

# Job Demands Analysis

**Worker's Occupation:** Horticulture Labourer (HL)

**Prepared for:** City of Richmond

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## **OVERVIEW OF POSITION**

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This is a manual labour position, which involves the maintenance and arrangement of vegetation on public grounds in the City of Richmond.

## **WORK HOURS/WORK SCHEDULE**

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- Fulltime Hours: 8.9 hours/day
- Shift: 5 days work, one day off and 4 days work (5-1-4)
- Breaks: two 15-minute breaks and one 37-minute lunch break
- Overtime: as required
- Frequency of overtime: varies depending on need

## **PERSONAL PROTECTIVE EQUIPMENT**

- Steel Toed Boots
- Gloves
- Overalls
- Safety Glasses
- Knee Protectors
- Hearing Protection (Task-specific)

## **TOOLS AND EQUIPMENT**

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A horticulture labourer (HL) may use the following tools and equipment to perform their duties:

### Up to 20 lbs:

- |   |                            |
|---|----------------------------|
| • Hand tools (hoe, spade, pruner, trowel) | • Spades                   |
| • Anvil lopper                            | • Broom                    |
| • Machete                                 | • Garden rake              |
| • Pitch fork                              | • Bulb planter             |
| • Garden hoe                              | • Garden weasel            |
| • Shovel                                  | • Buckets of varying sizes |

### 21-50 lbs:

- Wheelbarrow
- Leaf blower
- Weed wacker
- Hedge trimmer
- Fuel/gas can

### Vehicles

- City trucks/trailers

## **WORK ORGANIZATION**

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Workers tend to operate in small crews and/or individually. Each crew can have 3-4 labourers. An onsite leader/supervisor directs the work of each crew and their specific tasks for the day. A foreman supervises and organizes groups of crews.

## **REQUIRED EDUCATION & QUALIFICATIONS**

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- Completion of Grade 12
- Class 5 driver's license
- General orientation courses as required by the City of Richmond eg) flagging, traffic control
- A certified tradesmen in Horticulture requires the appropriate certification in gardens / landscaping

## **ESSENTIAL - PHYSICAL DEMANDS**

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The essential tasks of a Horticulture Labourer (HL) typically includes the following:

1. Preparing and transporting materials from the City Works Yard to the work site
2. Preparing the work site
3. Weeding
4. Preparing and planting flower beds
5. Hedging
6. Applying mulch
7. Pruning shrubs and trees
8. Brush maintenance
9. Cleaning up the work site (sweeping, disposal of vegetation) and the tools

The following tasks are physically repetitive:

3. Weeding
4. Preparing and planting flower beds
5. Hedging
6. Applying mulch
7. Pruning shrubs and trees
8. Brush maintenance

Of these tasks, the following tend to be seasonal, that is they tend to occur a few times per year:

4. Preparing and planting flower beds
5. Hedging
6. Applying mulch
7. Pruning shrubs and trees
8. Brush maintenance

HL staff need to be familiar with all of these tasks. Depending on the need and the season, HL staff can be involved in one task repetitively over several days or weeks. Staff can also be assigned to different tasks depending on need.

A detailed description of each essential task follows in this next section.

### 1 - Preparing and Transporting Materials from the City Works Yard

Horticulture Labourer (HL) staff meet at the City Works Yard on Lynas Lane at the start of each work shift and prepare for their duties for the day. Work tasks/schedules for the day are reviewed. Supplies and tools are loaded into City vehicles. HLs drive to their designated work sites for the day.

### 2 - Preparing the Worksite

Horticulture Labourer (HL) staff prepare the worksite (Figure 1). This typically includes the following:

- Diverting traffic, setting up traffic cones and warning signs.
- Transporting equipment from the City's work trucks to the work site.
- Setting up tarps for the removal of debris, and vegetation.
- Fuelling gas powered hand tools (leaf blower, weed wacker, hedger).



