

PHYSICAL & MENTAL REQUIREMENTS/WORKING CONDITIONS
City of Virginia Beach, VA

Job Title:	Maintenance Engineer II	Position Number(PCN):	B.002523.4
Div./Office:	PUD 035 Electrical Support	Approver's Name	
Date of Last Update:	April 15, 2026	Approver's Title	

Fields to the right (Y/N): The position's status AND If the background check must be passed by the incumbent	Safety Sensitive:	Yes	Child Protective Services (CPS) Background:	No	VCIN Background:	No
	CJIS Certification:	No	PREA Certification:	No	Subject to Barrier Crime Provisions:	No

REQUIREMENTS

FREQUENCY: Seldom = Infrequent, < 5%; Occasional = 5% to 25% of time on job; Frequent = 25% to 75% of time on job; Constant = Over 75% of time on job.

Typical DURATION: Short = < 1 hr per occurrence; Moderate = 1-2 hrs per occurrence; Substantial = 2-6 hrs per occurrence; Long = > 6 hrs per occurrence.

Physical Demands				Working Conditions				
Element	Condition/Level/Value	Frequency	Duration	Element	Condition/Level/Value	Frequency	Duration	
Standing		Frequent	Substantial	Working Outside:	in all weather conditions	Occasional	Short	
Walking		Frequent	Substantial	Working Alone:	out of communication w/others	N/A	N/A	
Sitting		Occasional	Short	Extreme Temperatures	At/above 90 degrees	Frequent	Long	
Reaching	Shoulder level or higher	Frequent	Short		Below 30 degrees	Frequent	Long	
Lifting	Up to 50 lbs.	Frequent	Short	Extreme Wetness		Seldom	Short	
	Over 50 lbs. w/assistance	Seldom	Short	Extreme Dryness		N/A	N/A	
Carrying	Weight: Up to 50 lbs.	Frequent	Short	Exposure to Traffic	N/A	N/A	N/A	
	Distance: Over 25 ft.	Frequent	Short					
Pushing	Estimated weight-resistance equivalency			Congested Area/Workspace		Seldom	Moderate	
	Over 50 lbs.	Occasional	Short	Confined Space-	Permit REQUIRED	Occasional	Short	
Pulling	Estimated weight-resistance equivalency			Working Below Ground		Occasional	Short	
	Over 50 lbs.	Seldom	Short	Working at Heights (ft.)	Up to 12 ft.	Occasional	Short	
Working Overhead	Using hand tools	Occasional	Moderate		Over 40 ft.	Seldom	Short	
	Using power tools	Seldom	Short	Noise Level:	> 85 decibels TWA for 8 hrs.	Yes	Frequent	
	Weight: Up to 10 lbs.	Occasional	Short				Moderate	
Climbing Stairs		Occasional	Short	Vibrations	Hammer-drill	Occasional	Short	
Climbing Ladders		Occasional	Short					
Balancing		Occasional	Short		Body area(s):	Ex- Trunk, shoulders, arms, and hands.		
Stooping		Frequent	Short	Dust / Dirt / Particulate		Frequent	Moderate	
Kneeling/Squatting		Frequent	Short	Radiation		Occasional	Short	
Bending		Frequent	Short	Silica/Fiberglass		Seldom	Short	
Crawling		N/A	N/A	Asbestos		N/A	N/A	
Explosive Strength: Short bursts of muscle force to propel oneself.		Seldom	Short	Aerosols & Gases	Irritant	Occasional	Short	
Trunk Strength: Use of abdominal and lower back muscles.		Occasional	Short	Hazardous Materials /Chemicals			Painting Supplies/Products	
								Cleaning Products
								undefined
Dynamic Strength: Use of muscle force repeatedly or continuously & resistant to fatigue.		Occasional	Short	Petroleum Products	N/A	N/A	N/A	
Repetitive Limb Movement	Fingers/Wrist	Constant	Substantial	Electrical Hazard		Constant	Long	
	Arm/Shoulder	Constant	Substantial	Fire Hazard		Frequent	Frequent	
Dexterity	Grasping	Frequent	Substantial	Infectious Diseases Exposure Type(s):	Sewer-like work spaces	Constant	Substantial	
	Use of computer keyboard	Frequent	Short					
Repetitive Twisting	Wrist/Elbow	Frequent	Substantial		Ex- Repair sewer pipes; empty residence trash cans.			
	Shoulder	Frequent	Substantial	Symbols:	< equal to or less than	< less than		
Awkward Positions & Motions	Awkward positions	Occasional	Short		> equal to or greater than	> greater than		
	Awkward motions	Occasional	Short					

