

Issued: March 1, 2018

Program: Landscape Horticulturist

To: ITA Training Providers
Articulation Chair
System Liaison Person
School Districts

Subject: **Landscape Horticulturist**

OPSN No.: **OPSN 2018 009**

Effective Date: **September 1, 2018**

Summary of Change: Please be advised that changes have occurred to the Landscape Horticulturist program as a result of the Pan-Canadian Harmonization Initiative and will be implemented effective September 1, 2018.

These changes are as follows:

- Landscape Horticulturist Program Outline Update
- Decrease of Work-Based Training Hours – 5,280 hours (from 6,480 hours)

The Harmonized Landscape Horticulturist Program Outline and Program Profile have been posted on the Landscape Horticulturist webpage at www.itabc.ca.

Rationale: At the request of industry, the Canadian Council of Directors of Apprenticeship’s (CCDA) Harmonization Initiative was launched in Fall 2013, and endorsed by the Forum of Labour Market Ministers (FLMM) in 2014. The goal of Harmonization is to *substantively align* apprenticeship systems across Canada by making apprenticeship training requirements more consistent in Red Seal trades.

In consultation with stakeholders, the CCDA identified four Harmonization priorities: trade name, total training hours (in-school plus on-the-job), number of training levels, and the sequencing of the training content.

Landscape Horticulturist is one of five trades identified for the third phase of Harmonization. After a series of consultations and pan-Canadian webinars, the finalized priorities for the Harmonized Landscape Horticulturist program were as follows:

Landscape Horticulturist	Changing in BC?	What will it be?
Trade Name	No	Landscape Horticulturist
Total Hours (Technical Training + Work Based)	Yes	6,000 total (720 technical training + 5,280 work-based)
Number of Training Levels	No	4
Training Sequence (Order of subjects taught)	Yes	Changes to training sequence

Details: A Landscape Horticulturist program review was conducted in September 2017 to align BC’s Landscape Horticulturist program to the Harmonized sequencing. The review resulted in significant changes to the current sequence of technical training.

After conducting a Gap Analysis, it was determined that a transition strategy would be necessary.

ITA will inform apprentices and employer sponsors of the changes to the program.

Attachments: ***Landscape Horticulturist Program Outline Review Details***

This attachment provides details of the revisions made to the Landscape Horticulturist Outline during the review process.

For more information contact:

ITA Program Standards
email: programstandards@itabc.ca

cc: All Staff

Key
Blue Text = Gap (Missed content)
Green Text = Overlap (Repeated content)
Orange Text = New
Black Text = No level change
** Some content only. See description of change in <i>Details of Changes</i> document
CL = Current Level
HL = Harmonized Level

Summary - Competency Migration

Overall: The Occupational Analysis Chart (OAC) for Landscape Horticulture has been aligned to the Red Seal Occupational Standard (RSOS). Therefore, all of the competencies have been renamed and restructured. This chart shows the finalized competency distribution for the Harmonized Landscape Horticulture program. It summarizes the major changes to the competencies, specifically the level they will be taught in.

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
Line A	Line A	Line A	Line A
PERFORMS SAFETY-RELATED FUNCTIONS	PERFORMS SAFETY-RELATED FUNCTIONS	PERFORMS SAFETY-RELATED FUNCTIONS	PERFORMS SAFETY-RELATED FUNCTIONS
A1 Uses personal protective equipment (PPE) and safety equipment CL1&2 (OLD A1 - Uses personal protective equipment (PPE) and safety equipment) moved to HL1 (but taught in context in L2) CL1 (OLD A2 - Identify fire types and extinguishing methods) stays in HL1 (but taught in context in L2)			

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
<p>A2 Maintains safe work environment</p> <p>CL1(OLD A3 - Uses WHMIS) stays in HL1 (but taught in context in L2)</p> <p>CL1 (OLD A4 - Recognize works hazards) stays in HL1 (but taught in context in L2)</p> <p>CL1,2 (OLD C10 - Maintain Safe Work Environment) moved to HL1 (but taught in context in L2)</p>			
<p>Line B</p> <p>USES TOOLS, EQUIPMENT AND VEHICLES</p>	<p>Line B</p> <p>USES TOOLS, EQUIPMENT AND VEHICLES</p>	<p>Line B</p> <p>USES TOOLS, EQUIPMENT AND VEHICLES</p>	<p>Line B</p> <p>USES TOOLS, EQUIPMENT AND VEHICLES</p>
<p>B1 Uses hand tools</p> <p>CL 1, 2, 3, 4 (OLD B1 - Use and maintain hand tools and power tools) moved to HL 1, 2, 3 (but taught in context in L4.) *Same learning tasks at each level but tools are specific to the level</p>	<p>B1 Uses hand tools</p> <p>CL 1, 2, 3, 4 (OLD B1 - Use and maintain hand tools and power tools) moved to HL 1, 2, 3 (but taught in context in L4.) *Same learning tasks at each level but tools are specific to the level</p>	<p>B1 Uses hand tools</p> <p>CL 1, 2, 3, 4 (OLD B1 - Use and maintain hand tools and power tools) moved to HL 1, 2, 3 (but taught in context in L4.) *Same learning tasks at each level but tools are specific to the level</p>	
<p>B2 Uses power tools</p> <p>CL 1, 2, 3, 4 (OLD B1 - Use and maintain hand tools and power tools) moved to HL 1, 2, 3 (but taught in context in L4.) *Same learning tasks at</p>	<p>B2 Uses power tools</p> <p>CL 1, 2, 3, 4 (OLD B1 - Use and maintain hand tools and power tools) moved to HL 1, 2, 3 (but taught in context in L4.) *Same learning tasks at each level but tools are specific to the level</p>	<p>B2 Uses power tools</p> <p>CL 1, 2, 3, 4 (OLD B1 - Use and maintain hand tools and power tools) moved to HL 1, 2, 3 (but taught in context in L4.) *Same learning tasks at each level but tools are specific to the level</p>	