Figure 1

### 3 – Weeding

HL staff are required to weed throughout the year. This task involves sustained stooping, squatting, and kneeling on all fours over even and uneven terrain/ground (Figure 2). HL staff engage in repeated bilateral upper extremity reaching, grabbing, twisting and lifting (Figure 2). Hand tools are used frequently for weeding. HL staff need to be able to sustain these repetitive actions and positions over a 2 to 4 hours and be prepared to work in confined spaces (Figure 3).

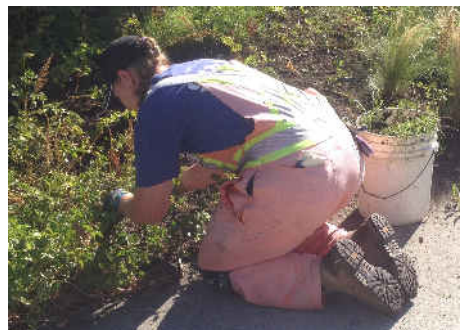


Figure 2





Figure 3

#### 4 – Preparing and planting flower beds

Preparing and planting flower beds is a seasonal task for HL staff (Figure 4). This task is typically completed twice per calendar year. Similar to weeding, this task involves sustained stooping, squatting, and kneeling on all fours over even and uneven terrain/ground (Figure 2). Hand tools are used to prepare the soil. As this task is seasonal, HL staff will typically perform the same task over several consecutive days or weeks.

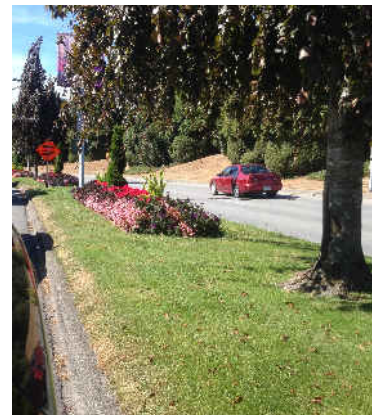


Figure 4

#### 5 – Hedging

Hedging is a seasonal task for HL staff (Figure 5). This task is completed several times per calendar year. This task involves sustained standing, and upper extremity reaching horizontally and overhead while holding a gas powered hedger that weighs approximately 30 lbs. The HL may be required to walk and stand over even and uneven terrain/ground. As this task is seasonal, HL staff will typically perform the same task over several consecutive days or weeks. Fuel is required to be added to the gas-powered hedger from time to time. Staff wear protective hearing and glasses. At the conclusion of this task, HL staff pick up debris (branches, leaves) and dispose of it accordingly in a City truck (Figure 6).



Figure 5





Figure 6

#### 6 – Applying mulch

Mulch is applied seasonally to prevent the loss of water to bedding plants and shrubs. This task involves sustained walking, standing, stooping, and upper extremity lifting/pushing/pulling while holding hand tools (rake, shovel, pitchfork, hoe). The HL may be required to work over even and uneven terrain/ground. As this task is seasonal, HL staff will typically perform the same task over several consecutive days or weeks.

#### 7 – Pruning shrubs and trees

Shrubs and tree branches up to a height of 20 feet are pruned and sheared by HL staff on a seasonal and as needed basis. This task involves sustained walking, standing, and upper extremity reaching (overhead, horizontal, below chest) while holding hand tool (pruner, anvil looper). The HL may be required to work over even and uneven terrain/ground. As this task is seasonal, HL staff will typically perform the same task over several consecutive days or weeks.

#### 8 – Brush Maintenance

HL staff occasionally need to cut back over grown brush or brambles bushes. This task occurs on an as needed basis. This task involves sustained walking, standing, and upper extremity reaching (overhead, horizontal, below chest) while holding hand tools (pruner, anvil looper, machete) or powered tools (weed wacker or hedge trimmer). The HL may be required to work over even and uneven terrain/ground and in confined areas (Figure 7).



Figure 7

### 9 – Cleaning up the work site

Once the task in question is completed, HLs will clean up the surrounding environment by disposing of any debris and vegetation into the City truck. This may occur in regular intervals over the course of a task such as weeding (Figure 8). Depending on the type of debris, a full bucket can weigh up to 45 lbs. If a City truck is filled, HL staff will be required to return to the City Work Yard at Lynas Lane to dispose of their trimmings and vegetation. This typically occurs once or twice per day and requires 2-3 HL staff to complete (Figure 9).



