

### Modification history

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

AHCDDES4XX	Apply sustainability principles to landscape design
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to analyse landscape designs for the application of sustainability principles and make recommendations for improving sustainability.</p> <p>The unit applies to individuals who apply specialist skills and knowledge to application of sustainability principles to landscape design. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.</p> <p>All work is carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Design (DES)

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. Research the application of sustainability in landscape design	1.1 Research principles of sustainability and their application to landscape design 1.2 Identify materials used in landscape design 1.3 Analyse the impacts of materials on environmental, ecological, economic and social resources 1.4 Determine sustainability criteria used to assess the materials 1.5 Analyse the impact of legislation, standards, policies and procedures on sustainable landscape design 1.6 Identify the ways in which alternative design strategies support the environment
2. Evaluate landscape designs for sustainability	2.1 Apply systems-based thinking to assess the overall design of a landscape 2.2 Use sustainability criteria to assess sustainable outcomes 2.3 Apply alternative design strategies to improve sustainability outcomes 2.4 Undertake a cost benefit analysis for alternative design strategies
3. Make recommendations for improvement	3.1 Review the outcomes of the landscape evaluation to determine potential sustainability improvements 3.2 Document recommended improvements and present findings to key stakeholders 3.3 Review and respond to key stakeholder feedback 3.4 Incorporate agreed changes into final landscape design

<b>Foundation Skills</b>	
<i>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.</i>	
<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Identify and interpret information regarding legislation, standards, policies and procedures</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Record sustainability improvements into landscape design information using correct conventions and terminology</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Initiate discussions with key stakeholders, using clear language and standard industry terminology to present findings, respond to feedback and agree changes to landscape design</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Undertake a cost benefit analysis</li> </ul>

<b>Unit Mapping Information</b>			
<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
AHCDES4XX Apply sustainability principles to landscape design	Not applicable	The unit has been created to address an emerging skill or task required by industry	Newly created

<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</a>
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<b>TITLE</b>	<b>Assessment requirements for AHCDES4XX Apply sustainability principles to landscape design</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has applied sustainability principles to landscape design on at least one occasion, and has:</p> <ul style="list-style-type: none"> <li>• applied relevant workplace health and safety and environmental and biosecurity legislation, regulations and workplace procedures</li> <li>• analysed and applied the principles of sustainability in landscape design to evaluate designs and make recommendations on improving sustainability</li> <li>• interpreted specifications and plans</li> <li>• evaluated landscape designs and made recommendations for improvements</li> <li>• sought, analysed and applied feedback from key stakeholders on recommendations to improve sustainability</li> <li>• determined appropriate alternative design strategies to minimise impacts and improve efficiencies to the landscape design.</li> </ul>	
<b>Knowledge Evidence</b>	
<p>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:</p> <ul style="list-style-type: none"> <li>• principles of sustainability and their application to landscape design, including: <ul style="list-style-type: none"> <li>• environmental, ecological, economic and social resources commonly related to sustainable design</li> <li>• legislation, standards, policies and procedures that commonly impact on sustainable landscape design</li> <li>• sustainable use of resources in the landscape</li> <li>• materials commonly used in landscape design</li> <li>• systems-based thinking</li> <li>• alternative design strategies</li> </ul> </li> <li>• features and processes of simple cost benefit analysis</li> <li>• workplace health and safety and environmental and biosecurity legislation and regulations and workplace procedures relevant to sustainable landscape design.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of the skills in this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• a workplace setting or an environment that accurately represents workplace conditions</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• landscape designs</li> <li>• site information, documentation and data applicable to sustainable landscape design</li> </ul> </li> <li>• specifications: <ul style="list-style-type: none"> <li>• legislation, standards, policies and procedures relevant to sustainable landscape design</li> <li>• workplace health and safety and environmental and biosecurity legislation and regulations and workplace procedures applicable to sustainable landscape design</li> </ul> </li> <li>• relationships: <ul style="list-style-type: none"> <li>• key stakeholders</li> </ul> </li> <li>• timeframes: <ul style="list-style-type: none"> <li>• according to job requirements.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</a>