

Case for endorsement
Part 3 AHC
Agriculture, Horticulture and
Conservation and Land
Management Training Package
Version 6.0

Submitted by Skills Impact
on behalf of
Agriculture and Production Horticulture Industry
Reference Committee and Amenity Horticulture,
Landscaping and Conservation & Land
Management Industry Reference Committee
October 2020

Contents

A. Administrative details	4
B. Description of work and request for approval	6
C. Evidence of Industry support	19
D. Industry expectations about training delivery	22
E. Implementation of the training package components	23
F. Quality assurance reports	25
G. Implementation of COAG Industry Skills Council reforms to training packages	27
H. Evidence of completion	28
I. IRC support	29
Appendix 1: Components for endorsement	30
Appendix 2: Industry support	46
Appendix 3: Minor Updates	88
Appendix 4: Quality assurance report	89
Quality Report Template	89
Section 1 – Cover page	89
Section 2 – Compliance with the Standards for Training Packages 2012	94
Section 3 – Compliance with the training package quality principles	98

A. Administrative details

This section provides an overview of the relevant organisations, the case for change and training package components for endorsement.

Organisational details

This submission is made by the following Industry Reference Committees (IRCs):

- Agriculture and Production Horticulture IRC
- Amenity Horticulture, Landscaping and Conservation & Land Management IRC.

Skills Impact Ltd is the Skills Service Organisation (SSO) supporting this submission.

Component details

The Case for Endorsement comprises 9 qualifications, 73 units of competency and their associated assessment requirements for endorsement as part of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0*.

Project Name	Components
Green Walls and Rooftop Gardens	<ul style="list-style-type: none">• 5 new units of competency• 3 new skill sets (not for endorsement)• 1 revised qualification
Nursery Production and Production Horticulture	<ul style="list-style-type: none">• 5 merged qualifications (combined 10 existing qualifications)• 3 revised qualifications• 1 qualification to be deleted• 67 revised units of competency (with new code)• 1 new unit of competency• 5 revised skill sets (not for endorsement)

A full list of components proposed for endorsement appears in **Appendix 1: Components for Endorsement**. Qualifications and units of competency reviewed as minor updates appear in **Appendix 3: Minor Updates**.

Case for Change details

Green Walls and Rooftop Gardens

The Case for Change (Reference number: Skills Impact/TPD/2019-20-002) was approved on 13 August 2019. The requirements set by the Australian Industry and Skills Committee (AISC) in relation to the training package development work are:

- 5 new units of competency
- 4 new skill sets.

Nursery Production and Production Horticulture

The Case for Change (Reference number: Skills Impact/TPD/2018-19/005) was approved on 26 March 2019. The requirements set by the Australian Industry and Skills Committee (AISC) in relation to the training package development work are:

- Review 11 qualifications
- Review 68 units of competency
- Review 5 skill sets.

B. Description of work and request for approval

The section describes the work undertaken and the decision being sought from the AISC. The components submitted for endorsement have been reviewed as part of the following projects:

- Green Walls and Rooftop Gardens
- Nursery Production and Production Horticulture.

Work undertaken and why

The following points are covered for each project.

- All components submitted for endorsement have been developed and reviewed in accordance with the *Standards for Training Packages 2012*, the *Training Package Products Policy 2019* and the *Training Package Development and Endorsement Process Policy, 2019*.
- Evidence of consultation with states and territories is provided in [Appendix 2: Industry support](#).

Green Walls and Rooftop Gardens

Skill Description:

Roof gardens, vertical gardens and green facades are a subset of the 'green infrastructure' or 'living infrastructure' industry sector. This is of growing significance to a range of stakeholders (product suppliers, government policy makers, builders/property developers, landscapers/horticulturalists and the community) as increasing urbanisation motivates green infrastructure projects in urban development for aesthetic, environmental, economic and/or social reasons.

Horticulturalists are familiar with plant and media recommendations and landscapers (designers and constructors) are familiar with building installations, such as garden beds and tree landscapes at ground level. However, the skills and knowledge required to design, construct and maintain green infrastructure on walls and roofs is specialised. Consideration needs to be given to drainage and filtration systems, soil/media and plant selection for specialised locations, waterproof barrier selection, nutrient requirements, access points, working at heights on elevated work platforms, and local government legislation. Knowledge of environmental factors and microclimates and how much weight a structure can bear is important. These unique skill requirements of workers in this sub-sector have been identified as part of this project and reflected in the national skills standards to support the skills development and career opportunities in this growing industry.

Driver for this project:

Australian city dwellers will be all too familiar with the fierce heat that can be experienced on a hot summer's day, when surrounded by closely constructed buildings, concrete and other solid surfaces. Roof gardens, vertical gardens and green facades can offer respite from these 'urban heat islands', where space for traditional parks is limited. In recent years, Australian city councils have pledged to increase green infrastructure to reduce the urban heat island effect. Melbourne has a Green Our City Strategic Action Plan, Sydney has the Green Roofs and Walls Policy, and Brisbane has introduced a non-statutory New World City Design Guide – Buildings that Breathe.

Vertical gardens and roof gardens not only help cool our cities, they manage storm water, improve air quality and offer energy-saving, lifestyle and health benefits in urban, regional and rural environments. These 'living' roofs and walls are growing in popularity, especially as they offer city residents healthier, environmentally responsible buildings. Population growth in cities is influencing government policies around sustainable living and urban greening within high-density living areas. The rising interest in the development of green infrastructure is encouraged by government policy and the increased availability of technology that makes their construction and maintenance easier and more economical. Skills and knowledge are shifting to respond to the needs of this specialised sector and with that, job opportunities are on the increase.

The 2019–2022 Skills Forecast submitted to the AISC by the Amenity Horticulture, Landscaping, Conservation & Land Management Industry Reference Committee (AHLCLM IRC) approved the Green Walls and Rooftop Gardens project. The purpose of this project was to establish new skill sets and units of competency for the specialised skills and knowledge required to design, construct, install and maintain green infrastructure.

Work undertaken:

A group of Subject Matter Experts (SMEs) were identified to provide advice throughout the project that saw key industry employers, associations and peak training bodies being represented nationwide. The first SME meeting was held in early September, in Sydney. With this being such a new and emerging field, the SMEs provided much needed clarification and direction for the project whereby they identified the tasks individuals undertake when working with green infrastructure: roof gardens, vertical gardens and green facades. Industry recognised that there is a skills gap in vocational education with respect to 'green infrastructure'. The specialised skills required were broken down to three key areas: design, construction, and maintenance. Currently there are no qualifications with these core skill requirements, though some skills such as plant selection and controlling plant pests, diseases and disorders, are covered in horticulture, landscaping and parks and gardens qualifications.

The roof gardens, vertical gardens and green facades sector is regarded as an emerging industry and a 'trend' that is in its infancy in Australia. Those organisations that are currently venturing into this niche market space are largely drawing on research, expertise and examples from overseas, system suppliers, experts, and specialist contractors who have been active in the sector for more than 10 years. The Australian governing bodies and some city councils have existing published policies and guides to encourage development in this sector. However, as is common for any growing industry that promises commercial opportunities; the increasing popularity of roof and vertical gardens and green facades is attractive for less experienced operators and/or employees. Feedback from consultation indicated that the main principles (skills and knowledge) of green infrastructure are very similar to ground-based principles of horticulture and landscape design, construction and maintenance. It is therefore understandable why existing landscape and horticulture operators are starting to take up this new market opportunity, as these individuals will be building on their existing knowledge. Feedback suggested the development of new skill sets is preferable to the development of a new qualification, as this will create a foundation for ongoing professional development for workers in this key specialist area.

Research of endorsed units of competency on the national system revealed that there are no current standards for training packages covering specific skills for green infrastructure. Therefore, three new skill sets have been created:

- *AHCSS00114 Design Roof Gardens, Vertical Gardens and Green Facades Skill Set,*
- *AHCSS00115 Construct Roof Gardens, Vertical Gardens and Green Facades Skill Set*
- *AHCSS00116 Maintain Roof Gardens, Vertical Gardens and Green Facades Skill Set.*

Accompanying these new skill sets are five new units of competency, that have been developed to encompass specialised skill areas:

- *AHCGRI501 Design roof gardens*
- *AHCGRI502 Design vertical gardens and green*
- *AHCGRI401 Construct roof gardens*
- *AHCGRI402 Construct vertical gardens and green facades*
- *AHCGRI301 Maintain roof gardens, vertical gardens and green facades.*

Research identified other existing units of competency such as: *AHCPCM504 Design specialised landscape* and *AHCPGD402 Plan a plant establishment program* which encompass skills and knowledge that can be utilised for green infrastructure related tasks. These units of competency have been included in the appropriate skill sets.

Through further SME discussions via phone and email, the accompanying units listed in these skill sets were modified to suit the needs for employers and employees. Initially, there was a suggestion to include a ropes unit in both *AHCSS00115 Construct Roof Gardens, Vertical Gardens and Green Facades Skill Set* and *AHCSS00116 Maintain Roof Gardens, Vertical Gardens and Green Facades Skill Set*. However, SMEs clarified that not all individuals undertaking these tasks would require knowledge and skills in the use of ropes. As skill sets cannot include elective units the decision was made to not include a ropes unit, therefore not limiting delivery. With the use of the new TPCMS analytical search tool it was discovered that there is no current ropes unit that would be suitable for this type of work. Analysis showed that the only ropes units in the system relate to abseiling (recreational sports) or to arboriculture (specifically with trees). Communication with Skills Service Organisation Artibus Innovation indicated that they are currently working with the Property Services IRC with regards to proposing a ropes unit; however, until such unit has been developed, endorsed and available on the national register, this is an area that will remain as a skills gap for the industry. This feedback has been placed into Skills Impact's continuous improvement register for possible future inclusion once the new ropes unit of competency becomes available.

A site visit hosted by the Australian Institute of Horticulture (AIH) with a presentation by Junglefy at Sydney's One Central Park on 16 October 2019, provided an opportunity to gain firsthand experience in the features and challenges of green infrastructure. The advantages of green infrastructure to urban environments were clearly identified and discussed. They include:

- improved air quality,
- biodiversity and health and well-being benefits,
- opportunities to grow and sell food; and
- provision for aesthetically pleasing buildings.

During the visit it became clear that design considerations need to not just consider external factors with regards to load bearing on the building structure and installation of irrigation systems but also site placement of plants, irrigation challenges when placed on multi storied buildings, ongoing maintenance and external aesthetics from the residents' perspectives (from the inside out). The multiple challenges faced and experienced during the installation/build phases at One Central Park reinforced to the group the critical importance of effective training to be able to problem solve; manage and work in collaboration with builders, architects and residents; and the need for clear and concise communication throughout the whole build lifecycle and ongoing maintenance is paramount.

Junglefy CEO discussed how components of the build can be managed by different contractors who are dependent on each other. An example of poor activity coordination cited was an occasion when the water supply was turned off for maintenance by a licenced plumber who failed to notify the company that the water was not going to be turned back on until after the weekend. This action caused thousands of dollars of damage as all the newly installed plants died over the weekend and had to be replaced. There was not only the monetary loss, but this action also set the completion date of the project back. The group were also reminded that owners of apartments also need to know costs will be incorporated into the body corporate fees of the building to cover the maintenance of the plants and systems, that all require a 24/7 maintenance plan.

Clarification through consultation with industry and SMEs confirmed that although an individual would undertake similar steps to design and construct each type of green infrastructure, there are slight differences between roof gardens, vertical gardens and green facades. This set the basis for the new design and construct units of competency to each contain separate elements for roof gardens, vertical gardens and green facades, reinforcing the specialised learning. Feedback suggested that maintenance could be contextualised per type of green infrastructure as the same processes would take place.

A concern raised during first draft consultation phase and again during IRC approval called into question whether the proposed unit for design and unit for construct were too intricate and therefore raise potential difficulties in delivery as a learner would have to demonstrate the skills and knowledge to design and construct for three different types of green infrastructure per unit. Feedback suggested splitting the design and construct units into two units apiece (one for designing roof gardens and the

other for designing vertical gardens and facades, one for constructing roof gardens and the other for constructing vertical gardens and facades) allowing adequate focus on delivery of these detailed units. Initially it was felt that keeping the units as is would satisfy industries needs as individuals would need to learn all three types of green infrastructure and how they interact with one another. However, at time of IRC approval (April 2020) this concern was escalated. To address this and other concerns a meeting with representatives from the IRC and SME working group was held on 4 June 2020. From this meeting it was determined that further consultation with SMEs including wider industry representation was required. On 25 June 2020 a meeting with SMEs and additional representatives was held to discuss potential changes to the components. They agreed that by splitting out the roof garden section of the initially proposed design unit and construct units, and therefore creating 4 units, would be a benefit in delivery, allowing greater focus on more robust units. With these adjustments implemented, further online consultation was sought on the reshaped drafts from 6 to 19 July 2020 and validated from 29 July to 12 August 2020.

Feedback on the Performance Evidence (PE) of these units indicated possible delivery complications with the individual having to design/construct one roof garden project with a minimum of 50 square metres, one vertical garden with a minimum of 20 square metres and one green facade with a minimum of 20 square metres. It was suggested that some Registered Training Organisations (RTOs) may struggle with the practical workspace to assess this PE. Industry experts consulted suggested that not all workers would be required to deliver spaces of these sizes (residential vs commercial) and that a minimal smaller square metre area would be suitable. The PE in both units was reduced to a minimum of 4 square meters for each type of green infrastructure. The work undertaken ensured that the industry experts consulted were satisfied the units still met the industries' needs whilst allowing for a more flexible delivery by RTOs.

Throughout all discussions with employers it was confirmed that if someone is interested in entering the green infrastructure industry, they need to know all three types of infrastructure and how they interact with one another. It is common for workers to use a range of green infrastructure building styles and techniques across one project; indeed, some development sites may have all three incorporated. Industry reinforced the fact that an individual would not specialise in one type of green infrastructure, i.e. roof gardens alone, they would need to have sound knowledge of all three. As a result of this feedback both design units; *AHCGRI501 Design roof gardens* and *AHCGRI502 Design vertical gardens and green facades* have been included in the *AHCSS00114 Design Roof Gardens, Vertical Gardens and Green Facades Skill Set* and both the construct units *AHCGRI401 Construct roof gardens* and *AHCGRI402 Construct vertical gardens and green facades* have been included in the *AHCSS00115 Construct Roof Gardens, Vertical Gardens and Green Facades Skill Set*. Similarly, this is reflected with the proposed unit placement into existing AHC qualifications as explained below.

With no industry requirements for a new qualification in green infrastructure at this time, feedback from consultation proposed adding the new units of competency into existing AHC qualifications as electives. The table below shows the recommendations for placement of these new units. The support captured during this project for the unit placement has been added to the Skills Impact continuous improvement register. The Certificate IV in Landscape has been updated to include the five new GRI units, the remaining qualifications will reflect industry recommendations as and when they are next reviewed. In the meantime, packaging rules within these qualifications permit the new units to be imported as electives.

Proposed qualifications	AHCGRI501 Design roof gardens	AHCGRI502 Design vertical gardens and green facades	AHCGRI401 Construct roof gardens	AHCGRI402 Construct vertical gardens and green facades	AHCGRI301 Maintain roof gardens, vertical gardens and green facades
AHC30716 Certificate III in Horticulture					Yes

Proposed qualifications	AHCGRI501 Design roof gardens	AHCGRI502 Design vertical gardens and green facades	AHCGRI401 Construct roof gardens	AHCGRI402 Construct vertical gardens and green facades	AHCGRI301 Maintain roof gardens, vertical gardens and green facades
AHC30916 Certificate III in Landscape Construction					Yes
AHC31016 Certificate III in Parks and Gardens					Yes
AHC40416 Certificate IV in Horticulture			Yes	Yes	Yes
AHC42020 Certificate IV in Landscape*	Yes	Yes	Yes	Yes	Yes
AHC50416 Diploma of Horticulture	Yes	Yes	Yes	Yes	
AHC50616 Diploma of Landscape Design	Yes	Yes	Yes	Yes	
AHC52016 Diploma of Landscape Project Management	Yes	Yes	Yes	Yes	

*This qualification has been updated to include the new GRI units as part of AHC v6.0

Another area of discussion during this project was the topic of prerequisites for the individual units as well as entry requirements for the skill sets. Concerns were raised by SMEs and further by the IRC that individuals should hold prior knowledge and possibly a qualification in horticulture or landscaping before undertaking further education in green infrastructure. As mentioned above, the new units of competency are proposed to be added as elective units to several existing qualifications, none of which currently have entry requirements, meaning a person could undertake the units, and RTOs could package the individual units into a short course from existing qualifications without entry requirements. As an alternative to entry requirements or prerequisites, wording such as; “This skill set is for experienced horticultural, landscaping, landscape design and/or construction workers, builders or developers who design green infrastructure for roof gardens, vertical gardens and green facades in association with specialists and building professionals” has been incorporated into the description of the new units and skill sets to indicate a necessary level of experience. RTOs can and should determine individual learner capabilities for enrolment. By not including prerequisites or entry requirements the units and skill sets will be accessible to a wider range of potential learners. This has been well received by industry and RTOs and reinforced during the additional consultation periods.

Terminology and language used throughout the project also needed to be consistent. With variations used throughout the country, advice was sought of the SMEs who concluded that the language used should be: roof garden, vertical garden and green facade, all to be classified under the new unit sector Green Infrastructure (GRI) within the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package*. The new GRI unit sector sets the foundation for this new and

emerging industry and provides space for additional units to be developed, should any future analysis identify this requirement.

A key message that became clear from consultation, is that roof gardens, vertical gardens and green facades have higher potential risks than traditional landscaping, as there is potential for significant risk to the building and/or structure in the event of a failure of the green infrastructure. As a result, consultation stakeholders posited that regulations for the sector may be imminent and stressed the importance of professional practice requirements (engagement of engineers, specialists, and certifiers) for operators in this industry sector. This is reinforced throughout the units where the individual must effectively communicate/consult with clients, contractors, architects, engineers, growing media specialists and suppliers to determine such things as design and regulatory requirements for green infrastructure. Consideration around who regulates this sector and the possible need for specific licences or tickets was a hot discussion. As these requirements will vary nationwide, a general licensing statement was placed in the skill sets and units stating the following:

“Licensing, legislative or certification requirements may apply to the work undertaken in this [unit/skill set] in some jurisdictions. Users are advised to check with the relevant regulatory authorities.”

This statement meets the need to satisfy any possible future regulatory/licencing changes.

Nursery Production and Production Horticulture

The Nursery Production and Production Horticulture project is part of the review of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package* based on industry sectors, including conservation and land management, nursery production, production horticulture, biosecurity and emergency response, and merchandising and sales. The project introduces a strategic and more efficient approach to reviewing the entire AHC Training Package over a four to six-year period, helping retain currency of training and response to industry skills needs.

