



**ONTARIO COLLEGE OF TRADES**  
**ORDRE DES MÉTIERS DE L'ONTARIO**

# Apprenticeship Training Standard

## Horticultural Technician

### Trade Code: 441C

Development Date: September 2010

**Please Note:** Apprenticeship Training and Curriculum Standards were developed by the Ministry of Training, Colleges and Universities (MTCU). As of April 8<sup>th</sup>, 2013, the Ontario College of Trades (College) has become responsible for the development and maintenance of these standards. The College is carrying over existing standards without any changes.

However, because the Apprenticeship Training and Curriculum Standards documents were developed under either the *Trades Qualification and Apprenticeship Act* (TQAA) or the *Apprenticeship and Certification Act, 1998* (ACA), the definitions contained in these documents may no longer be accurate and may not be reflective of the *Ontario College of Trades and Apprenticeship Act, 2009* (OCTAA) as the new trades legislation in the province. The College will update these definitions in the future.

Meanwhile, please refer to the College's website (<http://www.collegeoftrades.ca>) for the most accurate and up-to-date information about the College. For information on OCTAA and its regulations, please visit: <http://www.collegeoftrades.ca/about/legislation-and-regulations>

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## **Apprenticeship Program Summary for Horticultural Technician**

<b>1. Program Definition</b>	<b>Definition</b>
<p>“Horticultural Technician” is defined as a person who identifies plants, pests and materials; applies pesticides; removes and prepares plants and material for shipping; propagates, cultivates, fertilizes, installs, maintains and irrigates plants and turf grass; prunes plants; uses and operates tools and equipment used in horticulture; interprets and implements landscape drawings; and installs natural stone; pre-cast stone, concrete and wood for landscaping.</p> <p>Horticultural Technician is an approved apprenticeship program for the purposes of the <i>Apprenticeship and Certification Act, 1998</i> (ACA).</p>	
<b>2. Program Guidelines</b>	<b>Guidelines</b>
<b>2.1 On-the-Job Training Duration (for Apprentices)</b>	On-the-job Duration
<p>The Industry Committee has identified 7,622 hours as the duration generally necessary for an apprentice to become competent in the skills required. There may be individual circumstances where the duration varies from this guideline.</p>	
<b>2.2 In-school Training Duration</b>	In-school Duration
<p>The Industry Committee has identified 720 hours of in-school training as the duration generally necessary for an apprentice to complete the in-school curriculum for this program, except where an apprentice has been exempted from any level of that curriculum.</p>	
<b>2.3 Ratio</b>	Ratio
<p>The Industry Committee has identified a journeyperson-to-apprentice ratio of one journeyperson to two apprentices as the ratio generally necessary for an apprentice to be properly trained on the job in this program. There may be individual circumstances where the ratio varies from this guideline.</p>	
<b>2.4</b>	
<p>Hours worked by an apprentice in the trade of horticultural technician in excess of his or her regular hours shall be included in computing the apprentice’s hours of on-the- job training and work experience</p>	

<b>3. Program Requirements</b>	<b>Requirements</b>
<b>3.1 Restricted Skill Sets</b> This program does not contain any restricted skill sets as per Ontario Regulation 565/99, Restricted Skill Sets. Therefore, an individual is not required to be a registered apprentice or possess certification in order to perform skills contained in the program.	Restricted Skill Sets
<b>3.2 Academic Standard</b> The Industry Committee has identified the minimum academic standard for entry to this program as completion of Grade 12 or ministry-approved equivalent. (See ACA Policy 102, Confirming Academic Requirements.)	Academic Standard
<b>3.3 Eligibility for Exam Challenge (<i>for Non-apprentice C of Q Applicants</i>)</b> The challenger must: <ul style="list-style-type: none"><li>• provide proof of competency in all mandatory (unshaded) skills as identified in the CAP Chart;</li><li>• provide proof of competency in fifty percent of the shaded skills ( 50% of the total skills in Skill Sets: 6628;6629;6632;6634;6635;6636; and 6637.</li><li>• demonstrate that he/she has acquired 6000 hours of on-the-job training.</li></ul> (See ACA Policy 150, Assessing Applicants for the Certificate of Qualification.)	Exam Challenge Requirements
<b>3.4 Eligibility for Program Completion (<i>for Apprentices</i>)</b> The apprentice must: <ul style="list-style-type: none"><li>• achieve competency in all mandatory (unshaded) skills as identified in the CAP Chart;</li><li>• provide proof of competency in fifty percent of the shaded skills ( 50% of the total skills in Skill Sets: 6628;6629;6632;6634;6635;6636; and 6637.</li><li>• complete the in-school training as outlined in the industry and ministry-approved Curriculum Standard.</li></ul> (ACA Policy 309, Completion of an Apprenticeship Program, soon to be issued.)	Program Completion Requirements

<b>4. Other Information</b>	<b>Other</b>
<b>4.1 Other Resources</b> Complete program requirements, policies and standards can be obtained by referring to the following resources: <ul style="list-style-type: none"><li>• <i>Apprenticeship and Certification Act, 1998 (ACA);</i></li><li>• ACA General Regulation 573/99;</li><li>• ACA LGIC (Lieutenant Governor in Council) Regulations;</li><li>• Program-specific Apprenticeship Training Standards or Schedules of Training; and</li><li>• ACA Program and Policy Manual</li></ul>	Other Resources
<b>4.2 Other Required Certification</b> N/A	Other Required Certification
<b>4.3 Academic Background</b> Industry has identified relevant secondary school course(s) likely to increase an individual's chances of success if completed prior to program entry. For details, see the document Apprenticeship Subject Pathways at: <a href="http://www.edu.gov.on.ca/eng/training/apprenticeship/skills/pathwaye.pdf">http://www.edu.gov.on.ca/eng/training/apprenticeship/skills/pathwaye.pdf</a>	Academic Background

**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>



## HORTICULTURAL TECHNICIAN

<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>				

## HORTICULTURAL TECHNICIAN

<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>						

## HORTICULTURAL TECHNICIAN

<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>					

## HORTICULTURAL TECHNICIAN

<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>		

## HORTICULTURAL TECHNICIAN

<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>			

### **PREFACE**

This training standard was developed by the Ministry of Training Colleges and Universities (MTCU), in partnership with the Provincial Advisory Committee and in consultation with representatives from the industry. This document is intended to be used by apprentice, supervisor/trainer and sponsor/employer as a "blueprint" for training and as a prerequisite for completion and certification.

This training document becomes the apprentice's only record of workplace training performance.

Supervisor/trainer and apprentice are required to sign off and date the skills following each successful acquisition, unless a skill is shaded (optional).

**The care and maintenance of this training document are the joint responsibility of the apprentice and the sponsor/employer. By signing off the skill, the supervisor/trainer and the apprentice are indicating that the apprentice has demonstrated competence in the skill. This training standard has been developed specifically for documenting the apprentice's acquisition of skills in the trade.**

**DEFINITIONS****ACA**

Apprenticeship and Certification Act, 1998

**Certificate of Apprenticeship (CofA)**

Certification issued to individuals who have demonstrated that they have completed an apprenticeship in Ontario.

**Certificate of Qualification (CofQ)**

Certification issued to C of Q applicants who have achieved a passing grade on the certification exam for their trade.

**Competency Analysis Profile**

A document that identifies the training needs of an individual trade and details the skills/skill sets that must be demonstrated.

