

COUNTY OF SONOMA - JOB DEMANDS ANALYSIS

**JOB CLASSIFICATION:** Maintenance Assistant  
**DEPARTMENT:** Transportation and Public Works  
**PHYSICAL DEMAND STRENGTH RATING:** Heavy

**DATE COMPLETED:** August 2019  
**DIVISION:** Roads

**INSTRUCTIONS TO MEDICAL PROVIDERS COMPLETING THIS FORM:**

Please use the "Medical Provider Use Only" columns to the right of each section and the "Medical Provider's Comments & Signature" Section on the signature page to provide work restrictions by indicating whether there is some portion of each function that the employee can perform; designating whether each restriction is temporary or permanent; and, if restriction is temporary, stipulating the expected duration of work restriction(s). To finalize the form, please provide the name of the employee evaluated and additional comments, as appropriate, then sign and date where indicated.

**FREQUENCY RATING:**

Frequency	Percentage of time per shift	Repetition (# times per shift)	8 Hr Shift	9 Hr Shift	10 Hr Shift	12 Hr Shift
Never/Not Required (N)	n/a	n/a	n/a	n/a	n/a	n/a
Occasionally (O)	1 - 33%	1 – 100	0 - 2.5	0 - 3	0 - 3.5	0 – 4
Frequently (F)	34 - 66%	100 – 500	2.5 - 5.5	3 - 6	3.5 - 7	4 – 8
Continuously (C)	67 - 100%	500+	5.5 – 8	6 - 9	7 - 10	8 - 12

**PART 1 - JOB DUTIES/FUNCTIONS:**

A. Job Duty/Function	B. Job Duty #	C. Freq Rating	D. Equipment or tools used to perform (Describe)	E. Specialized Expertise, License, Certification Required? (Describe)	F. Essential or Non- Essential	Medical Provider Use Only: For each job duty/function, indicate in this column "Can Perform", is "Temporarily Restricted" from performing, or is "Permanently Restricted" from performing.
While performing the following duties, employees frequently work outdoors in all types of terrain, vegetation, and weather conditions, performing duties in both daylight and dark/dim conditions.						
Works long and irregular hours, including nights, weekends, and holidays as needed to maintain public infrastructure, including response and recovery phases of emergency situations (storms, accidents, fires, earthquake, flood, etc.).	1	O			E	
Patches, repairs, and seals potholes and cracks; lifts and carries materials weighing up to 50 pounds; hand tools weighing up to 90 pounds; shovels and rakes asphalt.	2	F	Spray Wand, Shovel, Rake, Crack Sealant, Vibro Plate, jackhammer, patch repair supplies		E	

A. Job Duty/Function	B. Job Duty #	C. Freq Rating	D. Equipment or tools used to perform (Describe)	E. Specialized Expertise, License, Certification Required? (Describe)	F. Essential or Non- Essential	Medical Provider Use Only: For each job duty/function, indicate in this column "Can Perform", is "Temporarily Restricted" from performing, or is "Permanently Restricted" from performing.
Drives county vehicle/pick-up truck to and from job sites and other offsite locations, including rugged, remote, and off road locations; drives pilot vehicle.	3	F	Pickup Trucks, Pilot	CA Driver's License	E	
Plants, prunes, cuts, and clears brush; picks up litter, tires, shopping carts, and other large debris; loads debris into truck; removes and disposes of dead animals; places bait for rodent eradication; operates power equipment; lifts, carries, and places materials and equipment weighing up to xx pounds; walks, climbs, and carries equipment and materials over steep, slippery, and uneven terrain.	4	O	Chipper, Chainsaw, Pruning Shears, Man lift, Pole Saw		E	
Performs traffic control/safety duties including; stands for long periods of time while remaining alert and holding flag at shoulder level; sets up and removes barricades and road signs weighing approximately 35 pounds.	5	C	Sign, Barricades, truck	Flagger Certification	E	
Installs erosion/sediment control devices including; loads, unloads, lifts, carries over steep, slippery, uneven terrain, and sets straw barriers and sand bags weighing up to 35 pounds.	6	O	Straw Bales and Wattles, Sand Bags		E	
Cleans, unclogs, and maintains manholes, catch basins, storm drains, culverts, and ditches including: digs trenches; lifts, carries and places culverts weighing up to 100 pounds; works below ground and in tight/confined spaces; lifts and removes manhole/drain covers weighing up to 100 pounds.	7	O	Potato Fork, Pitch Shovel, Rake, Grate Inlet, chainsaw, Manhole/Drain cover, Pry bar		E	
Inspects vehicles, machines, equipment and tools and reports damage, wear, required repairs and maintenance, and need for replacement.	8	O			E	
Communicates by phone, email, or in person with other departmental staff and members of the public to coordinate activities, answer questions, respond to complaints, and provide information; maintains a calm and professional manner while dealing with hostile or verbally abusive members of the public.	9	O	Phone, Computer	CA Driver's license	E	
Participates in training to maintain and enhance knowledge and skills necessary to perform assigned duties.	10	F			E	
Cleans and maintains tools and equipment.	11	O	Cleaning Supplies		N	