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Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
each level but tools are specific to the level			
<p>B3 Uses measuring equipment</p> <p>CL1 (OLD B2 - Use and maintain measuring equipment) moved to HL1,2,3 *Same learning tasks at each level but equipment is specific to the level</p>	<p>B3 Uses measuring equipment</p> <p>CL1 (OLD B2 - Use and maintain measuring equipment) moved to HL1,2,3 *Same learning tasks at each level but equipment is specific to the level</p>	<p>B3 Uses measuring equipment</p> <p>CL1 (OLD B2 - Use and maintain measuring equipment) moved to HL1,2,3 *Same learning tasks at each level but equipment is specific to the level</p>	
<p>B4 Uses vehicles and motorized equipment, trailers and attachments</p> <p>CL1&2 (OLD B3 - Operate vehicles and motorized equipment & OLD B4 - Maintain vehicles and motorized equipment) CL2 (OLD B5 - Use and maintain vehicle attachments) moved to HL1,2,3</p> <p>*Content in HL1 = basic engine systems, cleaning, pre-operation check, and maintenance/repair, inspection, operation</p>	<p>B4 Uses vehicles and motorized equipment, trailers and attachments</p> <p>CL1&2 (OLD B3 - Operate vehicles and motorized equipment & OLD B4 - Maintain vehicles and motorized equipment) CL2 (OLD B5 - Use and maintain vehicle attachments) moved to HL1,2,3</p> <p>*Content in HL2 = basic vehicle systems and components, selection, inspection, operation, attaching trailer to vehicle</p>	<p>B4 Uses vehicles and motorized equipment, trailers and attachments</p> <p>CL1&2 (OLD B3 - Operate vehicles and motorized equipment & OLD B4 - Maintain vehicles and motorized equipment) CL2 (OLD B5 - Use and maintain vehicle attachments) moved to HL1,2,3</p> <p>*Content in HL3 = Environmental considerations when selecting, maintenance of equipment attachments</p>	
<p>Line C ORGANIZES WORK</p>	<p>Line C ORGANIZES WORK</p>	<p>Line C ORGANIZES WORK</p>	<p>Line C ORGANIZES WORK</p>

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
<p>C1 Performs site assessments</p> <p>CL3 (OLD C1 - Performs site assessments) moved to HL1,2,3,4</p> <p>*Content in HL1 = visual inspection, security requirements</p> <p>CL3 (OLD E7 - Assess landscape sites with respect to soils) moved to HL1,2</p> <p>*Content in HL1 = soils, compaction, drainage, slope</p>	<p>C1 Performs site assessments</p> <p>CL3 (OLD C1 - Performs site assessments) moved to HL1,2,3,4</p> <p>*Content in HL2 = public and private markings, soil tests and erosion</p> <p>CL3 (OLD E7 - Assess landscape sites with respect to soils) moved to HL1,2</p> <p>*Content in HL2 = erosion</p> <p>CL4 (OLD I1 - Maintain growing media (LT2 – assessing growing media) moved to HL2</p>	<p>C1 Performs site assessments</p> <p>CL3 (OLD C1 - Performs site assessments) moved to HL1,2,3,4</p> <p>*Content in HL3 = protecting site conditions, assess soils</p>	<p>C1 Performs site assessments</p> <p>CL3 (OLD C1 - Performs site assessments) moved to HL1,2,3,4</p> <p>*Content in HL4 = environmental conditions</p>
<p>C2 Uses documentation and reference material</p> <p>CL3 (OLD C2 - Uses documentation and reference material) moved to HL1,2,3,4</p> <p>*Content in HL1 = documents, safety, textbooks</p>	<p>C2 Uses documentation and reference material</p> <p>CL3 (OLD C2 - uses documentation and reference material) moved to HL1,2,3,4</p> <p>*Content in HL2 = interpret documentation</p>	<p>C2 Uses documentation and reference material</p> <p>CL3 (OLD C2 - uses documentation and reference material) moved to HL1,2,3,4</p> <p>*Content in HL3 = field books and catalogues</p>	<p>C2 Uses documentation and reference material</p> <p>CL3 (OLD C2 - uses documentation and reference material) moved to HL1,2,3,4</p> <p>*Content in HL4 = interpret drawings and design intent, documentation for estimating</p>