**Competence**

The ability of an individual to perform a skill repeatedly and without assistance in the workplace to the standard set out in the Training Standard or Schedule of Training.

**General Performance Objective (On-the-job Skill Set)**

Describes set of skills which include all performance objectives under that skill set.

**Industry Committee (IC) - under the ACA and Provincial Advisory Committee (PAC) under the TQAA**

Under the ACA and TQAA, the Minister may appoint a provincial committee in any trade or group of trades to advise the Minister in matters relating to the establishment and operation of apprenticeship training programs and trades qualifications.

**Journey person or Equivalent**

A person who has acquired the knowledge and skills in a trade, occupation or craft as attested to by a provincial or territorial authority.

**Mandatory**

Status assigned to unshaded individual skills, skill sets or general performance objective which must be signed off for the apprentice to complete their program.

**Optional**

Status assigned to shaded individual skills, skills sets or general performance objective for which sign-off is not required for the apprentice to complete the program.

**Sign-off**

Signature of the sponsor/employer of record or an individual, to whom that sponsor or employer has delegated signing authority, indicating an apprentice's achievement of competence.

**Skill**

Individual skill described in the Training Standard (note: does not mean the larger skill groups referred to in the Training Standard as Skill Sets, Training Units, or General Performance Objective, but the individual skills that make up those groups).

**Skill Sets**

Group of individual skills found in the Training Standard (may also be called Training Unit or General Performance Objective)

**Skill Set Completion Form**

Lists all skill sets and includes space for sign-off by sponsor/employer of record.

**Sponsor/Employer**

Means a person that has entered into a registered training agreement under which the person is required to ensure that an individual is provided with workplace-based training in a trade, other occupation or skill set as part of an apprenticeship program approved by the Director.

**Sponsor/Employer of Record**

Refers to the sponsor or employer documented as the signatory to the current training agreement or contract. In order for an sponsor/employer to be considered for the training of apprentices, they must identify that the workplace has qualified journeypersons or equivalent on site and can identify that the workplace has the tools, equipment, materials, and processes which have been identified by Provincial Advisory Committees (PACs) or Industry Committees (ICs) to be required for the trade.

**Supervisor**

An individual, who oversees the execution of a task, oversees the actions or work of others.

**Trainer**

A qualified trainer in a compulsory trade is a journeyperson with a Certificate of Qualification or in a voluntary trade is an individual who is considered equivalent to a journeyperson with a Certificate of Qualification.

**TQAA**

Trades Qualification and Apprenticeship Act.

**Training Standard**

A document that has been written in concise statements, which describe how well an apprentice must perform each skill in order to become competent. In using the document, trainers will be able to ensure that the apprentice is developing skills detailed for the occupation.



**IMPORTANT DIRECTIONS****Apprentice**

1. All complete skills or skill sets must be signed and dated by both the apprentice and sponsor/employer when either all terms of the contract have been completed or the apprentice leaves the employ of the employer.
2. It is the responsibility of the apprentice to inform the apprenticeship staff at the local Ministry of Training, Colleges and Universities office regarding the following changes:
  - change of sponsor/employer address;
  - change of apprentice name or address;
  - transfer to a new sponsor/employer.
3. The Skill Set Completion Form must be completed and signed by the current sponsor/employer and presented to the local Apprenticeship Client Services Office at the fulfillment of all terms of a Contract of Apprenticeship/Training Agreement.
4. The apprentice completion form with the Completed and Authorized Training Standard must be presented to the local Apprenticeship Client Services Unit.

**Sponsors/Employers and Supervisors/Trainers**

The Training Standard identifies skills required for this trade/occupation and its related training program.

This Training Standard has been written in concise statements which describe how an apprentice must perform each skill in order to become competent. Competence means being able to perform the task to the required standard.

In using this Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing the skills detailed for the trade/occupation.

Supervisors/Trainers and apprentices are required to sign off and date the skills following each successful acquisition.

Sponsors/Employers participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each skill set.

**NOTICE OF COLLECTION OF PERSONAL INFORMATION**

1. At any time during your apprenticeship training, you may be required to show this training standard to the Ministry of Training, Colleges and Universities (the Ministry). You will be required to disclose the signed Apprenticeship Completion form to the Ministry in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system, including confirming your completion and issuing your certificate of apprenticeship.
2. The Ministry will disclose information about your program completion and your certificate of apprenticeship to the Ontario College of Trades, as it is necessary for the College to carry out its responsibilities.
3. Your personal information is collected, used and disclosed by the Ministry under the authority of the Ontario College of Trades and Apprenticeship Act, 2009.
4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre  
Ministry of Training, Colleges and Universities  
33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3  
Toll-free: 1-800-387-5656; Toronto: 416-326-5656  
TTY: 1-866-533-6339 or 416-325-4084.

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**ROLES & RESPONSIBILITIES OF APPRENTICE, SPONSOR/EMPLOYER  
AND SUPERVISOR/TRAINER**

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**Apprentice “Apprenticeship is Learning On-the-job”**

- Practice safe work habits.
- Use your apprenticeship training standard as a journal to keep track of which skills you have achieved.
- Talk over your training plan with your Training Consultant, Employer, Union, or Sponsor.
- Know what tools are required for your trade and how to use them.
- Ask questions and keep asking.
- Talk to your employer about your training needs.
- Demonstrate enthusiasm and good work habits.
- Ensure that you and your supervisor/trainer sign off skill/skill sets upon demonstration of competency.

**Sponsor/Employer “Training is an Investment”**

- Demonstrate safe work habits.
- Attest to successful achievement by signing the skill/skills sets.
- Provide opportunities and time for the apprentice to learn the trade.
- Offer practical trade training experiences that cover all of the skill sets.
- Foster work ethics that support training while minimizing productivity losses.
- Set out clear expectations, then recognize or reward performance excellence.
- Involve both the apprentice and supervisor/trainer in developing the training plan.
- Use the Training Standard as a monitoring tool and part of regular performance evaluations.
- Select supervisors/trainers with good communication skills and who work well with others.
- Encourage supervisors/trainers to take upgrading courses - (e.g. Train the Trainer, Mentor Coach, etc).
- Complete the Skill Set Completion Form once the apprentice has demonstrated competency in the training.
- Ensure that the apprentice always works under the direction of or has access to a qualified supervisor/trainer.
- Vary the apprentice’s exposure to all the skills set out in the training standard.

### **Supervisor/Trainer**

- Demonstrate safe work habits.
- Treat apprentices fairly and with respect.
- Use the Training Standard as a guide to evaluating competence in each skill area. In using the Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing skills detailed for the trade/occupation.
- Review the Training Standard with the apprentice and develop a training plan.
- Respond fully to all questions.
- Be patient. Explain what is to be done then, show how it is done, and then let the apprentice demonstrate the task.
- Provide continuous feedback.
- Sign off individual skills/skill sets once the apprentice demonstrates competence in the skill.

### **Suggestions for Assessing the Progress of the Apprentice in the Workplace**

- Use informal daily observation.
- Provide constructive feedback to build confidence.
- Allow the supervisor/trainer time to teach and demonstrate the skills.
- Take prompt action wherever problems occur.
- Conduct regular performance reviews involving the apprentice, supervisor/trainer and sponsor/employer.
- Use the Training Standard as the reference for establishing the competency of the apprentice.