**PART 2: PHYSICAL DEMANDS**

Activity	Examples of Duties/Functions Requiring Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY: Permanently Restricted
1 Sitting	3,4,9,10, 11	F			
2 Walking	1,2,4,5,6,7,8,9, 11	F			
3 Running	N/A	N			
4 Standing (for long periods while "flagging")	1,2,4,5,6,7,8,9, 11	C			
5 Bending (neck)	2-8,11	F			
6 Bending (waist) (shoveling, raking, placing erosion control)	2-8,11	O			
7 Squatting	4,5,6,7	O			
8 Climbing	4,6,7	O			
9 Kneeling (cleaning and maintain tools and equipment, inspecting vehicle, to access lower branches, work on culverts)	3,4,5,6,7,8,11	O			
10 Crawling (working in culvert)	7	O			
11 Twisting (neck)	2-8,11	C			
12 Twisting (waist)	2,4,5,6,7,8	O			
13 Repetitive Hand Use (cleaning and maintaining tools, using computer)	2-9,11	O			
14 Simple grasping (right hand) (holding spray wand, cleaning and maintain tools and equipment, holding traffic control "flag")	2-9,11	C			
15 Simple Grasping (left hand) (holding spray wand, cleaning and maintaining tools and equipment, holding traffic control "flag")	2-19,11	C			
16 Power Grasping (right hand) (raking and shoveling asphalt, pruning and trimming trees and shrubs, unclogging drains)	2,3,5,6,7,8	F			
17 Power Grasping (left hand) (raking and shoveling asphalt, pruning and trimming trees and shrubs, unclogging drains)	2,4,5,6,7,11	F			
18 Fine Manipulation (right hand)(cleaning and maintaining tools and equipment, using computer)	9,11	O			
19 Fine Manipulation (left hand)( cleaning and maintaining tools and equipment, using computer)	9,11	O			
20 Pushing and Pulling (right hand)(raking and shoveling asphalt, placing erosion control devices, cleans and unclogs ditched s and drains)	2,4,6,7	F			
21 Pushing and Pulling (left hand) (raking and shoveling asphalt, placing erosion control devices, cleans and unclogs ditched s and drains)	2,4,6,7	F			
22 Reaching (above shoulder level)(trimming and pruning trees)	4	O			
23 Reaching (below shoulder level)	2,4,5,6,7	F			
24 Lifting-up to 10 lbs. (spray wand, rake, shovel, cleaning supplies)	2,4,5,6,7,8,11	F			
25 Lifting-11-25 lbs. (patching material, chain saw, barricades and signs, erosion control devices, manhole/drain covers)	2,4,5,6,7,8,11	F			