The Agriculture and Production Horticulture and Amenity Horticulture, Landscaping and Conservation & Land Management IRCs have recommended implementing a strategic approach to reviewing the AHC Training Package. This approach is based on identifying and reviewing units by their sector classification rather than on their listing in qualifications. This has resulted in the capture of most job roles related to a relevant unit sector being identified, allowing training components to be updated with respect to the various performance contexts of those roles across industry.

Skill Description:

In Nursery Production and Production Horticulture, skills cover the whole value chain, from the propagation and growing of plants; to production horticulture businesses, growing and harvesting fruits, vegetables or nuts; and to retail nurseries selling plants to the public.

The skills and knowledge required to work within these areas are often transferable. Given their close relation, many of the challenges and opportunities facing these sectors are similar or related.

Increased competition from imported produce, market price pressures, and challenging seasonal conditions are all driving industry to adopt new technologies, process and operations.

Robotics are increasingly used for watering and picking crops; drones are being utilised to identify disease; and forecasting crop yield potential is coming along in leaps and bounds as collecting and processing a wide range of data becomes easier. Such developments require higher levels of digital skills to enable workers and managers to engage with equipment, software and data.

Driver for this project:

Given the high level of importance and complexity of these sectors it is essential that skills standards are reviewed and updated on a regular basis. This project has been proposed to review units across the sectors of production horticulture, nursery production and retail nursery. This will allow for the review of units to take into consideration ways in which transferable skills can be acknowledged, strengthening career paths across these sectors.

Nursery Production

The retail and production nurseries industry toil to find quality qualified staff. The industry also struggles to gain recognition as a career pathway for entry and graduate-level workers. Recently Horticulture Innovation and Nursery & Garden Industry Australia commissioned research into the lack of interest in the industry and how this can be changed.

Updates to the AHC Training Package since 2017 have addressed specific priority skills needs in this sector, particularly in pest management, soil management and irrigation. Given this work, it is now timely to review the remaining units of competency, within the Nursery Production, Plants Culture and Maintenance and Soils Management Unit Sectors to assist the industry's work in creating career pathways and improved recognition. This review, in turn will assist in the review and revision of 13 qualifications and 6 skill sets

Production Horticulture

The Agriculture and Production Horticulture (APH) IRC has identified Production Horticulture as a priority area for review. The relevant units have not been reviewed for some years, with updates in June 2016 undertaken for the purposes of transitioning to the Standards for Training Packages 2012, not for industry relevance.

Australia's horticulture industry has a reputation in both the domestic and international markets as a sustainable producer of premium safe food. This is primarily due to our high standards across all stages of the supply chain, from farm to consumer. The industry has moved from small-scale family farms to medium and larger scale operations, including corporate farming. Australian farmers continue to adjust their operations and adopt new technologies to respond to the opportunities and challenges of agricultural production in Australia, including increased competition from imported fresh and processed produce, market price pressures, challenging or adverse seasonal conditions.

Work undertaken:

Skills Impact was contracted to undertake the review and/or development of the following Nursery Production and Production Horticulture components for the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package*:

- 11 qualifications
- 5 skill sets
- 68 units of competency.

The project was segmented into three logical components and separate Subject Matter Expert Working Groups (SMEWG) were established for each of these segments. As a result, it was agreed that the following SMEWG's be established:

- Production Horticulture and Floriculture - SMEWG 1
- Production Nursery and Retail Nursery - SMEWG 2
- Production Horticulture, Production Nursery and Retail Nursery Management - SMEWG 3.

An initial meeting of the SME Working Groups was conducted at for the following locations and dates:

- 10th July 2019, Qantas Meeting Rooms, Sydney NSW – SMEWG 2
- 11th July 2019, Qantas Meeting Rooms, Sydney NSW – SMEWG 1
- 15th July 2019, Qantas Meeting Rooms, Sydney NSW – SMEWG 3.

During these meeting participants were asked to undertake a workforce functional analysis (WFA) in order to identify the job roles for their sector along with the tasks and sub tasks for each of these job roles. Participants were also asked whether the qualifications with low or no enrolments should be streamlined into other existing qualifications or deleted if the job roles were no longer valid in Australia.

Participants were asked to provide job descriptions, and Nursery & Garden Industry Victoria provided copies of job descriptions for nursery and garden industry workers after the SMEWG meetings.

A Production Nursery and Retail Nursery Discussion Paper capturing the discussion and subsequent meeting notes including suggested qualifications structures was developed and distributed to the SME WG participants for their consideration and feedback.

Site visits are valuable to observe, first hand, the processes required in different settings and the skills and knowledge required by individuals for those processes. These visits assisted the content writer in providing valuable insight to the various tasks and sub tasks that are carried out and assist in the development of units of competency.

Site visits have included:

- 19 August 2019 Gardenworld, 810 Springvale Road, Braeside
- 22 August 2019 Burleigh Flowers, 42 Wiseman Road, Silvan
- 26 August 2019 Peny Bryn Flowers, 25 White Street, Silvan
- 26 August 2019 Sunny Hill Flowers, 42 Wiseman Road, Silvan
- 30 August 2019 Biemond Nurseries Seville VIC
- 2 September 2019 Tasmanian Mushrooms, 193 Sheffield Main Road, Spreyton, Tasmania
- 3 September 2019 Agronico, 4 Cockers Creek Road, Spreyton, Tasmania

As a result of initial SMEWG meetings and site visits, draft documents for all components were developed and published on the Skills Impact website. A series of face-to-face consultation workshops were conducted to obtain feedback for the draft components. All feedback was collected from 16 September to 31 October 2019, via the online feedback hub, emails and phone calls.

Face-to-face consultation workshops were conducted in the following locations:

- Mildura - 17 September 2019
- Launceston - 23 September 2019
- Adelaide - 25 September 2019
- Sydney - 26 September 2019
- Brisbane - 8 October 2019
- Cairns - 9 October 2019
- Melbourne - 10 October 2019
- Darwin - 15 October 2019
- Perth - 16 October 2019.

For people who could not attend any of the planned face-to-face meetings above, a webinar was held on 14 October 2019. This allowed the project team to brief attendees on the key changes to the components and to allow for questions to be posed to the project team about the work undertaken.

During the review of the existing qualifications it was determined that the current Floriculture and Production Horticulture qualifications could be merged into a single suite of Production Horticulture qualifications, and that the current Production Nursery and Retail Nursery qualifications could be merged into a single suite of Nursery Operations qualifications.

During the latter part of this review, the SMEWG for the project were asked to consider the potential for further merging of these qualifications along with the current horticulture qualifications (Certificate II, III, IV in Horticulture and Diploma of Horticulture) into a single suite of horticulture qualifications with elective streams. There were a number of potential models identified for merging the qualifications, with the result being two opposing opinions, namely:

- Consolidate the qualifications. For example, the existing qualifications, *AHC20316 Certificate II in Production Horticulture* and *AHC21516 Certificate II in Floriculture* to be merged into a revised *AHC20320 Certificate II in Production Horticulture*, which includes elective streams for production horticulture and floriculture. This was the majority view and a position held by the Production Horticulture segment of the industry.

- Further consolidate the qualifications with the exception of the Certificate III “trade” qualifications – into a single suite of qualifications, including the horticulture qualifications. This was the view held by the majority of the Production Nursery and Retail Nursery segments of the industry.

Further consultation with the project SMEs determined that the qualifications should be made available for broader industry consideration and feedback. In addition, it was determined that a discussion paper should be developed and circulated at the same time to determine whether the qualifications should be merged.

The rationale for the merging of the qualifications was to provide greater clarity and simplicity for industry regarding the qualifications available for their workforce. Other opportunities that could arise from streamlining of the qualifications include:

- The potential for increased student enrolment numbers.
- The reduction of students enrolling in an unsuitable qualification.
- Marketing of the qualifications and industry outcomes to potential industry entrants is simplified.

Proposed changes to the units include:

- Minor changes to application.
- Minor edits to elements in some units and various changes and edits to Performance Criteria (PC).
- Inclusion of foundation skills.
- Assessment Requirements updated to include the frequency and or volume to performance evidence.
- Minor edits to performance evidence and knowledge evidence in some units.
- Specific conditions provided within the assessment conditions.

The following qualification has been proposed and recommended for deletion:

- *AHC50916 Diploma of Retail Nursery Management*. This qualification has been recommended for deletion due to low enrolment numbers.

The following units of competency has been merged:

- *AHCPHT301 Carry out a crop regulation program and AHCPHT305 Regulate crops have now been merged to create AHCPHT312 Implement a crop regulation program.*

Validation of components took place between 20 December 2019 – 16 February 2020. The extended period was due to a number of factors including the Christmas and New Year break and the devastating bushfires all around Australia that impacted this cohort of industry experts to carry out validation of the components in the normal allotted time for validation.

Despite these challenges, a representative group of experts from the industry were able to agree on minor updates to the final components and validation was achieved via a face-to-face meeting, -online surveys, phone calls and/or email.

Face-to-face validation meetings were held in Melbourne on 28 January and 30 January 2020. A webinar was also held on 19 February 2020 in order to discuss and review the remaining units which had not been validated during these meetings. All revised qualifications were reviewed and validated and units in the following sectors were completed and feedback captured:

- NSY Nursery
- PCM Plant Culture and Management
- PHT Production Horticulture.

Units in Soils and Media (SOL) and Water (WAT) were validated via the online feedback hub and email.

As a direct result of feedback received for validation, changes were made to the documents under review. Most notably:

- *AHC20720 Certificate II in Nursery Operations* - change to Group B and Group C elective unit lists, and minor edit to qualification packaging rules
- *AHC31120 Certificate III in Nursery Operations* – change to core unit list, Group A and Group C elective unit lists, and minor edits to qualification packaging rules
- *AHC40620 Certificate IV in Nursery Operations* – change to qualification descriptor, and Group B and Group C elective unit lists
- *AHC50820 Diploma of Nursery Management* – change of qualification title, qualification descriptor and qualification core and elective unit lists.

Major edits have been made to several units which has resulted in the requirement to allocate a new code. These edits have included:

- Changes to unit titles
- Changes to performance criteria and/or elements
- Major changes to performance evidence and/or knowledge evidence
- Assessment conditions may have also been updated

In May 2020, the Amenity Horticulture, Landscaping and Conservation and Land Management IRC reviewed the final draft skills standards and requested additional time for industry to review the 14 Nursery units, as they were concerned the terminology around these units required additional consideration to ensure learners have adequate opportunity to gain the required competencies.

As a result, meetings were held with SME WG to discuss all 14 units in the Nursery sector and clarify terminology throughout the drafts ensuring it was consistent and accurate.

The updated skills standards were then made available for broad industry feedback from 10 – 25 August 2020. This feedback was considered to produce final draft units and made available for validation and comment.

They have been updated to include work functions that reflect current job roles in the industry and incorporate the latest technologies, equipment and advances. Please note, this additional validation is for the NSY Nursery sector units only.

The draft documents were made available for validation until 4 September 2020.

Decision being sought

This submission puts forward the Case for Endorsement for the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package version 6.0*.

Green Walls and Rooftop Gardens

The draft components submitted for endorsement by the AISC are:

- 1 revised qualification
 - *AHC42020 Certificate IV in Landscape*
- 5 new units of competency
 - *AHCGRI501 Design roof gardens*
 - *AHCGRI502 Design vertical gardens and green facades*
 - *AHCGRI401 Construct roof gardens*
 - *AHCGRI402 Construct vertical gardens and green facades*
 - *AHCGRI301 Maintain roof gardens, vertical gardens and green facades*
- 3 new skill sets

- *AHCSS00114 Design Roof Gardens, Vertical Gardens and Green Facades Skill Set*
- *AHCSS00115 Construct Roof Gardens, Vertical Gardens and Green Facades Skill Set*
- *AHCSS00116 Maintain Roof Gardens, Vertical Gardens and Green Facades Skill Set (non endorsed).*

The proposed Training Package components are listed in **Appendix 1: Components for Endorsement**.

Nursery Production and Production Horticulture

The draft components submitted for endorsement by the AISC are:

- 8 qualifications
 - *AHC20320 Certificate II in Production Horticulture*
 - *AHC20720 Certificate II in Nursery Operations*
 - *AHC30620 Certificate III in Production Horticulture*
 - *AHC31120 Certificate III in Nursery Operations*
 - *AHC40320 Certificate IV in Production Horticulture*
 - *AHC40620 Certificate IV in Nursery Operations*
 - *AHC50320 Diploma of Production Horticulture*
 - *AHC50820 Diploma of Nursery Management*
- 1 qualification for deletion
 - *AHC50916 Diploma of Retail Nursery Management*
- 1 new unit of competency
 - *AHCPCM509 Apply knowledge of plant physiology to horticultural practices*
- 67 revised units of competency
 - *AHCNSY102 Support nursery work*
 - *AHCNSY205 Pot up plants*
 - *AHCNSY206 Care for nursery plants*
 - *AHCNSY207 Undertake propagation activities*
 - *AHCNSY208 Maintain indoor plants*
 - *AHCNSY308 Maintain nursery plants*
 - *AHCNSY309 Receive and dispatch nursery products*
 - *AHCNSY310 Install and maintain plant displays*
 - *AHCNSY311 Promote sales of plants*
 - *AHCNSY312 Prepare specialised plants*
 - *AHCNSY313 Implement a propagation plan*
 - *AHCNSY314 Operate fertigation equipment*
 - *AHCNSY403 Plan a growing-on program*
 - *AHCNSY404 Plan a propagation program*
 - *AHCPCM204 Recognise plants*
 - *AHCPCM205 Fell small trees*
 - *AHCPCM305 Implement a plant nutrition program*
 - *AHCPCM306 Provide information on plants and their culture*

- *AHCP307 Report on health and condition of trees*
- *AHCP404 Recommend plants and cultural practices*
- *AHCP405 Implement an integrated pest management program*
- *AHCP406 Develop a soil health and plant nutrition program*
- *AHCP507 Diagnose plant health problems*
- *AHCP508 Develop an integrated pest management program*
- *AHCP510 Collect and classify plants*
- *AHCP511 Specify plants for landscapes*
- *AHCP512 Design specialised landscape*
- *AHCP513 Conduct environment and food safety risk assessment of plant nutrition and soil fertility programs*
- *AHCP602 Develop and implement a plant health management strategy*
- *AHCPHT102 Support horticultural production*
- *AHCPHT215 Plant horticultural crops*
- *AHCPHT216 Carry out canopy maintenance*
- *AHCPHT217 Undertake field budding and grafting*
- *AHCPHT218 Carry out post-harvest operations*
- *AHCPHT219 Handle and move mushroom boxes*
- *AHCPHT220 Perform mushroom substrate process tasks*
- *AHCPHT221 Water mushroom crops*
- *AHCPHT222 Produce trellis dried grapes*
- *AHCPHT302 Prepare raw materials and compost feedstock*
- *AHCPHT312 Implement a crop regulation program*
- *AHCPHT313 Implement a post-harvest program*
- *AHCPHT314 Harvest horticultural crops mechanically*
- *AHCPHT315 Establish horticultural crops*
- *AHCPHT316 Supervise mushroom substrate preparation*
- *AHCPHT317 Coordinate horticultural crop harvesting*
- *AHCPHT318 Prepare value added compost-based products*
- *AHCPHT409 Develop a crop regulation program*
- *AHCPHT410 Develop harvesting and processing specifications to produce an olive oil*
- *AHCPHT411 Implement and monitor a horticultural crop harvesting program*
- *AHCPHT412 Manage mushroom substrate preparation*
- *AHCPHT413 Oversee vineyard practices*
- *AHCPHT414 Assess olive oil for style and quality*
- *AHCPHT415 Control Phase II mushroom substrate process*
- *AHCPHT416 Manage mushroom crop development*
- *AHCPHT511 Develop a horticultural production plan*
- *AHCPHT512 Manage a controlled growing environment*
- *AHCSOL203 Assist with soil or growing media sampling and testing*

- *AHCSOL406 Sample soils and interpret results*
- *AHCSOL407 Develop a soil use map for a property*
- *AHCSOL408 Prepare acid sulphate soil management plans*
- *AHCSOL409 Supervise acid sulphate soil remediation and management projects*
- *AHCSOL506 Manage erosion and sediment control*
- *AHCSOL507 Develop and manage a plan to reclaim land affected by salinity*
- *AHCSOL508 Manage soils to enhance sustainability*
- *AHCWAT202 Set up, operate and maintain water delivery systems for compost*
- *AHCWAT302 Monitor and operate water treatment processes*
- *AHCWAT504 Design water treatment systems*
- 5 skill sets, (non endorsed)
 - *AHCSS00064 Production Horticulture Administration Supervisor Skill Set*
 - *AHCSS00068 Production Horticulture Technology Skill Set*
 - *AHCSS00107 Production Horticulture Machinery Skill Set*
 - *AHCSS00108 Production Horticulture Manager Skill Set*
 - *AHCSS00109 Production Horticulture Supervisor Skill Set*

The proposed Training Package components are listed in **Appendix 1: Components for Endorsement**.

C. Evidence of Industry support

This section provides evidence that the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0* is supported by industry.

Support by IRC(s)

The Agriculture and Production Horticulture IRC and Amenity Horticulture, Landscaping and Conservation & Land Management IRC are responsible for the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package*. IRC members supported the SMEWGs recommendation to put forward the proposed training package products to the AISC for endorsement. Please refer to **Section I. IRC support** for written evidence of support.

Consultation with stakeholders

During development of the training package products, the following communication strategies were used for consultation with stakeholders:

- A project page was set up on the Skills Impact website at the start of each the projects, containing information about the project together with progress updates. Project pages remained on the website throughout the duration of the project. Visitors were invited to register their interest to receive email alerts about the project including notification and registration for public consultation workshops and opportunities to provide feedback on draft materials.
 - Green Walls and Rooftop Gardens project page:
<https://www.skillsimpact.com.au/horticulture-conservation-and-land-management/training-package-projects/green-walls-rooftop-gardens-project/>
 - Nursery Production and Production Horticulture project page:
<https://www.skillsimpact.com.au/agriculture/training-package-projects/horticulture-and-nursery-project/>
- IRC member communications with their industry networks
- Draft materials were hosted on the Skills Impact website for a minimum four-week period. Final drafts were hosted for an additional minimum two-week period for validation of final drafts.
- Stakeholders provided feedback via the Skills Impact Feedback Hub, online questionnaires/surveys, emails or telephone calls, or during consultation workshops.
- Emails and newsletters were sent to state and territory training authorities (STAs/TTAs), VET regulators, industry training advisory bodies (ITABs) and other stakeholders to keep them informed of the project's progress.

