



Case for Endorsement

Concreting

CPC Construction, Plumbing and Services Training Package

Release 7.0

Submitted by Artibus Innovation
on behalf of the
Construction, Plumbing and Services IRC
August 2020

Artibus Innovation

Artibus Innovation is the Skills Service Organisation supporting the Industry Reference Committees (IRCs) for the Construction, Plumbing and Services, and Property Services sectors in Australia. It develops, manages and supports nationally endorsed Training Packages.

These IRCs are responsible for providing guidance, direction and advice in relation to the workforce training and skills development needs of these two industry sectors.

Together, industry, employees and enterprises contribute significantly to Australia's infrastructure, underpinning the nation's economic and social fabric.

Artibus Innovation

373 Elizabeth Street, North Hobart

Tasmania 7000

p: 03 6218 2841

e: enquiries@artibus.com.au

w: artibus.com.au

© 2020 Commonwealth of Australia

Table of Contents

Table of Contents	i
A. Administrative details of the Case for Endorsement.....	1
B. Description of work and request for approval.....	3
C. Evidence of industry support	11
D. Industry expectations about training delivery.....	13
E. Implementation of the new training package components.....	14
F. Quality assurance reports.....	15
G. Implementation of COAG Industry Skills Council reforms to training packages.....	38
H. Proposed training package components.....	40
Appendix A: Enrolment and completion figures (2015-2018)	44
Appendix B: Summary of stakeholder consultation and engagement processes	45
Appendix C: Industry stakeholders	48
Appendix D: Stakeholder feedback and SSO response.....	59
Appendix E: Summary of survey outcomes	89
Appendix F: Feedback on performance evidence of place, finish and cure concrete units	90
Appendix G: Letters of support	91

A. Administrative details of the Case for Endorsement

Name of allocated Industry Reference Committee

The submission of this Case for Endorsement is made by the Construction, Plumbing and Services Industry Reference Committee (IRC).

Name of Skills Service Organisation

Artibus Innovation

Training Package components submitted for approval

This Case for Endorsement puts forward one revised qualification, eighteen revised units of competency and two new units of competency.

Qualification – revised

- CPC30320 Certificate III in Concreting

Units of competency – revised

- CPCCOM1016 Identify requirements for safe precast and tilt-up work
- CPCCON2021 Handle concreting materials and components
- CPCCON2022 Select, use and maintain concreting plant, tools and equipment
- CPCCON3035 Determine concrete supply requirements
- CPCCON3036 Plan concrete work and brief team
- CPCCON3041 Place concrete
- CPCCON3042 Finish concrete
- CPCCON3043 Cure concrete
- CPCCON3044 Apply decorative finishes to concrete
- CPCCON3046 Repair and rectify concrete
- CPCCON3047 Cut concrete
- CPCCON3048 Construct tilt panels on site
- CPCCON3049 Apply and finish sprayed concrete
- CPCCON3050 Carry out high-performance concreting
- CPCCON3051 Conduct off-form vertical concrete operations
- CPCCON3053 Slump-test concrete
- CPCCON3054 Operate concrete agitator trucks
- CPCCON3055 Install topping slabs

Units of competency – new

- CPCCON3056 Conduct concrete pump delivery operations
- CPCCON3057 Core concrete

Mapping information for the qualification and units of competency is provided in **Section H: Proposed training package components**.

Case for Change details

On behalf of the Construction, Plumbing and Services IRC, Artibus Innovation prepared a proposal as part of the *Construction, Plumbing and Services Industry Skills Forecast 2019* to update the *CPC30318 Certificate III in Concreting* and 18 associated units of competency.

Activity order number: TPD/2018-19/002
Activity start date: June 2019
Activity finish date: June 2020

The requirement set by the Australian Industry and Skills Committee (AISC)

The training package development activity commissioned by the AISC was to update the *CPC30318 Certificate III in Concreting* to ensure it complies with the *National Construction Code (NCC) 2019* amendments (expected to be adopted by states and territories in July 2020) and reflects other key developments in the industry.