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**HORTICULTURAL TECHNICIAN****SKILL SET COMPLETION FORM**

<b>SKILL SET</b>	<b>TITLE</b>	<b>SIGNING AUTHORITY</b>
<b>U6621.0</b>	PROTECT SELF AND OTHERS	
<b>U6622.0</b>	COMMUNICATE IN THE WORKPLACE	
<b>U6623.0</b>	CONTROL PLANT PESTS AND DISORDERS	
<b>U6624.0</b>	TRANSPLANT/INSTALL PLANT MATERIALS	
<b>U6625.0</b>	MANAGE GARDENS AND GROUNDS	
<b>U6626.0</b>	APPLY FERTILIZERS	
<b>U6627.0</b>	IRRIGATE PLANTS	
<b>U6628.0</b>	PROPAGATE PLANTS	
<b>U6629.0</b>	PRODUCE PLANTS	
<b>U6630.0</b>	PRUNE PLANTS	
<b>U6631.0</b>	ESTABLISH TURFGRASS	
<b>U6632.0</b>	MOW TURFGRASS	
<b>U6633.0</b>	CULTIVATE TURFGRASS	
<b>U6634.0</b>	INSTALL HORIZONTAL NATURAL/PRECAST STONE SURFACES	
<b>U6635.0</b>	PERFORM WOOD CONSTRUCTION	

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## **HORTICULTURAL TECHNICIAN**

<b>U6636.0</b>	INSTALL HORIZONTAL CONCRETE SURFACES	
<b>U6637.0</b>	CONSTRUCT RETAINING WALLS	

### **NOTE ON SHADED PERFORMANCE OBJECTIVES AND SKILLS:**

- Provide proof of competency in fifty percent of the shaded skills of the total skills in Skill Sets: 6628; 6629; 6632; 6634; 6635; 6636; and 6637.
- The in-school curriculum learning outcomes will cover all of the skill sets, both shaded and unshaded.
- The Certificate of Qualification examination will test the whole of the trade and may test both shaded and unshaded performance skill sets.

**U6621.0 PROTECT SELF AND OTHERS****GENERAL PERFORMANCE OBJECTIVE**

Protect self and others by: complying with federal and provincial legislation and regulations and municipal by-laws; selecting, adjusting, maintaining and wearing required eye, head, hearing, foot and hand protection; selecting, adjusting, maintaining and wearing required clothing; controlling pedestrian and vehicular traffic; lifting and carrying tools, equipment and materials; mounting and dismounting equipment; working around operating equipment; identifying impact of climatic extremes, of wind, temperature and precipitation; selecting a stable ground position; working around energy sources; locating all utilities; identifying, storing, and disposing all hazardous job materials; and responding to job site emergencies.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6621.01** **Comply with federal and provincial legislation and regulations and municipal by-laws**, to ensure safe working conditions in all job functions or operations.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.02** **Select, adjust, maintain and wear required eye protection**, according to the *Occupational Health and Safety Act (OHSA)*, ensuring correct fit and optimum protection during all job functions or operations, to protect self and others from eye injury

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.03** **Select, adjust, maintain and wear required head protection**, according to *OHSA*, ensuring correct fit and optimum protection during all job functions or operations, to protect self and others from head injury

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Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6621.0 PROTECT SELF AND OTHERS... Cont'd

**U6621.04**     **Select, adjust, maintain and wear required hearing protection**, according to *OHSA*, ensuring correct fit and optimum protection during all job functions or operations, to protect self from hearing loss.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.05**     **Select, adjust, maintain and wear required hand protection**, according to *OHSA*, ensuring correct fit and optimum protection during all job functions or operations, to protect self from hand injury.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.06**     **Select, adjust, maintain and wear required clothing**, according to *OHSA*, ensuring correct fit and optimum protection during all job functions or operations, to ensure safe working conditions.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.07**     **Select, adjust, maintain and wear required foot protection**, according to *OHSA*, ensuring correct fit and optimum protection during all job functions or operations, to protect self from foot injury.

---

Date Completed

---

Apprentice

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Supervisor/Trainer

**U6621.08**     **Control pedestrian and vehicular traffic**, on the job site, by the use of signs and barriers, to ensure safe working conditions for self and others.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6621.09**     **Lift and carry tools, equipment and materials**, in a safe manner, to protect self and others from injury.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer



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## HORTICULTURAL TECHNICIAN

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### U6621.0 PROTECT SELF AND OTHERS... Cont'd

**6621.10 Mount and dismount equipment**, using three point contact method, 2 hands 1 foot, 2 feet 1 hand, in order to prevent personal injury.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.11 Work around operating equipment**, obeying warning signals and alarms, remaining visible, giving and responding to standard hand signals and maintaining a safe distance from equipment, to ensure safe working conditions for self and others.

---

Date Completed

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Apprentice

---

Supervisor/Trainer

**U6621.12 Identify impact of climatic extremes of wind, temperature and precipitation**, as they affect worksite during job functions or operations, to ensure personal safety and efficient job performance.

---

Date Completed

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Apprentice

---

Supervisor/Trainer

**U6621.13 Select a stable ground position**, for all job functions or operations, to ensure safe work conditions and efficient job performance.

---

Date Completed

---

Apprentice

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Supervisor/Trainer

**U6621.14 Work around energy sources**, observing electrical limits of approach, to ensure safe working conditions and efficient job performance.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.15 Locate all utilities**, by contacting required agencies prior to commencing work, to ensure safe and efficient job performance.

---

Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6621.0 PROTECT SELF AND OTHERS... Cont'd

**U6621.16** Identify, store/dispose of all hazardous job materials, including motor fuel, lubricants and cleaning solvents, according to legislation and manufacturer specifications, to ensure safe environmental and working conditions for self and others.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6621.17** Respond to job-site emergencies, by following required procedures, to minimize injuries to self and others and restore safe working conditions.

---

Date Completed

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Apprentice

---

Supervisor/Trainer

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Sponsor/Employer Name

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Sponsor/Employer Signature

**U6622.0 COMMUNICATE IN THE WORKPLACE****GENERAL PERFORMANCE OBJECTIVE**

Communicate in workplace by: writing job documents in clear, concise, coherent and correct manner; interpreting job documents; listening to job instructions and customer queries; speaking to supervisors, co-workers, and customers in clear, concise, coherent and correct manner; solving problems; working as a team; developing personal and work related-goals; and working in a responsible manner.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6622.01 Write job documents in clear, concise, coherent and correct manner,** according to intended audience and purpose, to ensure safe and efficient job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6622.02 Interpret job documents,** including work orders, plans, and specifications, to determine scope of job and equipment requirements, and ensure efficient, effective and safe job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6622.03 Listen to job instructions and customer queries,** to determine scope of contract or project requirements, and ensure efficient, effective and safe job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6622.04 Speak to supervisors, co-workers and customers in a clear, concise, coherent and correct manner,** to ensure efficient, effective and safe job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

---

## HORTICULTURAL TECHNICIAN

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### U6622.0 COMMUNICATE IN THE WORKPLACE... Cont'd

**U6622.05** **Solve problems**, by identifying the issues, gathering related data, generating alternative solutions and selecting and implementing the best alternative, to ensure safe and efficient job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6622.06** **Work as a team**, recognizing peoples diversity and individual differences, accepting responsibility for own behaviour, planning and making decisions with others and supporting the outcomes, and leading by mobilizing group to work together, to ensure safe and efficient job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6622.07** **Develop personal and work-related goals**, by working within time constraints, employing appropriate learning strategies to accomplish job-related educational goals, utilizing peoples' expertise, utilizing budgeting skills, and developing control strategies to deal with stress, to ensure safe and efficient job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6622.08** **Work in a responsible manner**, by behaving within prescribed standards and conditions, accepting responsibility for own actions, decisions and progress, and evaluating and acting upon constructive feedback, to ensure safe and efficient job performance.