Please refer to **Appendix 2: Industry support** for a list of activities conducted, organisations and individuals consulted, together with letters of support.

In addition to these activities, the following specific stakeholder engagements took place for each project.

Green Walls and Rooftop Gardens

- SMEWG was formed to provide input on the development of draft materials. This group also provided advice and feedback throughout all stages of project development.
- SMEWG meeting held in Sydney on 3 September 2019, in addition to a teleconference and ongoing emails and telephone calls.
- Six public face-to-face consultation workshops were held in Darwin, Melbourne, Brisbane, Sydney, Adelaide, and Perth. Workshops were scheduled and promoted for all locations; however, no registered participants attended in Adelaide.
- One consultation webinar was held to cater for people who could not attend any of the face-to-face consultation workshops.

- Extended public feedback periods for both first draft consultation and validation via Skills Impact webpage.
- One site visit to building One Central Park, Sydney on 16 October 2019. Skills Impact were given a behind the scenes look at the world's tallest vertical garden at 130m high, hosted by Junglefy who continue to be involved in this creation.
- Stakeholders that were identified as potentially having an interest in the project were contacted via phone and email at the start of the project in August 2019 and continuously throughout as the project developed.
- Additional feedback was gathered from stakeholders via face-to-face meetings, emails and telephone calls.
- Validation meeting held in Brisbane on 26 February 2020 with SMEWG to provide advice on feedback received during the two-week public validation period and to review and validate final drafts.
- IRC and SME representatives meeting 4 June 2020 via zoom
- SMEWG meeting 25 June 2020 via zoom
- Redesign units available for additional feedback online from 6 to 19 July 2020
- Redesign units available for additional validation feedback online from 29 July to 12 August 2020.

Nursery Production and Production Horticulture

- Three SMEWGs were formed to provide input into the development of draft materials. These groups also provided advice and feedback throughout all stages of project development.
- SMEWGs meetings held in Sydney on 3 September 2019, in addition to a teleconference and ongoing emails and telephone calls.
- Six public face-to-face consultation workshops held between 17 September 2019 and 16 October in Mildura, Launceston, Adelaide, Sydney, Brisbane, Cairns, Melbourne, Darwin and Perth
- One consultation webinar was held to cater for people who could not attend any of the face-to-face consultation workshops.
- Extended public feedback periods for both first draft consultation and validation via Skills Impact webpage.
- Seven site visits in Victoria and Tasmania occurred between 19 August and 3 September 2019. Skills Impact were given the opportunity to observe the processes involved in the nursery production and production horticulture industries.
- Stakeholders that were identified as potentially having an interest in the project were contacted via phone and email at the start of the project in August 2019 and continuously throughout as the project developed.
- Additional feedback was gathered from stakeholders via face-to-face meetings, emails and telephone calls.
- Face to face validation meetings were held in Melbourne on 28th January and 30 January 2020. A webinar was also held on 19 February 2020.

State/Territory and key stakeholder engagement

A wide range of stakeholders have been engaged across Australia and from all states and territories. Stakeholders have included national and state-based industry associations, government departments, peak national committees, union, enterprises, key training providers and a range of individuals who are considered to be subject matter experts. Please refer to **Appendix 2: Industry support** for a list of activities conducted, together with organisations and individuals consulted.

Reports by exception

There are no reports by exception.

D. Industry expectations about training delivery

This section explains the advice provided in the Companion Volume Implementation Guide for the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0*, together with recommendations for delivery of qualifications as traineeships/apprenticeships.

Companion Volume Implementation Guide

The companion volume details information that covers key industry expectations about:

- qualifications suitable for vocational education and training delivered to secondary students
- qualifications suitable for delivery as apprenticeships or traineeships
- amount of training/volume of learning requirements to ensure that the individual can gain the necessary skills and knowledge
- key legislative requirements
- essential knowledge requirements.

Delivery as apprenticeship/traineeship

The Agriculture and Production Horticulture (APH) IRC and the Amenity Horticulture, Landscaping and Conservation & Land Management (AHLCLM) IRC recommends that each qualification listed in the following table could be the basis for a traineeship or apprenticeship.

Qualification	Delivery recommendation
AHC20320 Certificate II in Production Horticulture	Traineeship
AHC20720 Certificate II in Nursery Operations	Traineeship
AHC30620 Certificate III in Production Horticulture	Traineeship
AHC31120 Certificate III in Nursery Operations	Apprenticeship
AHC40320 Certificate IV in Production Horticulture	Traineeship
AHC40620 Certificate IV in Nursery Operations	Traineeship
AHC50320 Diploma of Production Horticulture	Traineeship
AHC50820 Diploma of Nursery Management	Traineeship

Delivery as VET programs for secondary students

- | |
|--|
| <ul style="list-style-type: none">▪ AHC20320 Certificate II in Production Horticulture▪ AHC20720 Certificate II in Nursery Operations |
|--|

E. Implementation of the training package components

This section explains how the training package meet occupational and/or licensing requirements and identifies particular implementation issues and strategies to manage these issues.

How training package components meet occupation and licensing requirements

Green Walls and Rooftop Gardens

Licensing requirements for approval of designs and specifications and landscape construction work depending on the value of the work, and certification requirements of operators using specific plant and equipment varies across state and territory jurisdictions. For example, not all green infrastructure work, construction or maintenance, will require use of high-risk work equipment (such as working at heights, using elevating work platforms or scissor lifts, or be on a construction site requiring a White Card).

As these requirements will vary nationwide, a general licensing statement was placed in the skill sets and units stating the following:

“Licensing, legislative or certification requirements may apply to the work undertaken in this [unit/skill set] in some jurisdictions. Users are advised to check with the relevant regulatory authorities.”

This statement meets the need to satisfy any possible future regulatory/licencing changes.

Implementation issues and management strategies

Green Walls and Rooftop Gardens

It is industry’s expectation that units of competency *AHCGRI501 Design roof gardens*, *AHCGRI502 Design vertical walls and green facades*, *AHCGRI401 Construct roof gardens* and *AHCGRI402 Construct vertical gardens and green facades* and the related skill sets are undertaken by persons with experience in landscaping work, landscape design, horticulture and/or building and construction. Without limiting entry by prescribing prerequisite units or entry requirements for skill sets, industry expects that users including registered training organisations would assess learners for necessary experience in these, or related fields that would enable their capability to undertake the units and/or skill sets.

Unit of competency *AHCGRI301 Maintain roof gardens, vertical walls and green facades* requires that maintenance activities be undertaken on at least three occasions and over a period of at least two months to enable maintenance of plants and infrastructure to be required.

Nursery Production and Production Horticulture

It is industry’s expectation that two of the revised qualifications include entry requirements before an individual can commence them. Those qualifications and their entry requirements are:

AHC40620 Certificate IV in Nursery Operations

To commence this qualification, individuals must demonstrate they have skills and knowledge in the application of:

- cultivating, growing and harvesting/production skills for a variety of plant types, including pest and disease control
- technology and equipment that apply in a production nursery or retail nursery workplace
- health and safety, pest management and biosecurity processes and regulations that apply in a production nursery or retail nursery workplace

The skills and knowledge may have been acquired through completion of a Certificate III or higher qualification relating to nursery or horticulture, or industry experience.

The job roles for this qualification require an individual to be able to provide technical support and supervise technical staff. This requires the individual to have underpinning technical skills in order to successfully undertake the qualification. As such it is critical that an individual has either completed an AQF3 level qualification in a related sector of the industry or have 2 years relevant industry experience.

AHC50820 Diploma of Nursery Management

To commence this qualification, individuals must demonstrate they have skills and knowledge in the application of:

- cultivating, growing and harvesting/production skills for a variety of plant types, including pest and disease control
- technology and equipment that apply in a production nursery or retail nursery workplace
- health and safety, pest management and biosecurity processes and regulations that apply in a production nursery or retail nursery workplace

The skills and knowledge may have been acquired through completion of a Certificate III or higher qualification relating to nursery or horticulture, or industry experience.

The job roles for this qualification require an individual to be able to provide technical support and manage technical staff. This requires the individual to have underpinning technical skills in order to successfully undertake the qualification. As such it is critical that an individual has either completed an AQF3 level qualification in a related sector of the industry or have 2 years relevant industry experience.

Pathways

A significant number of graduates of *AHC20320 Certificate II in Production Horticulture* would likely gain entry level jobs in the production horticulture or floriculture industry and then progress to *AHC30620 Certificate III in Production Horticulture*, which provides the skills and knowledge to perform higher skilled and autonomous operational roles.

A significant number of graduates of *AHC31120 Certificate III in Nursery Operations* would likely progress to *AHC40620 Certificate IV in Nursery Operations* enabling graduates to fill current and emerging roles such as; integrated pest managers, production nursery irrigation managers, dispatch managers, head growers, sales managers, site managers, quality assurance managers, retail nursery stock supervisors, green life buyer, nursery manager, merchandiser, or specialist technical roles.

It is envisaged that a number of graduates of *AHC40320 Certificate IV in Production Horticulture* would likely progress to *AHC50320 Diploma of Production Horticulture* or higher-level qualifications enabling graduates to fill current and emerging roles as owners, farm managers, head growers, crop managers, section managers, dispatch managers, sales managers, marketing managers or specialist consultant roles.

It is envisaged that a number of graduates of *AHC40620 Certificate IV in Nursery Operations* would most likely progress to *AHC50820 Diploma of Nursery Management* or higher-level qualifications enabling graduates to fill current and emerging roles as owners, farm managers, head growers, crop managers, sales managers, marketing managers or specialist consultant roles.

It is envisaged that a significant number of graduates of *AHC50320 Diploma of Production Horticulture* would most likely gain management level jobs in the production horticulture industry, which provides the skills and knowledge to perform higher skilled and autonomous operational roles.

F. Quality assurance reports

Skills Impact declares that the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version No 6* meet the requirements of the *Standards for Training Packages 2012* and the *Training Package Development and Endorsement Process Policy 2019*.

The table provides a statement of evidence that the components meet the Training Package Quality Principles.

Principle	Evidenced by:
1. Reflect identified workforce outcomes	<ul style="list-style-type: none"> • Changes demonstrate a clear link back to relevant AISC decisions commissioning the work, the IRC Skills Forecast and Proposed Schedule of Work, National Review Schedule and/or Case for Change, or demonstrate other evidence of industry needs. • Training package components are compliant with the Standards for Training Packages 2012, the Training Package Products Policy and the Training Package Development and Endorsement Process Policy 2019 • Evidence that the training package components respond to Ministers' policy initiatives, in particular the CISC 2015 training package reforms • Open and inclusive consultation and validation commensurate with scope and impact has been conducted
2. Support portability of skills and competencies including reflecting licensing and regulatory requirements	<ul style="list-style-type: none"> • Packaging rules, qualifications framework, and pathways support movement within and across sectors • Identification of skill sets that respond to client needs • Other national and international standards for skills are considered • Solutions to incorporate licensing and regulatory requirements are brokered and there is clear evidence of support from licensing and industry regulatory bodies
3. Reflect national agreement about the core transferable skills and core job-specific skills required for job roles as identified by industry	<ul style="list-style-type: none"> • Active engagement across industry has sought to achieve a national consensus about the advice being provided to the AISC. • Best use is made of cross-industry and work and participation bank units
4. Be flexible to meet the diversity of individual and employer needs, including the capacity to adapt to changing job roles and workplaces	<ul style="list-style-type: none"> • Provide flexible qualifications that enable application in different contexts • Provide multiple entry and exit points • Pre-requisite units of competency are used only when required
5. Facilitate recognition of an individual's skills and knowledge and support movement between the school, vocational education and higher education sectors	<ul style="list-style-type: none"> • Provide pathways from entry and preparatory level as appropriate to facilitate movement between schools and VET, from entry level into work, and between VET and higher education qualifications
6. Support interpretation by training providers and others through the use of simple, concise language and clear	<ul style="list-style-type: none"> • Industry advice about delivery is provided via a Companion Volume Implementation Guide ready for publication at the same time as the Training Package

<p>articulation of assessment requirements</p>	<ul style="list-style-type: none"> • Units of competency and their associated assessment requirements are clearly written and have consistent breadth and depth • Compliance with the TGA/National Register requirements for publication • Implementation advice is provided in a Companion Volume Implementation Guide that is ready for publication at the same time as the Training Package
--	---

The declaration and statement of evidence is confirmed by the independent Quality Report which is provided in **Appendix 4: Quality Report**.

The *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Companion Volume Implementation Guide Parts 1 and 2* have been quality assured through Skills Impact's quality processes and is available.

G. Implementation of COAG Industry Skills Council reforms to training packages

The decision being sought from the AISC would support the COAG Industry and Skills Council reforms to training packages. Completion of training package development work, together with extensive consultation with relevant stakeholders, confirms that the submission:

Green Walls and Rooftop Gardens

- The five new units of competency can be utilised as elective units across a broad range of landscape, horticulture and parks and gardens qualifications.
- The proposed inclusion of the five new units as electives in a single qualification (Certificate IV in Landscape) also enables an outcome specialising in green infrastructure end to end processes (design, construct, maintain) within the landscape sector.
- Three new skill sets have been developed.
- The skill sets provide specialisation pathways in green infrastructure into and from existing qualifications, including for other industry sectors such as building and property service professionals.

Nursery Production and Production Horticulture

- The qualifications have been designed to align with current industry roles and work functions. The core units in the qualifications provide alignment with the core job role outcomes of the qualifications, whilst the number of elective units available in the qualifications design enables flexibility in achieving the qualifications and ensuring that the breadth of occupational outcomes within the industry are serviced by these qualifications.
- The units in this project have been reviewed/developed to enable use by multiple industry sectors. Whilst the qualifications have relied on units currently in the system to ensure that there is no duplication of current units of competency and to enable the recognition of skills for workers transitioning from other industries into the production horticulture, floriculture and nursery industries and between sectors in these industries.
- The skill sets reviewed in this project, enable acquisition of specific skills requirements of the industry whilst providing transition from other industries into the production horticulture industry and between sectors and job roles in the production industry.

H. Evidence of completion

Skills Impact confirms that the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version No 6* have been completing according to the work assigned by the AISC in the Case for Change and the subsequent Activity Order.

The developed training package components are listed in **Appendix 1: Components for Endorsement**. Full copies of the listed training package components are provided with this Case for Endorsement.

Evidence that training package component(s) are prepared for publication.

The Quality Report provides confirmation that the draft components meet the *Standards for Training Packages 2012*.

All components have been created to comply with the National Register requirements for publication. The **Mapping Summary** and **Training Package Modification History** provided in **Appendix 1 Components for endorsement** provide details of the changes to the training package components that are required to allow them to be published on the National Register.

I. IRC support

The Agriculture and Production Horticulture Industry Reference Committee supports the submission of the training package components detailed in this Case for Endorsement.

Signed for and on behalf of the Agriculture and Production Horticulture IRC by its appointed Chair.

Name of Chair: Geoff Harvey

Signature of Chair: 

Date: 28 October 2020

The Amenity Horticulture, Landscaping, Conservation and Land Management Industry Reference Committee supports the submission of the training package components detailed in this Case for Endorsement.

Signed for and on behalf of the Amenity Horticulture, Landscaping, Conservation and Land Management IRC by its appointed Chair.

Name of Chair: Esther Ngang

Signature of Chair: 

Date: 27 October 2020

Appendix 1: Components for endorsement

a. List of qualification titles and codes

AHC Agriculture, Horticulture and Conservation and Land Management Training Package <i>Version No 6</i> Qualifications	
Code	Title
AHC20320	Certificate II in Production Horticulture
AHC20720	Certificate II in Nursery Operations
AHC30620	Certificate III in Production Horticulture
AHC31120	Certificate III in Nursery Operations
AHC40320	Certificate IV in Production Horticulture
AHC40620	Certificate IV in Nursery Operations
AHC42020	Certificate IV in Landscape
AHC50320	Diploma of Production Horticulture
AHC50820	Diploma of Nursery Management

b. List of unit titles and codes and associated assessment requirements

AHC Agriculture, Horticulture and Conservation and Land Management Training Package <i>Version No 6</i> Units of competency	
Code	Title
AHCGRI301	Maintain roof gardens, vertical gardens and green facades
AHCGRI401	Construct roof gardens
AHCGRI402	Construct vertical gardens and green facades
AHCGRI501	Design roof gardens
AHCGRI502	Design vertical gardens and green facades
AHCNSY102	Support nursery work
AHCNSY205	Pot up plants
AHCNSY206	Care for nursery plants
AHCNSY207	Undertake propagation activities
AHCNSY208	Maintain indoor plants
AHCNSY308	Maintain nursery plants
AHCNSY309	Receive and dispatch nursery products
AHCNSY310	Install and maintain plant displays
AHCNSY311	Promote sales of plants
AHCNSY312	Prepare specialised plants
AHCNSY313	Implement a propagation plan
AHCNSY314	Operate fertigation equipment
AHCNSY403	Plan a growing-on program
AHCNSY404	Plan a propagation program
AHCPCM204	Recognise plants
AHCPCM205	Fell small trees
AHCPCM305	Implement a plant nutrition program

AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version No 6 Units of competency	
Code	Title
AHCP306	Provide information on plants and their culture
AHCP307	Report on health and condition of trees
AHCP406	Develop a soil health and plant nutrition program
AHCP404	Recommend plants and cultural practices
AHCP405	Implement an integrated pest management program
AHCP507	Diagnose plant health problems
AHCP508	Develop an integrated pest management program
AHCP509	Apply knowledge of plant physiology to horticultural practices
AHCP510	Collect and classify plants
AHCP511	Specify plants for landscapes
AHCP512	Design specialised landscape
AHCP513	Conduct environment and food safety risk assessment of plant nutrition and soil fertility programs
AHCP602	Develop and implement a plant health management strategy
AHCPHT102	Support horticultural production
AHCPHT215	Plant horticultural crops
AHCPHT216	Carry out canopy maintenance
AHCPHT217	Undertake field budding and grafting
AHCPHT218	Carry out post-harvest operations
AHCPHT219	Handle and move mushroom boxes
AHCPHT220	Perform mushroom substrate process tasks
AHCPHT221	Water mushroom crops
AHCPHT222	Produce trellis dried grapes
AHCPHT302	Prepare raw materials and compost feedstock
AHCPHT312	Implement a crop regulation program
AHCPHT313	Implement a post-harvest program
AHCPHT314	Harvest horticultural crops mechanically
AHCPHT315	Establish horticultural crops
AHCPHT316	Supervise mushroom substrate preparation
AHCPHT317	Coordinate horticultural crop harvesting
AHCPHT318	Prepare value added compost-based products
AHCPHT409	Develop a crop regulation program
AHCPHT410	Develop harvesting and processing specifications to produce an olive oil
AHCPHT411	Implement and monitor a horticultural crop harvesting program
AHCPHT412	Manage mushroom substrate preparation
AHCPHT413	Oversee vineyard practices
AHCPHT414	Assess olive oil for style and quality
AHCPHT415	Control Phase II mushroom substrate process
AHCPHT416	Manage mushroom crop development
AHCPHT511	Develop a horticultural production plan
AHCPHT512	Manage a controlled growing environment
AHCSOL203	Assist with soil or growing media sampling and testing
AHCSOL406	Sample soils and interpret results
AHCSOL506	Manage erosion and sediment control

AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version No 6 Units of competency	
Code	Title
AHCSOL507	Develop and manage a plan to reclaim land affected by salinity
AHCWAT302	Monitor and operate water treatment processes
AHCSOL407	Develop a soil use map for a property
AHCSOL408	Prepare acid sulphate soil management plans
AHCSOL409	Supervise acid sulphate soil remediation and management projects
AHCSOL508	Manage soils to enhance sustainability
AHCWAT202	Set up, operate and maintain water delivery systems for compost
AHCWAT504	Design water treatment systems

c. Skill sets (not for endorsement)

AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version No 6 Skill sets	
Code	Title
AHCSS00064	Production Horticulture Administration Supervisor Skill Set
AHCSS00068	Production Horticulture Technology Skill Set
AHCSS00107	Production Horticulture Machinery Skill Set
AHCSS00108	Production Horticulture Manager Skill Set
AHCSS00109	Production Horticulture Supervisor Skill Set
AHCSS00114	Design Roof Gardens, Vertical Gardens and Green Facades Skill Set
AHCSS00115	Construct Roof Gardens, Vertical Gardens and Facades Skill Set
AHCSS00116	Maintain Roof Gardens, Vertical Gardens and Green Facades Skill Set

d. Mapping information

Mapping of qualifications

Mapping of qualifications between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
AHC20316 Certificate II in Production Horticulture	AHC20320 Certificate II in Production Horticulture	Merged two qualifications	Not equivalent
AHC21516 Certificate II in Floriculture	AHC20320 Certificate II in Production Horticulture	Merged two qualifications	Not equivalent

Mapping of qualifications between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
AHC20716 Certificate II in Production Nursery	AHC20720 Certificate II in Nursery Operations	Merged two qualifications	Not equivalent
AHC20816 Certificate II in Retail Nursery	AHC20720 Certificate II in Nursery Operations	Merged two qualifications	Not equivalent
AHC30616 Certificate III in Production Horticulture	AHC30620 Certificate III in Production Horticulture	Merged two qualifications	Not equivalent
AHC31116 Certificate III in Production Nursery	AHC31120 Certificate III in Nursery Operations	Merged two qualifications	Not equivalent
AHC31216 Certificate III in Retail Nursery	AHC31120 Certificate III in Nursery Operations	Merged two qualifications	Not equivalent
AHC33216 Certificate III in Floriculture	AHC30620 Certificate III in Production Horticulture	Merged two qualifications	Not equivalent
AHC40316 Certificate IV in Production Horticulture	AHC40320 Certificate IV in Production Horticulture	Amended packaging rules, new core and elective units	Not equivalent
AHC40616 Certificate IV in Production Nursery	AHC40620 Certificate IV in Nursery Operations	Merged two qualifications	Not equivalent
AHC40716 Certificate IV in Retail Nursery	AHC40620 Certificate IV in Nursery Operations	Merged two qualifications	Not equivalent
AHC42016 Certificate IV in Landscape	AHC42020 Certificate IV in Landscape	Updated elective units and added five new GRI units	Equivalent
AHC50316 Diploma of in Production Horticulture	AHC50320 Diploma of Production Horticulture	Amended packaging rules, new core and elective units	Not equivalent
AHC50816 Diploma of Production Nursery Management	AHC50820 Diploma of Nursery Management	Amended title, packaging rules and entry requirements, new core and elective units	Not equivalent
AHC50916 Diploma of Retail Nursery Management	Not applicable	Deleted	Not applicable

Mapping of units of competency

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
Not applicable	AHCGRI301 Maintain roof gardens, vertical gardens and green facades	The unit has been created to address an emerging skill or task required by industry	Newly created
Not applicable	AHCGRI401 Construct roof gardens	The unit has been created to address an emerging skill or task required by industry	Newly created
Not applicable	AHCGRI402 Construct vertical gardens and green facades	The unit has been created to address an emerging skill or task required by industry	Newly created
Not applicable	AHCGRI501 Design roof gardens	The unit has been created to address an emerging skill or task required by industry	Newly created
Not applicable	AHCGRI502 Design vertical gardens and green facades	The unit has been created to address an emerging skill or task required by industry	Newly created
AHCNSY101 Support nursery work	AHCNSY102 Support nursery work	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY201 Pot up plants	AHCNSY205 Pot up plants	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY202 Care for nursery plants	AHCNSY206 Care for nursery plants	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY203 Undertake propagation activities	AHCNSY207 Undertake propagation activities	Minor changes to application Major changes to performance criteria Foundation skills added	Not equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
		Assessment requirements updated	
AHCNSY204 Maintain indoor plants	AHCNSY208 Maintain indoor plants	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY301 Maintain nursery plants	AHCNSY308 Maintain nursery plants	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY302 Receive and dispatch nursery products	AHCNSY309 Receive and dispatch nursery products	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY303 Install and maintain plant displays	AHCNSY310 Install and maintain plant displays	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY304 Deliver and promote sales of plants	AHCNSY311 Promote sales of plants	Major changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY305 Prepare specialised plants	AHCNSY312 Prepare specialised plants	Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY306 Implement a propagation plan	AHCNSY313 Implement a propagation plan	Minor changes to application Major changes to performance criteria Foundation skills added	Not equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
		Assessment requirements updated	
AHCNSY307 Operate fertigation equipment	AHCNSY314 Operate fertigation equipment	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY401 Plan a growing-on program	AHCNSY403 Plan a growing-on program	Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCNSY402 Plan a propagation program	AHCNSY404 Plan a propagation program	Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPCM201 Recognise plants	AHCPCM204 Recognise plants	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPCM203 Fell small trees	AHCPCM205 Fell small trees	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPCM301 Implement a plant nutrition program	AHCPCM305 Implement a plant nutrition program	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPCM302 Provide information on plants and their culture	AHCPCM306 Provide information on plants and their culture	Minor changes to application Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
AHPCPM304 Report on health and condition of trees	AHPCPM307 Report on health and condition of trees	Minor changes to application Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHPCPM401 Recommend plants and cultural practices	AHPCPM404 Recommend plants and cultural practices	Minor changes to application Minor changes to performance criteria Foundation skills added Assessment requirements updated	Equivalent
AHPCPM402 Develop a soil health and plant nutrition program	AHPCPM406 Develop a soil health and plant nutrition program	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHPCPM403 Implement an integrated pest management program	AHPCPM405 Implement an integrated pest management program	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHPCPM501 Diagnose plant health problems	AHPCPM507 Diagnose plant health problems	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHPCPM502 Collect and classify plants	AHPCPM510 Collect and classify plants	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHPCPM503 Specify plants for landscapes	AHPCPM511 Specify plants for landscapes	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHPCPM504 Design specialised landscape	AHPCPM512 Design specialised landscape	Performance criteria clarified Foundation skills added	Equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
		Assessment requirements updated	
AHCP505 Conduct environment and food safety risk assessment of plant nutrition and soil fertility programs	AHCP513 Conduct environment and food safety risk assessment of plant nutrition and soil fertility programs	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCP506 Develop an integrated pest management program	AHCP508 Develop an integrated pest management program	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
Not applicable	AHCP509 Apply knowledge of plant physiology to horticultural practices	The unit has been created to address an emerging skill or task required by industry	Newly created
AHCP601 Develop and implement a plant health management strategy	AHCP602 Develop and implement a plant health management strategy	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHPHT101 Support horticultural production	AHPHT102 Support horticultural production	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHPHT201 Plant horticultural crops	AHPHT215 Plant horticultural crops	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHPHT202 Carry out canopy maintenance	AHPHT216 Carry out canopy maintenance	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHPHT204 Undertake field budding and grafting	AHPHT217 Undertake field budding and grafting	Minor changes to application	Not equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
		Major changes to performance criteria Foundation skills added Assessment requirements updated	
AHCPHT205 Carry out post-harvest operations	AHCPHT218 Carry out post-harvest operations	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT206 Handle and move mushroom boxes	AHCPHT219 Handle and move mushroom boxes	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT207 Perform mushroom substrate process tasks	AHCPHT220 Perform mushroom substrate process tasks	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT208 Water mushroom crops	AHCPHT221 Water mushroom crops	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT209 Produce trellis dried grapes	AHCPHT222 Produce trellis dried grapes	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT301 Carry out a crop regulation program	AHCPHT312 Implement a crop regulation program	Redesigned unit that includes content from previous units	Not equivalent
AHCPHT303 Implement a post-harvest program	AHCPHT313 Implement a post-harvest program	Minor changes to application	Not equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
		Major changes to performance criteria Foundation skills added Assessment requirements updated	
AHCPHT304 Harvest horticultural crops mechanically	AHCPHT314 Harvest horticultural crops mechanically	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT305 Regulate crops	AHCPHT312 Implement a crop regulation program	Redesigned unit that includes content from previous units	Not equivalent
AHCPHT306 Establish horticultural crops	AHCPHT315 Establish horticultural crops	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT307 Prepare raw materials and compost feedstock	AHCPHT302 Prepare raw materials and compost feedstock	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCPHT308 Prepare value added compost-based products	AHCPHT318 Prepare value added compost-based products	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCPHT309 Supervise mushroom substrate preparation	AHCPHT316 Supervise mushroom substrate preparation	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT310 Coordinate horticultural crop harvesting	AHCPHT317 Coordinate horticultural crop harvesting	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
AHCPHT401 Assess olive oil for style and quality	AHCPHT414 Assess olive oil for style and quality	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCPHT402 Develop a crop regulation program	AHCPHT409 Develop a crop regulation program	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT403 Develop harvesting and processing specifications to produce an olive oil	AHCPHT410 Develop harvesting and processing specifications to produce an olive oil	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT404 Implement and monitor a horticultural crop harvesting program	AHCPHT411 Implement and monitor a horticultural crop harvesting program	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT405 Manage mushroom substrate preparation	AHCPHT412 Manage mushroom substrate preparation	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT406 Control Phase II mushroom substrate process	AHCPHT415 Control Phase II mushroom substrate process	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCPHT407 Manage mushroom crop development	AHCPHT416 Manage mushroom crop development	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCPHT408 Oversee vineyard practices	AHCPHT413 Oversee vineyard practices	Minor changes to application Major changes to performance criteria	Not equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
		Foundation skills added Assessment requirements updated	
AHCPHT502 Develop a horticultural production plan	AHCPHT511 Develop a horticultural production plan	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCPHT503 Manage a controlled growing environment	AHCPHT512 Manage a controlled growing environment	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCSOL202 Assist with soil or growing media sampling and testing	AHCSOL203 Assist with soil or growing media sampling and testing	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCSOL401 Sample soils and interpret results	AHCSOL406 Sample soils and interpret results	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCSOL402 Develop a soil use map for a property	AHCSOL407 Develop a soil use map for a property	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCSOL403 Prepare acid sulphate soil management plans	AHCSOL408 Prepare acid sulphate soil management plans	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCSOL404 Supervise acid sulphate soil remediation and management projects	AHCSOL409 Supervise acid sulphate soil remediation and management projects	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent

Mapping of units of competency between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
AHCSOL502 Manage soils to enhance sustainability	AHCSOL508 Manage soils to enhance sustainability Release 2	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCSOL503 Manage erosion and sediment control	AHCSOL506 Manage erosion and sediment control	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCSOL504 Develop and manage a plan to reclaim land affected by salinity	AHCSOL507 Develop and manage a plan to reclaim land affected by salinity	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCWAT201 Set up, operate and maintain water delivery systems for compost	AHCWAT202 Set up, operate and maintain water delivery systems for compost	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCWAT301 Monitor and operate water treatment processes	AHCWAT302 Monitor and operate water treatment processes	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent
AHCWAT501 Design water treatment systems	AHCWAT504 Design water treatment systems	Minor changes to application Major changes to performance criteria Foundation skills added Assessment requirements updated	Not equivalent

Skill sets mapping information (not for endorsement)

Mapping of skill sets between AHC Agriculture, Horticulture and Conservation and Land Management Training Package Versions 5.0 and 6.0.			
Code and title AHC V5.0	Code and title AHC V6.0	Comments	Equivalence statement
AHCSS00064 Production Horticulture Administration Supervisor Skill Set Release 1	AHCSS00064 Production Horticulture Administration Supervisor Skill Set Release 2	Skill set requirements amended and minor edits.	Equivalent
AHCSS00065 Production Horticulture Machinery Skill Set	AHCSS00107 Production Horticulture Machinery Skill Set	Skill set requirements amended, minor edits and unit of competency updated to current version.	Equivalent
AHCSS00066 Production Horticulture Manager Skill Set	AHCSS00108 Production Horticulture Manager Skill Set	Skill set requirements amended, minor edits and units of competency updated to current version.	Equivalent
AHCSS00067 Production Horticulture Supervisor Skill Set	AHCSS00109 Production Horticulture Supervisor Skill Set	Skill set requirements amended, minor edits and unit of competency updated to current version.	Equivalent
AHCSS00068 Production Horticulture Technology Skill Set Release 1	AHCSS00068 Production Horticulture Technology Skill Set Release 2	Skill set requirements amended and minor edits.	Equivalent
Not applicable	AHCSS00114 Design roof gardens, vertical gardens and green facades	Skill set has been created to address a defined industry need	Newly created
Not applicable	AHCSS00115 Construct roof gardens, vertical gardens and green facades	Skill set has been created to address a defined industry need	Newly created
Not applicable	AHCSS00116 Maintain roof gardens, vertical gardens and green facades	Skill set has been created to address a defined industry need	Newly created

Credit arrangements

Credit arrangements for AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version No 6		
Qualification Code	Qualification Title	Credit Arrangement Details
AHC20320	Certificate II in Production Horticulture	At the time of endorsement of this training package, no national credit arrangements exist.
AHC20720	Certificate II in Nursery Operations	At the time of endorsement of this training package, no national credit arrangements exist.
AHC30620	Certificate III in Production Horticulture	At the time of endorsement of this training package, no national credit arrangements exist.
AHC31120	Certificate III in Nursery Operations	At the time of endorsement of this training package, no national credit arrangements exist.
AHC40320	Certificate IV in Production Horticulture	At the time of endorsement of this training package, no national credit arrangements exist.
AHC40620	Certificate IV in Nursery Operations	At the time of endorsement of this training package, no national credit arrangements exist.
AHC50320	Diploma of Production Horticulture	At the time of endorsement of this training package, no national credit arrangements exist.
AHC50820	Diploma of Nursery Management	At the time of endorsement of this training package, no national credit arrangements exist.

Appendix 2: Industry support

Consultation activities

A range of strategies were used for consultation with stakeholders during development of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0*.

Green Walls and Rooftop Gardens

Consultation activities included:

- Project page on the Skills Impact website - throughout project lifecycle
<https://www.skillsimpact.com.au/horticulture-conservation-and-land-management/training-package-projects/green-walls-rooftop-gardens-project/>
- News articles and stories in Skills Impact newsletters and other external publications – throughout project
- SME WG and functional analysis workshops – 3 September 2019
- Site visits and face-to-face meetings – throughout project
- Consultation draft 1 – feedback hub, face-to-face workshops and webinar – 30 October to 1 December 2019
- Validation survey – 7 February – 1 March 2020
- Validation meeting – 26 February 2020
- 2nd round feedback – 6 – 19 July 2020
- 2nd round validation – 29 July – 12 August 2020.

Stakeholders engaged during the project are described in the matrix below, with a full list of all engaged stakeholders available below. It is worth noting that, as the skill sets and units of competency developed as part of this project are new, there were no existing Registered Training Organisations (RTOs) to engage in the project. Instead, Skills Impact reached out to RTOs who were delivering existing related qualifications for their input.

	ACT	NS W	NT	Qld	SA	Tas	Vic	WA	National
Industry (employer / employee)									
Industry association									*
Union									
Registered Training Organisation (RTO)									
Government department	*					*			

** Note: Feedback received from a national industry association and an Industry Training Advisory Body, Government departments and Industry Association confirmed few to no relevant stakeholders in Tasmania and Australian Capital Territory.*

Project page on the Skills Impact website

A project page was set up on the Skills Impact website at the start of the project with information about the project together with progress updates. The project page remained on the website throughout the project. Visitors were invited to register their interest to receive email alerts about the project including notification and registration for public consultation workshops and opportunities to provide feedback on draft materials.

Green Walls and Rooftop Gardens project page: <https://www.skillsimpact.com.au/horticulture-conservation-and-land-management/training-package-projects/green-walls-rooftop-gardens-project/>

Publications

As part of communication activities to inform stakeholders of the project's progress and opportunities for input and feedback, news articles, social media posts and newsletters were published. Skills Impact newsletters and website news articles were published on the Skills Impact website and distributed to the database of subscribers. External publications were distributed to the relevant publisher's subscriber lists.

Skills Impact newsletters and website news articles

Distributed to the Skills Impact database of subscribers.

- Opportunities for Feedback & New Project; New Green Walls & Rooftop Gardens Project – 16 September 2019
- Register for a Workshop; Green walls & Rooftop Gardens – 4 October 2019
- Skills Impact Newsletter; Help shape the Skills Standards for Your Sector – 24 October 2019
- Feedback Invited on Draft Skills Standards; Green Walls & Rooftop Gardens drafts available – 30 October 2019, 7 November 2019 & 29 November 2019
- Year in Review & Australian Training Awards – 12 December 2019
- Skills Impact Newsletter; Your feedback in Action Green Walls & Rooftop Gardens – 20 December 2019
- Have Your Say on Final Draft Skill Standards; Green Walls & Rooftop Gardens – 31 January 2020
- Final Draft Skills Standards Available for Comment; Green Walls & Rooftop Gardens validation drafts available – 11 February 2020 & 21 February 2020.
- Feedback on Additional Changes Green Walls and Rooftop Gardens Project - 6 July 2020
- Validate Green Walls and Rooftop Gardens Skills Standards – 29 July 2020

In addition to these publications, an *Update on Skills Impact Projects* Newsletter was distributed to State and Territory Training Authorities, Industry Training Advisory Boards and Councils, Victorian Curriculum Maintenance Managers and TAFE NSW Industry Liaison people each month, providing updates on all Skills Impact projects, including the Green Walls and Rooftop Gardens project.