Figure 8



Figure 9

## PHYSICAL DEMANDS OF WORK TASKS

The following guide/descriptors have been used to identify the frequency, and the load of the specific steps as outlined in the preceding pages (3-7) of this document.

<b>Table ST1 - Physical Demand Characteristics Of Work</b> (Dictionary of Occupational Titles - Volume II, Fourth Edition, Revised 1991)			
Physical Demand Level	OCCASIONAL	FREQUENT	CONSTANT
	0-33% of the workday	34-66% of the workday	67-100% of the workday
Sedentary	1 - 10 lbs.	Negligible	Negligible
Light	11 - 20 lbs.	1 - 10 lbs.	Negligible
Medium	21 - 50 lbs.	11 - 25 lbs.	1 - 10 lbs.
Heavy	51 - 100 lbs.	26 - 50 lbs.	11 - 20 lbs.
Very Heavy	Over 100 lbs.	Over 50 lbs.	Over 20 lbs.

Action	Weight / Force (Lb.)	Travel Distance	Frequency	Task Parameters (Essential/non-essential)
<b>Lifting</b>				
Floor to Waist	11-20 lbs	0-36 Inches	Frequent	Essential – rakes, shovels, hand tools, buckets, etc. Steps 1-9. Figs 1, 3, & 8.
	21-50 lbs	0-36 Inches	Frequent	Essential – buckets of debris weighing up to 45 lbs into the truck & gas powered tools weighing 30 lbs. Steps 1-9. Figs 6, & 8.
	51-100 lbs	0-36 Inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.
	100+ lbs	0-36 Inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.
Waist to Shoulder	11-20 lbs	0-36 Inches	Frequent	Essential – rakes, shovels, hand tools, buckets, etc. Steps 1-9. Figs 1, 3, & 8.
	21-50 lbs	0-36 Inches	Frequent	Essential – buckets of debris weighing up to 45 lbs into the truck & gas powered tools weighing 30 lbs. Steps 1-9. Figs 6, & 8.
	51-100 lbs	0-36 Inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.
	100+ lbs	0-36 Inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.
Shoulder to Overhead	11-20 lbs	0-36 Inches	Occasional	Essential – rakes, shovels, hand tools, buckets, etc. Steps 1-9. Figs 1, 3, & 8.
	21-50 lbs	0-36 Inches	Occasional	Essential – buckets of debris weighing up to 45 lbs into the truck & gas powered tools weighing 30 lbs. Steps 1-9. Figs 6, & 8.



Action	Weight / Force (Lb.)	Travel Distance	Frequency	Task Parameters (Essential/non-essential)
<b>Carrying</b>				
Bilateral Carrying	11-20 lbs	0-36 Inches	Occasional	Essential – rakes, shovels, hand tools, buckets, etc. Steps 1-9. Figs 1, 3, & 8.
	21-50 lbs	0-36 Inches	Occasional	Essential – buckets of debris & gas powered tools. Steps 1-9. Figs 6, & 8.
	51-100 lbs	0-36 Inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.
	100+ lbs	0-36 inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.
Unilateral Carrying – Right / Left	11-20 lbs	0-36 Inches	Frequent	Essential – rakes, shovels, hand tools, buckets, etc. Steps 1-9. Figs 1, 3, & 8.

Action	Weight / Force (Lb.)	Travel Distance	Frequency	Task Parameters (Essential/non-essential)
<b>Push / Pull</b>				
Static / Dynamic Pushing & Pulling	11-20 lbs	0-36 Inches	Frequent	Essential – pushing/pulling rakes, shovels, hand tools, weeds, & pull cord on gas-powered tools. Steps 1-9. Figs 1, 3, & 8.
	21-50 lbs	0-36 Inches	Frequent	Essential – pushing/pulling rakes, shovels, & hand tools while weeding or shoveling. Steps 1, 3, 4, 6, 7, & 9. Figs 2.
	51-100 lbs	0-36 Inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.
	100+ lbs	0-36 Inches	Occasional	Essential – loaded wheelbarrow or tarp with debris. Step 2, 4, 6 & 9. Figs 9.