Variations to this requirement:

1. *CPCCCM1016 Identify requirements for safe tilt-up work* was added to the scope of work. The unit was originally included in the construction pathways project, but it required updating to address issues around its currency and coverage of all prefabricated concrete elements. The unit was reallocated to this project given it required targeted feedback from concreting industry stakeholders.
2. *CPCCCO3052 Conduct concrete boom delivery operations* was originally part of the High-Risk project. It was reallocated to this project. The unit was reallocated to this project given it required targeted feedback from concreting industry stakeholders.

B. Description of work and request for approval

Description of work undertaken and why

This project reviewed and updated the *CPC30318 Certificate III in Concreting* and associated concreting units of competency to ensure that:

- the qualification packaging rules remain fit for purpose, and reflect the current occupational role and licensing requirements
- the concreting units of competency meet industry needs, and reflect current work practices, technologies and NCC requirements.

Materials within this scope of work were transitioned to the *Standards for Training Packages 2012* and endorsed for implementation in 2018, then released on training.gov.au (TGA) early in 2019.

The need for another review was triggered by changes to the NCC and to core units that were revised as part of other CPC Construction, Plumbing and Services Training Package projects. Given their recent endorsement, it was assumed that further updates to the qualification and units of competency would be minor, therefore the IRC approved the project proceeding without the formation and oversight of a Technical Advisory Group (TAG).

The project commenced with desk-based industry research. The results showed that as one of the largest industries in construction services, concreting is integral to the construction of many types of buildings and structures and is characterised by mostly small-scale contractors. According to Labour Market Information Portal occupation projections 2019, employment in concreting is projected to increase by more than 11% in the next five years.

The industry is lightly regulated with limited formal qualifications and licensing requirements. The low take-up of the qualification in five states and territories is highlighted in **Appendix A: Enrolment and completion figures (2015–2018)**. Most concreting contractors begin their careers as builders' labourers and obtain concreting experience through on-the-job training.

Project processes focused on stakeholder consultation and engagement to ensure materials were fit for purpose, and widely accepted by industry and other key stakeholders. Initial consultations focusing on targeted face-to-face meetings with employers indicated that industry was dissatisfied with the qualification and in-depth review would be needed than originally anticipated. The general feeling was that the qualification was not relevant to commercial concreters, and that it needed to be more robust for its alignment with the Australian Qualifications Framework (AQF) as a Certificate III qualification.

Units of competency also needed to be revised to assure employers that workers deemed competent were equipped with the technical skills and knowledge required for the job, whether in residential or commercial concreting.

Consequently, a nationally representative group of industry technical experts was established as a Concreting Working Group (CWG) and used to provide advice and technical input into the draft qualification and units of competency to ensure their relevance to industry.

Decision being sought from the AISC

To note the work undertaken and approve the Case for Endorsement for *CPC30320 Certificate III in Concreting* and twenty units of competency and their assessment requirements..

Consultation

Concreting stakeholders were offered multiple opportunities to participate in general and targeted consultations throughout the consultation and engagement process, as detailed in the project timeline below.

The main methods used for consultation were designed to engage stakeholders from metropolitan, regional and remote geographical areas, including those in smaller states and territories, and small and large employers and organisations with limited representation:

- 60 targeted face-to-face meetings with employers and other stakeholders
- phone and email consultations with a wide range of stakeholders (emails were sent to targeted contacts plus an additional 487 email contacts identified from a related project)
- CWG meetings, emails and phone discussions
- three nationwide online industry surveys to obtain and consolidate feedback
- national validation webinar
- Artibus Innovation website project page to provide information and links to materials
- Artibus Innovation newsletters (4,000 subscribers).