External publications

- Master Landscapers of SA Newsletter – 'Help Define National Skills Standards for Green Walls & Rooftop Gardens' – November 2019
- Landscape QLD Newsletter – 'Green Walls and Rooftop Gardens Project Consultation' – November 2019
- The Landscape Association - 18 October 2019 workshops
- Velg Training - 30 May 2019
- VET PD Group - September 2019

Industry Feedback – Green Walls and Rooftop Gardens

Subject Matter Expert Working Group – meeting 3 September 2019 Sydney attended by 15 SMEs

Name	Organisation	Position	Organisation Type / Size	State
Andrew Booth	Junglefy	NSW State Manager	Industry / Medium	NSW

Ben Nicholson	Groof Consulting/The Urban Greener	Director	Industry / Sole Trader	VIC
Claire Farrell	The University of Melbourne	Senior Lecturer in Green Infrastructure	RTO / Large	MEL
Dr Jana Soderlund	Green Roofs Australasia	National Business Development Manager	Industry / Large	WA
Eddie Bennett	TAFE Queensland	Board Director	RTO / Large	QLD
Emil Montibeler	Ozbreed Plants	National Business Development Manager	Industry / Medium	NSW
Leigh Barrett	Living Style and Landscapes	Director	Industry / Medium	QLD
Marianne Mentis	Greenwall Solutions	Business Development Manager	Industry / Small	NSW
Mark Paul	The Greenwall Company	Director	Industry / Small	NSW
Matthew Lunn	Landscape Industry Association of Western Australia (LIAWA)	Executive Officer	Industry Association / Small	WA
Michael Casey	Australian Institute of Horticulture	President	Industry Association / Small	NAT
Pamela Gurner-Hall	Footprint Landscape Design	Director	Industry / Small	SA
Penny Smith	The Hills Bark Blower	Research Manager	Industry / Medium	NSW
Saul Johnson	SJ Landscapes	Director Head Landscaper	Industry / Small	QLD
Tony Momi	Horticulture TAFE NSW	Head Teacher	RTO / Large	NSW

Consultation Webinar Participants – 26 November 2019 – 4 attendees

Name	Organisation	Position	Organisation Type / Size	State
David Priem	Agribusiness SkillsPoint	Industry Relationship Lead – Land Management	RTO / Large	NSW
Frances Parnell	Department of Training and Workforce Development	Manager, Training Curriculum Services	Government / Small	WA

Jeremy Rose	Artibus Innovation	Manager Industry Development	Government / Small	NAT
Mark Corea	Moreland City Council	Unit Manager, Open Space Maintenance	Government / Small	WA

Consultation Workshop Participants – 13 November 2019 Adelaide

1 registration with no attendees

Consultation Workshop Participants – 14 November 2019 Perth – 6 attendees

Name	Organisation	Position	Organisation Type / Size	State
Catherine Storrs	South Metropolitan TAFE	Lecturer	RTO / Large	WA
Esther Ngang	Matrix Enterprises WA Pty Ltd	Director	Industry	NAT
Julian Rose	Deep Green Landscaping	Director	Industry / Medium	WA
Lisa Hall	South Metropolitan TAFE	Lecturer	RTO / Large	WA
Paul Etheredge	Food, Fibre & Timber Industries Training Council	Project Manager	Industry Association / Small	WA
Shaun Banner	OCKHM Biophilicities Australia	Director, Vice Chair	Industry / Small	WA

Consultation Workshop Participants – 19 November 2019 Brisbane – 3 attendees

Name	Organisation	Position	Organisation Type / Size	State
Eddie Bennett	TAFE Queensland	Board Director	RTO / Large	QLD
Kathleen FitzGerald	Greening Australia	Compliance Trainer	RTO / Large	NAT
Mark Sorby	Landscape Queensland	CEO	Industry / Small	QLD

Consultation Workshop Participants – 20 November 2019 Sydney – 4 attendees

Name	Organisation	Position	Organisation Type / Size	State
David Hinton	TAFE NSW	Teacher	RTO / Large	NSW
Michael Clay	Clayscaping	Owner	Industry / Small	NSW
Robbie Renu	Gecko Plant Scapes	Owner	Industry	NSW
Tony Momi	Horticulture TAFE NSW	Head Teacher	RTO / Large	NSW

Consultation Workshop Participants – 26 November 2019 Melbourne – 6 attendees

Name	Organisation	Position	Organisation Type / Size	State
Anne Wiltshire	Melbourne Polytechnic	Primary Industries Curriculum Maintenance Manager	RTO / Large	VIC
Ben Nicholson	Groof Consulting & The Urban Greener	Director	Industry / Sole Trader	VIC
Claudia Green	Box Hill Institute	Trainer – Horticulture and Land Management	RTO / Large	VIC
Gail Hall	City of Melbourne	Green Infrastructure Coordinator	Government / Large	VIC
Lynda Green	Australian Apprenticeships & Traineeships Information Service	Training Package Content Officer	Government / Small	VIC
Megan Flower	Landscaping Victoria Master Landscapers	Executive Officer	Industry / Small	VIC

Consultation Draft Feedback Contributors 30 October – 1 December 2019 – 10 attendees

Name	Organisation	Position	Organisation Type / Size	State
Andrew Hewitt	TAFE NSW	Head Teacher – Landscape Design	RTO / Large	NSW
Anne Wiltshire	Melbourne Polytechnic	Primary Industries Curriculum Maintenance Manager	RTO / Large	VIC

Belinda Watson	Melbourne PolyTech	Teacher/Project Officer	RTO / Large	VIC
Ben Nicholson	Groof Consulting & The Urban Greener	Director	Industry / Sole Trader	VIC
Eddie Bennett	TAFE Queensland	Board Director	RTO / Large	QLD
Erik Van Zuilekom	United Natures	Designer, Botanist and Living Architecture Designer	Industry	NAT
Lisa Hall	South Metropolitan TAFE	Lecturer	RTO / Large	WA
Paul Etheredge	Food, Fibre & Timber Industries Training Council	Project Manager	Industry Association / Small	WA
Sheree Bourke	Alexandria Park Community School	Science and TAS Department	RTO	NSW
Tony Momi	Horticulture TAFE NSW	Head Teacher	RTO / Large	NSW

SME Validation Forum Participants – 26 February 2020 Brisbane – 7 attendees

Name	Organisation	Position	Organisation Type / Size	State
Ben Nicholson	Groof Consulting & The Urban Greener	Director	Industry / Sole Trader	VIC
Eddie Bennett	TAFE Queensland	Board Director	RTO / Large	QLD
Leigh Barrett	Living Style and Landscapes	Director	Industry / Medium	QLD
Lisa Hall	South Metropolitan TAFE	Lecturer	RTO / Large	WA
Michael Casey	Australian Institute of Horticulture	President	Industry Association / Small	NAT
Michael Clay	Clayscaping	Owner	Industry / Small	NSW
Saul Johnson	SJ Landscapes	Director Head Landscaper	Industry / Small	QLD

Validation Draft Feedback Contributors 7 February – 1 March 2020 – 4 respondents

Name	Organisation	Position	Organisation Type / Size	State
Anne Wiltshire	Melbourne Polytechnic	Primary Industries Curriculum Maintenance Manager	RTO / Large	VIC
Leigh Barrett	Landscape Queensland	President	Industry Association / Small	QLD
Nelson Brown	Department of Trade, Business and Innovation Northern Territory Government of Australia	Senior Project Officer	Government	NT
Pamela Gurner-Hall	Footprint Landscape Design	Director	Industry / Small	SA

IRC and SME representatives meeting – 4 June 2020 via zoom – 8 attendees

Name	Organisation	Position	Organisation Type / Size	State
Craig Hallam	Amenity Horticulture Landscaping Parks and Gardens	Expert	Industry Association	VIC
Esther Ngang	Amenity Horticulture Landscaping Parks and Gardens	Expert	Industry	WA
Jen Ford	Australian Association of Bush Regenerators Inc	Organisational member	Industry Association	QLD
Leigh Barrett	Living Style and Landscapes	Director	Industry / Medium	QLD
Lisa Hall	South Metropolitan TAFE	Lecturer	RTO / Large	WA
Megan Flower	Amenity Horticulture Landscaping Parks and Gardens	Expert	Industry Association	VIC
Michael Casey	Australian Institute of Horticulture	President	Industry Association / Small	NAT

Stewart Detez	Swinburne University	Manager	RTO / Large	VIC
---------------	----------------------	---------	-------------	-----

SME meeting – 25 June 2020 via zoom – 12 attendees

Name	Organisation	Position	Organisation Type / Size	State
Ben Nicholson	Groof Consulting & The Urban Greener	Director	Industry / Sole Trader	VIC
Eddie Bennett	TAFE Queensland	Board Director	RTO / Large	QLD
Leigh Barrett	Living Style and Landscapes	Director	Industry / Medium	QLD
Lisa Hall	South Metropolitan TAFE	Lecturer	RTO / Large	WA
Michael Casey	Australian Institute of Horticulture	President	Industry Association / Small	NAT
Craig Jones	Maroondah Landscapes	Managing Director	Industry / Medium	VIC
Stewart Detez	Swinburne University	Manager	RTO / Large	VIC
Gail Hall	Individual	Individual	N/A	VIC
Michael Platt	Design Landscapes	Managing Director	Industry / Medium	NSW
Esther Ngang	Amenity Horticulture Landscaping Parks and Gardens	Expert	Industry	WA
Tony Momi	Horticulture TAFE NSW	Head Teacher	RTO / Large	NSW
Saul Johnson	SJ Landscapes	Director Head Landscaper	Industry / Small	QLD

Further Draft Feedback Contributors 6-19 July 2020 – 14 respondents

Name	Organisation	Position	Organisation Type / Size	State
Ann Moore	Holmesglen Institute	Assistant Manager	RTO	VIC

Anne Wiltshire	Melbourne Polytechnic	Primary Industries Curriculum Maintenance Manager	RTO / Large	VIC
Craig Jones	Maroondah Landscapes	Managing Director	Industry / Medium	VIC
Eddie Bennett	TAFE Queensland	Board Director	RTO / Large	QLD
Gail Hall	Individual	Individual	N/A	VIC
Geoff Heard	Fytogreen	Director	Industry	VIC
Jacqueline Spencer	Department of Education and Training Victoria	Manager, Training Products Unit	STA	VIC
Jock Gammon	Junglefy	Founder & Managing Director	Industry / Medium	NSW
Lisa Ellis	Lisa Ellis Gardens Pty Ltd	Director	Industry / Medium	VIC
Michael Casey	Australian Institute of Horticulture	President	Industry Association / Small	NAT
Paul Etheredge	Food, Fibre and Timber Industries Training Council WA Inc.	Projects Manager	Industry Association	WA
Rosie Mohorko	Leaf Wood Rock Landscapes	Landscape Architect	Industry / Medium	QLD
Saul Johnson	SJ Landscapes	Director Head Landscaper	Industry / Small	QLD
Tony Momi	Horticulture TAFE NSW	Head Teacher	RTO / Large	NSW

Further Validation Draft Feedback Contributors 29 July - 12 August 2020 – 10 respondents

Name	Organisation	Position	Organisation Type / Size	State
Ben Nicholson	Groof Consulting & The Urban Greener	Director	Industry / Sole Trader	VIC
Craig Jones	Maroondah Landscapes	Managing Director	Industry / Medium	VIC
Dr Jana Soderlund	Green Roofs Australasia	National Business Development Manager	Industry / Large	WA

Eddie Bennett	TAFE Queensland	Board Director	RTO / Large	QLD
Gail Hall	Individual	Individual	N/A	VIC
Leigh Barrett	Living Style and Landscapes	Director	Industry / Medium	QLD
Lisa Hall	South Metropolitan TAFE	Lecturer	RTO / Large	WA
Lucinda Pita	Department of Training & Workforce Development WA	Senior Program Officer	Government	WA
Michael Casey	Australian Institute of Horticulture	President	Industry Association / Small	NAT
Tony Momi	Horticulture TAFE NSW	Head Teacher	RTO / Large	NSW

Other face-to-face consultation activities

In addition to regular email and telephone contact with relevant stakeholders and Subject Matter Experts, the following face-to-face consultation activities have taken place as part of this project.

Date 16 October 2019 – Visit to and detailed exploration of One Central Park in Sydney

Name	Organisation	Position	Organisation Type / Size	State
Jock Gammon	Junglefy	Managing Director & Co-Founder	Industry / Medium	NSW

These organisations were invited to participate in the project:

- Tas TAFE
- Merivale Tactical Training Group
- International College of Management Sydney
- Jungle Horticulture
- Instyle plants
- Melbourne Polytechnic
- Boss Landscapes
- Citygreen
- Outside space
- Building Designers Association of Australia
- Ecopolis
- The Landscape Association

- Biofilta
- Irrigation Australia
- Yerrabingin House
- TWS Building & Waterproofing Consultants Pty Ltd
- Arboriculture Australia
- Therapeutic Horticulture Association
- ASPECT Studios
- Master Landscapers of SA MLSA
- Bayer
- Facility Management Association of Australia
- EcoCity World
- Riverside Place Apartments
- Strata Management
- TW Consulting
- APTC Australia.

Letters of Support



SKILLS IMPACT-LETTER OF SUPPORT

Dear Lucinda,

I am writing to you regarding the new, proposed Skill Sets for the new and emerging Green Walls and Roof top Garden project. Tafe Queensland, as an RTO, has been offering accredited training in Amenity Horticulture since the early eighties. Grovely campus has become synonymous with this Industry and has purpose built grounds on 20 acres, within 15minutes from the Brisbane CBD.

This is a new and emerging facet of our industry in Australia, that has been around for decades in other countries around the world. There is a real need and purpose for these units in Australia as demand for Green Space within Cities increases.

Different types of buildings require different approaches, as "One size doesn't fit all", pollution to be offset with Green Infrastructure and provide oxygen, water/rainfall mitigation along with learning new types of workplace safety eg Different facets of working at heights, utilisation of new technology such as Artificial Intelligence-"Drone Operations".

The need to plan and educate businesses and people properly, design of excessive, unnecessary thermal heating, by having Green Roofs, Walls/Facades, water harvesting etc. The benefits of Health and well being of people, lush greenery in concrete jungles.

To Educate people in the real benefits of Green Infrastructure and the all important critical installation phases.
What value do you put on Green Space, Trees etc.? Monetary vs Health.

I was fortunate enough to be involved in the full consultation process for this project at its inception, valuing the networking with Industry representatives and Registered Training Organisations (from all over Australia)and their contributions, right through to the finalisation stage. I have spoken to Industry Representatives and prospective students and they are excited about the prospects of "Green Infrastructure" to be included into

Training to further their knowledge and employability status, moving forward into the twenty-first century.

Yours Sincerely
Eddie Bennett
Horticulture Lecturer -Tafe Qld

Eddie Bennett
Teacher/LVT
Horticulture

Brisbane Region
TAFE Queensland Brisbane

p: 07 3354 5538
e: Eddie.Bennett@tafe.qld.edu.au
a: Fitzsimmons Street Grovely, QLD 4054
p:
w: tafeqld.edu.au



RTO 0275 | CRICOS 03020E | TEQSA PRV13003

We respectfully acknowledge the Traditional Owners of the lands on which TAFE Queensland operates. We recognise the continuing connection to land, waters, culture and kin that Aboriginal and Torres Strait Islander peoples uphold. We pay our respects to Elders past and present, who give us strength, inspiration and guidance to deliver great training outcomes for all Queenslanders

Dear Skills Impact,

I am writing to provide my support for the Green Walls and Rooftop Gardens project. I have been involved in this project from its inception as a Subject Matter Expert in the first meeting through to its finalisation along with other RTOs and industry representatives nationwide. I am satisfied of the process and that the skill sets developed will serve the industry.

With Green Infrastructure being a new and emerging area for Australia I recognise the importance of the materials developed to set standards for individuals to learn how to safely design, construct and maintain roof gardens, vertical gardens and green facades.

At TAFE NSW Padstow campus we deliver Horticulture Certificates 2 and 3, Landscape Certificate 3, Parks and Garden Certificate 3 and Landscape Design Diploma. Other related disciplines around TAFENSW include but not limited to Nursery Trades, Horticulture Certificate 4 and Horticulture Diploma. The addition of these green infrastructure skill sets and units of competency will give our students an opportunity to learn additional skills and build on their existing knowledge.

There is considerable interest in these fields. Many designers and architects are now incorporating such design concepts in building and park design. Many of our students are already constructing and maintaining green walls and rooftop gardens therefore are keen to further explore and develop their skills. Hence in time, we will be delivering the training and offering these skill sets to students and industry.

Yours sincerely

Tony Momi



Digitally signed by Tony Momi on the 7 April 2020

Head Teacher Horticulture

Padstow College TAFENSW

tony.momi@tafensw.edu.au

0450190650

7 April 2020



Skills Impact,

RE: Green Walls and Roof Top Gardens.

I am writing this letter of support for the project " Green walls and Rooftop gardens ".
I was involved with the consultation process throughout the project and the discussion at the beginning through to the final draft. The project has been handled extremely well and thoroughly and I fully support the proposal.

It covers the correct skills and addresses the knowledge needed to be successful in the field.
As I am involved in the industry, I am in full support of the proposal.

Feel free to call me if you need to discuss the above project

Leigh Barrett

Director

Living Style Co
0412 742 666.



Australian Institute of Horticulture Inc.
'Promoting Horticulture - the Profession of the 21st Century'

24th March 2020

Dear Skills Impact,

Our organization is writing to indicate our support for the recently drafted Green Walls and Rooftop Gardens project. After having our President and several members working as subject matter experts, alongside Skills Impact and other professionals in the field, on shaping the drafts for the project, you can rely upon our support for the documents that have been proposed.

Our purpose for the last 59 years is to represent professional horticulture practitioners across Australia, to encourage and develop relationships with affiliate and like organisations, to deliver the highest quality and productive results to any horticultural project. Many of our members currently work and study in the green infrastructure field and have many years of both knowledge and experience. These members and many others all assisted with reviewing these documents.

The skills set and units of competency have all been carefully considered and reflect what we, and the industry, consider to be key in training those entering the industry.

We believe there is a demand for this in our industry and feel that it will encourage students to seek out the appropriate training and qualification/s to perform their role with rigour within their relevant chosen field.