Sensory Demands				Working Conditions (cont.)			
Element	Condition/Level/Value	Frequency	Duration	Element	Condition/Level/Value	Frequency	Duration
Vision	20/20 w/correction	Constant	Long	Hazardous Surfaces	Unguarded holes/pits	Frequent	Moderate
	Color vision (colors)	Constant	Long		Abrupt uneven surfaces	Occasional	Short
	Peripheral vision	Constant	Long		Steep incline	Seldom	Moderate
	Depth perception	Constant	Long		Animal/Insect bites/stings	Frequent	Short
Hearing	Conversational level	Constant	Long	Other Hazards	Electric shock	Constant	Short
Smell	Burning odor	Occasional	Short		Sharp edges/objects	Frequent	Short
	Natural gas	Occasional	Short	Hours Worked	Four 10-hour days	Constant	
	Sewage	Frequent	Moderate		More than 40 hours/week	Occasional	
Touch	Distinguish temperature	Constant	Long	Telework Eligible	No		
Voice	One-on-One	Constant	Long				
Personal Protective Equipment (PPE)				Equipment Operation & Use			
Category	Type	Frequency	Duration	Category	Type	Frequency	Duration
Eye and Face Protection	Safety glasses w/side shields	Frequent	Moderate	Motor Vehicles	Sedan/Pickup/Van	Frequent	Short
	Face shield	Seldom	Short				
				Heavy Equipment	N/A	N/A	N/A
Respiration Protection	Dust mask	Occasional	Short				
Hearing Protection	Ear plugs	Frequent	Moderate	Other Equipment or Machinery	N/A	N/A	N/A
	Ear muffs	Occasional	Short				
Head Protection	Hard hat (electrical shock)	Frequent	Moderate				
	Hard hat (impact protection)	Frequent	Moderate	Hand-Held Power Tools	Cordless drill	Frequent	Short
Hand Protection	Electrical hazard insulated	Occasional	Short		Impact drill/wrench	Frequent	Short
	Leather	Frequent	Moderate				
	Medical grade exam gloves	Frequent	Moderate				
Foot Protection	Steel/composite toe-safety rated	Constant	Long	Hand Tools and Instruments	Electrical tools	Constant	Long
					Survey tools	Occasional	Short
Body, Arm, and Leg Protection	Arc Rated	Occasional	Moderate	Office Machines & Equipment	Computer	Frequent	Short
	Tyvek coveralls	Seldom	Short		Printer/Copier/Fax	Occasional	Short
Operator License				Commercial Driver's License			
NOTE: If CDL is required, show CDL Class in element to right.	Type			VA DMV requires: 20/40 in each eye w/o telescopic lens & ≥140° horizontal vision.	N/A		
	Standard Driver's License						
Other physical or sensory demands, working conditions, equipment, hazards, PPE, etc., not indicated above:							

Mental Requirements

Evaluate based on the level of complexity [least to most] inherent in the job using the examples provided; then select the number from the drop-down list that matches the column which best represents the mental demand required in each element.

1 Comprehend Verbal Communication - Understand information and directions which are provided verbally
Job requires the ability to understand and follow: Complex information where the listener must analyze the information presented, discern the key facts vs. opinions, and make a determination on appropriate recommendation or action.
2 Communicate Orally - Verbally express thoughts and directions
Job requires: Communicating complex information to higher officials and authorities.
3 Comprehend and Follow Written Material or Instructions - Understand written material, interpret appropriately, and adhere to the procedures stated.
Job requires ability to comprehend: Detailed written material such as analytical, statistical, or status reports where information will be interpreted and applied to course of action.
4 Written Communication Skills - Express thoughts and directions in writing
Job requires: Preparation of reports and documents involving complex information.
5 Maintain an Appropriate Work Pace - The flow or rate of incoming work assignments and the expectations for completion of tasks
Job requires ability to adhere to work schedule: In moderately paced environment with some unexpected assignments.
6 Perform Complex or Varied Tasks - The variety of tasks and assignments and the level of complexity of those tasks/assignments
Job requires ability to perform: A variety of complex tasks with little predictability as to their occurrence; tasks which are unlikely to reoccur.
7 Interact and Relate to Peers, Co-Workers, or the Public - The nature and level of interaction with others required of the job
Job requires interaction: With a variety of individuals or groups outside the immediate unit/agency to collaborate on issues or projects.
8 Decision Making & Reasoning Ability - The extent to which the job requires logic to analyze information, draw conclusions/ generalizations, and make decisions based on facts
Job requires: Considerable reasoning and decision making. Issues and/or data are interpreted and evaluated, alternatives are evaluated, and recommendations are made for resolution of issues.
9 Memory and Recall - The body of stored knowledge required and the retrieval of that information to accomplish duties
Job requires the ability to: Remember laws, codes, policies, procedures, etc., which are somewhat repetitive from day to day.
10 Flexibility and Adaptability - The extent to which one must adjust to changing circumstances and expectations, take on new challenges on short notice, and/or deal successfully with changing priorities and workloads
Job requires flexibility and willingness: To adjust to non-typical conditions or situations where a new or different process/procedure must be utilized to accomplish work.
11 Attention Span - Sustained attention or the time spent continuously on task without becoming distracted to successfully perform duties
Job tasks are: Varied and typically of moderate duration requiring sustained focus. Lapses may result in injury or legal or financial liability.
12 Attention to Detail - Thoroughness and accuracy are required to accomplish tasks
Job tasks: Involve investigation, inspection, auditing, or observation. Inattention to detail could result in confusion and delays.
13 Reaction Time - Describes work that requires an immediate response or decision
Job requires the ability to: Provide an immediate response/decision to situations outside of normal daily operations, procedures or processes. Delays occur if response is not timely.
14 Direct, Control, and Plan the Work of Others - Determine the time, place and sequence of work procedures, operations, and actions. Establish goals and objectives, motivate, and promote cooperation and teamwork in the work group
Job requires: Supervision of a small group of employees (5 or less).
15 Influence Others - Obtain cooperation from others to accomplish tasks and objectives
Job requires: Obtaining support from other work groups to accomplish objectives.
16 Stress Tolerance - Ability to perform duties without anxiety when faced with difficulties. Having positive stress tolerance is being able to stay calm in situations of heavy workload, tight deadlines, and/or difficult customers
Job requires the ability to: Handle stress associated with having to work with other people who are in distress.