Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0. |

| AHCTRF302 | Establish turf |
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| Application | This unit of competency describes the skills and knowledge required to establish turf by sowing, turf laying, sprigging and chaffing or stolonization in sporting, public recreational open space, commercial and residential sites.  The unit applies to individuals who work under broad direction and take responsibility for their own work. They use discretion and judgement in the selection, allocation and use of available resources and for solving problems.  No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Turf (TRF) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Develop a turf establishment plan | 1.1 Collect representative soil samples of turf establishment area for testing according to workplace procedures  1.2 Package and label soil samples for laboratory testing according to laboratory procedures  1.3 Perform field tests of soil and record results according to workplace procedures  1.4 Identify and select turf grass species and propagation method according to workplace or client planned outcomes  1.5 Assess the site for physical and cultural impediments to turf establishment site and record results according to workplace procedures  1.6 Interpret results and prepare a turf establishment plan according to workplace procedures |
| 2. Prepare to establish a new turf area | 2.1 Select materials, tools, equipment and machinery for planting according to turf establishment plan  2.2 Carry out pre-operational and safety checks on tools, equipment and machinery according to workplace procedures and manufacturer instructions  2.3 Identify work health, safety and environmental hazards, assess risks and implement controls  2.4 Select, check, use and maintain personal protective equipment (PPE)  2.5 Implement weed control strategy in preparation for turf establishment activities according to workplace procedures |
| 3. Prepare soil and plant turf | 3.1 Prepare planting site, incorporate soil additives and ensure soil moisture is within specification according to establishment plan  3.2 Distribute turf propagation material on turf area according to turf establishment plan  3.3 Implement irrigation requirements to newly propagated turf according to turf establishment plan  3.4 Collect and dispose of waste according to workplace and environmental procedures  3.5 Clean, store and maintain tools, equipment and machinery according to workplace procedures |
| 4. Maintain turf establishment | 4.1 Protect the site from disturbance and damage according to workplace procedures  4.2 Assess soil moisture condition and rectify according to workplace irrigation practices  4.3 Implement turf mowing practices during establishment according to workplace procedures and turf establishment plan  4.4 Apply top dressing to level the turf area according to turf establishment plan  4.5 Apply nutrients and amendments according to turf establishment plan |
| 5. Report and repair areas of damaged turf | 5.1 Monitor turf condition for quality and repair according to turf establishment plan and workplace procedures  5.2 Record and report work outcomes according to workplace procedures |

| Foundation Skills  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. | |
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| Skill | Description |
| Reading | * Interpret symbols and text on plans * Interprets soil test procedures and test results for establishing turf grass |
| Writing | * Complete workplace documentation using industry terminology and required format |
| Numeracy | * Estimates and calculates distance, area, volumes, percentage, time, temperature and ratio * Applies numerical information to determine application rates for turf establishment treatments |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCTRF302 Establish turf | AHCTRF302 Establish turf | Changes to Performance Criteria for clarity.  Updated Performance Evidence and Knowledge Evidence | Equivalent unit |

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

| TITLE | Assessment requirements for AHCTRF302 Establish turf |
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| 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 established a turf surface using at least three different propagation materials, including:   * seed (either hand seed sowing, mechanical seed sowing, hydro-seeding, or drilling) * sod (turf rolls or sheets).   and one of the following methods:   * sprigs (either hand sprigging, hydro sprigging, mechanical sprigging) * plugs * chaffing or stolonisation   There must be evidence that the individual has:   * collected and prepared soil samples for testing according to workplace procedures and interpreted results * identified impediments to turf establishment and recorded results according to workplace procedures * determined turf establishment species, methods and requirements and prepared an establishment plan to meet client or workplace requirements * identified, hazards and risks and implemented control measure for personal and site specific safety according to workplace procedures * prepared materials, equipment, machinery and turf propagation materials ready for implementation according to turf establishment program * performed turf establishment activities safely using equipment, machinery and materials according to establishment plan and workplace procedures * collected waste and disposed of safely according to workplace safety and environmental procedures * selected, safely used, cleaned, maintained and stored turf establishment machinery and equipment according to workplace procedures * maintained turf establishment records and reported outcomes according to workplace procedures. | |

| Knowledge Evidence |
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| 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:   * principles and practices for establishing turf including: * preparing a turf establishment plan * turf grass identification, propagation and growth characteristics * turf establishment methods including, seed, sod, sprigs, plugs, chaffing and stolonisation * handling and assessing turf propagation materials for defects * distributing/laying/planting turf propagation materials to establish even coverage * fertiliser use and application * soils and turf nutrition * overseeding warm season grasses and allelopathy * common weeds, pests and diseases infestations and control measures for establishing new turf including field tests to identify problems * physical and chemical soils tests and their interpretation and effect on establishing new turf including: * compaction * pH * salinity and nutrition * texture and soil type * soil sampling techniques and preparation for laboratory testing * field testing techniques for soils * irrigation requirements for establishment of new and establishing turf * soil types and their preparation for establishing new turf * basic checks to assess soil condition include; soil moisture, tilth, compactness, depth and organic matter * soil preparation additives including, fertilisers, ameliorants, moisture control materials, pesticides and herbicides * methods for incorporation of soil additives * soil preparation requirements for different turf propagation techniques * calculations for rates of application of materials including: * quantitites of ammendments, fertilizer and planting material * areas to be treated * volumes of liquids to apply * tools, equipment and machinery used in preparing new turf surfaces * type of equipment and their effective and safe operation * pre-start checks * care and storage of tools, equipment and machinery * post turf propagation treatments including * protection for seed, sod, sprigs and plugs during first weeks of establishment * basic irrigation practices and recognising turf establishment needs and problems * rolling and mowing practices for new turf * monitoring and control of nutrient disorders, pest, diseases and other damage * top dressing purpose and procedures * nutrients and amendments used for establishing turf * 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 * record keeping and reporting procedures relevant to turf establishment. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a sports turf facility or an environment that accurately represents workplace conditions * resources, equipment and materials: * access to hand tools, stringlines, buckets, shovels, rakes, spades, level lawns, wheelbarrows * access to equipment, sod cutter, scarifier, transporter, roller, fertiliser and chemical application equipment * dry sand, propagation material, turf plugger * personal protection safety equipment * soil amendments and treatment materials * soil testing equipment * at least 3 types of turf propagation materials specified in the performance evidence * specifications: * turf establishment program, including turf grass species specifications and requirements * workplace procedures and instructions for establishing turf   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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