



Australian Government

**Assessment Requirements for AHCARB509
Develop an arboricultural impact
assessment report**

Release: 1

Assessment Requirements for AHCARB509 Develop an arboricultural impact assessment report

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 5.0.

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 on at least one occasion developed an arboricultural impact assessment report for a development site and has:

- identified and researched the impact and specific requirements of legislation, Australian Standards, and local government laws for trees on development site
- conducted site assessment and identified conditions that impact tree protection program
- identified work health and safety hazards, assessed risk and applied controls for site
- identified hazards and assessed the risks that harm trees
- located, confirmed and plotted all trees on survey plan
- collected plans and documentation
- identified and recorded tree by botanical and common name and included a record of:
 - tree height, crown spread and diameter-at-breast-height (DBH), diameter at ground level and statutory dimensions
 - age class and estimated life expectancy
 - tree health in relation to tree physiology and pathology
 - condition of tree structure in relation to tree anatomy
- assessed the following values for trees:
 - heritage and cultural
 - habitat, ecological and environmental
 - location of tree to existing and past site structures
- determined the tree retention value
- compiled tree assessment data for report
- recorded all trees suitable for retention
- determined and plotted indicative tree protection zone (TPZ), tree identifiers for each tree on survey plan
- documented preliminary arboricultural report

- interpreted plans, designs, working drawings, terms, symbols and language for development
- assessed and determined controls for mechanical and chemical damage affecting trees
- provided client with preliminary feedback for potential improvements
- liaised with client on design development and assessed impact of construction on trees
- liaised with design team to develop tree sensitive design and construction methods
- assessed development requirements for site access and logistics
- reviewed indicative tree protection zone and determined:
 - extent of encroachment into indicative TPZ
 - impact of works on structural root zone (SRZ)
- determined extent of SRZ
- determined and recorded level of encroachment and actual TPZ for trees to be retained
- assessed the following factors affecting tree viability for a major encroachment:
 - location and distribution of roots
 - potential loss of root mass
 - species tolerance to root loss
 - age, health, size, lean and stability of tree
- assessed impact of encroachment on health, physiology and structural integrity of tree
- assessed impact on soil characteristics and volume from past, existing or planned structures
- considered site and design factors to minimise impact of proposed encroachment
- rationalised all factors to decide on the viability of the tree
- determined remedial measures to protect the tree
- investigated, specified and produced installation and construction drawings for tree protection devices and systems to mitigate tree damage
- provided advice to client on tree removal and tree pruning program
- prepared a draft arboricultural impact assessment report
- developed a tree protection plan and drawings
- prepared, documented tree management and monitoring, including strategies to handle problems
- consolidated reports, plans and guidelines into final arboricultural impact assessment report in both:
 - digital format
 - print format
- presented report to client.

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:

- legislative and regulatory framework for trees on development sites, including:
 - role of Australian Standards AS2303, AS2223, AS3743, AS4970 and AS4373

- specific requirements of statutory authorities
- local government tree protection and preservation regulations
- construction drawings, plans and documentation, including:
 - types of drawings and plans
 - terms, symbols and language used in development
 - version control of drawings, including revision and issue dates
- working and communicating with clients and development design personnel
- conducting site assessment and conditions that impact tree protection programs, including:
 - development site safety and safe access procedures
 - plotting trees/tree identifiers onto survey plans
 - naming and recording tree by botanical and common name
 - methods for determining tree dimensions, height, crown spread and DBH
 - age class and estimated life expectancy
 - tree health in relation to tree physiology and pathology
 - assessing and determining the viability of a trees
 - soil volume and characteristics on development sites
- tree values and importance, including:
 - heritage and cultural values
 - habitat, ecological value
 - environmental values
 - methods of determining retention value
- the principles of TPZ, including:
 - methods of mechanical and chemical damage to trees on development sites
 - impact of proposed development on trees
 - SRZ
 - levels of tolerance to encroachment and potential loss of root mass
 - species tolerance to root loss
- type and structure of tree impact assessment reports, including:
 - purpose and structure of preliminary arboricultural report
 - purpose and structure of arboricultural assessment report
 - use and interpretation of development plans and documentation
 - drawing techniques for illustration in reports and plans, including digital images
 - tree protection plans and drawings
 - purpose and structure of tree management and monitoring guidelines
 - presenting reports in digital or paper-based formats
- tree protection devices, methods and systems, including:
 - designs and their purpose
 - tree response to tree protection systems
 - installation and construction methods for tree protection.

Assessment Conditions

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

- physical conditions:
 - a development worksite with existing trees, or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - computer with word processing and drawing software
 - digital image capture device
 - personal protective equipment
 - basic diagnostic tools, including sounding hammer, trowel, probe, cordless drill
 - basic soil testing equipment
 - trees
- specifications:
 - client brief and instruction for safety audit objectives
 - industry standards AS2303, AS2223, AS3743, AS4970 and AS4373
- relationships:
 - client.

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

- arboriculture vocational competencies at least to the level being assessed
- current arboriculture industry skills directly relevant to the unit of competency being assessed.

Links

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