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
<p>CL3 (OLD C4 - Comply with policies and regulations) moved to HL HL1,2,3,4</p> <p>*Content in HL1 = safety regs, contacting authorities and locators</p>	<p>CL3 (OLD C4 - comply with policies and regulations) moved to HL HL1,2,3,4</p> <p>*Content in HL2 = compliance</p> <p>CL 4 (OLD D4 - Prepare estimates for basic landscape installation projects: LT1 – read plans) moved to HL2</p> <p>CL3 (OLD F1 - Interpret landscape plans) moved to HL2</p>		
<p>C3 Maintains records</p> <p>CL3 (OLD C3 – Maintains Records) moved to HL1,2,3,4</p> <p>*Content in HL1 = safety records, tool and equipment records</p>	<p>C3 Maintains records</p> <p>CL3 (OLD C3– Maintains Records) moved to HL1,2,3,4</p> <p>*Content in HL2 = additional records</p> <p>CL4 (OLD C7 – Orders plants and materials: packing slips) moved to HL2</p>	<p>C3 Maintains records</p> <p>CL3 (OLD C3– Maintains Records) moved to HL1,2,3,4</p> <p>*Content in HL3 = shipping and receiving, client communication</p>	<p>C3 Maintains records</p> <p>CL3 (OLD C3– Maintains Records) moved to HL1,2,3,4</p> <p>*Content in HL4 = work records, IPM program</p>

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Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
		<p>C4 Participates in job planning activities</p> <p>CL3 (OLD C5 - Plans daily tasks) moved to HL 3,4</p> <p>*Content in HL3 = prioritize and sequence tasks</p> <p>CL3 (OLD F2 - Participate in job planning activities) moved to HL3,4</p> <p>*Content in HL3 = verify materials</p>	<p>C4 Participates in job planning activities</p> <p>CL3 (OLD C5 - Plans daily tasks) moved to HL 3,4</p> <p>*Content in HL4 = modify tasks, delegate tasks</p> <p>CL3 (OLD F2 - Participates in job planning activities) moved to HL3,4</p> <p>*Content in HL4 = schedule labour, materials, tools, equipment</p>
		<p>C5 Orders materials</p> <p>CL4 (OLD C7 - Orders plants and materials) moved to HL3</p>	
	<p>C6 Organizes materials and equipment</p> <p>CL2 (OLD C9 - Organize plants, materials and equipment) moved to HL2,3</p> <p>*Content in HL2 = inspection, verification, describe storage areas</p>	<p>C6 Organizes materials and equipment</p> <p>CL2 (OLD C9 - Organize plants, materials and equipment) moved to HL2,3</p> <p>*Content in HL3 = receive, unload, record, handle</p>	

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
<p>C7 Transports materials</p> <p>CL3 (OLD C8 - Transports Materials) moved to HL1,2</p> <p>*Content in HL1 = prepare for transport</p>	<p>C7 Transports materials</p> <p>CL3 (OLD C8 - Transports Materials) moved to HL1,2</p> <p>*Content in HL2 = load and transport</p>		
<p>C8 Transports equipment</p> <p>CL3,4 (OLD B6 - Transports equipment) moved to HL1,2</p> <p>*Content in HL1 = secure, load and unload</p>	<p>C8 Transports equipment</p> <p>CL3,4 (OLD B6 - Transports equipment) moved to HL1,2</p> <p>*Content in HL 2 = transports</p>		
<p>Line D PARTICIPATES IN MARKETING AND SALES</p>	<p>Line D PARTICIPATES IN MARKETING AND SALES</p>	<p>Line D PARTICIPATES IN MARKETING AND SALES</p>	<p>Line D PARTICIPATES IN MARKETING AND SALES</p>
		<p>D1 Controls inventory</p> <p>(OLD D1 - Controls inventory) = No change</p>	
		<p>D2 Sells products and services</p> <p>CL4 (OLD D2 - Sells products and services) moved to HL3</p>	

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Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
		D3 Maintains customer relations CL4 (OLD D3 - Maintains customer relations) moved to HL3	
			D4 Prepares estimates (OLD D4 - Prepares estimates for basic landscape installation projects) = No change
Line E USE COMMUNICATION AND MENTORING TECHNIQUES	Line E USE COMMUNICATION AND MENTORING TECHNIQUES	Line E USE COMMUNICATION AND MENTORING TECHNIQUES	Line E USE COMMUNICATION AND MENTORING TECHNIQUES
E1 Uses communication techniques CL1,2 (OLD C6- Communicate with others) moved to HL1 (but taught in context in L2)			
			E2 Uses mentoring techniques CL1(OLD C11 - Examine interpersonal and supervisory skills) (LT 2,3,6) and CL2 moved to HL4
Line F APPLIES HORTICULTURAL PRACTICES	Line F APPLIES HORTICULTURAL PRACTICES	Line F APPLIES HORTICULTURAL PRACTICES	Line F APPLIES HORTICULTURAL PRACTICES