David Thompson
Engagement Manager
Australian Institute of Horticulture
(M) 0429 951 552
(E) members@aih.org.au

Australian Institute of Horticulture Inc.
PO Box 2238 Toowong, Qld, 4066 Australia
P: (02) 8001 6198 info@aih.org.au www.aih.org.au





20/3/2020

Dear Skills Impact, the recently drafted Greens Roofs and Walls project that our company has been following and assisting with is going to be just what our industry requires. We have been designing, constructing and maintaining green infrastructure projects for approx. 10 years and have had to do all our education and training of staff onsite. To have a [training standards](#) that allow our company to hire pre-trained staff will now allow us to use our time more efficiently by carrying out our own brand of onsite skills training to pre-trained/qualified workers.

Myself and my team welcome this proposal and wish to express our support for these documents and the skill sets and units of competency. I know personally that our company would commit any new staff and some of our existing ones to enroll in this training.

I would also like to acknowledge the work performed by Skills Impact in both getting this training drafted, as [its](#) represents the industries needs and requirements, and also the work they have performed in consulting with companies and experts that currently work in this field.

Regards,

Clint Griffiths
Landscape Foreman
(M) 0407 320 171
clint@mjchorticulture.com.au
MJC Horticulture Pty Ltd



06 April 2020

Lucinda O'Brien
Industry Skills Standards Specialist
Skills Impact
559A Queensberry St (PO Box 466),
North Melbourne, VICTORIA, 5000

Dear Lucinda O'Brien,

GREEN WALLS AND ROOF GARDENS PROJECT

Following the amendments made to units of competency and skills sets during the subject matter expert meeting held on the 26th of March 2020, South Metropolitan TAFE endorses the Green Walls and Roof Gardens project. We further support the following:

- Delivery of new units
- Planned employment outcomes
- Planned technical content to be delivered
- Inclusion of new units as electives in the nominated existing AHC qualifications

I have been involved in this project from the Perth public consultation workshop through to the validation Subject Matter Expert meeting along with other RTOs and industry representatives nationwide.

With Green Infrastructure being a new and emerging area for Australia, I recognise the importance of the materials developed to set standards for individuals to learn how to safely design, construct and maintain roof gardens, vertical gardens and green facades.

At South Metropolitan TAFE we deliver Horticulture, Landscape Design and Landscaping training and qualifications. There is a growing interest and need amongst our students to undergo formal training in relation to the design, construction and maintenance of vertical gardens, green roofs and green facades. We are currently filling the need for vertical garden design knowledge and skills through the delivery of unit AHCWRK509 Provide Specialist advice to Clients, as part of our Diploma of Landscape Design and Diploma of Horticulture. The addition of these green infrastructure units of competency will give our students an opportunity to learn these skills and build on their existing knowledge.

Postal address: 1 Fleet Street Fremantle Western Australia 6160
Telephone: 1800 001 001 Email: info@smtafe.wa.edu.au
www.southmetrotafe.wa.edu.au
ABN: 15 965 263 323



Government of **Western Australia**
South Metropolitan TAFE

Lucinda O'Brien,
559A Queensberry St,
North Melbourne, VICTORIA, 5000
GREEN WALL AND VERTICAL GARDENS PROJECT
06 April 2020

We look forward to exploring the opportunity to deliver this training.

Yours sincerely,

Lisa Hall
Lecturer- Landscape Design
South Metropolitan TAFE, Murdoch Campus

Letter sighted and supported by:

Pascaline Owers
Portfolio manager Science and Environment
South Metropolitan TAFE, Murdoch Campus

Julie Micallef
Principal Lecturer
South Metropolitan TAFE, Murdoch Campus



to. Skills Impact

24th March 2020

Dear Skills Impact,

I'm writing to indicate my support for the recently drafted Green Walls and Rooftop Gardens project. After having worked as a subject matter expert, alongside Skills Impact and other professionals in the field, on shaping the drafts for the project, you can rely upon my support for the documents that have been proposed.

The skills [sets](#) and units of competency have all been carefully considered and reflect what I, and the industry, consider to be key in training those entering the industry. I currently employ staff who work in this field and ultimately would like to have staff formally trained prior to commencing employment, in addition to the practical/onsite training that currently occurs.

Having worked in this industry for the last 10 years, I have been advocating for newly developed standards for the industry that seek to promote best practice and professional installations of green infrastructure. This would also include teaching and training those coming into this industry about the importance and necessity of obtaining a solid foundational understanding of the processes involved in this new and emerging industry.

I believe that this proposal is not only essential for the industry, it will also encourage students to seek out the appropriate training and qualification/s to perform their role with rigour within their relevant chosen field.

Michael Casey

Director

evergreeninfrastructure.com.au, hello@evergreeninfrastructure.com.au . PO Box 392 Hawthorn Victoria 3122

20 August 2020

Dear Skills Impact,

I am writing to provide my support for the Green Walls and Rooftop Gardens project. I have been involved in this project from the first Subject Matter Expert meeting in September 2019, to the Perth public consultation workshop through to the second round of validation.

Having completed a PhD in Biophilic Design, I have actively been involved in bringing nature and green infrastructure into our cities for 8 years. Green walls and rooftop gardens are a huge component of this and a rapidly expanding field as people are discovering the huge potential of this area. I am a member of the Biophilic Cities steering committee and chair Biophilic Cities Australia.

The materials developed set standards for individuals to learn how to safely design, construct and maintain roof gardens, vertical gardens and green facades. These are very important skills and knowledge and I support the drafts created. I am very much looking forward to the courses beginning and trained individuals resulting.

Dr Jana Soderlund

Chair



BiophilicCitiesAustralia

W: biophiliccitiesaustralia.org

 Biophilic Cities Australia

Lucinda O'Brien
Industry Skills Standards Specialist
Skills Impact
559A Queensberry Street
NORTH MELBOURNE VIC 3051

e: Lucinda@skillsimpact.com.au

Dear Lucinda,

GREEN WALLS & ROOFTOP GARDENS PROJECT – LETTER OF SUPPORT

I am writing this letter to convey my strong support for the Design, Construct and Maintain Roof Gardens, Vertical Gardens and Green Facades Skills Sets and Competencies project, developed by the Skills Impact team following extensive consultation with key industry players.

As a respected subject matter expert, it is my firm belief that Australia's green infrastructure sector is more than sufficiently advanced to warrant the development and roll-out of national skills sets across the Vocational Education and Training sector. Based on my experience within Victoria, there is clear evidence of demand for these skills sets from students and of the capacity to develop and deliver content for these skills sets within the green infrastructure sector, in partnership with Registered Training Organisations.

The following evidence is provided in support of my belief in the relevance and timeliness of this project:

- The City of Melbourne's Green Our City Strategic Action Plan 2017-2021 includes Action Item 2.2.1 - Advocate for the development of industry standards for green roofs and vertical greening; and Action 4.1 - Pursue changes to the planning scheme to require all types of development in the City to play a part in achieving environmentally sustainable design targets, including green roofs and vertical greening.
- The City of Melbourne's 'Green Factor' rating tool is currently being developed, which will assist in achieving identified targets, including doubling the area of green roofs in the municipality from 5 hectares to 10 hectares, doubling the number of vertical greening installations from 50 to 100 and achieving at least 80 percent health and diverse vegetation in green roofs and vertical greening installations.
- The Green Building Council of Australia and the Council Alliance for a Sustainable Built Environment are both examining opportunities to 'fine tune' their Green Star and BESS rating tools respectively, to increase weighting for green infrastructure elements within projects, in recognition of the suite of benefits provided by green roofs and vertical greening.
- In 2019 I was commissioned by the City of Melbourne and City of Moreland to produce 'Green Infrastructure Planning Guidance Material' to assist property developers and designers in the preparation of town planning permit application material. This material was produced in response to the increase in medium and high density development proposals that incorporate green infrastructure within building façades and roofs.
- I delivered guest lectures to students enrolled in the Diploma of Landscape Design at Swinburne University as part of the Design Sustainable Landscapes subject, on the design, construction and maintenance of green infrastructure, in 2017 and 2018. On both

30 Newlands Road
COBURG NORTH VIC 3058

A.B.N. 34 131 388 916

grow@theurbangreener.com
www.groof.com.au

Page 1 of 2

occasions, the students were keen to learn more and expressed disappointment at the lack of opportunities for further study.

- In 2019, CERES Community Environment Park launched an 'Introduction to Green Roofs and Walls' course that was fully booked within weeks of it being offered. This course is scheduled to run again twice in 2020. I developed and delivered the green walls/vertical greening module of this course and the students again voiced frustration at the lack of further, more detailed study and opportunities for practical training.
- CERES have indicated that they would run the 'Maintain Roof Gardens, Vertical Gardens and Green Facades' Skill Set as part of their Cert II in Horticulture program.
- At the tertiary level, there is also increasing demand for skills and knowledge in green infrastructure design, construction and maintenance. I delivered a guest lecture on 'Designing Green Roofs and Walls' to the Masters of Horticulture students at University of Melbourne, Burnley in 2019. These students were particularly interested in green roofs that could deliver ecological benefits while also providing storm water and urban heat island mitigation benefits, as well as exploring opportunities for bio-solar green roofs.
- I have been invited by the School of Architecture and Design, RMIT University, to deliver a guest lecture to 3rd year Architecture students in 2020 on the restoration of ecological process through intelligent design.
- In December 2019 I delivered a guest lecture at the City of Melbourne's MelBIM (Building Information Modelling) event on 'Intelligent Greening – BIM, maintenance and the regulatory environment'. Attendees were keen to learn about the interaction between green infrastructure performance over the long-term, as measured via sensors, and the emerging link with planning permit conditions that require building managers to effectively maintain green infrastructure, once approved as part of the planning permit application process; and
- In my experience of more than ten years as a green infrastructure consultant, there are numerous instances of sub-optimal performance of green infrastructure due to the lack of awareness by personnel during the design, construction and/or maintenance phases. The green infrastructure sector and Australia more broadly, would benefit significantly with the introduction of national skill sets, as has been demonstrated overseas in nations that have adopted similar levels of competency.

Please convey my thanks to the Agriculture, Horticulture and Conservation and Land Management Industry Reference Committee for entrusting Skills Impact with the development of these critically important skills sets and competencies. The process that has been followed by you and your team to develop the content has been rigorous and thorough and I commend you all for your professionalism.

I would be happy to provide further evidence and support should such a request be made. Please let me know if you have any questions with respect to this letter.

Regards,



Ben Nicholson
Director

Phone: 0434 925 604

30 Newlands Road
COBURG NORTH VIC 3058

A.B.N. 34 131 388 916

grow@theurbangreener.com
www.groof.com.au

Page 2 of 2

Dear Skills Impact,

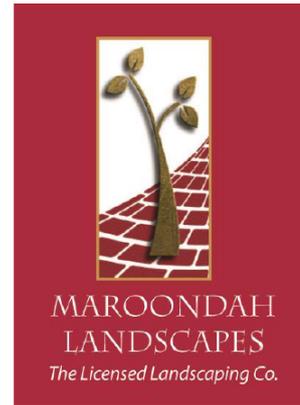
I am writing to provide my support for the Green Walls and Rooftop Gardens project. I have participated in the project as a Subject Matter Expert and provided feedback to help shape the drafts through the further feedback period.

As an individual who has been working in the Landscape construction industry for a period in excess of 15 Years, with involvement from conception to completion in many award winning commercial Landscape rooftop projects during this time, I feel has given me an extensive knowledge on the constructability of Roof Top Green Space infrastructure and was more than happy to assist with this project and to pass on this knowledge to the future generations of up and coming Landscapers.

With Green Infrastructure being a new and emerging area for Australia I recognise the importance of the materials developed to set standards for individuals to learn how to safely design, construct and maintain roof gardens, vertical gardens and green facades. I look forward to employing/working with individuals who have completed this training a solid foundation of learning in place.

Kind Regards

Craig Jones
Manager of Maroondah Landscapes & Ultimate Swimming Pools & Spas



- Designed Gardens
- Commercial
- Maintained



P: 03 9761 5319
F: 03 9761521

4 Halbert Road
Bayswater North
VIC 3153

admin@maroondahlandscapes.com.au
www.maroondahlandscapes.com.au

Domestic Building DB-L3234-2
LIAV CONTRACTORS 080160

ABN 40 515 572 133
ACN 063 617 989

Nursery Production and Production Horticulture

Consultation activities included:

- Project page on the Skills Impact website - throughout project lifecycle
<https://www.skillsimpact.com.au/agriculture/training-package-projects/horticulture-and-nursery-project/>
- News articles and stories in Skills Impact newsletters and other external publications – throughout project
- SME Working group and functional analysis workshops – 15th July 2019 – 31st August 2019
- Site visits and face-to-face meetings – throughout project
- Consultation draft 1 – feedback hub, face-to-face workshops, webinars – 15th September 2019 to 30th October 2019
- Validation survey and validation meetings – 20th December 2019 to 15th February 2020
- SME Working group meetings – 23 and 25 June 2020
- Nursery (NSY) sector units of competency review meetings – 17, 22 and 23 July 2020
- Nursery (NSY) sector units of competency 2nd round feedback – 10 – 25 August 2020
- Nursery (NSY) sector units of competency 2nd round validation – 28 August – 5 September 2020

Stakeholders engaged during the project are described in the matrix below, with a full list of all engaged stakeholders available below.

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	National
Industry (employer / employee)									
Industry association									
Union									**
Registered Training Organisation (RTO)									
Government department									

***Note: Representatives from unions United Voice, National Union of Workers and Australian Manufacturing Workers' Union (AMWU) were informed of the project throughout its progress.*

Project page on the Skills Impact website

A project page was set up on the Skills Impact website at the start of the project with information about the project together with progress updates. The project page remained on the website throughout the project. Visitors were invited to register their interest to receive email alerts about the project including notification and registration for public consultation workshops and opportunities to provide feedback on draft materials.

Horticulture and Nursery project page: <https://www.skillsimpact.com.au/agriculture/training-package-projects/horticulture-and-nursery-project/>

Publications

As part of communication activities to inform stakeholders of the project's progress and opportunities for input and feedback, news articles, social media posts and newsletters were published. Skills Impact newsletters and website news articles were published on the Skills Impact website and distributed to the database of subscribers.

- Next Steps for Agronomy, Horticulture, Nursery, & Rural Merchandising Skill Standards – 21 February 2020
- Next Steps for Agronomy, Horticulture, Nursery, & Rural Merchandising Skill Standards – 10 February 2020
- Final drafts for horticulture, nursery and rural merchandising – 29 November 2019
- Food, Fibre and Timber Industries Training Council – Update and links to new Skills Impact projects – 8 September 2019
- Food, Fibre and Timber Industries Training Council – Update and links to new Skills Impact projects – 9 August 2019
- Velg Training – 'Five Focus Areas in One New Project Alone' – 30 May 2019.

In addition to these publications, an *Update on Skills Impact Projects* Newsletter was distributed to State and Territory Training Authorities, Industry Training Advisory Boards and Councils, Victorian Curriculum Maintenance Managers and TAFE NSW Industry Liaison people each month, providing updates on all Skills Impact projects, including the 20-05 – Nursery Production and Production Horticulture project.

Industry Feedback – Nursery Production and Production Horticulture

Subject Matter Expert Working Group – Production Nursery and Retail Nursery 10th July 2019 Sydney NSW

#	Name	Organisation	Position	Organisation Type / Size	State
1	Michelle Lindhout	SuniTAFE Mi1ldura	Trainer/Assessor Production Nursery	RTO	VIC
2	David Reid	Nursery & Garden Industry Victoria, East Malvern	Policy and Technical Manager	Industry Association	VIC
3	Matt Lunn	Nursery & Garden Industry WA	CEO	Industry Association	WA
4	Chris O'Connor	Nursery & Garden Industry Australia	Program Manager	Industry Association	National
5	Mark Cody	Primary Industries Skills Council	Executive Director	Industry Association	SA
6	Matt Mansfield	Mansfield's Propagation Nursery	Operations Manager	Enterprise	VIC
7	Steve Biemond	Biemond's Nursery	General Manager	Enterprise	VIC
8	George Vavitis	Gardenworld	General Manager	Enterprise	VIC
9	Shane Hickey	Flower Power	Director HR	Enterprise	NSW
10	Des Boorman	Biyamiti FBB	Owner/Sole Trader	Enterprise	NSW
11	Stephen Rixon	TAFE NSW	Head of Horticulture	RTO	NSW
12	Estelle Cornell	Allora Gardens Nursery/Estelle's Florist	Managing Director	Enterprise	NT

Subject Matter Expert Working Group – Production Horticulture and Floriculture 11th July 2019 Sydney NSW – 12 attendees

Name	Organisation	Position	Organisation Type / Size	State
Nathan Free	Victorian Farmer's Federation	Vice-president Horticulture Board Director	Industry Association	VIC

Sophie Lapsley	RMCG VegPRO	Education & Training Coordinator and Agriculture Consultant	RTO	TAS
Mark Cody	Primary Industries Skills Council	Executive Director	Industry Association	SA
Michelle Smith	NSW Depart Primary Industries Tocal College	Leader Digital Delivery Resources	RTO	NSW
Terry Buckley	J&FL Buckley & Sons	Partner/Manager	Enterprise	SA

Subject Matter Expert Working Group - Production Horticulture, Production Nursery and Retail Nursery Management 15th July 2019 Sydney NSW – 6 attendees

Name	Organisation	Position	Organisation Type / Size	State
Janne Dipple	FarmReady P/L	Induction and Training	Enterprise	QLD
Karen George	GrowCom QLD Ag Workforce Network	Ag Workforce Manager	Industry Association	QLD
Kathleen Fitzgerald	Greening Australia	RTO Compliance Trainer	RTO	QLD
John Piccirillo	SuniTAFE	Teacher – Production Horticulture	RTO	VIC
Chris O'Connor	Nursery and Garden Industry Australia	Program Manager	Industry Association	National
Erika Smith	TAFE NSW	Teacher/Industry/Self-employed	RTO and Enterprise	NSW

Consultation Webinar Participants 3rd September hosted from Penguin, Tasmania – 5 attendees

Name	Organisation	Position	Organisation Type / Size	State
Karen George	GrowCom QLD Ag Workforce Network	Ag Workforce Manager	Industry Association	QLD
Michelle Smith	NSW Depart Primary Industries Tocal College	Leader Digital Delivery Resources	RTO	NSW
Shane Hickey	Flower Power	Director HR	Enterprise	NSW

Sophie Lapsley	RMCG VegPRO	Education & Training Coordinator and Agriculture Consultant	RTO	TAS
Terry Buckley	J&FL Buckley & Sons	Partner/Manager	Enterprise	SA

Consultation Workshop Participants 17th September 2019 in Mildura, VIC – 3 attendees

Name	Organisation	Position	Organisation Type / Size	State
Michelle Lindhout	SuniTAFE	Primary industries teacher	RTO	VIC
John Piccirillo	SuniTAFE	Teacher - Production Horticulture	RTO	VIC
Nick Moore	SuniTAFE	Production Horticulture teacher	RTO	VIC