---

Date Completed

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Apprentice

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Supervisor/Trainer

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**Sponsor/Employer Name**

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**Sponsor/Employer Signature**

**U6623.0 CONTROL PLANT PESTS AND DISORDERS****GENERAL PERFORMANCE OBJECTIVE**

Control plant pests or disorders by: identifying pest or disorder; determining plant health requirements; selecting treatment methods; implementing treatment methods; determining use of regulated control materials; mixing regulated control materials and calibrating equipment; applying selected treatment; maintaining application equipment; storing/disposing of regulated control materials and container; maintaining and updating logs; monitoring effectiveness of cultural control and treatment; washing hands and laundering clothing; and wearing protective clothing and equipment.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6623.01 Identify pest or disorder**, using reference materials, to determine control measures.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.02 Determine plant health requirements**, by referencing manuals and consulting with appropriate personnel, to achieve optimum plant health.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.03 Select treatment methods**, by considering cultural changes, referencing manuals and consulting with appropriate personnel, to achieve optimum plant health.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.04 Implement treatment methods**, according to desired plant health care program, to achieve optimum plant health.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

---

## HORTICULTURAL TECHNICIAN

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### U6623.0 CONTROL PLANT PESTS AND DISORDERS... Cont'd

**U6623.05** **Determine use of regulated control materials**, as required, by reading labels, referencing manuals and consulting with appropriate personnel, to achieve optimum plant health.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.06** **Mix regulated control materials and calibrate equipment**, according to specifications, to ensure required application rate.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.07** **Apply selected treatment**, according to prescribed method, to achieve required control.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.08** **Maintain application equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe, optimum and efficient performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.09** **Store/dispose of regulated control materials and container**, according to government regulations, to prevent injury to self and others and damage to equipment and environment.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6623.10** **Maintain and update logs**, recording type of cultural controls and treatment applied, date, weather conditions and required follow-up, to monitor effectiveness of control.

---

Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6623.0 CONTROL PLANT PESTS AND DISORDERS... Cont'd

**U6623.11**     **Monitor effectiveness of cultural controls and treatment**, by inspecting and recording conditions of plants and surroundings, taking corrective action as required.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6623.12**     **Wash hands and launder clothing**, after using regulated control materials and other treatments, to ensure personal health and safety.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6623.13**     **Wear required protective clothing and equipment**, when dealing with regulated control materials and other treatments, to ensure personal safety.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

\_\_\_\_\_  
**Sponsor/Employer Name**

\_\_\_\_\_  
**Sponsor/Employer Signature**

**U6624.0      TRANSPLANT/INSTALL PLANT MATERIALS****GENERAL PERFORMANCE OBJECTIVE**

Transplant/install plant materials by: conducting-on site inspection; selecting plant materials to be installed; selecting method for digging plant materials; selecting tools and equipment; digging plant materials; preparing plant materials for relocation; loading and securing plant materials for transport; storing plant material; identifying plant locations; selecting equipment, tools and supplies; selecting soil amendments; preparing transplant site; verifying plants for installation; installing plant materials; performing plant after care; disposing of recycle excess materials; and maintaining equipment.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6624.01      Conduct on-site inspection**, to determine soil quality, exposure, water availability or accessibility, to enhance transplant success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.02      Select plant materials to be installed**, according to location/soil conditions, reading labels, referencing manuals and consulting with appropriate personnel, to achieve optimum plant health.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.03      Select method for digging plant materials**, according to plant type, job condition and season, to enhance transplant success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer



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## HORTICULTURAL TECHNICIAN

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### U6624.0 TRANSPLANT/INSTALL PLANT MATERIALS... Cont'd

**U6624.04**     **Select tools and equipment**, according to plant type, job condition, season, transportation and installation methods selected, to enhance transplant success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.05**     **Dig plant material**, manually or mechanically, to minimize damage to plant and to enhance transplant success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.06**     **Prepare plant material for relocation**, by wrapping, applying anti-desiccant and/or containerizing to ensure transplant success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.07**     **Load and secure plant material for transport**, by tying and tarping, to minimize dehydration and plant damage.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.08**     **Store plant material**, according to site and plant conditions, by protecting from adverse weather and theft/vandalism, to minimize plant stress/loss, until installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.09**     **Identify planting locations**, using measuring instruments, to meet plans and specifications.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

---

## HORTICULTURAL TECHNICIAN

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### U6624.0      **TRANSPLANT/INSTALL PLANT MATERIALS...** Cont'd

**U6624.10**      **Select equipment, tools and supplies**, according to job site, and plant type, size, and condition, to install plant material according to plans and specifications.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.11**      **Select soil amendments**, according to specifications, plant requirements and site conditions, to ensure transplant success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.12**      **Prepare transplant site**, according to plans and specifications, to produce desired planting/growing conditions.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.13**      **Verify plants for installation**, by checking quantities, varieties and conditions, to meet plans and specifications.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.14**      **Install plant materials**, manually or mechanically, according to plans, specifications and industry standards.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6624.15**      **Perform plant aftercare**, by watering, guying, staking, pruning and/or applying seasonal protection, to ensure transplant success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

---

## HORTICULTURAL TECHNICIAN

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**U6624.0      TRANSPLANT/INSTALL PLANT MATERIALS...Cont'd**

**U6624.16      Dispose of or recycle excess materials**, according to government regulations/company practices, to ensure a clean and healthy environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6624.17      Maintain equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation and minimize damage to the environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

\_\_\_\_\_  
**Sponsor/Employer Name**

\_\_\_\_\_  
**Sponsor/Employer Signature**

**U6625.0      MANAGE GARDENS AND GROUNDS****GENERAL PERFORMANCE OBJECTIVE**

Manage gardens and grounds by: selecting tools and equipment; preparing planting beds; planting/transplanting annuals, perennials, and ground covers; applying fertilizer/ watering plant materials; maintaining gardens; determining water and fertilizer needs; pruning plants; prepare gardens for winter; maintaining hard surfaces; disposing of or recycling excess materials; and maintaining equipment.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6625.01      Select tools and equipment**, according to site conditions including accessibility and suitability, to achieve safe and efficient installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.02      Prepare planting beds**, by tilling soil, incorporating regulated and/or unregulated amendments as required, in compliance with government legislation, removing weeds/garbage/debris and edging, to enhance growing conditions.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.03      Plant/transplant annuals, perennials and ground covers**, according to plans and specifications, in order to ensure planting/transplanting success.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.04      Apply fertilizer/ water plant material**, using required methods, to enhance plant growth.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

---

## HORTICULTURAL TECHNICIAN

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### U6625.0      **MANAGE GARDENS AND GROUNDS...** Cont'd