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
<p>F1 Practices basic plant science</p> <p>CL1,2 (OLD E4 - Describe plant science as it applies to Horticulture) = No change in number of levels *Content in HL1 = plant morphological characteristics</p>	<p>F1 Practices basic plant science</p> <p>CL 1,2 (OLD E4 - Describe plant science as it applies to Horticulture) = No change in number of levels *Content in HL2 = internal anatomy</p>		
<p>F2 Identifies plants and plant requirements</p> <p>CL1,2,3,4 (OLD E1 - Identify plants and plant requirements) = No change in number of levels *Content in HL1= plant requirements, morphological characteristics, growing requirements</p>	<p>F2 Identifies plants and plant requirements</p> <p>CL1,2,3,4 (OLD E1 - identify plants and plant requirements) = No change in number of levels *Content in HL2 = weed and invasive plants</p>	<p>F2 Identifies plants and plant requirements</p> <p>CL1,2,3,4 (OLD E1 - Identify plants and plant requirements) = No change in number of levels *Content in HL3 = tropical, floral, interior situations, plants for difficult situations</p>	<p>F2 Identifies plants and plant requirements</p> <p>CL1,2,3,4 (OLD E1 - Identify plants and plant requirements) = No change in number of levels *Content in HL4 = native and seasonal plants in BC, plants for green infrastructure and edible landscapes</p>
<p>F3 Manages plant health and growing conditions</p> <p>CL2 (OLD E2 - Manages growing conditions) moved to HL1,2 *Content in HL1 = conditions and practices for plant health, plant stress</p> <p>CL1 (OLD E3 – Manage pests and diseases (LT 1-2:plant stress) moved to HL1</p>	<p>F3 Manages plant health and growing conditions</p> <p>CL2 (OLD E2 - Manages growing conditions) moved to HL1,2 *Content in HL2 = test samples, develop plan for growing conditions, apply fertilizers and amendments</p>		
	F4	F4	

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Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
	<p>Prunes plant materials</p> <p>CL3 (OLD I5 - Demonstrate basic pruning of trees, shrubs, groundcovers and vines) moved to HL2,3</p> <p>*Content in HL2 = shrubs, vines, groundcover</p>	<p>Prunes plant materials</p> <p>CL3 (OLD I5 - Demonstrate basic pruning of trees, shrubs, groundcovers and vines) moved to HL2,3</p> <p>*Content in HL3 = trees</p> <p>CL4 (OLD I6 - Describe cultural maintenance of trees, shrubs, groundcovers and vines – (LT 5 Hazard trees) moved to HL3</p>	
		<p>F5 Manages pests, diseases and invasive species</p> <p>CL1,2,3,4 (OLD E3 - Manage pests and diseases) moved to HL3,4</p> <p>*Content in HL3 = characteristics, treatment methods</p>	<p>F5 Manages pests, diseases and invasive species</p> <p>CL1,2,3,4 (OLD E3 - Manage pests and diseases) moved to HL3,4</p> <p>*Content in HL4 = quarantine protocol, IPM program</p>
<p>Line G APPLIES ENVIRONMENTAL PRACTICES</p>	<p>Line G APPLIES ENVIRONMENTAL PRACTICES</p>	<p>Line G APPLIES ENVIRONMENTAL PRACTICES</p>	<p>Line G APPLIES ENVIRONMENTAL PRACTICES</p>
<p>G1 Practices environmental stewardship</p>	<p>G1 Practices environmental stewardship</p>	<p>G1 Practices environmental stewardship</p>	<p>G1 Practices environmental stewardship</p>

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
<p>CL3 (OLD H4 - Installs steps and retaining walls: LT4 – standards for environmental protection) moved to HL1</p>			
			<p>G2 Practices biodiversity enhancement</p>
<p>G3 Practices soil stewardship</p> <p>CL1 (OLD E5 - Describe physical and biological characteristics of soil and soilless media) moved to HL1,2</p> <p>*HL 1 will be a basic introduction as this exceeds level requirement for RSOS</p> <p>*Content in HL1 = soil and soil management, soil tests,</p> <p>CL2 (OLD E6 - Describe chemical characteristics of soil and soilless media) moved to HL1,2</p> <p>*Content in HL1 = soil and soil management, soil tests,</p>	<p>G3 Practices soil stewardship</p> <p>CL1 (OLD E5 - Describe physical and biological characteristics of soil and soilless media) moved to HL1,2</p> <p>*Content in HL2 = interpreting results</p> <p>CL2 (OLD E6 - Describe chemical characteristics of soil and soilless media) moved to HL1,2</p> <p>*Content in HL2 = interpreting results</p> <p>CL3 (OLD E7 - Assess landscape sites with respect to soils: LT 7 – site remediation) moved to HL2</p> <p>CL4 (OLD I1 - Maintain growing media: LT4,5 –</p>		

