Modification history

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| Release | Comments |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0. |

| AHCGRIXX3 | Maintain rooftop gardens, green walls and green facades |
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| Application | This unit of competency describes the skills and knowledge required to carry out maintenance work on green infrastructure.  The unit applies to individuals who carry out maintenance on various types of rooftop gardens, green walls and green facades.  This unit of competency is suitable for individuals using their own judgment to deal with predictable and unpredictable problems and decide on solutions to a range of complex problems during the maintenance process.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Green Infrastructure (GRI) |

| 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. Plan maintenance | 1.1 Read maintenance program and records, determine maintenance objectives and schedule appropriate work  1.2 Read and follow organisational processes, practices and procedures  1.3 Identify, calculate and order materials and products for the task  1.4 Determine job priorities and sequence job tasks in consultation with others on site  1.5 Identify hazards and implement controls following workplace safety and environmental requirements, including planning safe access to maintenance areas for persons, materials and equipment  1.6 Develop a vegetation maintenance plan that eliminates or minimises the risk of fire |
| 2. Carry out maintenance | 2.1 Select, fit and use personal protective equipment (PPE) appropriate for the task  2.2 Select and check plant, equipment and tools for serviceability and rectify and report faults  2.3 Remove and dispose of weeds  2.4 Remove decaying vegetation, clean up stagnant water and adjust the pace of drip irrigation system, if required  2.5 Prune or remove vegetation to eliminate or minimise the risk of fire  2.6 Apply appropriate method of eliminating pest infestation  2.7 Clear drainage areas and outlets and inspect and report on roof or building surface penetrations  2.8 Prune plants to encourage growth, condition, top up and fertilise  2.9 Evaluate soil or growing media condition, and add ameliorates or additives to improve the soil or growing media and plant quality |
| 3. Record maintenance activities | 3.1 Observe and note plant health, burrows and nests, pest infestation and droppings  3.2 Record soil or growing media fertility and nutrient level  3.3 Consider and record maintenance requirements that maintain and improve biodiversity  3.4 Record and log maintenance activity and schedule next maintenance period |
| 4. Clean up | 4.1 Clear the work area, and dispose of, reuse or recycle materials following workplace and environmental requirements.  4.2 Clean tools and equipment, check for serviceability and report damage or faults.  4.3 Store and secure tools and equipment following 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 |
| Oral communication | * Interact and collaborate effectively with others, including using communication tools and devices |
| Reading | * Interpret and follow maintenance schedules, product information and manufacturer specifications * Research and read climate and weather conditions |
| Writing | * Complete maintenance documentation accurately and legibly * Develop relevant documentation and record information using digital technologies |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCGRIXX3 Maintain rooftop gardens, green walls and green facades |  |  | No equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  [Agriculture Horticulture and Conservation and Land Management Training Package](https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72) |

| TITLE | Assessment requirements for AHCGRIXX3 Maintain rooftop gardens, green walls and green facades |
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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 maintained one rooftop garden with a minimum area of 100 square metres, one green wall with a minimum of 20 square metres and one green facade with a minimum of 20 square metres and:   * conducted scheduled interval visual and irrigation system inspections * carried out spring and autumn or seasonal pruning * evaluated soil or growing media condition and adjusted as required * removed rubbish during general inspections * maintained climate and weather records or charts of the local environment. | |

| 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:   * functional and maintenance requirements of green infrastructure * intensive and extensive green roofs * ecosystems and habitat restoration in urban areas * site analysis: * climatic factors – wind, temperature, solar radiation and rainfall * drainage and irrigation * terminology of green infrastructure maintenance * processes and techniques of maintenance: * feeding and watering * weeding and trimming * ameliorants and additives * seasonal, moderate and or regular * features and benefits of green infrastructure: * improved stormwater management * increase sound insulation * regulate building temperatures * run off water filtration * food production * aesthetic value * improving air quality * energy efficiency * reduction in energy consumption and saving * sustainability * protecting building from the elements and increasing roof life span * thermal insulation * reduction in risk of fire * reducing the urban heat island effect * creation and preservation of habitat and ecological biodiversity * characteristics, properties and limitations of materials/plants used for green infrastructure: * water proofing material * substrate * root barrier * drainage and irrigation systems * storing and recycling water systems * lighting systems * types of green wall construction: * geo-fabric system * steel framed system * types of green roofs: * extensive green roof comprises of water proof membrane, root protection layer, a drainage layer, filter mat, growing medium and vegetation * intensive – maximise environment benefits, provide public amenities and production of food * semi extensive – hybrid of extensive and intensive, might have limited access and structural capacity to support an intensive green roof * types of green facades * current and relevant work health and safety and environmental requirements * organisational policies, procedures and quality systems * functional and operational features of plant, equipment, hand and power tools: * elevated work platform * power tools * battery operated tools * workplace safety: * hierarchy of control * working at heights * falling objects * personal protective equipment (PPE) * hazardous manual labour * hazardous materials * worker and public safety * high-risk work * traffic management * causes and controls of fire hazards in green infrastructure. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in green infrastructure workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * tools and equipment appropriate for carrying out horticultural maintenance work * PPE * specifications: * specific organisational policies, procedures and processes * green infrastructure maintenance schedule/checklist * work health and safety and environmental documentations * relationships: * clients to discuss green infrastructure design requirements.   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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