A summary of stakeholder consultation and engagement processes, key feedback received and the response to this feedback and issues raised during the update of the qualification and units of competency is provided in **Appendix B: Summary of stakeholder consultation and engagement processes**.

A full listing of stakeholders consulted during the project is provided in **Appendix C: Industry stakeholders**, and further information on stakeholder feedback and its treatment is provided in **Appendix D: Stakeholder feedback and SSO response**.

Face-to-face consultations

To engage directly with industry from a cross-section of small, medium and large companies, Artibus Innovation conducted targeted face-to-face consultations with 43 employer representatives who are concreters or employ concreting contractors.

These included:

- project managers from large building companies, including Probuild (VIC) and Hutchinson Builders (QLD)
- sole director and project manager of a large development/building company (McLaren Property Developments (VIC))
- employers and representatives of medium-sized concreting companies, such as Concretus (WA), Piotto Bros (SA), Diverse Concreting (NSW/ACT), QR Contracting (QLD), Bianco Precast (SA), AAA Access Concrete and Civil Work (VIC), Prestige Concrete Services (VIC), and Bess Concrete (QLD)
- employers and representatives of small concreting companies, such as ExCo (WA), Mid Central Concrete (VIC), MLC Concrete Construction (VIC), Betta Getta Concreta (ACT), T&M Concreters (NT), Shoreline Building Contractors (ACT/NSW), JPD Concreting Specialists (QLD), and DGR Concreting Services (NSW)).

Another 17 face-to-face consultations were held with representatives from RTOs and other industry stakeholders in the ACT, QLD, SA, NT and WA.

Employers were asked questions about current issues within the industry, changed practices, emerging trends and technologies, functions performed by concreters in the workplace (e.g. whether the slump test is performed).

They had varying levels of interest in, or knowledge of the qualification given it is not mandatory in most states and territories. Most expressed concern about the poor quality of concreters presenting to them for employment and their difficulties in attracting workers; and for those who do train workers using the qualification, the fact that learners need almost four years to be fully competent, given the breadth and depth of skills and knowledge required to be a competent concreter, was raised as an issue.

While this feedback was echoed in meetings with other stakeholders, RTOs provided additional feedback related to problems with the packaging of the qualification, and ambiguities and lack of clarity around technical content in units of competency.

Project page

To make information generally available to stakeholders, a project page was developed on the Artibus Innovation website. The project page was kept updated throughout the duration of the project, providing information on the status of the project and opportunities to provide input into draft components: https://www.artibus.com.au/project?project_id=38.

Newsletters

During the review three newsletters were distributed to a broad range of industry stakeholders to:

- communicate project milestones
- inform about opportunities to provide feedback
- provide access to the project page, draft materials, and survey and webinar feedback mechanisms.

The purpose of the newsletters was to communicate project information at key stages to a broad reach of subscribed stakeholders in addition to those already listed on the project register.

Surveys

Three industry surveys were developed to give industry and stakeholders a platform to provide feedback on the development of the training package components throughout the different consultative stages of the project.

The surveys were made publicly available on the Artibus Innovation website and promoted through the Artibus Innovation newsletter and CWG members.

Respondents were able to download the draft materials from the website to provide feedback on the qualification and individual units of competency. The types of questions asked in these surveys were designed to provide information on emerging trends, changing practices in concreting, problems with the qualification packaging rules, for example:

- *Are you aware of any emerging trends, changes or challenges happening in the concreting industry over the next 5 years that need to be considered in reviewing the qualification? If so, what are they?*
- *What skills and knowledge might these emerging trends, changes or challenges bring about*

for the industry that will need to be reflected in the concreting training?

- *Do you agree that the combination of core and elective units meet the skill and knowledge requirements of concreters in residential and commercial concreting?*

A summary of survey timeframes, respondents and feedback is provided in **Appendix E: Summary of survey outcomes**.

Feedback from each survey was compiled and incorporated into components where requirements were clear. Where feedback required technical advice, this was discussed and resolved during CWG meetings. Survey respondents were contacted in each case to discuss their comments and how they would be addressed.