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
	soil and water samples, amending growing media) moved to HL2		
	G4 Practices water stewardship	G4 Practices water stewardship	
Line H PERFORMS PRE-CONSTRUCTION ACTIVITIES	Line H PERFORMS PRE-CONSTRUCTION ACTIVITIES	Line H PERFORMS PRE-CONSTRUCTION ACTIVITIES	Line H PERFORMS PRE-CONSTRUCTION ACTIVITIES
			H1 Participates in landscape design activities (OLD F4 - Examines the principles of garden design and participate in basic landscape design activities) =No change
	H2 Prepares construction site CL3 (OLD F3 - Prepares site) moved to HL2 CL 3 (OLD I1 - Maintain growing media- LT 5 – protect site elements) moved to HL2 CL 3 (OLD H4 - Installs steps and retaining walls: LT 5 – protect site elements) moved to HL2		
H3 Performs grading CL3 (OLD E7 - Assess landscape sites with respect to soils: LT 4 – cut and fill, site hydrology)			

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
moved to HL1			
H4 Installs drainage systems CL3 (OLD H1 - Install drainage system) moved to HL1			
Line I INSTALLS HARDSCAPE	Line I INSTALLS HARDSCAPE	Line I INSTALLS HARDSCAPE	Line I INSTALLS HARDSCAPE
		I1 Installs landscape structures (OLD H2 - Install landscape structures) No change	
	I2 Installs surface materials CL3 (OLD H3 - Install walkway, patio, driveway and parking lot materials) moved to HL2		
	I3 Installs steps and retaining walls CL3 (OLD H4 - Installs steps and retaining walls: LT 1-3, 6,12-14) moved to HL2		
		I4 Installs irrigation systems (OLD H5 - Installs irrigation systems) No change	

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Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
		I5 Installs water features (OLD H6 - Installs water features) No change	
		I6 Installs low voltage landscape lighting (OLD H7 - Installs low voltage landscape lighting) No change	
Line J INSTALLS SOFTSCAPE	Line J INSTALLS SOFTSCAPE	Line J INSTALLS SOFTSCAPE	Line J INSTALLS SOFTSCAPE
J1 Installs growing media CL4 (OLD G2 - Install growing media) moved to HL1			
	J2 Installs exterior landscape plants CL4 (OLD G5 - Installs exterior landscape plants) moved to HL2		
	J3 Transplants plants CL4 (OLD I3 - Maintain interior softscape: LT 7, 8 - transplanting and dividing plants) moved to HL2 CL4 (OLD I4 - Maintain exterior softscape: LT 7 –		

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
	transplanting plants) moved to HL2 CL3 (OLD I5 - Demonstrate basic pruning of trees, shrubs, groundcovers and vines - LT 7 – transplants ornamental woody plants) moved to HL2		
	J4 Installs mulch CL4 (OLD G7 - Install mulch) moved to HL2		
J5 Installs turf from seed CL4 (OLD G4 - Install turf from seed) moved to HL1			
J6 Installs sod CL4 (OLD G6 - Install sod) moved to HL1			
		J7 Installs interior landscape plants CL4 (OLD G3 - Describe installation of interior landscape plants) moved to HL3	
Line K INSTALLS GREEN INFRASTRUCTURE SYSTEMS	Line K INSTALLS GREEN INFRASTRUCTURE SYSTEMS	Line K INSTALLS GREEN INFRASTRUCTURE SYSTEMS	Line K INSTALLS GREEN INFRASTRUCTURE SYSTEMS
			K1 Selects green infrastructure

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Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
			K2 Installs green roofs and walls
			K3 Installs rainwater and stormwater management systems
			K4 Installs erosion control (OLD G1 - Install erosion control materials) No change
			K5 Installs biodiverse plantings and natural areas
Line L MAINTAINS HARDSCAPE	Line L MAINTAINS HARDSCAPE	Line L MAINTAINS HARDSCAPE	Line L MAINTAINS HARDSCAPE
	L1 Maintains drainage systems CL3 (OLD J1 - Maintain drainage system) moved to HL2		
		L2 Maintains landscape structures (OLD J7 - Maintain landscape structures) – No change	
	L3 Maintains surface materials CL3 (OLD J2 - Maintain walkway, patio, driveway and parking lot materials) moved to HL2		

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Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
	<p>L4 Maintains steps and retaining walls</p> <p>CL3 (OLD J6 - Maintains steps and retaining walls) moved to HL2</p>		
		<p>L5 Maintains irrigation systems</p> <p>(OLD J3 - Maintains irrigation systems) – No change</p>	
		<p>L6 Maintains water features</p> <p>(OLD J5 - Maintains water features) – No change</p>	
		<p>L7 Maintains landscape lighting</p> <p>(OLD J4 - Maintains landscape lighting) – No change</p>	
		<p>L8 Practices snow and ice control</p>	
		<p>L9 Repairs hardscape</p> <p>(OLD J7 - Maintain landscape structures) – No change</p>	
<p>Line M</p> <p>MAINTAINS SOFTSCAPE</p>	<p>Line M</p> <p>MAINTAINS SOFTSCAPE</p>	<p>Line M</p> <p>MAINTAINS SOFTSCAPE</p>	<p>Line M</p> <p>MAINTAINS SOFTSCAPE</p>

