

Prerequisite competency completion		
Not applicable. There are no prerequisite requirements.		
Required assessment forms completion		
Has the candidate successfully completed the required reports?	Yes/No (Y/N)	Signed (Initialled)
Tree profile and benefits form		
Database of tree selections and suitability characteristics		
Report of the identification, selection and specification process		
Mandatory Equipment (as a minimum)		
Has each of the mandatory equipment items been used to gather evidence for assessment?	Yes/No (Y/N)	Signed (Initialled)
computer		
word processing software		
internet connection		
digital camera/phone camera		
soil testing equipment		
loupe		
field guides		
print and digital taxonomic keys		
trees		
soils, soil mixes and growing media		
Knowledge Evidence		
Has the candidate successfully completed the Knowledge Evidence requirements by demonstrating knowledge of each of the line items below?	Yes/No (Y/N)	Signed (Initialled)
Tree identification and benefits		
general characteristics of trees		
trees or other woody plants		
region of origin		
tree dimensions:		
– height		
– crown spread		
– diameter-at-breast-height (DBH)		

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tree morphology		
tree morphology attributes:		
– fruit type and characteristics		
– leaf morphology for shape, colour and size		
– trichomes on lamina, petiole and branchlets		
– buds, branchlets, branches and bark		
– epicormic shoots		
floral characteristics:		
– structure of inflorescence		
– location of the flower		
– flower colour		
– details of the flower parts present, absent or modified		
comparison of leaf colour and size against a healthy specimen		
canopy density and distribution		
cultural practices of trees		
current and past cultural practices		
cultural and performance requirements of trees		
horticultural function of trees		
the growing requirements of trees		
seasonal growth stages of the tree		
environmental and cultural factors predisposing tree to disease		
the impact of the growing environment on tree health		
tree functionality		
tree functionality for precise locations		
functional life expectancy of tree and site		
tree classification and nomenclature		
classification:		
– tree genus		
– tree species		
tree nomenclature		
nomenclature:		
– botanical names		
– common names		
tree identification process		
tree taxonomy:		
– tree identification using multiple reference sources		

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– tree identification using taxonomic keys		
– tree species-specific characteristics		
tree ethnobotany		
tree suitability		
selection of tree species and cultivars		
research using multiple reference sources		
concept of ‘suitability for a purpose’		
suitability for purpose (above-and-below-ground characteristics)		
tree selection methodology:		
– methods of determining the suitability of a tree for a purpose(s)		
– using the quality criteria of suitability for a purpose(s)		
estimation of planting area dimensions		
evaluation of tree selection from an extensive range of trees common in the region		
recommendations of tree species or cultivars for replacement or new plantings		
tree specification and quality control		
inspections of site, trees, location and relevant matters		
notes on quality expectations as specifications		
incorporation of criteria for size of stock selection into specifications		
inspection methods for structural quality, root health and quantities of plants on site:		
– tree structural quality		
methods of quality control and quality assurance:		
– how to monitor quality and apply quality controls		
inspection of delivered materials, soils and growing media on site		
on-site inspection of delivered materials, soils and growing media with the specifications		
conformance with specifications		
database production		
characteristics of taxonomy and nomenclature required for database use		
characteristics of tree ‘suitability for a purpose’ required for database use		
database of tree specimens		
report production		
documentation of rationale for tree selection		
documentation of tree selections and selection criteria		

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recording quality checks on delivered plants and products		
report of the identification, selection and specification process		
Edaphic environment		
soil properties		
site hydrology		
physical properties of soil or growing media		
chemical properties of soil or growing media		
tree nutrition issues associated with soil or media		
toxicity and compatibility with soil		
soil assessment		
assessment of soil characteristics		
methods of assessment of soil for suitability as a growth medium		
characteristics of soils:		
– density		
– organic content		
– nutrient status		
– physical properties		
– chemical properties		
assessment of soil volume:		
– soil volume proportion to tree size		
growing media evaluation		
evaluation of a wide range of soils		
evaluation of a wide range of soil mixes		
evaluation of a wide range of growing media		
recommendations for soil, soil mix and growth medium improvements		
determination of suitability for intended purpose		
Data operations		
databases:		
– database construction		
– database of tree characteristics		
data collection:		
– methods of data capture		
using photographic equipment		
recording of visual evidence		
data collation:		