National webinar

A national webinar was held on 27 February 2020 to provide all stakeholders with an opportunity to validate the updated draft qualification, units of competency and their assessment requirements. Attendees were presented with an explanation of the rationale for updates to the qualification packaging arrangements, units of competency and the assessment requirements, and given an opportunity to comment and provide feedback.

There was no specific feedback recorded with attendees generally supportive of changes made. Attendees noted the main issues raised through the validation consultation period:

- the inclusion of *CPCWHS1001 Prepare to work safely in the construction industry* in the qualification core listing is not widely supported
- a request to reduce the requirement to place, finish and cure concrete for a minimum of 100 square metres to 60 square metres. Comments from NSW were that some concreters only work with footpaths and granny flats and blocks in Sydney are getting smaller, and from an RTO in Victoria that 100 square metres is expensive for RTO delivery and assessment. Attendees were advised that the 100 versus 60 square metre issue would be put to the CWG for decision. The MBA representative in attendance offered to seek advice from MBA contacts to assist the process.

Engagement with State/Territory Training Authorities (STAs)

Artibus Innovation has engaged with all state and territory training authorities (STAs) throughout the project, maintaining open dialogue and requesting feedback on draft components.

Consideration was given to specific STA feedback and individual STA members were contacted directly via face-to-face, phone and email communication methods to address concerns and questions in the development of training package components.

Concreting Working Group

The CWG was established to oversee technical updates to the qualification, units of competency and their assessment requirements to ensure they were relevant and fit for purpose to meet the expectations of both commercial and residential concreting workplaces.

Chaired by IRC member Marie Paterson, the group consisted mainly of representatives of employers/concreters, with some of these also bringing expertise from the RTO perspective, and industry bodies including Master Concreters Australia (MCA), Master Builders Australia (MBA) and Concrete Institute of Australia and Cement Australia.

CWG members brought significant experience and expertise in commercial and residential concreting and representation across jurisdictions, excluding the Northern Territory (NT). Given the low enrolments in the qualification in the NT it was agreed that the Industry Skills Advisory Council NT (ISACNT) would be kept informed of project progress.

Four online meetings of the CWG were held with the meeting dates, purpose and outcomes summarised below. Some employer members could not attend meetings due to work commitments, however, they provided technical advice via phone discussions and/or emails to ensure decisions on technical issues were influenced by a majority.

Multiple phone and email discussions were held with individual CWG members during the project as the qualification, units of competency and their assessment requirements were continually revised to accommodate feedback and ensure technical detail was correct.

Other consultation correspondence

Additional industry feedback was recorded in a project register. Throughout the project, industry members from across the country phoned or emailed Artibus Innovation to give feedback on qualification packaging, units of competency and their assessment requirements, and industry skills and knowledge needs.

At the completion of the project the register had 272 targeted entries plus another 487 email contacts for concreting companies sourced from a previous project.

Views of stakeholders, competing views and alternative approaches explored

A summary of all feedback received throughout the project and the SSO response to issues raised is available at **Appendix D: Stakeholder feedback and SSO response**. Below are specific feedback and issues for the AISC to note.

Licensing and regulatory issues

Employers consulted across the country consistently expressed frustration about the poor quality of concreters presenting to them for work and the fact that there are too many people doing sub-quality concreting work with the associated risks to quality, to the detriment of quality concreting businesses and the industry as a whole.

Employers felt that any consultation on the qualification provided an appropriate opportunity to express these concerns. This is evidenced by the amount of feedback on this subject listed in Appendix D.

With limited regulation/licensing for concreting in Australia, almost anyone can perform concreting work. However, according to employers consulted (and some RTOs) the job requires a high level of skill and depth of learning warranting a minimum of three years' training.