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
<p>M1 Maintains exterior softscape</p> <p>CL4 (OLD I1 - Maintain growing media: LT 3 - cultivating growing media) moved to HL1</p> <p>CL 4 (OLD I4 - Maintain exterior softscape: LT 1,3,4,5,11,13,14 – purpose and procedure of exterior softscape maintenance) moved to HL1</p>	<p>M1 Maintains exterior softscape</p> <p>CL 4 (OLD I4 - Maintain exterior softscape: LT 4,9,10,12,15 – seasonal planting, fertilizing, mulching) moved to HL2</p>		
		<p>M2 Maintains interior softscape</p> <p>CL4 (OLD I3 - Maintain interior softscape: LT 1-6, 9-11 – everything except transplanting and dividing plants) moved to HL3</p>	
<p>M3 Maintains turfgrass</p> <p>CL4 (OLD I2 - Maintain and schedule maintenance activities for grass/turf) moved to HL1</p>			
	<p>M4 Propagates plant materials</p> <p>CL4 (OLD I4 - Maintains exterior softscape: LT8 – dividing plants) moved to HL2</p>		
		<p>M5 Repairs softscape CL4(Old 14 – Maintains exterior softscape)</p>	



Program Outline Review Details

Landscape Horticulture Level 1 (HL)	Landscape Horticulture Level 2 (HL)	Landscape Horticulture Level 3 (HL)	Landscape Horticulture Level 4 (HL)
		moved to HL3	
Line N MAINTAINS GREEN INFRASTRUCTURE			
			N1 Maintains green roofs and walls
			N2 Maintains rainwater and stormwater management systems
			N3 Maintains erosion control
			N4 Maintains biodiverse plantings and natural areas

Key
Blue Text moved to Gap (Missed content)
Green Text moved to Overlap (Repeated content)
Red Text moved to Removed
Black Text moved to No change

CL moved to Current Level
HL moved to Harmonized Level

Details of Changes

Current Program Outline to Harmonized Program Outline Mapping

Overall: The Occupational Analysis Chart (OAC) for Landscape Horticulture has been aligned to the Red Seal Occupational Standard. Therefore, all of the competencies have been renamed and restructured. The following provides a side by side comparison with notes of major changes.

Level 1 – Landscape Horticulture					
Current Competencies		Harmonized Competencies		Harmonized Level(s)	Description of Change **
Line A	USES OCCUPATIONAL SKILLS				
A1	Uses personal protective equipment (PPE) and safety equipment.	A1	Uses personal protective equipment (PPE) and safety equipment.	1	CL1&2 moved to HL1 (but taught in context in L2)
A2	Identify fire types and extinguishing methods	A1	Uses personal protective equipment (PPE) and safety equipment.	1	Was a standalone competency in CL but now part of the learning tasks in A1
A3	Use WHMIS	A2	Maintains safe works environment	1	no change
A4	Recognize work hazards	A2	Maintains safe works environment	1	no change
A5	Demonstrate basic horticulture skills	Removed			This content is taught throughout the program in context and does not need to be a standalone competency
A6	Identify relevant legislation, regulations and standards	Removed			This content is taught throughout the program in context and does not need to be a standalone competency
Line B	USES AND MAINTAINS TOOLS AND EQUIPMENT				
B1	Use and maintain hand tools and power tools	B1 B2	Use hand tools Use power tools	1,2,3 1,2,3	CL1, 2, 3, 4 moved to HL1, 2, 3 (but taught in context in L4.) CL1, 2, 3, 4 moved to HL1, 2, 3 (but taught in context in L4.) *Same learning tasks at each level but tools are specific to the level
B2	Use and maintain measuring equipment	B3	Uses measuring equipment	1,2,3	CL1 moved to HL1,2,3 *Same learning tasks at each level but equipment is specific to the level
B3	Operate vehicles and motorized equipment	B4	Uses vehicles and motorized equipment, trailers and attachments	1,2,3	CL1&2 moved to HL1,2,3 *Content in HL1 = basic engine systems, cleaning, pre-operation check, and maintenance/repair, inspection, operation
B4	Maintain vehicles and motorized equipment	B4	Uses vehicles and motorized equipment, trailers and attachments	1,2,3	*Content in HL2 = basic vehicle systems and components, selection, inspection, operation, attaching trailer to vehicle
B5	Use and maintain equipment attachments	B4	Uses vehicles and motorized equipment, trailers and attachments	1,2,3,	*Content in HL3 = Environmental considerations when selecting, maintenance of equipment attachments
B6	Transport equipment	C8	Transport equipment	1,2	CL3,4 moved to HL1 *Content in HL1 = load and unload *Content in HL 2 = transports
Line C	ORGANIZES WORK				

