



**Australian Government**

# **AHCARB504 Develop an arboricultural impact assessment report**

**Release: 1**

# AHCARB504 Develop an arboricultural impact assessment report

## Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

## Application

This unit of competency describes the skills and knowledge required to plan for and monitor the protection of trees at sites where there may be threats to the trees.

This unit applies to individuals who take personal responsibility and exercise autonomy in undertaking complex work, to analyse and synthesise information and design, and to communicate solutions to complex problems. The role involves the self-directed application of knowledge with substantial depth in some areas such as tree assessment techniques, the impact of development on trees and specialist tree protection techniques and reporting methods.

Licensing, legislative, regulatory, or certification requirements apply to this unit in some states and territories at the time of publication, and may differ according to jurisdiction. Specific determination should be sought through the relevant State or Territory. Works involving this unit of competency may be subject to local tree protection and preservation laws, and the relevant content of applicable Australian Standards such as the current AS 4970 Protection of trees on development sites.

## Pre-requisite Unit

AHCARB502 Identify, select and specify trees

## Unit Sector

Arboriculture (ARB)

## Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Undertake assessment of trees on site	1.1 Identify and research relevant legislation and Australian Standards 1.2 Determine specific requirements of Statutory authorities in

Element	Performance criteria
	<p>relation to trees on development site</p> <p>1.3 Determine local government planning laws, tree protection and preservation regulations</p> <p>1.4 Conduct a site assessment and identify conditions that impact tree protection program</p> <p>1.5 Identify work health and safety hazards that impact safety of staff and public, assess level of risk and apply controls</p> <p>1.6 Identify hazards, activities and circumstances that have potential to harm trees and assess the level of risk</p> <p>1.7 Locate and confirm trees plotted on survey plan</p> <p>1.8 Plot trees not on plan onto survey plan</p>
2. Compile preliminary tree assessment data	<p>2.1 Collect available relevant plans and documentation</p> <p>2.2 Identify and record tree genus and species by botanical and common name</p> <p>2.3 Record tree dimensions, height, crown spread and diameter-at-breast-height (DBH)</p> <p>2.4 Determine age class and estimate life expectancy</p> <p>2.5 Determine tree health in relation to tree physiology and pathology</p> <p>2.6 Determine condition of tree structure in relation to tree anatomy</p> <p>2.7 Consider heritage and cultural issues</p> <p>2.8 Consider habitat, ecology and other matters relevant to the site</p> <p>2.9 Consider location relative to existing and past site structures</p> <p>2.10 Determine the retention value</p> <p>2.11 Compile all tree assessment data required for report</p>
3. Document preliminary arboricultural report	<p>3.1 Record all trees and groups of trees suitable for retention</p> <p>3.2 Determine indicative tree protection zone for each tree</p> <p>3.3 Plot tree identifiers and indicative tree protection zone on survey plan</p> <p>3.4 Document preliminary arboricultural report</p>
4. Record impact of proposed development on trees	<p>4.1 Interpret existing plans, working drawings, terms and symbols</p> <p>4.2 Interpret development and design language</p> <p>4.3 Consider how development can result in mechanical and chemical damage and determine appropriate controls</p> <p>4.4 Determine impact of proposed development on trees</p> <p>4.5 Provide preliminary feedback to client on potential areas of improvement</p>
5. Determine indicative and actual tree protection zones	<p>5.1 Assess development requirements for site access and logistics</p> <p>5.2 Consider indicative tree protection zone</p> <p>5.3 Determine extent of encroachment into indicative tree protection</p>

Element	Performance criteria
	<p>zone</p> <p>5.4 Determine whether works will impact on structural root zone</p> <p>5.5 Determine extent and area of structural root zone</p> <p>5.6 Determine actual tree protection zone for trees to be retained</p> <p>5.7 Define and record the actual tree protection zones</p>
6. Demonstrate tree viability to major encroachment	<p>6.1 Determine level of encroachment</p> <p>6.2 Assess for a major encroachment: location and distribution of roots; potential loss of root mass; species tolerance to root loss; and age, health, size, lean and stability of tree</p> <p>6.3 Consider impact of major encroachment on health, physiology and structural integrity of tree</p> <p>6.4 Assess soil characteristics and volume and presence of existing or past structures and design factors</p> <p>6.5 Consider how site and design factors minimise impact of proposed encroachment on tree</p> <p>6.6 Demonstrate that the tree would remain viable</p> <p>6.7 Determine additional remedial measures required</p>
7. Develop protection measures and advise client	<p>7.1 Develop an evidentiary portfolio of tree protection devices, techniques, tree-sensitive design and construction measures and tree responses to development activities</p> <p>7.2 Specify protection devices, techniques and systems to minimise impact of development</p> <p>7.3 Determine installation and construction methods for tree protection and produce working drawings for on-site personnel for implementation</p> <p>7.4 Provide advice on tree removal and tree pruning program to client</p>
8. Document the relevant reports	<p>8.1 Prepare draft arboricultural impact assessment report</p> <p>8.2 Develop tree protection plan and tree protection plan (drawing)</p> <p>8.3 Prepare and document tree management and monitoring guidelines with alternative strategies for possible problems</p> <p>8.4 Consolidate relevant reports, plans and guidelines into final version of arboricultural impact assessment report in digital and print format and present to client</p>

## Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

## **Range of Conditions**

## **Unit Mapping Information**

This unit is not equivalent to AHCARB504A Develop a tree protection plan.

## **Links**

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>