**U6625.05      Maintain gardens**, by using methods such as thinning, raking, weeding, cultivating, mulching, staking and/or edging, to enhance plant growth/health and aesthetic appeal.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.06      Determine water and fertilizer needs**, by monitoring plants, soil conditions and infestations, to ensure optimum plant health and aesthetic appeal.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.07      Prune plants**, according to required equipment/tools and techniques, to ensure safe and efficient job performance, optimum plant health and aesthetic appeal.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.08      Prepare gardens for winter**, by protecting plants from adverse weather conditions and infection/disease, including removal of annuals, weeds, cutting back perennials, as required, and by removal of debris, to enhance winter survival and aesthetic appeal.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.09      Maintain hard surfaces**, by sweeping, blowing, controlling vegetation, washing and sealing, performing minor repairs, and edging walks and driveways, to achieve a safe and aesthetically appealing site.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

---

## HORTICULTURAL TECHNICIAN

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### U6625.0      **MANAGE GARDENS AND GROUNDS-** Cont'd

**U6625.10      Dispose of or recycle excess materials**, according to government regulations/company practices, to ensure a clean and healthy environment.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6625.11      Maintain equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation and minimize damage to the environment.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

---

**Sponsor/Employer Name**

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**Sponsor/Employer Signature**

**U6626.0      APPLY FERTILIZERS****GENERAL PERFORMANCE OBJECTIVE**

Apply Fertilizers by: identifying nutrient requirements; selecting fertilizer type and formulation; selecting application method; applying selected formulation; maintaining application equipment; inspecting and recording condition of plants and surroundings; storing/disposing of fertilizers/containers; and maintaining and updating records.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6626.01      Identify nutrient requirements**, by evaluating plant conditions, preparing growing media/tissue samples for analysis, as required, to mitigate deficiencies.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6626.02      Select fertilizer type and formulation**, according to media/tissue test results, to meet specific plant requirements.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6626.03      Select application method**, according to fertilizer type and formulation, to ensure effective and efficient distribution.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6626.0 APPLY FERTILIZERS- Cont'd

**U6626.04**     **Apply selected formulation**, by calibrating/operating required equipment, according to predetermined rate, to achieve required application and plant health.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6626.05**     **Maintain application equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6626.06**     **Inspect and record condition of plants and surroundings**, by monitoring plant/growing media, to evaluate effectiveness of fertilizer application.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6626.07**     **Store/dispose of fertilizers/containers**, according to government regulations, to prevent injury to self and others, and damage to equipment, product and environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6626.08**     **Maintain and update records**, including recording type of treatment, dates and weather conditions, to track effectiveness of treatment relating to plant health.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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**Sponsor/Employer Name**

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**Sponsor/Employer Signature**



**U6627.0 IRRIGATE PLANTS****GENERAL PERFORMANCE OBJECTIVE**

Irrigate plants by: determining system design, capacity and water quality; establishing irrigation rate, method and schedule; watering plants; maintaining irrigation equipment; programming/operating control systems; troubleshooting and affecting repair to in-ground irrigation system; performing spring start-up in the spring and shut-down in the fall; and maintaining clear and concise records.

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**PERFORMANCE OBJECTIVES****SKILLS**

- U6627.01 Determine system design, capacity and water quality**, by measuring static water pressure and calculating working pressure and flow for the worst-case emission device in order to confirm suitability for irrigation.

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Date Completed

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Apprentice

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Supervisor/Trainer

- U6627.02 Establish irrigation rate, method and schedule**, by assessing plant type and condition, growing media and environmental conditions, to meet water requirements.

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Date Completed

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Apprentice

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Supervisor/Trainer

- U6627.03 Water plants**, according to required rate and method, to meet water requirements.

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Date Completed

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Apprentice

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Supervisor/Trainer

- U6627.04 Maintain irrigation equipment**, by inspecting for damages, performing minor repairs, cleaning and storing according to manufacturer specifications, in order to maintain efficient, effective and safe operation.

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Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6627.0      IRRIGATE PLANTS...Cont'd

**6627.05**      **Program/operate control systems**, by determining application rates and run times, to meet plant water requirements/health.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6627.06**      **Troubleshoot and affect repair to an in-ground irrigation system**, by isolating source of problems, selecting tools and carrying out corrective measures, to re-establish an effective and efficient operating system.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6627.07**      **Perform start-up in the spring and shut-down in the fall**, according to established procedures, to maintain an efficient operation and protection of system.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6627.08**      **Maintain clear and concise records**, including dates, locations, methods, application rates, volumes and additives used, to monitor irrigation effectiveness and plant health.

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Date Completed

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Apprentice

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Supervisor/Trainer

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**Sponsor/Employer Name**

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**Sponsor/Employer Signature**

**U6628.0 PROPAGATE PLANTS****GENERAL PERFORMANCE OBJECTIVE**

Propagate plants by: selecting stock plants; selecting required propagation technique; preparing propagation area and growing medium; collecting and preparing propagation materials; placing propagule into required environment; maintaining propagation environment; conditioning plants for growing-on; disposing of or recycling excess materials; and maintaining propagation records.

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**PERFORMANCE OBJECTIVES****SKILLS**

**U6628.01** **Select stock plants**, according to type/name and condition, to produce vigorous progeny.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6628.02** **Select required propagation technique**, according to plant type, condition, source, purpose and season, to maximize reproduction success.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6628.03** **Prepare propagation area and growing medium**, according to selected technique and plant type and condition, to maximize reproduction success.

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Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6628.0 PROPAGATE PLANTS... Cont'd

**U6628.04**     **Collect and prepare propagation materials**, including treating cuttings with root-promoting hormone and anti-fungal material, according to government legislation, preparing scion wood and understock, and pre-treating/preparing seed, as required, to initiate root and shoot growth.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6628.05**     **Place propagule into required environment**, according to selected technique, plant type and condition, in order to initiate root and shoot growth.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6628.06**     **Maintain propagation environment**, including misting, irrigating, fertilizing/amendments and monitoring/controlling pests, according to government legislation and to ensure root and shoot growth.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6628.07**     **Condition plants for growing-on**, including hardening-off, pruning and feeding, to ensure healthy plant growth.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6628.08**     **Dispose of or recycle excess materials**, according to government regulations/company practices, to ensure a clean and healthy environment.

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Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6628.0 PROPAGATE PLANTS... Cont'd

**U6628.09** **Maintain propagation records**, including dates, plant types, quantities, success rates, propagation method and environment, for future reference/evaluation.

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Date Completed

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Apprentice

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Supervisor/Trainer

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Sponsor/Employer Name

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Sponsor/Employer Signature

**U6629.0      PRODUCE PLANTS****GENERAL PERFORMANCE OBJECTIVE**

Produce plants by: preparing growing media/field planting site; selecting container/field production site; preparing plants for potting or planting; installing plant into growing medium; maintaining optimum growing conditions; harvesting and grading plants; placing plants in holding environment; disposing or recycling excess materials; and maintaining production records.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6629.01      Prepare growing media/field planting site**, manually or mechanically, to provide optimum growing conditions.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6629.02      Select container/field production site**, according to plant growth requirements, to provide optimum growing conditions, ensure plant health and conform to industry/contract specifications.

**U6629.03      Prepare plants for potting or planting**, according to plant growth requirements, to provide optimum growing conditions, ensure plant health and conform to industry/contract specifications.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6629.04      Install plant into growing medium**, at the required depth and/or spacing, to ensure optimum growing conditions.

---

Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6629.0 PRODUCE PLANTS- Cont'd

**U6629.05** **Maintain optimum growing conditions**, by irrigating, fertilizing, and monitoring/controlling pests, according to government legislation, for continued plant growth and development.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6629.06** **Harvest and grade plants**, according to the Canadian Nursery Landscape Association Standards, to meet customer requirements.

