbs.), handles on wheelbarrow, furniture or office equipment. Note: Items over 75 lbs. are lifted by two people, or are lifted by lifts, hoists, and other equipment.			
Carrying (up to 10 pounds)	F	Power and hand tools, shovels/picks, buckets, boards, lengths of pipe, traffic cones, up to 3 steel studs.			
Carrying (10 to 25 pounds)	0	Power tools, lengths of pipe, building materials, partial bags of sand or concrete, lifting handles on wheelbarrow, traffic barriers, moving furniture or office equipment.			
Carrying (25 to 75 pounds)	S	Moving building materials, sandbags used to weight down tarps (35 lbs.), whole bags of sand (50 lbs.), bags of concrete (60 lbs.), smaller jack hammer (60 lbs.), sheets of plywood or drywall (50-60 lbs.), rolls of chain link fencing (to 75 lbs.), lifting handles on wheelbarrow, furniture or office equipment. Note: Items over 75 lbs. are carried by two people, or are transported using lifts, hoists, cranes, hand trucks, dollies and other equipment.			
Pushing/Pulling (Up to 25 pounds)	F	Shoveling, digging, spreading, and leveling dirt and gravel, mixing, pouring, and spreading concrete, asphalt, and other materials, sweeping, using hand and power tools, setting up shoring, using wheelbarrows or wheeled carts, performing demolition tasks, guiding/operating suction tube on Vactor truck, guiding objects suspended by a lift or crane, moving furniture, opening doors, pulling items from storage racks/shelves.			
Pushing/Pulling (25 to 60 pounds)	S	Shoveling, digging, spreading, and leveling dirt and gravel, mixing and spreading concrete and asphalt, using hand and power tools, using wheelbarrows or wheeled carts, performing demolition tasks, guiding objects suspended by a lift or crane, moving furniture, unrolling chain link fencing, pushing up sections of chain link fencing, digging holes for fencing (using shovel, post hole digger, or power auger), setting up shoring, guiding objects into place when suspended by a lift or crane, moving furniture.			



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Climbing Ladders/Stairs	S	Depending on work assigned. Ladders may be used to enter or exit trenches, or reach work areas on buildings or roofs. Stairs may be encountered in the field or in the shop building.				
Working at	S-O	Depending on work assigned. Laborers would rather use a manlift than				
Heights/Balancing		stand and work on a ladder. Working around open trenches or				
- 0 , 0		underground vaults. Working on roofs. Working on docks.				
Bending at Waist	F	While shoveling, using asphalt lutes, saws, drills, and jackhammers,				
-		performing demolition tasks, placing pipes, picking up building and				
		fencing materials, and gathering bags of sand and cement.				
Bending Neck	С					
Crouching/Kneeling	O-F	Depending on work assigned.				
Crawling	S	Depending on work assigned. In general crawling is not a				
Twisting at Waist	O-F	Depending on work assigned. While loading work truck, shoveling,				
<u> </u>		spreading dirt or gravel, placing conduit or pipe in trench, guiding objects				
		suspended by a lift or crane.				
Reaching (Floor to Shoulder)	F	While gathering tools and equipment in shop or from truck, setting up				
		fencing, performing demolition tasks, digging, sweeping, and pulling				
		items from storage racks/shelves.				
Reaching (Over the Shoulder)	S-O	Depending on work assigned. Gathering tools and equipment in shop or				
		from truck, pulling items from storage racks/shelves, throwing items into				
		dumpster, placing pipe into a trench, or patching storm water collection				
Descrition Matica	6	boxes. May also need to reach overhead while working in a trench.				
Repetitive Motion	S	Although generally limited due to the variety of tasks performed by Laborers, potentially while shoveling/digging.				
Keyboarding	S	Very limited. Workers use computer keyboard to enter time spent on				
Reyboarding	3	projects/work orders each day (3-5 minutes).				
Handling/Grasping	С	30% Pinch Grasp70% Whole Hand Grasp				
Fine Finger Manipulation	0	Using hand tools, pulling triggers on power tools, tying ropes, weaving				
The Thiger Manipulation	U	fence lengths together, using 2-way radios, and writing.				
Talking	O-F	Communicating with co-workers, supervisors, and public.				
Hearing	F	Communicating with co-workers, supervisors, and public. Listening for				
8		signs of danger (traffic, yelling, radio).				
Seeing	С	Visual abilities would be considered important in this position.				
Writing	S	Writing notes and measurements.				
Normal Job Site Hazards	F	Working in trenches, carrying heavy objects, working at heights (ladders				
5	_	and manlifts), falling objects, striking head on overhead objects, working				
		near moving vehicles/equipment, slippery walking surfaces, sharp tools,				
		fumes, dust, noise, and vibrations. Entering confined spaces (air quality				
		must be tested before entering). Heat exhaustion can be an issue if				
		working with asphalt on a warm day. There may be a rare circumstance				
	ļ	that there may be a risk of capsizing if working from a boat.				
Expected Environmental	C					
Conditions Northwest weather, although work may also be performed in a						
		environment or inside buildings. In addition, workers may be exposed to				
		noisy environments, dust, and fumes.				



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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:	Tom Berg and Jim Kimball		
Completed by Vocational Provider	Brice York, B.	A., CDMS	
Date December 23, 2016	_ Signature of V	ocational 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
	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
COMM	ENTS:
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