Activity	Examples of Duties/Functions Requiring Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY: Permanently Restricted
26 Lifting-26-50 lbs. (patching material, cleared brush, erosion control devices, manhole/drain covers)	2,4,6,7,11	F			
27 Lifting 51-75 lbs.(manhole/drain covers, concrete)	2,7	O			
28 Lifting 76-100 lbs. (manhole/drain covers, concrete)	2,7	O			
29 Lifting 100 + lbs.	N/A	N			
30 Carrying 0-10 lbs. (spray wand, rake, shovel, cleaning supplies)	2,4,5,6,7,8,11	F			
31 Carrying 11-25 lbs. (patching material, chain saw, barricades and signs, erosion control devices, manhole/drain covers)	2,4,5,6,7,11	F			
32 Carrying 26-50 lbs. 9 patching material, cleared brush, erosion control devices, manhole/drain covers)	2,4,6,7,11	O			
33 Carrying 51-75 lbs. (manhole/drain covers, concrete)	2,3,7	O			
34 Carrying 76-100 lbs. (manhole/drain covers, concrete)	2,7	O			

**PART 3: SENSORY REQUIREMENTS**

Activity	Examples of Duties/Functions Requiring Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY Permanently Restricted
1 Functional vision, normal or corrected	2-8,11	C			
2 Functional color vision, normal or corrected	N/A	N			
3 Functional night vision, normal or corrected (while working on an early morning or night time work assignment, during response to emergency situations)	2-8,11	O			
4 Functional hearing, normal or corrected (to be alerted to vehicle dysfunction and hazards)	2-8,11	C			
5 A sense of smell or taste	N/A	N			

**PART 4: COMPREHENSION LEVEL**

Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY Permanently Restricted
1 Follow Oral Instructions	F			
2 Follow Written Instructions	F			
3 Required to sustain concentration	C			

**PART 5: NATURE OF TASKS**

Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY Permanently Restricted
1 Follow set procedures	C			
2 Organize own work	O			
3 Able to ask questions or request assistance when needed	C			
4 Required to make decisions independently	O			
5 Required to train and/or lead other staff	N			
6 Required to direct other staff (e.g. planning, goal setting, performance)	N			

**PART 6: WORK PACE**

Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY Permanently Restricted
1 Tightly scheduled and rapid pace of work activities at high volume	O			
2 Meet time sensitive deadlines	O			
3 Long and/or irregular hours	O			
4 Limited/unpredictable opportunity for breaks	O			
5 Required to perform on-call or emergency work	O			

**PART 7: COMPLEXITY/VARIABILITY**

Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY Permanently Restricted
1 Variable and unpredictable workflow	F			
2 Attention divided by issues requiring multi-tasking	F			
3 Work requires precise attention to detail	F			
4 Use of judgment in routine matters	O			
5 Requires use of judgment in adapting procedures from one task to another	O			
6 Possible legal ramifications associated with work activities or work product	O			

**PART 8: INTERACTIONS WITH OTHERS**

Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY Permanently Restricted
1 Works with others (e.g., co-workers, other departments/agencies, public)	C			
2 Interactions limited to giving/receiving information	F			
3 Interactions exceed giving/receiving information (e.g., advises, persuades, justifies)	O			
4 Interactions occur under circumstances of emotional stress	O			
5 Risk of confrontation with violent or assaultive clients or customers	O			