---

Date Completed

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Apprentice

---

Supervisor/Trainer

**U6629.07** **Place plants in holding environment**, according to plant species, to minimize stress prior to transport.

---

Date Completed

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Apprentice

---

Supervisor/Trainer

**U6629.08** **Dispose of or recycle excess materials**, according to government regulations/company practices, to ensure a clean and healthy environment.

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Date Completed

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Apprentice

---

Supervisor/Trainer

**U6629.09** **Maintain production records**, including dates, plant species, quantities, production methods and success rates, for future reference/evaluation.

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Date Completed

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Apprentice

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Supervisor/Trainer

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Sponsor/Employer Name

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Sponsor/Employer Signature

**U6630.0 PRUNE PLANTS****GENERAL PERFORMANCE OBJECTIVE**

Prune plants by: identifying plants; selecting pruning method and timing; removing plants parts; isolating and disposing of contaminated plant parts; disposing of or composting non-contaminated parts; and maintaining equipment.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6630.01 Identify plants**, plant parts and correct position to cut, including growth collar, by referencing manuals and consulting with appropriate personnel, to determine growth characteristics and pruning requirements.

---

Date Completed

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Apprentice

---

Supervisor/Trainer

**U6630.02 Select pruning method and timing**, according to required growth characteristics, safety and aesthetics, to achieve desired results.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6630.03 Remove plant parts**, using required tools and pruning methods, to achieve desired results.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6630.04 Isolate and dispose of contaminated plant parts**, using methods such as burning, with permit, or disposal at a landfill site, or chipping, depending on the type/virulence of infestation, according to government regulations and to prevent the spread of infestation.

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Date Completed

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Apprentice

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Supervisor/Trainer



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## HORTICULTURAL TECHNICIAN

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**U6630.0**      **PRUNE PLANTS-** Cont'd

**U6630.05**      **Dispose of or compost non-contaminated plant parts**, according to government regulations, to ensure a clean and healthy environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6630.06**      **Maintain equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation, control the spread of infestations and minimize damage to the environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

\_\_\_\_\_  
**Sponsor/Employer Name**

\_\_\_\_\_  
**Sponsor/Employer Signature**

**U6631.0 ESTABLISH TURFGRASS****GENERAL PERFORMANCE OBJECTIVE**

Establish turfgrass by: analyzing turfgrass site; analyzing growing medium; determining turf species for the site and purpose; laying out site and setting grades; roughing grade site; amending growing medium; fine-grading site; applying seed mix and mulch; rolling seed; protecting seeded areas; installing sod; rolling sod; irrigating turfgrass; disposing or composting excess materials; and maintaining installation/irrigation records.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6631.01**     **Analyze turfgrass site**, by on-site survey, to determine drainage characteristics, condition, location, use and exposure and ensure safe and efficient job performance.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6631.02**     **Analyze growing medium**, by sampling/testing of growing medium, to determine percentage of sand, silt and clay, organic matter content, nutrient content and suitability to turf type.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6631.03**     **Determine turf species for the site and purpose**, by referencing manuals, and consulting with appropriate personnel, to ensure successful turf establishment.

---

Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6631.0 ESTABLISH TURFGRASS... Cont'd

**U6631.04**     **Layout site and set grades**, using measuring devices, to meet plans and specifications.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6631.05**     **Rough grade site**, according to plans and specifications, to establish required grades.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6631.06**     **Amend growing medium**, by incorporating stone, sand, organic materials, and/or fertilizers, to ensure turfgrass development.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6631.07**     **Fine-grade site**, according to plans and specifications, to ensure optimum conditions for turfgrass establishment and use.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6631.08**     **Apply seed mix and mulch**, according to plans and specifications, to ensure germination and turfgrass establishment.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6631.09**     **Roll seed**, manually or mechanically, to maximize soil contact and ensure turfgrass establishment.

---

Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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**U6631.0 ESTABLISH TURFGRASS... Cont'd**

**U6631.10 Protect seeded areas**, by erecting barriers, to minimize damage to seeded area.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6631.11 Install sod**, manually or mechanically, by staggering, fitting joints and pegging as required, to ensure turfgrass establishment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6631.12 Roll sod**, manually or mechanically, to maximize soil contact and ensure turfgrass establishment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6631.13 Irrigate turfgrass**, after installation, manually or mechanically depending on environmental conditions, to ensure turfgrass establishment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6631.14 Dispose or compost excess materials**, according to government regulations/company practices, to ensure a clean and healthy environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6631.15 Maintain installation/irrigation records**, including: dates, turfgrass species, quantities, methods and success rates, for future reference/evaluation.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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**Sponsor/Employer Name**

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**Sponsor/Employer Signature**

**U6632.0 MOW TURFGRASS****GENERAL PERFORMANCE OBJECTIVE**

Mow turfgrass by: assessing turfgrass; selecting and adjusting equipment; determining mowing pattern/procedure; preparing mowing site; determining height and frequency of cut; cutting and trimming turfgrass; trimming edges of turfgrass areas; collecting and disposing of or composting turfgrass clippings; conducting final inspection; monitoring turfgrass quality; maintaining equipment; and maintaining records.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6632.01** **Assess turfgrass**, according to use and/or mowing specifications, to determine mowing requirements.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6632.02** **Select and adjust equipment**, according to mowing requirements, site conditions and type of turf species, to achieve desired quality/utility of cut.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6632.03** **Determine mowing pattern/procedure**, considering safety, previous mowing patterns, slope, obstructions, dampness or frost, to minimize compaction and achieve an attractive, functional surface and healthy turf.

---

Date Completed

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Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6632.0 MOW TURFGRASS... Cont'd

**U6632.04 Prepare mowing site**, by removing all debris and obstructions, to ensure safe and efficient equipment operation.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6632.05 Determine height and frequency of cut**, by referencing manuals and consulting with appropriate personnel, to maximize turf health and use.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6632.06 Cut and trim turfgrass**, according to pre-determined pattern and procedure including removal or mulching of clippings, to achieve desired results.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6632.07 Trim edges of turfgrass areas**, manually or mechanically, minimizing damage to plant materials and site features, to achieve a uniform cut.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6632.08 Collect and dispose of or compost turfgrass clippings**, according to government regulations, to ensure a clean and healthy environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6632.09 Conduct final inspection**, upon job completion, to assess quality of cut.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6632.0 MOW TURFGRASS... Cont'd

**U6632.10** **Monitor turfgrass quality**, by visual assessment or testing, to identify potential turfgrass problems and report as required.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6632.11** **Maintain equipment**, by cleaning and servicing, according to manufacturer specifications, to ensure safe and efficient operation, control the spread of pathogens and minimize damage to the environment.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6632.12** **Maintain records**, including mowing dates, turfgrass species, site conditions, equipment used, mowing patterns and procedures and operator, for future reference/evaluation.