Employers particularly expressed strong views that quality issues in industry would only be addressed if the occupation was better regulated, for example by making it mandatory for licensing or regulatory requirements and/or by recognising it nationally as an apprenticeship.

Slump test

Feedback from industry and RTO stakeholders around the slump test unit of competency was almost unanimous that it should not be a core requirement for the qualification. Slump is usually performed by the supplier and rarely, if ever, by the concreter.

Moving the slump test into the core was a major change made in the 2018 review of the qualification. It was done to attempt to address issues and risks around concreters watering down concrete. The change created an unintended barrier in requiring a mandatory function that is not performed by most concreters. Some stakeholders felt that the slump should stay in the core because of the risks associated with adding water on site, even though concreters do not actually perform the slump test.

In consultation with industry and RTOs it was agreed to use a different approach in this revision and to move the slump test unit back into the elective listing and embed key knowledge about the importance of the slump and risks associated with adding non-specified water on site in the 'place concrete' unit. This compromise was supported by stakeholders.

Packaging of the qualification to meet industry needs

Initial consultation indicated that the qualification did not adequately meet the needs of the commercial sector. Some larger employers indicated that they would take on apprentices if the qualification better met their needs. A general view was expressed that when compared with trade qualifications such as carpentry, the concreting qualification contained more 'lower level' units.

At the IRC meeting of 26 February 2020, the CFMMEU (Construction and General) raised the issue that it 'does not support the inclusion of the higher level formwork units as electives in the concreting qualification', and 'does not support the qualification as an apprenticeship'. The CFMMEU outlined its position in an email to the IRC on 13 May 2020.

The IRC Chair met with the CWG on 4 June 2020 to discuss and resolve the issues raised. It was agreed to remove the two formwork units from the elective listing given the packaging rules were not impacted and sufficient flexibility remained to meet individual workplace requirements. It was also acknowledged that the concreting industry recommends the qualification as an apprenticeship, and that the IRC recognises the qualification as suitable for an Australian apprenticeship pathway with its implementation a matter for STA consideration.

Performance evidence in place, finish and cure concrete units (100 sqm versus 60 sqm)

The performance evidence for the place, finish and cure concrete units requires assessment of the workplace outcome at five different sites, each site measuring at least 100 square metres (sqm).

Some stakeholders requested that this requirement be reduced from 100 sqm to 60 sqm to accommodate concreters who specialise in paths and driveways and those who work in metro areas where an increasing number of granny flats are being built and block sizes are reducing.

The specific feedback received is shown in **Appendix F: Feedback on performance evidence of place, finish and cure concrete units**.

Advice on the issue was sought from several members of the CWG (via an online meeting and via phone discussions). Members comprised employer and RTO representatives. These stakeholders were adamant that 100 sqm is the minimum industry standard for competence in placing/finishing/curing concrete and has been for some time (note: the requirement for 100 sqm has been in these units since the BCG03 General Construction Training Package).

Some stakeholders acknowledged that a person can indeed demonstrate basic skills in placing, finishing and curing concrete over 60 sqm, however there is a 'big jump' in the breadth and

depth of skills and knowledge needed for 100 sqm and more. It is essential that a concreter can place and finish concrete over more than one load (i.e. 60 cubic metres per load) and to justify using mechanical troweling, which is necessary for industry competence and required by the 'finish concrete' unit.

Learners must be afforded the opportunity to 'read' the concrete between loads, for example checking for hot spots, ensuring it doesn't 'go off', placing sufficient joints etc. and 60 sqm does not provide these opportunities to the standard required for all concreters across commercial and residential workplaces.

Five of the employers consulted said that any concreter assessed against less than 100 sqm would be considered unemployable by their organisations. A TasTAFE representative consulted on the issue confirmed that a minimum of 100 sqm is imperative for competence that none of their apprentices have any trouble finding sites of 100 sqm, and that any reduction would negatively impact learners in terms of their long-term employment prospects.