Action	Force Required	Frequency	Task Parameters (Essential/non-essential)
<b>Gripping</b>			
Right & Left Hand	11-20 lbs	Frequent	Essential – all hand tools (shovels, traffic cones, spades, rakes, bucket, hoe, levers), tarps, and weeds/shrubs. Steps 1-9. Figs 2, 3, 5, 6, & 8.

Action	Force Required	Frequency	Task Parameters (Essential/non-essential)
<b>Fine Finger Movement</b>			
Right & Left Hand	11-20 lbs	Frequent	Essential – weeding, operating the trigger on gas-powered tools, & planting bulbs. Steps 1-9. Figs 2, & 4-6.

The table in the subsequent page highlights the frequency of the most common movement patterns performed by the City of Richmond's Horticultural Labourer (HL).

The numeral in the "Task #" column refers to these tasks:

1. Preparing and transporting materials from the City Works Yard to the work site
2. Preparing the work site
3. Weeding
4. Preparing and planting flower beds
5. Hedging
6. Applying mulch
7. Pruning shrubs and trees
8. Brush maintenance
9. Cleaning up the work site (sweeping, disposal of vegetation) and the tools

The "Frequency" column is described as follows:

N = Not required, R = Rarely (<2%), O = Occasional (3-33%), F = Frequent (34-66%), C = Constant (67-100%)

PHYSICAL DEMAND	TASK #	FREQUENCY					DESCRIBE ACTIVITY Note distances, durations and surfaces
		N	R	O	F	C	
<b>MOBILITY</b>							
Walking	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Walking ~ 66% of time
Standing	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	- Over paved/uneven/graded terrain
Sitting	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Operating hand tools and wheelbarrow
Crawl	2-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Standing ~ 66% of time
Driving (Forklift/Vehicle/Other)	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Pruning, hedging, shoveling
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Obtaining/operating tools/machinery and talking with peers
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Crawling ~ 66% of time
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Weeding, applying bedding,
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sitting/Driving ~ 2% of time
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Operating city trucks
<b>POSTURE – Back</b>							
Bending Forward	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Forwards ~ 70% of time
Bending Backwards	1-9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Shoveling, raking, weeding, mulching
Twisting	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	- Obtaining tools, cleaning debris from tarps/buckets
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Twisting ~ 50% of time
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Obtaining supplies
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Preparing materials
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Weeding, mulching, raking, applying bedding/bulbs
<b>POSTURE – Reaching</b>							
Note forward and/or side reach distances							
Above Shoulder Level	1,2,5,7,9	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Both
Chest to Shoulder Level	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Both
Below Chest Level	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Both
Behind Body	1-9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Both
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Above ~ 33%
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Unloading debris to the truck
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Hedging, pruning brush/branches
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chest to shoulder ~ 70%
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Hedging, pruning, weeding, trimming
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Below chest ~ 66%
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Weeding, pruning, trimming
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Setting up cones, tarps
<b>POSTURE – Elbow/Forearm/Wrist</b>							
Elbow Flexion/Extension	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Both
Wrist Flexion/Extension	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Both
Wrist Rotation	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Both
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Elbow ~ 75%
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Shoveling, weeding, hedging, raking
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Tool use (shovel, rakes, bucket)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wrists ~ 75%
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Shoveling, weeding, hedging, raking
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Tool use (shovel, rakes, bucket)
<b>POSTURE – Neck</b>							
Forward Bending/Flexion	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Forwards/Twisting/Turning ~ 90%
Backward Bending/Ext.	1,2,5,7,9	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Monitoring environment while working
Twisting/Turning/Tilting	1-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	- Shoveling, weeding, hedging, raking, cleaning
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Reviewing work
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Backward ~ 33%
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Overhead pruning/hedging of brush/branches/trees
<b>POSTURE – Hip/Knee/Ankle/Foot</b>							
Crouching/Squatting	1-4 & 6-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Crouch / Squat ~ 75%
Kneeling	1-4 & 6-9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	- Weeding, preparing beds, planting bulbs
Climbing (Stairs/Other)	1-9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Use of hand tools (hoe, trowel, spade, shovel)
Jumping	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Kneeling ~ 66%
Foot Pedal/Action	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Weeding, preparing beds, planting bulbs
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Use of hand tools (hoe, trowel, spade, shovel)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Climbing/Foot pedal ~ 2%
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Climbing in/out of City vehicles
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- Operating City vehicles