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Date Completed

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Apprentice

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Supervisor/Trainer

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**Sponsor/Employer Name**

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**Sponsor/Employer Signature**

**U6633.0 CULTIVATE TURFGRASS****GENERAL PERFORMANCE OBJECTIVE**

Cultivate turfgrass by: assessing turfgrass condition; selecting and adjusting equipment/tools; aerating turfgrass; applying top-dressing materials and turf seed; dethatching turfgrass; over-seeding turfgrass; cleaning cultivated area; disposing or composting excess materials; irrigating turfgrass; monitoring turfgrass quality; and maintaining records.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6633.01**     **Assess turfgrass condition**, according to use and/or cultural requirements, to determine cultivation procedures.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.02**     **Select and adjust equipment/tools**, according to cultivation requirements and site conditions, to achieve desired results and minimize damage to surrounding plants/features.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.03**     **Aerate turfgrass**, using prescribed equipment, to improve structure of growing medium and optimize turfgrass growth.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer



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## HORTICULTURAL TECHNICIAN

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### U6633.0 CULTIVATE TURFGRASS... Cont'd

**U6633.04**     **Apply top-dressing materials and turf seed**, according to pre-determined rates and specifications, to improve growing medium and achieve desired results.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.05**     **Dethatch turfgrass**, where thatch buildup is excessive, by manual or mechanical methods, to ensure turfgrass growth.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.06**     **Overseed turfgrass**, manually or mechanically, to maintain turfgrass density and/or introduce desired turfgrass species.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.07**     **Clean cultivated area**, by removing excess materials, to achieve desired turfgrass surface.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.08**     **Dispose or compost excess materials**, according to government regulations/company practices, to ensure a clean and healthy environment.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.09**     **Irrigate turfgrass**, manually or automatically, to infiltrate amendments and reduce stress.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6633.0 CULTIVATE TURFGRASS...Cont'd

**U6633.10** **Monitor turfgrass quality**, by visual assessment or testing, to determine success of cultivation practices and report as required.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6633.11** **Maintain records**, including date, time, site conditions, practices employed, materials and equipment used, for future reference and evaluation.

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Date Completed

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Apprentice

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Supervisor/Trainer

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Sponsor/Employer Name

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Sponsor/Employer Signature

**U6634.0      INSTALL HORIZONTAL NATURAL/PRECAST STONE SURFACES****GENERAL PERFORMANCE OBJECTIVE**

Install horizontal natural/precast stone surfaces by: determining scope of work and preparing take off of quantities of materials and equipment required; laying out site; selecting tools and equipment; verifying materials; preparing sub-grade and base materials; compacting sub-grade and base materials; installing edging; preparing stone; mixing mortar; placing natural/precast stone in a wet or dry application; cutting stone; filling joints; compacting precast stone in dry application; cleaning and finishing stone surface; disposing of or recycling waste materials; and maintaining equipment.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6634.01      Determine scope of work and prepare take off of materials and equipment required**, by interpreting plans and specifications, and work orders, to ensure safe and efficient job performance.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6634.02      Lay out site**, according to plans and specifications and utility locations, using measuring instruments, to achieve safe and accurate installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6634.03      Select tools and equipment**, according to site conditions, including accessibility and suitability, to achieve safe and efficient installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6634.04      Verify materials**, according to suitability, colour, type, quality, size, quantity and condition, to meet plans and specifications.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

## HORTICULTURAL TECHNICIAN

### U6634.0 INSTALL HORIZONTAL NATURAL/PRECAST STONE SURFACES... Cont'd

**U6634.05 Prepare sub-grade and base materials**, by establishing specified final grade/slope, excavating or back filling, installing drainage, installing granular fill/or concrete base as specified and compacting, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.06 Compact sub-grade and base materials**, manually or mechanically, to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.07 Install edging**, manually or mechanically, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.08 Prepare stone**, using required tools and equipment, to cut, split, chip and face, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.09 Mix mortar**, when installing wet-laid applications, by manual or mechanical means, to achieve specified mixture and consistency.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.10 Place natural/precast stone in a wet or dry application**, manually or mechanically, to achieve desired slope and to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## HORTICULTURAL TECHNICIAN

### U6634.0 INSTALL HORIZONTAL NATURAL/PRECAST STONE SURFACES... Cont'd

**U6634.11** **Cut stone**, with chisel/mallet, concrete saw, wet saw and/or guillotine, to achieve an even edge and precise fit and to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.12** **Fill joints**, using mortar/caulking or granular materials, to bond and support stones and achieve specified finish.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.13** **Compact precast stone in dry application**, by manual or mechanical means, to achieve required surface and stability.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.14** **Clean and finish stone surface**, using required tools, equipment and cleaning/finishing agents, to remove excess mortar, granular material and stains.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6634.15** **Dispose of or recycle waste materials**, according to government regulations, to ensure a clean and healthy environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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**U6634.0**      **INSTALL HORIZONTAL NATURAL/PRECAST STONE SURFACES...** Cont'd

**U6634.16**      **Maintain equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation and minimize damage to the environment.

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Date Completed

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Apprentice

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Supervisor/Trainer

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Sponsor/Employer Name

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Sponsor/Employer Signature

**U6635.0      PERFORM WOOD CONSTRUCTION****GENERAL PERFORMANCE OBJECTIVE**

Perform wood construction by: determining scope of work and preparing take off of quantities of materials and equipment required; laying out site; selecting tools and equipment; verifying materials; preparing wood; installing wood; finishing wood surfaces; disposing of or recycling waste materials; and maintaining equipment.

---

**PERFORMANCE OBJECTIVES****SKILLS**

**U6635.01      Determine scope of work and prepare take off of quantities of materials and equipment required,** by interpreting plans and specifications, and work orders, to ensure safe and efficient job performance.

---

Date Completed

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Apprentice

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Supervisor/Trainer

**U6635.02      Lay out site,** according to plans and specifications and utility locations, using measuring instruments, to achieve a safe and accurate installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6635.03      Select tools and equipment,** according to site conditions, including accessibility and suitability, to achieve safe and efficient installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6635.04      Verify materials,** according to suitability, type, quality, size, quantity and condition, to meet plans and specifications.

---

Date Completed

---

Apprentice

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Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6635.0 PERFORMS WOOD CONSTRUCTION... Cont'd

**U6635.05 Prepare wood**, by such means as measuring and cutting, to meet plans and specifications.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6635.06 Install wood**, by securing components with specified/required hardware/fasteners/glues, to achieve a sound assembly according to plans and specifications.

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Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6635.07 Finish wood surfaces**, manually or mechanically, to meet plans and specifications.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6635.08 Dispose of or recycle waste materials**, according to government regulations, to ensure a clean and healthy environment.

---

Date Completed

---

Apprentice

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Supervisor/Trainer

**U6635.09 Maintain equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation and minimize damage to the environment.

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Date Completed

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Apprentice

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Supervisor/Trainer

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Sponsor/Employer Name

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Sponsor/Employer Signature



**U6636.0      INSTALL HORIZONTAL CONCRETE SURFACES****GENERAL PERFORMANCE OBJECTIVE**

Install horizontal concrete surfaces by: determining scope of work and preparing take off of quantities of materials and equipment required; laying out site; selecting tools and equipment; verifying materials; preparing sub-grade and base materials; constructing and bracing forms; installing welded wire mesh/steel reinforcing bars; preparing concrete; installing expansion joint material; placing concrete; finishing surface, edges and joints; applying curing techniques; dismantling forms and cleaning job site; installing control joints; disposing of or recycling waste materials; and maintaining equipment.

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**PERFORMANCE OBJECTIVES****SKILLS**

**U6636.01      Determine scope of work and prepare take off of quantities of materials and equipment required,** by interpreting plans and specifications, and work orders, to ensure safe and efficient job performance.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6636.02      Lay out site,** according to plans and specifications and utility locations, using measuring instruments, to achieve safe and accurate installation.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6636.03      Select tools and equipment,** according to site conditions including accessibility and suitability, to achieve safe and efficient installation.