Consultation Workshop Participants 25th September 2019 in Adelaide, SA – 2 attendees

Name	Organisation	Position	Organisation Type / Size	State
Andrew Nooteboom	ARO Educational Services	Trainer	RTO	SA
Dr Kavitha Shanmugan	Ironwood Institute	Trainer	RTO	SA

Consultation Workshop Participants 26th September 2019 in Sydney, NSW – 3 attendees

Name	Organisation	Position	Organisation Type / Size	State
Samantha Minslow	Flower Power	Training Manager	RTO	NSW
George Koukkoulis	Open Colleges	Trainer/Assessor	RTO	National
Anna Richards	TAFE NSW	Head Teacher (Horticulture)	RTO	NSW

Consultation Workshop Participants 8th October 2019 in Brisbane, QLD – 3 attendees

Name	Organisation	Position	Organisation Type / Size	State
Marsha Young	Safe Food QLD	Policy and Engagement Officer	Government/35	QLD
Ian Bray	Safe Food QLD	Engagement Coordinator and Auditor	Government/35	QLD
Pete Macqueen	TAFE QLD	Teacher	RTO	QLD

Consultation Workshop Participants 9th October 2019 in Cairns, QLD

Name	Organisation	Position	Organisation Type / Size	State
No registrations on EventBrite and no attendees on the day				

Consultation Workshop Participants 10th October 2019 in Melbourne, VIC – 4 attendees

Name	Organisation	Position	Organisation Type / Size	State
David Reid	Nursery & Garden Industry Victoria	Policy and Technical Manager	Industry Association	VIC
Michael Callaway	Swinburne	Teacher	RTO	VIC
Stewart Detez	Swinburne	Manager	RTO	VIC
Leigh Taig	GoTAFE Goulburn Ovens TAFE	Teacher	RTO	VIC

Consultation Webinar Participants 14th October 2019 in Darwin, NT – 6 attendees

Name	Organisation	Position	Organisation Type / Size	State
Debbie Knight	Industry Skills Advisory Council NT	Industry Support Officer	Industry Association	NT
Anne Wiltshire	Melbourne Polytechnic	Curriculum Maintenance Manager	RTO	VIC

Megan Hurst	Tabma Training/Quest College	Training and Compliance Officer	RTO	QLD
Jacqueline Heap	TAFE NSW	Teacher Resource Writer	RTO	NSW
Mala Rupal	ACT Education Management	Teacher	RTO	ACT
Shweta Singh	University of Queensland	Lecturer	RTO	QLD

Consultation Workshop Participants 15th October 2019 in Darwin, NT – 3 attendees

Name	Organisation	Position	Organisation Type / Size	State
Neda Aleksic	Industry Skills Advisory Council NT	Training Package Development Officer	Industry Association	NT
Estelle Cornell	Allora Nursery & Estelle's Florist	Managing Director	Enterprise – small-medium	NT
Michelle Lewis	Charles Darwin University	Educational Program Manager	RTO	NT

Consultation Workshop Participants 16th October in Perth, WA – 8 attendees

Name	Organisation	Position	Organisation Type / Size	State
Ric Ullman	Southern Metro TAFE	Manager	RTO/300+	WA
Philip Owen	Wallum Nurseries	Quality Manager	Enterprise/30	WA
Frances Parnell	Dept Training and Workforce Development	Manager	Government Department	WA
Catherine Storrs	Southern Metro TAFE	Lecturer	RTO/300+	WA
Pascaline Owers	Southern Metro TAFE	Portfolio Manager	RTO/300+	WA
Matthew Lunn	Nursery & Garden Industry Western Australia	CEO	Industry association/100 members	WA
Paul Etheredge	Food, Fibre & Timber Industries Training Council WA (FFTITC)	Project Manager	Industry Association	WA

Dr Kathya Kar	Public	Botanist	Public	WA
---------------	--------	----------	--------	----

Consultation Draft Feedback Contributors 16 September to 31 October 2019 – 30 respondents

Name	Organisation	Position	Organisation Type / Size	State
Robyn Wing	Charles Darwin University	VET lecturer- Horticulture	RTO	NT
Jacqueline Heap	TAFE NSW	Teacher resource writer	RTO	NSW
Paul Etheredge	Agriculture, Food, Seafood, Horticulture & Animal Care, Food, Fibre & Timber Industries Training Council	Project Manager	Industry Association	WA
Anne Wiltshire	Dept of Agriculture, Animal and Equine Studies Melbourne Polytechnic	Primary Industries Curriculum Maintenance Manager (PICMM)	RTO	VIC
Frances Parnell	State Workforce Planning Dept of Training and Workforce Development	manager, Training Curriculum Services	Government Department	WA
George Koukkoullis	Open Colleges	Horticulture & Agriculture Trainer & Assessor	RTO	NSW
Kathleen FitzGerald	Greening Australia	RTO Compliance / Trainer	RTO	QLD
Samantha Minslow	Flower Power Group NSW	Training Manager	RTO	NSW
Belinda Watson-Noblet	Melbourne Polytechnic	Primary Industries Curriculum Maintenance Manager (PICMM)	RTO	VIC
Sophie Lapsley	RMCG	Education & training initiative Coordinator	RTO	TAS
Nathan Free	Victorian Farmer's Federation	Vice President Horticulture	Industry association	VIC
Doris Blaesing	RMCG	Associate	Enterprise	TAS
Michelle Lindhout	Sunraysia Tafe	Primary industries teacher	RTO	VIC
Colin Hunt	TAFE NSW	Teacher	RTO	NSW

David Reid	Nursery & Garden Industry	Policy and Technical Manager	Industry association	VIC
Pascaline Owers	South Metropolitan TAFE	Portfolio Manager	RTO	WA
Peter Macqueen	TAFE Queensland	Teacher	RTO	QLD
Catherine Storrs	South Metro TAFE	Lecturer Horticulture	RTO	WA
Nick Moore	Suni TAFE	Head of Primary Industries	RTO	VIC
Gavin James	Benara Nurseries	Director/General Manager	Enterprise	WA
Janne Dipple	FarmReady Hub	Director	Enterprise	QLD
Janelle Beard	TAFE NSW	Product Development Coordinator	RTO	NSW
John Piccirillo	SuniTAFE	Teacher – Production Horticulture	RTO	VIC
Sethu Ramasamy	RMIT University	Tutor	RTO	VIC
Lorraine Tomlinson	South Metropolitan TAFE	Principal Lecturer	RTO	WA
Kavitha Shanmugam	Ironwood Institute	Trainer	RTO	SA
Andrew Milner	TAFE QLD	Teacher	RTO	QLD
Neil Marriott	South Metro TAFE	Teacher	RTO	WA
Ric Ullman	SM TAFE	Lecturer	RTO	WA
Paul McClure	Sunraysia TAFE	Teacher	RTO	VIC

Validation Draft Feedback Contributors Email and Survey Feedback Hub – 5 respondents

Name	Organisation	Position	Organisation Type / Size	State
Anne Wiltshire	Dept of Agriculture, Animal and Equine Studies Melbourne Polytechnic	Primary Industries Curriculum Maintenance Manager (PICMM)	RTO	VIC

Shane Hickey	Flower Power	Director HR	Enterprise	NSW
Dr Shweta Singh	University of Qld	Lecturer	RTO	QLD
Alvin Gopal	Australian College of Agriculture and Horticulture (ACAH)	CEO	RTO	VIC
Stephen Rixon	TAFE NSW	Head of Horticulture	RTO	NSW

Validation Meeting Participants 28th January and 30 January 2020 Melbourne – 5 attendees

Name	Organisation	Position	Organisation Type / Size	State
George Vavitis	Gardenworld	General Manager	Enterprise	VIC
David Reid	Nursery & Garden Industry	Policy and Technical Manager	Industry association	VIC
Des Boorman	Biyamiti FBB	Owner/Sole Trader	Enterprise	NSW
Michelle Lindhout	Sunraysia Tafe	Primary industries teacher	RTO	VIC
Mark Cody	Primary Industries Skills Council	Executive Director	Industry Association	SA

Webinar Participants 19 February 2020 – 3 attendees

Name	Organisation	Position	Organisation Type / Size	State
David Reid	Nursery & Garden Industry	Policy and Technical Manager	Industry association	VIC
Des Boorman	Biyamiti FBB	Owner/Sole Trader	Enterprise	NSW
Michelle Lindhout	Sunraysia Tafe	Primary industries teacher	RTO	VIC

Webinar SME WG Participants 23 and 25 June 2020 – 9 attendees

Name	Position	Organisation	Organisation Type / Size	State
Craig Taberner	CEO	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC
Mark Cody	Primary Industries Skills Council	Executive Director	Industry Association	SA
David Reid	Policy and Technical Manager	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC
Nick Juniper	Executive Officer	Food and Primary Skills Victoria	Industry Association	VIC
Peter Vaughan	CEO	Greenlife Industry GIA	Industry association	NSW
Matt Mansfield	Mansfield's Propagation Nursery	Operations Manager	Enterprise	VIC
Des Boorman	Biyamiti FBB	Owner/Sole Trader	Enterprise	NSW
Ian Atkinson	CEO	Nursery and Garden Industry Queensland	Industry Association	QLD
Jim Johnson	Nursery Manager	Oasis Horticulture	Enterprise	VIC

Webinar Review Participants 17, 22 and 23 July 2020 – 3 attendees

Name	Position	Organisation	Organisation Type / Size	State
Des Boorman	Biyamiti FBB	Owner/Sole Trader	Enterprise	NSW
Ian Atkinson	CEO	Nursery and Garden Industry Queensland	Industry Association	QLD
Michael Callaway	Horticulture Teacher	Swinburne College	RTO	VIC

Participants who were invited but did not attend 17, 22 and 23 July 2020

Name	Position	Organisation	Organisation Type / Size	State
Peter Vaughan	CEO	Greenlife Industry GIA	Industry association	NSW

Matt Mansfield	Mansfield's Propagation Nursery	Operations Manager	Enterprise	VIC
Craig Taberner	CEO	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC
Mark Cody	Primary Industries Skills Council	Executive Director	Industry Association	SA
David Reid	Policy and Technical Manager	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC
Geoffrey Fuller	Former President	Nursery and Garden Industry South Australia	Industry Association	SA
George Vavitis	Store Manager	Gardenworld	Enterprise with 25 employees	VIC
Shane Hickey	Flower Power	Director HR	Enterprise	NSW
Estelle Cornell	Allora Gardens Nursery/Estelle's Florist	Managing Director	Enterprise	NT
Matthew Lunn	Landscape Industry Association of Western Australia (LIAWA)	Executive Officer	Industry Association / Medium	WA
Stephen Rixon	TAFE NSW	Head of Horticulture	RTO	NSW

Consultation Draft Feedback Contributors 10th to 25th August 2020 – 2 respondents

Name	Position	Organisation	Organisation Type / Size	State
Megan Hurst	Horticultural Trainer/ Compliance Officer	TABMA	RTO	QLD
Peter MacQueen	Teacher	TAFE Qld	RTO	QLD

Further Validation Draft Contributors 25th August 2020 to 4th September 2020 – 8 respondents

Name	Position	Organisation	Organisation Type / Size	State
Matthew Lunn	CEO	NGIWA Nursery & Garden Industry (WA)	Industry Association / Small	WA
David Reid	Policy and Technical Manager	Nursery & Garden Industry	Industry association	VIC
Des Boorman	Owner/Sole Trader	Biyamiti FBB	Enterprise	NSW

Michelle Lindhout	Primary industries teacher	Sunraysia Tafe	RTO	VIC
Ian Atkinson	CEO	Nursery and Garden Industry Queensland	Industry Association	QLD
Catherine Storrs	Lecturer Horticulture	South Metropolitan TAFE	RTO	WA
Neda Aleksic	Training Package Development	Industry Skills Advisory Council NT on behalf of Charles Darwin University Batchelor Institute of Indigenous Tertiary Education	RTO / Industry Association	NT
Lucinda Pita	Senior Program Officer	Training Curriculum Services Department of Training & Workforce Development	Government	WA

Other face-to-face consultation activities

In addition to regular email and telephone contact with relevant stakeholders and Subject Matter Experts, the following face-to-face consultation activities have taken place as part of this project.

Meeting with Nursery and Garden Industry Victoria, 24th July 2019 at NGIV office, East Malvern, VIC.

Name	Position	Organisation	Organisation Type / Size	State
Craig Taberner	CEO	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC
David Reid	Policy and Technical Manager	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC

Site visit – Retail Nursery 19th August 2019 at Braeside, VIC.

Name	Position	Organisation	Organisation Type / Size	State
George Vavitis	Store Manager	Gardenworld	Enterprise with 25 employees	VIC

Site visit –Floriculture 22nd August 2019 at Silvan, VIC.

Name	Position	Organisation	Organisation Type / Size	State
Alana Pittard	Manager Horticulture Group	Victorian Farmer's Federation	Industry association	VIC
Robert de Wit	Farmer/Owner	Burleigh Flowers	Enterprise with 15 employees	VIC
Mariske de Wit	Farmer/Owner	Sunny Hill Flowers	Enterprise with 20 employees	VIC
Owen Brinson	Farmer/Owner	Peny Bryn Flowers	Enterprise with 5 employees	VIC

Site visit – Production Nursery 30th August 2019 at Seville, VIC.

Name	Position	Organisation	Organisation Type / Size	State
Steve Biemond	Managing Director	Biemond's Nursery	Enterprise with 25 employees	VIC

Site visit – Mushroom grower 2nd September 2019 at Spreyton, TAS.

Name	Position	Organisation	Organisation Type / Size	State
Michael Kaine	Head grower/site manager	Tasmanian Mushrooms	Enterprise with 70 employees	TAS

Site visit – Cherry and Apple producer 2nd September 2019 at Spreyton, TAS.

Name	Position	Organisation	Organisation Type / Size	State
Warren Viney	Site Manager/Owner	Spreyton Fresh	Enterprise with 18-100 employees depending on season	TAS

Site visit – Seed Potato producer (mini-tubers) 3rd September 2019 at Spreyton, TAS.

Name	Position	Organisation	Organisation Type / Size	State
Les Ollington	Operations Manager	Agronico	Enterprise with 25 employees	TAS

Meeting with Nursery and Garden Industry Victoria, 10th September 2019 at NGIV office, East Malvern, VIC – 13 attendees

Name	Position	Organisation	Organisation Type / Size	State
Craig Taberner	CEO	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC
David Reid	Policy and Technical Manager	Nursery and Garden Industry Victoria	Industry association with 3000 stakeholders	VIC
Andrew White	Manager	Humphris Nursery	Enterprise	VIC
Anne Moore	Head of Department Environment	Holmesglen TAFE	RTO	VIC
David Mathews	Managing Director	ProteaFlora	Enterprise	VIC
Gaby Mitchell	Manager	Speciality Trees	Enterprise	VIC
George Vavitis	General Manager	Gardenworld	Enterprise	VIC
James Farmer	Manager	Melbourne Polytechnic	RTO	VIC
Kate O'Grady	Trainer	Swinburne	RTO	VIC
Mike Callaway	Teacher	Swinburne	RTO	VIC
Nick Juniper	Executive Officer	Food and Primary Skills Victoria	Industry Association	VIC
Steve Biemond	Managing Director	Biemond Nursery	Enterprise	VIC
Stewart Detez	Manager	Swinburne	RTO	VIC

Letters of Support

Cathy,

Please accept this email as formal confirmation of my support of the work that Skills Impact has done to submit a Case to the Australian Industry and Skills Committee.

I have been part of each step as an Industry Representative for Horticulture and have been impressed with the process and outcomes achieved by Skills Impact.

I represent two valid entities, as follows:

Director

Sunny Daze Pty Ltd t/a Bare Essentials Quality Vegetables

Vegetable and herb farm located in the Lockyer Valley, Queensland

ABN: 77 069 925 499



As well as:

Founder

FarmReady Ptd Ltd

Australian Agricultural Workforce Development and Training

www.farmreadyhub.com



Thank you for the opportunity to support the project from both an industry and training perspective.

Kind regards,

Janne Dipple

Grad Dip in Adult Language, Literacy and Numeracy in Practice

Cert IV in Training and Assessment

Adv Dip in Rural Bus Mgt

Diploma Farm Management Skill Set

Cert IV in Agriculture

AHC Agriculture, Horticulture and Conservation and Land Management Training Package

Version 6.0

Page 85 of 102

Case for Endorsement

October 2020

Cert IV in Business Administration

Chemical Skills Set

Company Founder

Mobile: **0417 163 487**

[Linkedin](#)

www.farmreadyhub.com



FarmReady Pty Ltd
Australian agricultural workforce
development & training.



9 April 2020

To whom it may concern

Letter of Support for changes made Certificate Levels in Production Nursery, Retail Nursery, Production Horticulture and Floriculture Production, Horticulture, Production Nursery and Retail Nursery Management.

Flower Power is the largest retail nursery company in NSW which comprises of 10 retail Garden Centres made up of plants, landscape supplies & homewares. In addition, we have a 65 acre growing facility at Glenorie and indoor growing facility at Warriewood. We service 420 000 Garden Lovers Members throughout NSW.

Flower Power supports the changes being made to programs from Certificate Levels in Production Nursery, Retail Nursery, Production Horticulture and Floriculture Production, Horticulture, Production Nursery and Retail Nursery Management.

These changes will support the ongoing training necessary to see participants who complete programs are skilled to a level that supports our industry.

Streamlining the programs will now be in line with industry specific needs. This has been much needed in the industry for some time.

The process of completing this project was very systematic which involved those from various areas of the horticulture, production, floriculture and retail sectors.

