

## HORTICULTURAL TECHNICIAN

### COMPETENCY ANALYSIS PROFILE Horticultural Technician – 441C

*(All unshaded skill sets must be demonstrated/completed)*

#### SKILL SETS

#### SKILLS

<b>PROTECT SELF AND OTHERS</b>	Comply with federal and provincial legislation and regulations and municipal by-laws	Select, adjust, maintain and wear required eye protection	Select, adjust, maintain and wear required head protection	Select, adjust, maintain and wear required hearing protection	Select, adjust, maintain and wear required hand protection
<b>U6621.0</b>	<b>U6621.01</b>	<b>U6621.02</b>	<b>U6621.03</b>	<b>U6621.04</b>	<b>U6621.05</b>
Select, adjust, maintain and wear required clothing	Select, adjust, maintain and wear required foot protection	Control pedestrian and vehicular traffic	Lift and carry tools, equipment and materials	Mount and dismount equipment	Work around operating equipment
<b>U6621.06</b>	<b>U6621.07</b>	<b>U6621.08</b>	<b>U6621.09</b>	<b>U6621.10</b>	<b>U6621.11</b>
Identify impact of climatic extremes of wind, temperature and precipitation	Select a stable ground position	Work around energy sources	Locate all utilities	Identify, store/dispose of all hazardous job materials	Respond to job-site emergencies
<b>U6621.12</b>	<b>U6621.13</b>	<b>U6621.14</b>	<b>U6621.15</b>	<b>U6621.16</b>	<b>U6621.17</b>

<b>COMMUNICATE IN THE WORKPLACE</b>	Write job documents in clear, concise, coherent and correct manner	Interpret job documents	Listen to job instructions and customer queries	Speak to supervisors, co-workers and customers in clear, concise, coherent and correct manner	Solve problems
<b>U6622.0</b>	<b>U6622.01</b>	<b>U6622.02</b>	<b>U6622.03</b>	<b>U6622.04</b>	<b>U6622.05</b>
Work as a team	Develop personal and work-related goals	Work in a responsible manner			
<b>U6622.06</b>	<b>U6622.07</b>	<b>U6622.08</b>			

## HORTICULTURAL TECHNICIAN

<b>CONTROL PLANT PESTS AND DISORDERS</b>	Identify pest or disorder	Determine plant health requirements	Select treatment methods	Implement treatment methods	Determine use of regulated control materials
<b>U6623.0</b>	<b>U6623.01</b>	<b>U6623.02</b>	<b>U6623.03</b>	<b>U6623.04</b>	<b>U6623.05</b>
Mix regulated control materials and calibrate equipment	Apply selected treatment	Maintain application equipment	Store/dispose of regulated control materials and container	Maintain and update logs	Monitor effectiveness of cultural controls and treatment
<b>U6623.06</b>	<b>U6623.07</b>	<b>U6623.08</b>	<b>U6623.09</b>	<b>U6623.10</b>	<b>U6623.11</b>
Wash hands and launder clothing	Wear protective clothing and equipment,				
<b>U6623.12</b>	<b>U6623.13</b>				

<b>TRANSPLANT/ INSTALL PLANT MATERIALS</b>	Conduct on-site inspection	Select plant materials to be installed	Select method for digging plant materials	Select tools and equipment	Dig plant material
<b>U6624.0</b>	<b>U6624.01</b>	<b>U6624.02</b>	<b>U6624.03</b>	<b>U6624.04</b>	<b>U6624.05</b>
Prepare plant material for relocation	Load and secure plant material for transport	Store plant material	Identify planting locations	Select equipment, tools and supplies	Select soil amendments
<b>U6624.06</b>	<b>U6624.07</b>	<b>U6624.08</b>	<b>U6624.09</b>	<b>U6624.10</b>	<b>U6624.11</b>
Prepare transplant site	Verify plants for installation	Install plant materials	Perform plant aftercare	Dispose of or recycle excess materials	Maintain equipment
<b>U6624.12</b>	<b>U6624.13</b>	<b>U6624.14</b>	<b>U6624.15</b>	<b>U6624.16</b>	<b>U6624.17</b>

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<b>MANAGE GARDENS AND GROUNDS</b>	Select tools and equipment	Prepare planting beds	Plant/transplant annuals, perennials and ground covers	Apply fertilizer and/or water plant material	Maintain gardens
<b>U6625.0</b>	<b>U6625.01</b>	<b>U6625.02</b>	<b>U6625.03</b>	<b>U6625.04</b>	<b>U6625.05</b>
Determine water and fertilizer needs	Prune plant	Prepare gardens for winter	Maintain hard surfaces	Dispose of or recycle excess materials	Maintain equipment
<b>U6625.06</b>	<b>U6625.07</b>	<b>U6625.08</b>	<b>U6625.09</b>	<b>U6625.10</b>	<b>U6625.11</b>