---

Date Completed

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Apprentice

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Supervisor/Trainer

## HORTICULTURAL TECHNICIAN

### U6636.0 INSTALL HORIZONTAL CONCRETE SURFACES...Cont'd

**U6636.04** **Verify materials**, according to suitability, colour, type, quality, size, quantity and condition, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.05** **Prepare sub-grade and base materials**, by establishing specified final grade/slope, excavating or back filling, installing drainage, installing granular fill and compacting, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.06** **Construct and brace forms**, using required tools and materials, to retain concrete, establish finished slope and grade and meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.07** **Install welded wire mesh/steel reinforcing bars**, according to plans and specifications, to achieve structural strength.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.08** **Prepare concrete**, manually or mechanically, by combining aggregate, sand, cement, admixtures and potable water, to achieve specified strength and consistency.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## HORTICULTURAL TECHNICIAN

### U6636.0 INSTALL HORIZONTAL CONCRETE SURFACES... Cont'd

**U6636.09** **Install expansion joint material**, manually, at required locations, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.10** **Place concrete**, manually or mechanically, by filling forms, shoveling, consolidating and striking off, to achieve desired grade or elevation.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.11** **Finish surface, edges and joints**, including hand tooled control joints, manually or mechanically, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.12** **Apply curing techniques**, manually, mechanically or with curing agents, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.13** **Dismantle forms and clean job site**, by removing all unused materials and debris, to provide a neat and aesthetically pleasing job site.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.14** **Install control joints**, by saw cutting, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6636.15** **Dispose of or recycle waste materials**, according to government regulations, to ensure a clean and healthy environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6636.0      INSTALL HORIZONTAL CONCRETE SURFACES... Cont'd

**U6636.16**      **Maintain equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation and minimize damage to the environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

\_\_\_\_\_  
Sponsor/Employer Name

\_\_\_\_\_  
Sponsor/Employer Signature

**U6637.0 CONSTRUCT RETAINING WALLS****GENERAL PERFORMANCE OBJECTIVE**

Construct retaining walls by: determining scope of work and preparing take off of quantities of materials and equipment required; laying out site; selecting tools and equipment; verifying materials; preparing sub-grade and base materials; compacting sub-grade and base materials; installing wall materials; constructing and bracing forms for concrete; placing concrete in forms; preparing stone; mixing mortar for wet application; placing natural/precast stone in wet or dry application; cutting stone; filling joints; cleaning and finishing stone surface; removing forms from concrete; installing drainage materials/components; backfilling retaining wall; disposing or recycling waste materials; maintaining equipment.

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**PERFORMANCE OBJECTIVES****SKILLS**

**U6637.01 Determine scope of work and prepare take off of quantities of materials and equipment required,** by interpreting plans and specifications, and work orders, to ensure safe and efficient job performance.

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Date Completed

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Apprentice

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Supervisor/Trainer

**U6637.02 Lay out site,** according to plans and specifications and utility locations, using measuring instruments, to achieve safe and accurate installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

**U6637.03 Select tools and equipment,** according to site conditions, including accessibility and suitability, to achieve safe and efficient installation.

---

Date Completed

---

Apprentice

---

Supervisor/Trainer

## HORTICULTURAL TECHNICIAN

### U6637.0 CONSTRUCT RETAINING WALLS... Cont'd

**U6637.04** **Verify materials**, according to suitability, type, quality, size, quantity and condition, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.05** **Prepare sub-grade and base materials**, by excavating, shoring as required, installing drainage, granular fill/concrete and grade, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.06** **Compact sub-grade and base materials**, manually or mechanically, to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.07** **Install wall materials**, including tiebacks and steps, manually or mechanically, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.08** **Construct and brace forms for concrete**, manually or mechanically, to meet plans and specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6637.0 CONSTRUCT RETAINING WALLS... Cont'd

**U6637.09 Place concrete in forms**, manually or mechanically, raking, vibrating and screeding, to achieve desired grade or elevation.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.10 Prepare stone**, using required tools and equipment, to cut, split, chip and face, and to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.11 Mix mortar for wet application**, manually or mechanically, testing to specifications, to achieve specified mixture and consistency.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.12 Place natural/precast stone in a wet or dry application**, manually or mechanically, to achieve desired drainage and to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.13 Cut stone**, manually or mechanically, by using tools including concrete saws, wet saws and/or guillotines, to achieve an even edge and precise fit and to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.14 Fill joints**, manually or mechanically, using mortar/caulking or granular materials, to bond and support stones and achieve specified finish.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

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## HORTICULTURAL TECHNICIAN

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### U6637.0 CONSTRUCT RETAINING WALLS... Cont'd

**U6637.15**     **Clean and finish stone surface**, using required tools, equipment and cleaning/finishing agents, to remove excess mortar, granular material and stains.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.16**     **Remove forms from concrete**, after setting, by dismantling braces and shoring and remove debris, for disposal or re-use.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.17**     **Install drainage materials/components**, according to plans and specifications, to provide positive drainage at base of wall.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.18**     **Backfill retaining wall**, using required materials, manually or mechanically, to meet specifications.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**U6637.19**     **Dispose or recycle waste materials**, according to government regulations, to ensure a clean and healthy environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer



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## HORTICULTURAL TECHNICIAN

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### U6637.0 CONSTRUCT RETAINING WALLS... Cont'd

**U6637.20** **Maintain equipment**, by cleaning and servicing according to manufacturer specifications, to ensure safe and efficient operation and minimize damage to the environment.

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

\_\_\_\_\_  
**Sponsor/Employer Name**

\_\_\_\_\_  
**Sponsor/Employer Signature**

## **HORTICULTURAL TECHNICIAN**

### **APPRENTICE RECORD**

**APPRENTICE NAME (Print):**

#### **SPONSOR/EMPLOYER INFORMATION**

Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

#### **SUMMARY OF TRAINING**

Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## **HORTICULTURAL TECHNICIAN**

### **APPRENTICE RECORD**

**APPRENTICE NAME (Print):**

#### **SPONSOR/EMPLOYER INFORMATION**

Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

#### **SUMMARY OF TRAINING**

Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

## **HORTICULTURAL TECHNICIAN**

### **APPRENTICE RECORD**

**APPRENTICE NAME (Print):**

#### **SPONSOR/EMPLOYER INFORMATION**

Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

#### **SUMMARY OF TRAINING**

Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	

\_\_\_\_\_  
Date Completed

\_\_\_\_\_  
Apprentice

\_\_\_\_\_  
Supervisor/Trainer

**APPRENTICE COMPLETION FORM**

<b>APPRENTICE INFORMATION</b>	
Name (Print)	
Signature	
Client ID	

Skill Sets when completed should be signed by the Supervisor/Trainer and presented with this completion form to your local Apprenticeship Client Services Office. Any supporting documentation should also be attached.

In-school Completed                      Yes ( )                      No ( )                      Not applicable ( )  
(Proof to be Provided)

Hours completed as                      Yes ( )                      No ( )                      Not applicable ( )  
Per Contract:

<b>SPONSOR/EMPLOYER INFORMATION</b>	
Name (Print)	
Address	
Telephone	
E-mail Address	
Signature of Signing Authority	

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system. For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.