N = Not required, R = Rarely (<2%), O = Occasional (3-33%), F = Frequent (34-66%), C = Constant (67-100%)

## **ESSENTIAL – NON-PHYSICAL DEMANDS**

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Horticultural labourers (HLs) are required to account for environmental variables. These variables (wind, warm or cool temperatures, and weather) can impact their work. HLs also need to be knowledgeable of different types of vegetation ie) weed vs plant

HLs are also required to demonstrate their knowledge and ability to do the following:

- Knowledge of the occupational hazards ie) sharps/feces while weeding
- Converse, instruct, follow and direct work as required through various mediums such as face to face direct contact.
- Interact with the public

These demands (environment, hazards, interactions) require the following range of cognitive and sensory skills.

### Attention/concentration

- Sustained - attending to the environment, traffic, the horticultural tasks and machinery.
- Divided - conversing with crew, minding/directing traffic, machinery and horticultural tasks.
- Alternating - conversing with crew or the public, directing traffic, and other tasks.

### Memory

- Procedural - knowledge of methods, materials, tools, equipment and use of same
- Immediate and delayed visual - written directions/diagrams and location of materials/tools
- Immediate and delayed auditory - verbal directions and discussions with crew/leader
- Prospective - project timelines, daily/weekly schedules, meeting times

### Executive Functioning

- Initiation - beginning task/project
- Working memory - short term directions/changes, one off instructions
- Sequencing - identifying and/or following an order of activities/actions
- Problem solving - identifying and/or addressing unexpected issues
- Termination - completing a specific task

### Sensory

- Vision - observation of the immediate environment and task at hand
- Hearing - attending to sounds within the environment
- Touch - to hold and manipulate tools/equipment

The table in the subsequent page summarizes the key environmental conditions that may influence and impact a HLs ability to do their job.



**ENVIRONMENTAL/PSYCHOSOCIAL FACTORS:**

ENVIRONMENTAL & OTHER CONDITIONS	YES	NO	TASK DESCRIPTION
Inside Work Location	X		Limited to the crew's supervisor
Outside Work Location	X		
Electronic		X	
Mechanical	X		Various gas powered tools such as a weed wacker, leave blower, hedger.
Fumes, Gases or Odours	X		Inorganics (fumes/odours from gas powered tools) and fumes/odours from traffic
Dust	X		Dust from loose soil, and ground
Toxic Conditions		X	
Explosives	X		Portable gas tanks
Wet/Humid	X		Weather conditions ie) rain, sun, wind
Noise	X		Traffic, immediate environment, and various tools
Vibration	X		Gas powered tools
Exposure to Changes in Temperature	X		Sun, rain, and wind
Confined and/or Awkward Spaces	X		See page 5 – figure 3 and 5.
Talking	X		Interacting with co-workers, public, supervisor
Hearing	X		Interacting with co-workers, public, supervisor
Near Vision	X		Horticultural related tasks ie) weeding
Far Vision	X		Directing traffic. Driving City vehicles.
Depth Perception	X		Horticultural related tasks ie) weeding
Decision Making	X		Limited to the crew's supervisor
Reading	X		Limited to the crew's supervisor
Writing	X		Limited to the crew's supervisor
Driving	X		City vehicles to and from worksites.
Operating Hand/Foot Controls	X		Driving City vehicles to and from worksites.
Travel	X		Driving City vehicles to and from worksites.
Deadline Pressures	X		At the direction of the supervisor.
Work Alone	X		Specific tasks ie) weeding, hedging, pruning
Work in Group	X		Within crews to complete the tasks.