Level 1 – Landscape Horticulture					
Current Competencies		Harmonized Competencies		Harmonized Level(s)	Description of Change **
C1	Perform site assessment	C1	Performs site assessments	1,2,3,4	CL3 moved to HL1,2,3,4 *Content in HL1 = visual inspection, security requirements *Content in HL2 = public and private markings, soil tests and erosion *Content in HL3 = protecting site conditions, assess soils *Content in HL4 = environmental conditions
C2	Use documentation and reference material	C2	Use documentation and reference material	1,2,3,4	CL3 moved to HL1,2,3,4 *Content in HL1 = documents, safety, textbooks *Content in HL2 = interpret documentation *Content in HL3 = field books and catalogues *Content in HL4 = interpret drawings and design intent, documentation for estimating
C3	Maintains records	C3	Maintains records	1,2,3,4	CL3 moved to HL1,2,3,4 *Content in HL1 = safety records, tool and equipment records *Content in HL2 = packing slips *Content in HL3 = shipping and receiving, client communication *Content in HL4 = work records, IPM program
C4	Comply with policies and regulations	C2	Use documentation and reference material	1,2,3,4	CL3 moved to HL1,2 *Content in HL1 = safety regs, contacting authorities and locators *Content in HL2 = compliance
C5	Plan daily tasks	C4	Participates in job planning activities	3,4	CL3 moved to HL 3,4 *Content in HL3 = prioritize and sequence tasks *Content in HL4 = modify tasks, delegate tasks
C6	Communicate with others	E1	Communication Techniques	1	CL1,2 moved to HL1 (but taught in context in L2)
C7	Order plants and materials	C3 C5	Maintains Records Orders Materials	1,2,3,4 3	CL4 moved to HL2 CL4 moved to HL3
C8	Transport materials	C7	Transports material	1,2	CL3 moved to HL1,2 *Content in HL1 = prepare for transport *Content in HL2 = load and transport
C9	Organize plants, materials and equipment	C6	Organizes materials and equipment	2,3	CL2 moved to HL2,3 *Content in HL2 = inspection, verification, describe storage areas *Content in HL3 = receive, unload, record, handle
C10	Maintain safe work environment	A2	Maintains safe works environment	1	CL1,2 moved to HL1 (but taught in context in L2)
C11	Examine interpersonal and supervisory skills	E1 E2	Communication Techniques Uses Mentoring Techniques	1 4	No change (*only LT 4,5,7 from old C11 are in this competency) CL1 (LT 2,3,6) and CL2 moved to HL4
Line D	PARTICIPATES IN MARKETING AND SALES				
D1	Control inventory	D1	Control inventory	3	No change
D2	Sell product and services	D2	Sell product and services	3	CL4 moved to HL3

Level 1 – Landscape Horticulture					
Current Competencies		Harmonized Competencies		Harmonized Level(s)	Description of Change **
D3	Maintain customer relations	D3	Maintain customer relations	3	CL4 moved to HL3
D4	Prepare estimates for basic landscape installation projects	D4 C2	Prepare estimates Uses documentation and reference material	4 1,2,3,4	No change CL 4 (LT1 – read plans) moved to HL2
Line E	ANALYZES AND MAINTAINS PLANT HEALTH				
E1	Identify plants and plant requirements	F2	Identifies plants and plant requirements	1,2,3,4	No change
E2	Manage growing conditions	F3	Manages plant health and growing conditions	1,2	CL2 moved to HL1,2 *Content in HL1 = conditions and practices for plant health, plant stress *Content in HL2 = test samples, develop plan for growing conditions, apply fertilizers and ammendments
E3	Manage pests and diseases	F3 F5	Manages plant health and growing conditions Manages pests, diseases and invasive species	1 3,4	CL1 moved to HL1 CL1,2,3,4 moved to HL3,4 *Content in HL3 = characteristics, treatment methods *Content in HL4 = quarantine protocol, IPM program
E4	Describe plant science as it applies to Horticulture	F1	Describe basic plant science	1,2	No change
E5	Describe physical and biological characteristics of soil and soilless media	G3	Practices soil stewardship	1,2	CL1 moved to HL1,2 *HL 1 will be a basic introduction as this exceeds level requirement for RSOS *Content in HL1 = soil and soil management, soil tests, *Content in HL2 = interpreting results
E6	Describe chemical characteristics of soil and soilless media	G3	Practices soil stewardship	1,2	CL2 moved to HL1,2 *HL 1 will be a basic introduction as this exceeds level requirement for RSOS *Content in HL1 = soil and soil management, soil tests, *Content in HL2 = interpreting results
E7	Assess landscape sites with respect to soils	C1 G3 H3	Performs site assessments Practices soil stewardship Performs grading	1,2,3,4 1,2 1	CL3 moved to HL1,2 *Content in HL1 = soils, compaction, drainage, slope *Content in HL2 = erosion CL3 (LT 7 – site remediation) moved to HL2 CL3 (LT 4 – cut and fill, site hydrology) moved to HL1
Line F	PERFORMS PRE-CONSTRUCTION ACTIVITIES				
F1	Interpret landscape plans	C2	Uses documentation and reference materials	1,2,3,4	CL3 moved to HL2

