



Australian Government

AHCDES401 Apply construction techniques to landscape design

Release: 1

AHCDES401 Apply construction techniques to landscape design

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to incorporate constructed elements into landscape designs, within site and budgetary requirements, and seek technical and specialist expertise.

The unit applies to individuals who apply specialist skills and knowledge to the application of construction techniques to landscape design. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Design (DES)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Incorporate structures and features into a landscape design	1.1 Identify and locate design structures and features to maximise efficient use of the space 1.2 Identify and source any required preliminary specialist expertise 1.3 Select materials that reflect the style and aesthetic of overall design concept 1.4 Assess suitability of constructed elements in relation to physical

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	properties of soils on site 1.5 Assess effects of surface and subsurface water and drainage patterns on constructed elements 1.6 Assess drainage requirements to ensure integrity of constructed elements in design
2. Determine construction requirements	2.1 Evaluate factors that impact on selection and construction of elements in the design 2.2 Select materials according to properties and application within the design 2.3 Determine construction techniques that support design, fit timelines and meet budget requirements 2.4 Identify surface treatments appropriate for selected materials and design
3. Assess the need for supplementary water in a landscape design	3.1 Identify available water in the landscape 3.2 Determine the feasibility of using available water in the landscape 3.3 Identify appropriate irrigation methods to support the design 3.4 Incorporate irrigation requirements into the design or design documentation
4. Source technical services and expertise	4.1 Determine construction requirements beyond the scope of own expertise 4.2 Determine and consult with technical and specialist services beyond own scope of expertise as required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Identify and interpret information regarding design concept requirements
Oral communication	Initiate discussions, using clear language and standard industry

Skill	Description
	terminology to discuss and determine construction requirements
Numeracy	- Estimate construction budget and timelines - Take and record measurements - Calculate quantities and cost of construction materials

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCDES401 Apply construction techniques to landscape design	Not applicable	The unit has been created to address an emerging skill or task required by industry	Newly created

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCDES401 Apply construction techniques to landscape design

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has applied construction techniques to landscape designs on at least one occasion, and has:

- selected, in consultation with appropriate specialist representatives, appropriate construction methods for structures and features to suit site specific soil properties
- identified and modified natural drainage patterns
- determined appropriate drainage systems for the landscape design
- incorporated into a landscape design constructed elements and drainage that meet the aesthetic and physical requirements of the site
- assessed the need for supplementary water and suitability of available water on site to support landscape design
- identified and specified where required appropriate waterwise irrigation systems
- recognised limits of own expertise and sourced providers of technical services and specialist expertise when required.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- landscape features and elements commonly used in landscape design projects
- specialist and technical services commonly involved in the construction of landscape design projects
- physical soil properties and their impact on constructed features
- natural drainage patterns and modification methods
- movement of water through soil
- purpose and application of drainage systems
- properties of construction materials commonly used in landscape design projects
- construction techniques commonly required for landscape design projects

- purpose and application of hydro zoning
- different methods of irrigation.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - design concepts, construction drawings, site plans and specifications
 - software and hardware to source and document information
- specifications:
 - construction material manufacturer specifications
- relationships:
 - technical and specialist representatives
- timeframes:
 - according to job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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