Discussion also explored the potential for compromise, for example requiring some sites at 100 sqm and the remaining sites at 60 sqm, however members maintained that 100 sqm at five sites is the absolute minimum benchmark for competence.

CWG members said that any reduction in these requirements would be to the detriment of industry and counter to the objective of strengthening the qualification to reflect the current job and ensuring its relevance to all concreters and workplaces (not just those specialising in smaller jobs).

Precast work

The *CPC30318 Certificate III in Concreting* and concreting units of competency do not adequately cater for workers in the precast environment. The *MSM30318 Certificate III in Manufactured Mineral Products* provides some coverage for this worker cohort, but the concreting qualification is generally seen as a preferred training pathway.

While there is little available research, employers are of the view that the precast concrete industry in Australia is growing rapidly. Consultation with the National Precast Association of Australia confirmed this view noting that construction methods for precast concrete elements differ from conventional methods, for example for grouting precast elements.

GoTAFE in Wangaratta, Victoria is currently delivering the concreting qualification to a progressive rollout of over 100 students this year as part of a major new precast construction project in Benalla. Core units for place, finish and cure concrete contain performance evidence requirements involving five different sites of a minimum 100 sqm each.

Allowing for reasonable adjustments in training and assessment methods, this is difficult to assess in precast terms. The performance evidence was modified in the assessment requirements for these three key units to allow demonstration in either a non-precast work environment (five sites at 100 sqm) **or** a precast work environment (on five different occasions, a minimum of three panels involving more than one truck load of concrete).

While these revisions will be of some assistance, the absence of suitable formal training for precast work and consequently workers, remains.

Summary of key changes

Key changes	Description
KC 1	<p><i>CPC30320 Certificate III in Concreting</i> has been updated to meet current industry requirements; it supersedes and is equivalent to the <i>CPC30318 Certificate III in Concreting</i>. Packaging arrangements have been revised to increase the total number of required units and strengthen the AQF alignment and technical concreting requirements.</p>
KC 2	<p>Eighteen units of competency have been updated to reflect current industry practices and comply with current NCC requirements. Performance and knowledge evidence have been revised to include the technical detail sought by industry and to support enhanced quality of training and assessment.</p>
KC 3	<p>Two new units of competency have been developed in line with current industry practices:</p> <ul style="list-style-type: none"> • 'cut and core concrete' was split into two discrete outcomes resulting in a revised 'cut concrete' and a new 'core concrete' unit • 'conduct concrete pump delivery operations' was developed to cover an identified skills gap associated with the line/hose hand role.
KC 4	<p>All units of competency were updated to provide clarity, remove duplication and embed the technical skills and knowledge expected of concreters in the workplace. Elements and performance criteria have been rewritten more clearly and foundation skills requirements made explicit.</p> <p>In addition, the concreting units of competency underwent significant review and were revised to better align outcomes with occupational benchmarks set by industry.</p>

C. Evidence of industry support

Written evidence of support by IRC responsible for the training package components

This Case for Endorsement presents evidence of broad-based industry support for the proposed training package components as outlined in the *Training Package Development and Endorsement Process Policy*.

The Construction, Plumbing and Services IRC supports the submission of the training package components put forward in this Case for Endorsement.

Signed on behalf by the appointed Chair of the Construction, Plumbing and Services IRC.

Name of Chair: Stuart Maxwell

Signature of Chair:



Date: 23 June 2020

State and Territory Training Authority (STA) responses to the Case for Endorsement

