

PHYSICAL & MENTAL REQUIREMENTS/WORKING CONDITIONS									
City of Virginia Beach, VA									
Job Title:	Engineer I					Position Number(PCN):	B.001759		
Div./Office:	PWD 514 Traffic Engineering	Approver's Name							
Date of Last Update:	September 01, 2023	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:	No	Child Protective Services (CPS) Background:	No	VCIN Background:	No		
		CJS 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		Occasional	Short		Working Outside: in all weather conditions		Seldom	Short	
Walking		Occasional	Short		Working Alone: out of communication w/others		N/A	N/A	
Sitting		Frequent	Substantial		Extreme Temperatures	At/above 90 degrees	Seldom	Short	
Reaching	Lower than shoulder level	Seldom	Short		Extreme Wetness		N/A	N/A	
Lifting	Up to 25 lbs.	Seldom	Short		Extreme Dryness		N/A	N/A	
	Up to 50 lbs.	Seldom	Short		Exposure to Traffic		Little Used Roads	Seldom	Short
Carrying	Weight: Up to 10 lbs.	Seldom	Short				High Traffic High Speed	Seldom	Short
	Distance: Over 25 ft.	Seldom	Short		Congested Area/Workspace		N/A	N/A	
Pushing	Estimated weight-resistance equivalency				Confined Space- Permit REQUIRED		N/A	N/A	
	N/A	N/A	N/A		Working Below Ground		N/A	N/A	
Pulling	Estimated weight-resistance equivalency				Working at Heights (ft.)		N/A	N/A	
	N/A	N/A	N/A		Noise Level: > 85 decibels TWA for 8 hrs.		N/A	N/A	
Working Overhead					Vibrations		N/A	N/A	
	Weight: N/A	N/A	N/A		Body area(s):		Ex- Trunk, shoulders, arms, and hands.		
Climbing Stairs		N/A	N/A		Dust / Dirt / Particulate		N/A	N/A	
Climbing Ladders		N/A	N/A		Radiation		N/A	N/A	
Balancing		N/A	N/A		Silica/Fiberglass		N/A	N/A	
Stooping		N/A	N/A		Asbestos		N/A	N/A	
Kneeling/Squatting		N/A	N/A		Aerosols & Gases		N/A	N/A	
Bending		Seldom	Short		Hazardous Materials /Chemicals		N/A	undefined	
Crawling		N/A	N/A				N/A	undefined	
Explosive Strength: Short bursts of muscle force to propel oneself.		N/A	N/A		Petroleum Products		N/A	N/A	
Trunk Strength: Use of abdominal and lower back muscles.		N/A	N/A		Electrical Hazard		N/A	N/A	
Dynamic Strength: Use of muscle force repeatedly or continuously & resistant to fatigue.		N/A	N/A		Fire Hazard		N/A	N/A	
Repetitive Limb Movement	Fingers/Wrist	Frequent	Substantial		Infectious Diseases Exposure		N/A	N/A	
	Neck	Frequent	Short		Type(s):		Ex- Repair sewer pipes; empty residence trash cans.		
Dexterity	Use of computer keyboard	Frequent	Substantial		Symbols:		< equal to or less than	< less than	
	Handwriting	Frequent	Substantial				> equal to or greater than	> greater than	
Repetitive Twisting	N/A	N/A	N/A						
Awkward Positions & Motions	N/A	N/A	N/A						

Sensory Demands				Working Conditions (cont.)			
Element	Condition/Level/Value	Frequency	Duration	Element	Condition/Level/Value	Frequency	Duration
Vision	20/40 w/correction	Frequent	Substantial	Hazardous Surfaces	N/A	N/A	N/A
	Color vision (colors)	Frequent	Substantial				
Hearing	Conversational level	Frequent	Moderate	Other Hazards	N/A	N/A	N/A
Smell	N/A	N/A	N/A				
Touch	N/A	N/A	N/A	Hours Worked	More than 40 hours/week	Occasional	
					More than 8 hours/day	Occasional	
					More than 5 consecutive days	Seldom	
Voice	One-on-One	Frequent	Short	Telework Eligible	Yes		
Personal Protective Equipment (PPE)				Equipment Operation & Use			
Category	Type	Frequency	Duration	Category	Type	Frequency	Duration
Eye and Face Protection	N/A	N/A	N/A	Motor Vehicles	Sedan/Pickup/Van	Occasional	Short
				Heavy Equipment	N/A	N/A	N/A
Respiration Protection	N/A	N/A	N/A				
Hearing Protection	N/A	N/A	N/A	Other Equipment or Machinery	N/A	N/A	N/A
Head Protection	Hard hat (impact protection)	Seldom	Short				
Hand Protection	N/A	N/A	N/A	Hand-Held Power Tools	N/A	N/A	N/A
Foot Protection	Steel/composite toe-safety rated	Seldom	Short	Hand Tools and Instruments	N/A	N/A	N/A
Body, Arm, and Leg Protection	Traffic vest	Seldom	Short	Office Machines & Equipment	Computer	Constant	Substantial
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: Explaining and interpreting specialized, and sometimes sensitive, information to co-workers, customers, citizen groups or higher officials.
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: Written explanation and interpretation of specialized information to other City agencies, customers, higher officials and authorities.
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 a fast paced environment where much of the work is new and nonrecurring.
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 tasks at the fully functional independent level.
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 information from broad bodies of knowledge (engineering, psychology, biology, law, etc.) and apply it to projects and assignments.
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, lengthy, and require considerable 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 numerous and various details, some of which have subtle differences, that require continuous and close attention to detail to facilitate accuracy of outcome. Inattention to detail could result in legal or financial liability.
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: No supervision or management of staff.
15 Influence Others - Obtain cooperation from others to accomplish tasks and objectives
Job requires: Obtaining support and cooperation from citizens and outside 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: Tolerate typical work stressors such as deadlines or conflict and maintain composure.