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– compilation of tree selections		
Performance evidence		
Has the candidate successfully demonstrated the Performance Evidence requirements of the unit of competency AHCARB502 Identify, select and specify trees, and as per listed line items below?	Yes/No (Y/N)	Signed (Initialled)
consulting client, developing a brief and gaining agreement		
undertaking site inspection according to the client brief		
determine legislative requirements, regulatory requirements and requirements of Australian Standards including the current AS 2303, AS 2223 and AS 3743		
determining functional life expectancy of site and plantings		
determining tree function for the precise location within the plan		
confirming that species and cultivar selection is appropriate for the aspect and site dimensions		
researching trees suitable for the intended purpose using multiple reference sources		
identifying trees suitable for the intended purpose using multiple reference sources and use of taxonomic keys		
giving consideration to tree morphology, physiology and ethnobotany in the identification of suitable trees		
estimating planting area dimensions for the tree species or cultivar		
confirming that soil volume is proportioned to the size of tree in consideration and assess soil for suitability as a growth medium		
considering environmental conditions including site hydrology for the functional characteristics of the tree and apply findings		
evaluating soils, soil mixes and growing media for density, organic content, nutrient status, and physical and chemical properties		
appraising a wide range of soils, soil mixes and growing media		
making recommendations for soil, soil mix and growth medium improvements by determining soil suitability for intended purpose		
evaluating trees from an extensive range of trees common in the region		
selecting trees in accordance with suitability for the intended purpose as quality criterion		
evaluating and documenting the rationale for tree selection		
recommending tree species or cultivars for replacement or new plantings		
documenting tree selections, selection criteria and notes on quality expectations as specifications		

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incorporating determined criteria for size of stock selection into the specifications		
matching species and cultivars appropriately to the determined selection criteria for species-specific characteristics		
evaluating selection criteria for mature trees against capability for transplanted trees		
assessing final selections against the specified soil, site location and client brief and confirm the tree specification		
inspecting selected plants on site for structural quality, root health and quantities according to the specifications		
inspecting delivered materials, soils and growing media on site for quality assurance in accordance with the specifications		
recording quality checks on delivered plants and products		
compiling tree selections into a database of tree specimens and characteristics based on tree taxonomy and nomenclature, and suitability characteristics		
producing a report of the identification, selection and specification process and incorporate the correlated records		
presenting the client or organisation with the report		
Assessment conditions		
<p>It is an industry requirement for competency in this unit that assessment includes construction of a database that must contain a minimum of eighty (80) tree species with general characteristics of suitability for the intended purpose and key identifying features. An additional twenty (20) intensive tree profiles are required that detail attributes of the location, taxonomic characteristics, edaphic and environmental preferences and limitations of the tree. The database must include woody monocots and gymnosperms.</p> <p>Images used as evidence for assessment purposes must be the candidate's photographs or drawings.</p>		
Have the assessments incorporated the assessment conditions and met the industry requirements for competency in this unit as per listed line items below?	Yes/No (Y/N)	Signed (Initialled)
Has assessment confirmed the <u>construction</u> by the candidate of a database that contains a minimum of eighty (80) tree species with general characteristics of suitability for the intended purpose and key identifying features?		
Has assessment confirmed the inclusion of an additional twenty (20) intensive tree profiles detailing attributes of the location, taxonomic characteristics, edaphic and environmental preferences and limitations of the tree?		
Has assessment of the database confirmed the inclusion of woody monocots and gymnosperms?		

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Has assessment confirmed that Images used as evidence are the candidate's own photographs or drawings?			
Assessment may be conducted in a simulated or real work environment; however, determination of competency requires the application of work practices under work conditions.		Yes/No (Y/N)	Signed (Initialled)
Have assessments been demonstrated consistently over time?			
Have assessments been demonstrated in a suitable range of contexts?			
Have assessments been demonstrated with a productivity-based outcome?			
Have assessments been demonstrated with multiple assessment events and reports?			
Assessor Declaration			
Assessors must satisfy current standards for RTOs in the assessment of arboriculture units of competency.		Yes/No (Y/N)	Signed (Initialled)
Has assessment been conducted only by persons who have:			
<ul style="list-style-type: none"> • arboriculture vocational competencies at least to the level being assessed? 			
<ul style="list-style-type: none"> • current arboriculture industry skills directly relevant to the unit of competency being assessed? 			
Assessor name	Assessor qualification	Year	Full Signature
Competency Determination			
This section determines the skills and knowledge required to inspect, identify, select and specify a range of trees for suitability for an intended purpose.			Competent /Not yet competent
The candidate is competent in identifying, selecting and specifying trees.			
Competency Assessment Completion			
Assessor name	Date	Full Signature	

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