Level 1 – Landscape Horticulture					
Current Competencies		Harmonized Competencies		Harmonized Level(s)	Description of Change **
F2	Participate in job planning activities	C4	Participate in job planning activities	3,4	CL3 moved to HL3,4 *Content in HL3 = verify materials *Content in HL4 = schedule labour, materials, tools, equipment
F3	Prepare site	H2	Prepares construction site	2	CL3 moved to HL2
F4	Examine the principles of garden design and participate in basic landscape design activities	H1	Participates in landscape design activities	4	No change
Line G	INSTALLS SOFTSCAPE				
G1	Install erosion control materials	K4	Install erosion control materials	4	No change
G2	Install growing media	J1	Installs growing media	1	CL4 moved to HL1
G3	Describe installation of interior landscape plants	J7	Installs interior landscape plants	3	CL4 moved to HL3
G4	Install turf from seed	J5	Install turf from seed	1	CL4 moved to HL1
G5	Install exterior landscape plants	J2	Install exterior landscape plants	2	CL4 moved to HL2
G6	Install sod	J6	Install sod	1	CL4 moved to HL1
G7	Install mulch	J4	Installs mulch	4	CL4 moved to HL2
Line H	INSTALLS HARDSCAPE				
H1	Install drainage system	H4	Installs drainage	1	CL3 moved to HL1
H2	Install landscape structures	I1	Installs landscape structures	3	No change
H3	Install walkway, patio, driveway and parking lot materials	I2	Installs surface materials	2	CL3 moved to HL2
H4	Install steps and retaining walls	H2 G1 I3	Prepares construction site Practices environmental stewardship Install steps and retaining walls	2 1,2,3,4 2	CL 3 (LT 5 – protect site elements) moved to HL2 CL3 (LT4 – standards for environmental protection) moved to HL1 CL3 (LT 1-3, 6,12-14) moved to HL2
H5	Install irrigation systems	I4	Install irrigation systems	3	No change
H6	Install water features	I5	Install water features	3	No change
H7	Install low voltage landscape lighting	I6	Install low voltage landscape lighting	3	No change
Line I	MAINTAINS SOFTSCAPE				
I1	Maintain growing media	C1 G3 M1	Performs site assessments Practices soil stewardship Maintain exterior softscape	1,2,3,4 1,2 1,2	CL4 (LT2 – assessing growing media) moved to HL2 CL4 (LT4,5 – soil and water samples, amending growing media) moved to HL2 CL4 (LT 3 - cultivating growing media) moved to HL1
I2	Maintain and schedule maintenance activities for grass/turf	M3	Maintains turfgrass	1	CL4 moved to HL1
I3	Maintain interior softscape	M2 J3	Maintains interior softscape Transplants plants	3 2	CL4 (LT 1-6, 9-11 – everything except transplanting and dividing plants) moved to HL3 CL4 (LT 7, 8 - transplanting and dividing plants) moved to HL2

Level 1 – Landscape Horticulture					
Current Competencies		Harmonized Competencies		Harmonized Level(s)	Description of Change **
I4	Maintain exterior softscape	J3 M1 M4	Transplants plants Maintain growing media Propagates plant materials	2 1,2 2	CL4 (LT 7 – transplanting plants) moved to HL2 CL 4 (LT 1,3,4,5,11,13,14 at HL1; LT 4,9,10,12,15 at HL2) CL4 (LT8 – dividing plants) moved to HL2
I5	Demonstrate basic pruning of trees, shrubs, groundcovers and vines	F4 J3	Prunes plant materials Transplants plants	2,3 2	CL3 moved to HL2,3 *Content in HL2 = shrubs, vines, groundcover and vines *Content in HL3 = trees CL3 (LT 7 – transplants ornamental woody plants) moved to HL2
I6	Describe cultural maintenance of trees, shrubs, groundcovers and vines	F4	Prunes plant materials	2,3	CL4 (LT5 only) moved to HL4 *Content in HL4 =tree failure
Line J	MAINTAINS HARDSCAPE				
J1	Maintain drainage system	L1	Maintain drainage system	2	CL3 moved to HL2
J2	Maintain walkway, patio, driveway and parking lot materials	L3	Maintain surface materials	2	CL3 moved to HL2
J3	Maintain irrigation systems	L5	Maintain irrigation systems	3	No change
J4	Maintain landscape lighting	L7	Maintain landscape lighting	3	No change
J5	Maintain water features	L6	Maintain water features	3	No change
J6	Maintain steps and retaining walls	L4	Maintain steps and retaining walls	2	CL3 moved to HL2
J7	Maintain landscape structures	L2 L9	Maintain landscape structures Repairs hardscape	3 3	No change No change