<b>APPLY FERTILIZERS</b>	Identify nutrient requirements	Select fertilizer type and formulation	Select application method	Apply selected formulation	Maintain application equipment
<b>U6626.0</b>	<b>U6626.01</b>	<b>U6626.02</b>	<b>U6626.03</b>	<b>U6626.04</b>	<b>U6626.05</b>
Inspect and record condition of plants and surroundings	Store/dispose of fertilizers/containers	Maintain and update records			
<b>U6626.06</b>	<b>U6626.07</b>	<b>U6626.08</b>			

<b>IRRIGATE PLANTS</b>	Determine system design, capacity and water quality	Establish irrigation rate, method and schedule	Water plants	Maintain irrigation equipment	Program/operate control systems
<b>U6627.0</b>	<b>U6627.01</b>	<b>U6627.02</b>	<b>U6627.03</b>	<b>U6627.04</b>	<b>U6627.05</b>
Troubleshoot and affect repair to an in-ground irrigation system	Perform start-up in the Spring and shut-down in the Fall	Maintain clear and concise records			
<b>U6627.06</b>	<b>U6627.07</b>	<b>U6627.08</b>			

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<b>PROPAGATE PLANTS</b>	Select stock plants	Select required propagation technique	Prepare propagation area and growing medium	Collect and prepare propagation materials	Place propagule into required environment
<b>U6628.0</b>	<b>U6628.01</b>	<b>U6628.02</b>	<b>U6628.03</b>	<b>U6628.04</b>	<b>U6628.05</b>
Maintain propagation environment	Condition plants for growing-on	Dispose of or recycle excess materials	Maintain propagation records		
<b>U6628.06</b>	<b>U6628.07</b>	<b>U6628.08</b>	<b>U6628.09</b>		

<b>PRODUCE PLANTS</b>	Prepare growing media/field planting site	Select container/field production site	Prepare plants for potting or planting	Install plant into growing medium	Maintain optimum growing conditions
<b>U6629.0</b>	<b>U6629.01</b>	<b>U6629.02</b>	<b>U6629.03</b>	<b>U6629.04</b>	<b>U6629.05</b>
Harvest and grade plants	Place plants in holding environment	Dispose of or recycle excess materials	Maintain production records		
<b>U6629.06</b>	<b>U6629.07</b>	<b>U6629.08</b>	<b>U6629.09</b>		

<b>PRUNE PLANTS</b>	Identify plants	Select pruning method and timing	Remove plant parts	Isolate and dispose of contaminated plant parts	Dispose of or compost non-contaminated plant parts
<b>U6630.0</b>	<b>U6630.01</b>	<b>U6630.02</b>	<b>U6630.03</b>	<b>U6630.04</b>	<b>U6630.05</b>
Maintain equipment					
<b>U6630.06</b>					

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<b>ESTABLISH TURFGRASS</b>	Analyze turfgrass site	Analyze growing medium	Determine turf species for the site and purpose	Layout site and set grades	Rough grade site
<b>U6631.0</b>	<b>U6631.01</b>	<b>U6631.02</b>	<b>U6631.03</b>	<b>U6631.04</b>	<b>U6631.05</b>
Amend growing medium	Fine-grade site	Apply seed mix and mulch	Roll seed	Protect seeded areas	Install sod
<b>U6631.06</b>	<b>U6631.07</b>	<b>U6631.08</b>	<b>U6631.09</b>	<b>U6631.10</b>	<b>U6631.11</b>
Roll sod	Irrigate turfgrass	Dispose or compost excess materials	Maintain installation and or irrigation records		
<b>U6631.12</b>	<b>U6631.13</b>	<b>U6631.14</b>	<b>U6631.15</b>		

<b>MOW TURFGRASS</b>	Assess turfgrass	Select and adjust equipment	Determine mowing pattern and/or procedure	Prepare mowing site	Cut and trim turfgrass
<b>U6632.0</b>	<b>U6632.01</b>	<b>U6632.02</b>	<b>U6632.03</b>	<b>U6632.04</b>	<b>U6632.05</b>
Determine height and frequency of cut	Trim edges of turfgrass areas	Collect and dispose of or compost turfgrass clippings	Conduct final inspection	Monitor turfgrass quality	Maintain equipment
<b>U6632.06</b>	<b>U6632.07</b>	<b>U6632.08</b>	<b>U6632.09</b>	<b>U6632.10</b>	<b>U6632.11</b>
Maintain records					
<b>U6632.12</b>					

