Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and 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. |

| AHCDRG301 | Install drainage systems |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to prepare, coordinate, undertake and complete surface and subsurface drainage system installation.  The unit applies to individuals who install drainage systems under broad direction and take responsibility for their own work.  No occupational licensing, legislative or certification requirements to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Drainage (DRG) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for drainage system installation activities | 1.1 Confirm activity to be undertaken, including identifying potential hazards and risks and implementing safe working practices to manage risks  1.2 Identify drainage system construction site  1.3 Select required materials, tools, equipment and machinery and check for safe operation  1.4 Select, fit, use and maintain personal protective equipment applicable to the task  1.5 carry out pre-operational checks |
| 2. Coordinate installation work | 2.1 Coordinate work tasks in a sequential, timely and effective manner  2.2 Identify environmental considerations of drainage installation activities  2.3 Maintain a clean and safe work area throughout work |
| 3. Prepare the site for installation of drainage system | 3.1 Interpret symbols and terminology to ensure drainage system plan is clearly understood  3.2 Identify layout of services, check depths and report discrepancies  3.3 Complete survey, measurement and marking out of site and confirm soil characteristics relevant to the system |
| 4. Undertake installation of drainage system | 4.1 Complete excavations without damage to services, facilities, features and established plants  4.2 Install drainage system  4.3 Test drainage system configuration, flow rates and capacity  4.4 Confirm remedial action to be taken when the drainage system operation does not meet the plan specifications |
| 5. Complete installation of drainage system | 5.1 Finish earthworks  5.2 Restore site and remove and dispose of waste material  5.3 Clean, maintain and store tools, equipment and machinery  5.4 Record work outcomes and report works as per the executed drawings, including adjustments |

| 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. | |
| --- | --- |
| Skill | Description |
| Reading | * Interpret textual information from a range of sources to identify relevant and key information about workplace operations |
| Writing | * Document drainage system installation activities |
| Oral communication | * Use clear language to report drainage system installation activities |
| Numeracy skills | * Measure drainage system site and drain depths |
| Navigate the world of work | * Recognise and follow workplace requirements, including safety requirements, associated with own role and area of responsibility |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCDRG301 Install drainage systems  Release 2 | AHCDRG301 Install drainage systems  Release 1 | Minor changes to performance criteria and foundation skills | Equivalent unit |

|  |  |
| --- | --- |
| 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 AHCDRG301 Install drainage systems |
| --- | --- |
| 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 installed drainage systems on at least one occasion and has:   * installed drainage system works * interpreted drainage system plans and drawings * interpreted site specifications, soil types and drainage system plans * levelled and aligned earthworks * measured materials required to install drainage systems * prepared for installation activities * set out drainage system works * set out, surveyed, tested and excavated the installation site * tested the drainage system * used equipment, tools and machinery appropriate to the scope of works. | |

| 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:   * principles and practices of drainage installation * drain types, components and installation techniques * soil characteristics and their impact on drainage systems * purposes of drainage systems and the application of drainage system plans. |

| Assessment Conditions |
| --- |
| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * work instructions and workplace procedures applicable to installing drainage systems * drainage system installation equipment * drainage system installation tools and equipment and procedures * personal protective equipment applicable to installing drainage systems * specifications: * recording procedures * relationships: * supervisor * timeframes: * according to job requirements.   Assessors of this unit must satisfy the requirements of assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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