STA	Supported	Comment	Date	STA Officer
ACT	-	As we do not have any enrolments at present we have nil comment on this case for endorsement	01/5/2020	Tim Sealey
NSW	Y	Thank you for the opportunity to provide feedback on the Cases for Endorsement for the Concreting project as part of the CPC Construction, Plumbing and Services Training Package (Release 7.0). NSW supports these Cases for Endorsement.	01/5/2020	Sue Bearfield
NT	-	No response received		
Qld	Y	Queensland has undertaken industry consultation on the Case for Endorsement for Concreting. We are not aware of any issues and industry had not raised any issues, however, should we become aware of issues about the training qualification we will advise as soon as possible. On that basis, Queensland supports the Case for Endorsement for Concreting.	30/4/2020	Filippa Ross
SA	-	No response received		
TAS	Y	Thanks, and providing any issues raised by Tasmanian stakeholders have been addressed,	1/05/2020	Michael McGee

		Skills Tasmania is able to support the Case for Endorsement for Certificate III in Concreting.		
VIC	Y	The Victorian STA now supports the CfE for Concreting, based on the changed expression of the unit of competency and relying on industry's judgement that "Identify" is the work outcome.	06/5/2020	Jacqui Spencer
WA	Y	Based on the materials provided, the Western Australian State Training Authority supports the Case for Endorsement for the CPC Construction, Plumbing and Services Training Package Release 7, which relates to concreting.	04/5/20	Frances Parnell

Reports by exception

Nil

Letters of support

Letters of support for the Case for Endorsement from eighteen industry stakeholders are available at **Appendix G: Letters of support**.

D. Industry expectations about training delivery

Advice about industry's expectations of training delivery

The proposed components have been developed in close consultation with industry and stakeholders to:

- provide a qualification that is accessible in content, format and logic
- support learner mobility within and across organisations and residential and commercial settings
- support national implementation and delivery and assessment in a wide variety of contexts
- support sound assessment practice to ensure that assessment is fair, reliable and evidenced by knowledge, skills and work performance that meet agreed industry standards.

The revised qualification better reflects the current job role of concreter – industry has had direct input into the revised core requirements and elective options, ensuring employer needs are met and relevance of the qualification across workplaces nationally.

The proposed qualification provides a range of elective choices that facilitate vocational outcomes in a range of occupational contexts such as sole-traders and small business owners who may require a very broad range of skills, including job planning, specifying concrete supply requirements, briefing the work team, and erecting and dismantling formwork.

The proposed qualification also provides vocational outcomes for specialist contractors constructing tilt panels on site or those working with high-performance concrete.

Unit of competency elements and performance criteria have been updated to clarify delivery benchmarks; performance and knowledge evidence have been updated to clarify assessment requirements and enhance technical content to reflect employer expectations of the skills and knowledge that graduates of the qualification would bring to the workplace.

The changes to the packaging arrangements on the qualification and revisions to units of competency and their assessment requirements will require RTOs to update training and assessment materials to reflect new content.

There are no training package components proposed for deletion.

Equivalency

In line with current *Training Package Products Policy*, *CPC30320 Certificate III in Concreting* is equivalent to its predecessor because the occupational outcomes remains the same.

The decision by the Australian Skills Quality Authority (ASQA) to extend the teach-out period for the *CPC30313 Certificate III in Concreting to September 2020* will support training providers as they transition to the updated *CPC30320 Certificate III in Concreting*; because the updated qualification is deemed equivalent to its predecessor, it will automatically be added to the scope of relevant RTOs.

IRC Recommendations on traineeships and apprenticeships

The IRC notes that the concreting industry recommends the qualification as an apprenticeship. The IRC recognises the qualification as suitable for an Australian apprenticeship pathway with its implementation a matter for STA consideration.

E. Implementation of the new training package components

Advice about occupational and licensing requirements

Concreting is not a licensed occupation. Concrete workers who are employed by concrete contractors do not need to be licensed. Licensing requirements may apply for concrete contractors in different states and territories.

Unless an exception applies, a Queensland Building and Construction Commission (QBCC) contractor licence of the appropriate class is required to carry out or undertake to carry out concreting if the work is being performed as part of erection, construction, renovation, alteration, extension, improvement or repair of a building or fixed structure. Concreting includes concrete cutting, spalling or repairs to concrete fixed structures (for example, repairing concrete cancer, or spalling).