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<b>CULTIVATE TURFGRASS</b>	Assess turfgrass condition	Select and adjust equipment/tools	Aerate turfgrass	Apply top-dressing materials and turf seed	Dethatch turfgrass
<b>U6633.0</b>	<b>U6633.01</b>	<b>U6633.02</b>	<b>U6633.03</b>	<b>U6633.04</b>	<b>U6633.05</b>
Overseed turfgrass	Clean cultivated area	Dispose or compost excess materials	Irrigate turfgrass	Monitor turfgrass quality	Maintain records
<b>U6633.06</b>	<b>U6633.07</b>	<b>U6633.08</b>	<b>U6633.09</b>	<b>U6633.10</b>	<b>U6633.11</b>

<b>INSTALL HORIZONTAL NATURAL/PRECAST STONE SURFACES</b>	Determine scope of work and prepare take off of quantities of materials and equipment required	Lay out site	Select tools and equipment	Verify materials	Prepare sub-grade and base materials
<b>U6634.0</b>	<b>U6634.01</b>	<b>U6634.02</b>	<b>U6634.03</b>	<b>U6634.04</b>	<b>U6634.05</b>
Compact sub-grade and base materials	Install edging	Prepare stone	Mix mortar	Place natural/precast stone in a wet or dry application	Cut stone
<b>6634.06</b>	<b>U6634.07</b>	<b>U6634.08</b>	<b>U6634.09</b>	<b>U6634.10</b>	<b>U6634.11</b>
Fill joints	Compact precast stone in dry application	Clean and finish stone surface	Dispose of or recycle waste materials	Maintain equipment	
<b>U6634.12</b>	<b>U6634.13</b>	<b>U6634.14</b>	<b>U6634.15</b>	<b>U6634.16</b>	

<b>PERFORM WOOD CONSTRUCTION</b>	Determine scope of work and prepare take off of quantities of materials and equipment required	Lay out site	Select tools and equipment	Verify materials	Prepare wood
<b>U6635.0</b>	<b>U6635.01</b>	<b>U6635.02</b>	<b>U6635.03</b>	<b>U6635.04</b>	<b>U6635.05</b>
Install wood	Finish wood surfaces	Dispose of or recycle waste materials	Maintain equipment		
<b>U6635.06</b>	<b>U6635.07</b>	<b>U6635.08</b>	<b>U6635.09</b>		

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<b>INSTALL HORIZONTAL CONCRETE SURFACES</b>	Determine scope of work and prepare take off of quantities materials and equipment required	Lay out site	Select tools and equipment	Verify materials	Prepare sub-grade and base materials
<b>U6636.0</b>	<b>U6636.01</b>	<b>U6636.02</b>	<b>U6636.03</b>	<b>U6636.04</b>	<b>U6636.05</b>
Construct and brace forms	Install welded wire mesh/steel reinforcing bars	Prepare concrete	Install expansion joint material	Place concrete	Finish surface, edges and joints
<b>U6636.06</b>	<b>U6636.07</b>	<b>U6636.08</b>	<b>U6636.09</b>	<b>U6636.10</b>	<b>U6636.11</b>
Apply curing techniques	Dismantle forms and clean job site	Install control joints	Dispose of or recycle waste materials	Maintain equipment	
<b>U6636.12</b>	<b>U6636.13</b>	<b>U6636.14</b>	<b>U6636.15</b>	<b>U6636.16</b>	

<b>CONSTRUCT RETAINING WALLS</b>	Determine scope of work and prepare take off of quantities materials and equipment required	Lay out site	Select tools and equipment	Verify materials	Prepare sub-grade and base materials
<b>U6637.0</b>	<b>U6637.01</b>	<b>U6637.02</b>	<b>U6637.03</b>	<b>U6637.04</b>	<b>U6637.05</b>
Compact sub-grade and base materials	Install wall materials	Construct and brace forms for concrete	Place concrete in forms	Prepare stone	Mix mortar for wet application
<b>U6637.06</b>	<b>U6637.07</b>	<b>U6637.08</b>	<b>U6637.09</b>	<b>U6637.10</b>	<b>U6637.11</b>
Place natural/precast stone in wet or dry application	Cut stone	Fill joints	Clean and finish stone surface	Remove forms from concrete	Install drainage materials/components
<b>U6637.12</b>	<b>U6637.13</b>	<b>U6637.14</b>	<b>U6637.15</b>	<b>U6637.16</b>	<b>U6637.17</b>
Backfill retaining wall	Dispose or recycle waste materials	Maintain equipment			
<b>U6637.18</b>	<b>U6637.19</b>	<b>U6637.20</b>			