Shane Hickey

Chief Human Resources Officer

The Flower Power Group

Arborglen Pty Ltd



Appendix 3: Minor Updates

AHC - Agriculture, Horticulture and Conservation and Land Management Training Package V5.0 and V6.0 mapping of qualifications			
Code and title (previous version)	Code and title (current version)	Comments	Equivalence statement
AHC20919 Certificate II in Sports Turf Release 1	AHC20919 Certificate II in Sports Turf Release 2	Updated unit codes	Equivalent
AHC21819 Certificate II in Protected Horticulture Release 2	AHC21819 Certificate II in Protected Horticulture Release 1	Added new Medicinal Crops units to Group E General electives and updated elective unit codes	Equivalent
AHC31516 Certificate III in Indigenous Land Management Release 3	AHC31516 Certificate III in Indigenous Land Management Release 4	Updated unit codes	Equivalent
AHC31818 Certificate III in Beekeeping Release 1	AHC31818 Certificate III in Beekeeping Release 2	Updated unit codes	Equivalent
AHC40219 Certificate IV in Protected Horticulture Release 1	AHC40219 Certificate IV in Protected Horticulture Release 2	Updated unit codes	Equivalent
AHC41119 Certificate IV in Irrigation Management Release 1	AHC41119 Certificate IV in Irrigation Management Release 2	Updated unit codes	Equivalent

Appendix 4: Quality assurance report

Quality Report Template

Section 1 – Cover page

Information required	Detail
Training Package title and code	AHC Agriculture, Horticulture, Conservation and Land Management Training Package, Version 6.0
Number of new qualifications and their titles ¹	Nil
Number of revised qualifications and their titles	<p>Nine revised qualifications:</p> <ol style="list-style-type: none"> 1. AHC20320 Certificate II in Production Horticulture 2. AHC20720 Certificate II in Nursery Operations 3. AHC30620 Certificate III in Production Horticulture 4. AHC31120 Certificate III in Nursery Operations 5. AHC40320 Certificate IV in Production Horticulture 6. AHC40620 Certificate IV in Nursery Operations 7. AHC42020 Certificate IV in Landscape 8. AHC50320 Diploma of Production Horticulture 9. AHC50820 Diploma of Nursery Management
Number of new units of competency and their titles	<p>Six new units of competency:</p> <ol style="list-style-type: none"> 1. AHCGRI301 Maintain roof gardens, vertical gardens and green facades 2. AHCGRI401 Construct roof gardens 3. AHCGRI402 Construct vertical gardens and green facades 4. AHCGRI501 Design roof gardens 5. AHCGRI502 Design vertical gardens and green facades 6. AHPCM509 Apply knowledge of plant physiology to horticultural practices

¹ When the number of training products is high the titles can be presented as an attached list.

Number of revised units of competency and their titles	<p>Sixty seven revised units of competency:</p> <ol style="list-style-type: none"> 1. AHCNSY102 Support nursery work 2. AHCNSY205 Pot up plants 3. AHCNSY206 Care for nursery plants 4. AHCNSY207 Undertake propagation activities 5. AHCNSY208 Maintain indoor plants 6. AHCNSY308 Maintain nursery plants 7. AHCNSY309 Receive and dispatch nursery products 8. AHCNSY310 Install and maintain plant displays 9. AHCNSY311 Promote sales of plants 10. AHCNSY312 Prepare specialised plants 11. AHCNSY313 Implement a propagation plan 12. AHCNSY314 Operate fertigation equipment 13. AHCNSY403 Plan a growing-on program 14. AHCNSY404 Plan a propagation program 15. AHCPCM204 Recognise plants 16. AHCPCM205 Fell small trees 17. AHCPCM305 Implement a plant nutrition program 18. AHCPCM306 Provide information on plants and their culture 19. AHCPCM307 Report on health and condition of trees 20. AHCPCM404 Recommend plants and cultural practices 21. AHCPCM405 Implement an integrated pest management program 22. AHCPCM406 Develop a soil health and plant nutrition program 23. AHCPCM507 Diagnose plant health problems 24. AHCPCM508 Develop an integrated pest management program 25. AHCPCM510 Collect and classify plants 26. AHCPCM511 Specify plants for landscapes 27. AHCPCM512 Design specialised landscape 28. AHCPCM513 Conduct environment and food safety risk assessment of plant nutrition and soil fertility programs 29. AHCPCM602 Develop and implement a plant health management strategy 30. AHCPTH102 Support horticultural production 31. AHCPTH215 Plant horticultural crops 32. AHCPTH216 Carry out canopy maintenance 33. AHCPTH217 Undertake field budding and grafting 34. AHCPTH218 Carry out post-harvest operations 35. AHCPTH219 Handle and move mushroom boxes
--	--

	36. AHCPTH220	Perform mushroom substrate process tasks
	37. AHCPTH221	Water mushroom crops
	38. AHCPTH222	Produce trellis dried grapes
	39. AHCPTH302	Prepare raw materials and compost feedstock
	40. AHCPTH312	Implement a crop regulation program
	41. AHCPTH313	Implement a post-harvest program
	42. AHCPTH314	Harvest horticultural crops mechanically
	43. AHCPTH315	Establish horticultural crops
	44. AHCPTH316	Supervise mushroom substrate preparation
	45. AHCPTH317	Coordinate horticultural crop harvesting
	46. AHCPTH318	Prepare value added compost-based products
	47. AHCPTH409	Develop a crop regulation program
	48. AHCPTH410	Develop harvesting and processing specifications to produce an olive oil
	49. AHCPTH411	Implement and monitor a horticultural crop harvesting program
	50. AHCPTH412	Manage mushroom substrate preparation
	51. AHCPTH413	Oversee vineyard practices
	52. AHCPTH414	Assess olive oil for style and quality
	53. AHCPTH415	Control Phase II mushroom substrate process
	54. AHCPTH416	Manage mushroom crop development
	55. AHCPTH511	Develop a horticultural production plan
	56. AHCPTH512	Manage a controlled growing environment
	57. AHCSOL203	Assist with soil or growing media sampling and testing
	58. AHCSOL406	Sample soils and interpret results
	59. AHCSOL407	Develop a soil use map for a property
	60. AHCSOL408	Prepare acid sulphate soil management plans
	61. AHCSOL409	Supervise acid sulphate soil remediation and management projects
	62. AHCSOL506	Manage erosion and sediment control
	63. AHCSOL507	Develop and manage a plan to reclaim land affected by salinity
	64. AHCSOL508	Manage soils to enhance sustainability

Information required	Detail
	<p>65. AHCWAT202 Set up, operate and maintain water delivery systems for compost</p> <p>66. AHCWAT302 Monitor and operate water treatment processes</p> <p>67. AHCWAT504 Design water treatment systems.</p>
<p>Confirmation that the panel member is independent of:</p> <ul style="list-style-type: none"> the Training Package or Training Package components review ('Yes' or 'No') development and/or validation activities associated with the Case for Endorsement ('Yes' or 'No') undertaking the Equity and/or Editorial Reports for the training package products that are the subject of this quality report ('Yes' or 'No') 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
Confirmation of the Training Packages or components thereof being compliant with the <i>Standards for Training Packages 2012</i>	Yes
Confirmation of the Training Packages or components thereof being compliant with the <i>Training Package Products Policy</i>	Yes
Confirmation of the Training Packages or components thereof being compliant with the <i>Training Package Development and Endorsement Process Policy</i>	Yes
<p>Panel member's view about whether:</p> <ul style="list-style-type: none"> the evidence of consultation and validation process being fit for purpose and commensurate with the scope estimated impact of the proposed changes is sufficient and convincing 	It is the panel member's view that the evidence of consultation and validation process is suitable and appropriate for the scope of work against the coverage of the industry. The proposed changes arising from consultation and validation processes are also suitable and appropriate.
Name of panel member completing Quality Report	Lina Robinson

Information required	Detail
Date of completion of the Quality Report	<p>26 October 2020 *</p> <p>*Revised 29 September 2020 report based on:</p> <ul style="list-style-type: none"> • Victorian STA's determination that 19 units originally presented as 'minor change' required recoding <p>the inclusion of AHC42020 Certificate IV in Landscape, originally presented as 'minor change' but required recoding based on the recent deletion of two BSB units which formed part of the elective units.</p>

Section 2 – Compliance with the Standards for Training Packages 2012

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 1</p> <p>Training Packages consist of the following:</p> <ol style="list-style-type: none"> 1. AISC endorsed components: <ul style="list-style-type: none"> • qualifications • units of competency • assessment requirements (associated with each unit of competency) • credit arrangements 2. One or more quality assured companion volumes 		<p>The proposed components of the AHC Agriculture, Horticulture, Conservation and Land Management Training Package, Version 6.0 case for endorsement meet the requirements of Standard 1. The training package products reviewed as part of this quality process consisted of:</p> <ul style="list-style-type: none"> • nine qualifications • seventy-three (6 new and 67 revised) units of competency • seventy-three assessment requirements (6 new and 67 revised) associated with each unit of competency • credit arrangements advising that 'at the time of endorsement of this training package, no national credit arrangements exist' • a companion volume implementation guide.

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 2</p> <p>Training Package developers comply with the <i>Training Package Products Policy</i></p>	<p>Yes</p>	<p>The training package products presented for this quality review comply with the <i>Training Package Products Policy</i> that meet the requirements of Standard 2, including:</p> <ul style="list-style-type: none"> • Coding/recoding and titling of all qualifications and units of competency comply with the standard. • Entry requirements which are 'expressed in terms of competencies' exist for the AHC40620 Certificate IV in Nursery Operations and AHC50820 Diploma of Nursery Management. A rationale for the requirements is provided in the case for endorsement and implementation guide. • Packaging rules in the qualifications are clear. The offering of elective units and the use of the imported unit ruling are sufficient to address a broad range of job roles within the agriculture and horticulture industry sectors. • Foundation skills were identifiable in the units of competency, however where not explicitly described in the performance criteria, are described in the foundation skills field. An explanation on foundation skills is provided in the revised AHC Companion Volume Implementation Guide Version 6.0. • The revised AHC Companion Volume Implementation Guide Version 6.0 provides advice on access and equity considerations including reasonable adjustment for learners with disabilities. • Mapping information to inform users of changes to revised components and equivalence is provided within the qualification and unit of competency mapping information sections and in the AHC Companion Volume Implementation Guide Version 6.0.

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 3</p> <p>Training Package developers comply with the <i>AISC Training Package Development and Endorsement Process Policy</i></p>	<p>Yes</p>	<p>The development processes undertaken by the developers as described in the case for endorsement comply with the <i>AISC Training Package Development and Endorsement Process Policy</i> that meet the requirements of Standard 3. The case for endorsement addresses the cases for change (Reference numbers: Skills Impact/TPD/2019-20-002 and Skills Impact/TPD/2018-19/005) submitted on behalf of the Agriculture and Production Horticulture Industry Reference Committee and approved on 26 March 2019 and 13 August 2019 respectively for the following priority training package development areas undertaken as separate projects:</p> <ul style="list-style-type: none"> • Green Walls and Rooftop Gardens • Nursery Production and Production Horticulture. <p>The case for endorsement describes the national consultation and validation processes undertaken for each project in great detail, which included the following communication strategies: face to face meetings, teleconferences, emails, individual phone calls, newsletters and updates and drafts being available on websites. Lists of individuals and organisations who formed part of subject matter expert working groups and those who attended consultation meetings for each project are also included in the appendices. Letters of support from a number of key stakeholders are also included. There were no 'reports by exception'.</p>
<p>Standard 4</p> <p>Units of competency specify the standards of performance required in the workplace</p>	<p>Yes</p>	<p>The evidence provided of consultation processes indicates that the developers have responded to industry needs in ensuring that the AHC units of competency specify the standards of performance required in the workplace.</p>
<p>Standard 5</p> <p>The structure of units of competency complies with the unit of competency template</p>	<p>Yes</p>	<p>The editorial report confirmed the structure of the units of competency complies with the required template. Suggestions were provided to, and the majority addressed by the developer during this review.</p>

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 6</p> <p>Assessment requirements specify the evidence and required conditions for assessment</p>	Yes	The assessment requirements specify the frequency and/or volume of performance evidence, the depth and breadth of knowledge evidence and required conditions to collect this evidence.
<p>Standard 7</p> <p>Every unit of competency has associated assessment requirements. The structure of assessment requirements complies with the assessment requirements template</p>	Yes	The editorial report confirmed the structure of the assessment requirements complies with the required template.
<p>Standard 8</p> <p>Qualifications comply with the Australian Qualifications Framework specification for that qualification type</p>	Yes	The revised qualifications comply with the Australian Qualifications Framework.
<p>Standard 9</p> <p>The structure of the information for the Australian Qualifications Framework qualification complies with the qualification template</p>	Yes	The editorial report confirmed the structure of information for qualifications complies with the required template.
<p>Standard 10</p> <p>Credit arrangements existing between Training Package qualifications and Higher Education qualifications are listed in a format that complies with the credit arrangements template</p>	Yes	Details that advise that 'at the time of endorsement of this training package, no national credit arrangements exist' appear in the case for endorsement in the required template.
<p>Standard 11</p> <p>A quality assured companion volume implementation guide produced by the Training Package developer is available at the time of endorsement and complies with the companion volume implementation guide template.</p>	Yes	The editorial report confirmed the revised AHC Companion Volume Implementation Guide V6.0 complies with the required template and updated to include the qualifications, units and skill sets presented in this submission.
<p>Standard 12</p> <p>Training Package developers produce other quality assured companion volumes to meet the needs of their stakeholders as required.</p>	Yes	No other quality assured companion volumes beside the implementation guide were required by stakeholders.

Section 3 – Compliance with the training package quality principles

Note: not all training package quality principles might be applicable to every training package or its components. Please provide a supporting statement/evidence of compliance or non-compliance against each principle.

Quality principle 1. Reflect identified workforce outcomes

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance/non compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Driven by industry's needs	Yes	The case for endorsement provides information about the extent of industry consultation and stakeholder engagement and rationales for changes that occurred during the review of the revised qualifications units of competency and the development of the new units and skill sets. It outlines the involvement of industry and other stakeholders, and summaries the changes made from stakeholder feedback to meet the needs of those stakeholders.
Compliant and responds to government policy initiatives Training package component responds to the COAG Industry and Skills Council's (CISC) training package-related initiatives or directions, in particular the 2015 training package reforms. Please specify which of the following CISC reforms are relevant to the training product and identify supporting evidence: <ul style="list-style-type: none"> • ensure obsolete and superfluous qualifications are removed from the system • ensure that more information about industry's expectations of training delivery is available to training providers to improve their delivery and to consumers to enable more informed course choices 	Yes	The AHC training package components are compliant with the <i>Standards for Training Packages 2012</i> , the <i>Training Package Products Policy</i> and the <i>Training Package Development and Endorsement Process Policy</i> . AHC Version 6.0 responds to all the Ministers' policy initiatives, in particular the following 2015 training package reforms: <ul style="list-style-type: none"> • the newly created and revised units of competency were designed to be utilised across agriculture and horticulture industry sectors, supporting individuals to move easily across the sectors. • removes duplication by merging 10 existing qualifications into 5 revised qualifications, deleting the AHC50916 Diploma of Retail Nursery Management due to low enrolments and merging 2 units of competency into one. • information about industry's expectations of training delivery and pathways is available in the revised AHC Companion Volume Implementation Guide V6.0 • five skill sets to address skills and knowledge in green infrastructure has been developed to support an industry need and a pathway into a qualification.

<ul style="list-style-type: none"> • ensure that the training system better supports individuals to move easily from one related occupation to another • improve the efficiency of the training system by creating units that can be owned and used by multiple industry sectors • foster greater recognition of skill sets 		
Reflect contemporary work organisation and job profiles incorporating a future orientation	Yes	Detailed information on consultation processes including the developer’s responses to industry needs confirm that the new and revised components reflect contemporary job profiles and work for these industries.

Quality principle 2: Support portability of skills and competencies including reflecting licensing and regulatory requirements

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle
Support movement of skills within and across organisations and sectors	Yes	<p>Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i></p> <p>Packaging rules in the revised qualifications enables flexibility in the selection of units to suit specific organisation or broader industry applications. Options to import units from other training packages or accredited courses enable movement within organisations, within and across agriculture and horticulture industry sectors and settings.</p> <p>The reviewer confirms comments from the equity report which states, “flexibility also applies to the Assessment Conditions. The AHC units specify that physical conditions may be ‘a workplace setting or an environment.”</p> <p>Three skill sets relating to green infrastructure have been developed to support industry training needs and provide a pathway into an AHC qualifications.</p>
Promote national and international portability	Yes	Australian Standards relating to health and safety, environmental, and biosecurity were considered for the units and are addressed in the relevant unit of competencies.

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Reflect regulatory requirements and licensing	Yes	Regulatory requirements for green infrastructure were considered during consultation. It was established that requirements vary nationwide, hence the following general licensing statement is included in the skill sets and units of competency relating to green infrastructure: <i>“Licensing, legislative or certification requirements may apply to the work undertaken in this [unit/skill set] in some jurisdictions. Users are advised to check with the relevant regulatory authorities.”</i>

Quality principle 3: Reflect national agreement about the core transferable skills and core job-specific skills required for job roles as identified by industry

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Reflect national consensus	Yes	Evidence of industry engagement is reflected in the case for endorsement that details the consultation that was conducted, and summaries the changes made to accommodate stakeholder views. As well as targeted consultations, there were opportunities for stakeholders to review the draft components on Skills Impact website prompted by email alerts.
Recognise convergence and connectivity of skills	Yes	The AHC units of competency support the attainment of skills and knowledge in a range of agriculture and horticulture environments. The newly created and revised units of competency are appropriate to be used across relevant AHC qualifications. Units listed in AHC qualifications include imported units from other nationally endorsed training packages.

Quality principle 4: Be flexible to meet the diversity of individual and employer needs including the capacity to adapt to changing job roles and workplaces

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Meet the diversity of individual and employer needs	Yes	The revised qualifications have been updated to ensure that the elective units of competency are appropriate and available to meet the needs of individuals as well as employers.
Support equitable access and progression of learners	Yes	Entry requirements for qualifications only exist for AHC40620 Certificate IV in Nursery Operations and AHC50820 Diploma of Nursery Management. Prior skills and knowledge may be obtained from a qualification or industry experience. There are no prerequisite requirements for AHC units of competencies.

Quality principle 5: Facilitate recognition of an individual's skills and knowledge and support movement between the school, vocational education and higher education sectors

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Support learner transition between education sectors	Yes	Information to support learner transition between education sectors and progression between qualifications is provided in the revised AHC Companion Volume Implementation Guide V6.0. Both the AHC20320 Certificate II in Production Horticulture and AHC20720 Certificate II in Nursery Operations are suitable for delivery as VET programs for secondary school students, and 8 qualifications have been recommended by the IRCs as suitable for traineeship/apprenticeship delivery.

Quality principle 6: Support interpretation by training providers and others through the use of simple, concise language and clear articulation of assessment requirements

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Support implementation across a range of settings	Yes	Advice about delivery across a range of agronomy and rural settings is provided in the AHC Companion Volume Implementation Guide V6.0. This was confirmed in the Equity Report.
Support sound assessment practice	Yes	The assessment requirements support sound assessment practice because they clearly written and express the frequency or volume of performance evidence, the extensiveness of knowledge evidence and the essential assessment conditions to collect the evidence.
Support implementation	Yes	No barriers have been identified that would impact on implementation. The draft training package components are publication ready. Implementation advice is provided the revised AHC Companion Volume Implementation Guide Version 6.0 that is ready for publication at the same time as the Training Package.