



Australian Government

Assessment Requirements for AHCTRF307 Construct turf playing surfaces

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0.

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 contributed to the completion of a sports turf construction project of a minimum of 100 square metres, individually or as part of a team, from concept to completion, including:

- developed a working plan and drawings to scale, including:
 - selected root zone materials
 - determined construction method according to industry standards
 - assessed the site layout
 - obtained, read and interpreted site and construction plans and specifications
 - selected the drainage system
 - estimated materials and costs for the project
- planned the construction of a turf profile, including:
 - conducted and interpreted soil tests
 - identified hazards and assessed the risks and implemented controls
 - used surveying equipment and techniques to accurately set out the site
- constructed the turf profile according to plans and specifications, including:
 - excavated to planned levels
 - installed sub-base to specification
 - installed drainage system to specification
 - installed and consolidated soil profile to specified grade and levels
- complied with local environmental requirements
- scheduled and organised construction work tasks according to construction project
- identified hazards and risks, and implemented control measures for personal, environmental and site-specific safety requirements
- operated, cleaned, maintained and stored tools and excavation and load shifting equipment.

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:

- interpretation of plans and specifications for the scope of sports turf construction, including:
 - location of site
 - implication of impediments and services on construction activities, including irrigation pipes, overhead and underground power, drainage, telecommunications, gas, root system of trees
 - dimensions of construction for determining list of materials
- sports turf soil profile construction principles, methods and resources, including:
 - range of construction methods for specific applications (e.g. golf and bowling greens, cricket wickets, sports fields, race tracks, lawn tennis)
 - Australian and international standards for sports turf construction
 - United States Golf Association (USGA) greens construction profiles
 - Californian method
 - local construction methods
 - natural construction
 - push up greens
 - sand over clay
 - working with a perched water table
- drainage installation methods and materials, including:
 - pipes
 - drainage materials
 - root zone layer and uniformity in depth of horizons
- materials, tools, equipment and machinery for construction of soil profiles, including:
 - soil amendments
 - base construction materials
 - turf growing media and quality
- safe operation of machinery and equipment for constructing profiles, including:
 - excavating to known levels, including the cut and fill quantities
 - working to a consistent level and grade from sub-base to final level
 - methods of compacting and testing the compaction of the sub-base
- practical understanding of surveying principles and techniques, including:
 - using survey equipment to establish benchmarks and levels on a construction site
 - interpreting and constructing basic contour drawings
 - transferring and pegging out contours to a construction site
- soil testing techniques and the application of results to the construction process, including:
 - texture (particle size)
 - pH

- electrical conductivity
- infiltration rates
- site constraints and their impact on constructing turf surface, including:
 - aspect
 - site history
 - trees and other vegetation
 - location of services
 - water quality and reclaimed sources of water
- workplace health and safety hazards, risks and control measures when constructing new turf, including:
 - site safety
 - personal safety
 - safe use and operation of tools, equipment and machinery
- planning and scheduling construction works to ensure a logical, timely and effective process
- laying out a construction area from plans and drawings, including:
 - measuring techniques
 - finding and marking levels
 - types of markers, including paint, pegs, stringlines, flags
- calculations relevant to costing and estimating a turf construction project, including:
 - excavation volumes
 - volume of construction materials
 - labour time and costs
- environmental practices and procedures relevant to turf construction sites, including:
 - implications associated with construction and excavation activity
 - waste disposal procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a sports turf facility or an environment that accurately represents workplace conditions of a minimum of 100 square metres
- resources, equipment and materials:
 - personal protective equipment and other site safety equipment
 - surveying equipment
 - hand tools, excavation and load shifting equipment
 - soil testing equipment for pH, electrical conductivity, texture and infiltration rates
- specifications:
 - workplace procedures and instructions for construction of sports turf playing surfaces

- sports turf project construction drawings, plans and specifications
- workplace safety and environmental procedures related to construction of sports turf playing surfaces.

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

Links

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