**PART 9: ENVIRONMENTAL FACTORS/WORKING CONDITIONS:**

Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	MEDICAL Can Perform	PROVIDER Temporarily Restricted	USE ONLY Permanently Restricted
1 Work Inside	O			
2 Work Outside	C			
3 Extreme Heat (above 100 degrees)	O			
4 Extreme Cold (below 32 degrees)	O			
5 Excessive Noise (must raise voice to be heard)	F			
6 Vibration (e.g., jack hammer, hammer drill, chainsaw, etc.) (using Vibro Plate or Chain Saw)	F			
7 Dust, Vapors, Fumes, Smoke	F			
8 Silica, asbestos, etc.	N			
9 Solvents (e.g., gas, turpentine, etc.)	O			
10 Grease, oils	F			
11 Acidic, Caustic Solutions	N			
12 Pesticides	O			
13 Explosives (e.g., dynamite, bomb, etc.)	N			
14 Cleaning supplies, abrasives	O			
15 Other Chemicals (e.g. drugs and other contraband)	N			
16 Human Blood, Body Tissues, or Fluids	N			
17 Human Wastes	N			
18 Animal Blood, Body Tissues, or Fluids	O			
19 Animal Wastes	O			
20 Biological Toxins (e.g., poison ivy, poison oak, anthrax, etc.)	F			
21 Insect Bites (e.g., ticks, mosquitos, spiders, etc.)	F			
22 Biomedical Waste	N			
23 Ionizing Radiation	N			
24 Non-Ionizing Radiation	N			
25 Electrical Energy (working near overhead power lines trimming trees; contact with underground lines while digging ditches and culverts)	O			
26 Walking on uneven, slippery, or rough surfaces	C			
27 Proximity to moving mechanical parts (e.g., equipment, machinery)	C			
28 Proximity to moving vehicles or objects	C			
29 Heights (e.g., rooftop, ladders, scaffolding, etc.)	O			
30 Contact with water, other liquids, humid conditions - not weather related	O			
31 Work Below Ground: (e.g., excavation, trench, etc.)	O			
32 Potential exposure to airborne infectious diseases (e.g. clinics, labs, corrections)	N			
33 Operates non-commercial motor vehicles (cars, trucks)	F			
34 Operates commercial vehicles – CDL Class _____ Endorsements _____	N			
35 Operates passenger van to transport clients, inmates, etc.	N			
36 Pulls non-commercial trailers or equipment	O			
37 Operates heavy equipment	N			
38 Other:	N			

**PART 10: MEDICAL SCREENING, SURVEILLANCE AND VACCINATION REQUIREMENTS:**

Please check each of the medical screening, surveillance, and vaccination requirements that apply to the position, and indicate if the requirement applies pre-employment/pre-placement only, or whether there are additional requirements after hire.

Medical Screening, Surveillance or Vaccination	Pre-Hire	Post-Hire	Frequency (one time, annual, etc.)
1 Audiometric Testing			
2 DOT Commercial Driver Drug and Alcohol Screening			
3 DOT Commercial Driver Physical Exam			
4 Respirator Physical Exam			
5 Respirator Questionnaire – Short			
6 Respirator Questionnaire – Standard			
7 Blood lead level			
8 Hazardous Waste/Emergency Worker physical			
9 Heavy metal screen (mercury, lead, arsenic)			
10 HINT Hearing Noise Sensitivity Testing			
11 Tuberculosis skin test			
12 Vaccine: MMR			
13 Vaccine: Hepatitis B	X		One time
14 Vaccine: Influenza			
15 Vaccine: Meningococcal			
16 Vaccine: Pneumococcal			
17 Vaccine: Rabies			
18 Vaccine: Rabies Titer			
19 Vaccine: Tdap			
20 Vaccine: Chickenpox			

**PART 11: ADDITIONAL INFORMATION, PICTURES, ETC.**



Work Truck with Lift, step to enter Driver's side 16 inches



Work Truck with Lift



Traffic Barricade with sign- 17 lbs.



Sand Bag- 28 lbs.



Grate Inlet - Avg.= 100 lbs.



Cold Mix Bucket- 50 lbs.



Pavement Finisher Bucket- 40 lbs.





Crack Sealant- 25 lbs. per bag  
50 bags per pallet



Straw Wattle - 35 lbs.



Pole Saw – 17 lbs. Shortest at 107”  
Extends to max of 180” (15’)



Potato Hook



Bobtail Dump Truck- 39 inches to  
Bed of truck/gate



Bobtail Asphalt Patch Truck – 19 inches to  
lowered gate.