However, in some circumstances the work may be exempt from being classified as building work or otherwise requiring a licence under the QBCC Act or its regulation.

Licensing, legislative, regulatory or certification requirements apply to some concreting units of competency in all states and territories except Tasmania. Further detail is provided in the units of competency. Relevant state and territory regulatory authorities should be consulted to confirm these requirements.

Implementation issues of note and management strategy

To date, no implementation issues of note.

Advice on downstream effects of the change

The impact for enterprises and RTOs is expected to be a positive one. The proposed components will provide enterprises with a workforce that can apply job-relevant skills and knowledge across the concreting industry nationally.

As the qualification has been deemed equivalent to its previous iteration, RTOs will have the updated version added to their scope automatically by ASQA.

F. Quality assurance reports

Editorial and Equity reports

The Editorial and Equity reports have been undertaken by Kerry Jennings.

Editorial Report: Concreting project

1. Cover page	
Information required	Detail
Training Package title and code	<i>CPC Construction, Plumbing and Services Training Package Release 7.0</i>
Number of new qualifications and their titles	Nil
Number of revised qualifications and their titles	One new qualification: CPC30320 Certificate III in Concreting.
Number of new units of competency and their titles	Two new units of competency: <ul style="list-style-type: none"> • CPCCON3056 Conduct concrete pump delivery operations • CPCCON3057 Core concrete.
Number of revised units of competency and their titles	Eighteen revised unit of competency (replacing superseded units in the CPC Construction, Plumbing and Services Training Package): <ul style="list-style-type: none"> • CPCCOM1016 Identify requirements for safe precast and tilt-up work • CPCCON2021 Handle concreting materials and components • CPCCON2022 Select, use and maintain concreting plant, tools and equipment • CPCCON3035 Determine concrete supply requirements • CPCCON3036 Plan concrete work and brief team • CPCCON3041 Place concrete • CPCCON3042 Finish concrete • CPCCON3043 Cure concrete • CPCCON3044 Apply decorative finishes to concrete • CPCCON3046 Repair and rectify concrete • CPCCON3047 Cut concrete • CPCCON3048 Construct tilt panels on site • CPCCON3049 Apply and finish sprayed concrete • CPCCON3050 Carry out high-performance concreting • CPCCON3051 Conduct off-form vertical concrete operations • CPCCON3053 Slump-test concrete • CPCCON3054 Operate concrete agitator trucks • CPCCON3055 Install topping slabs
Confirmation that the draft training package components are publication-ready	I believe that the draft Training Package components I have seen, prior to the quality audit process, were publication-ready at that time. Unless I see the draft Training Package components before submission to the Australian Industry and Skills Committee (AISC,) I am not in a position to confirm their state at any point in the future.

1. Cover page	
Information required	Detail
Is the Editorial Report prepared by a member of the Quality Assurance Panel? If 'yes' please provide a name.	Kerry Jennings
Date of completion of the report	7 April 2020

2. Content and structure

Units of competency

Editorial requirements	Comments
Standard 5: The structure of units of competency complies with the unit of competency template.	The structure of units of competency complies with the unit of competency template: all mandatory fields are used the 'prerequisite unit' optional field is used when required by the work and determined by industry as necessary; one prerequisite unit features predominantly across a number of the units – CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry the 'competency field' and 'Range of Conditions' optional fields are not used the 'unit sector' optional field is used.
Standard 7: The structure of assessment requirements complies with the assessment requirements template.	Every unit of competency has associated assessment requirements and the structure of these assessment requirements complies with the assessment requirements template. The assessment requirements specify performance evidence, knowledge evidence and assessment conditions. Assessment can be conducted in the workplace or in a simulated workplace environment. Resources required for assessment are outlined in the Assessment Conditions which, depending on the unit content, could include documentation relating to jurisdictional requirements for safe work; documentation, specifications, instructions, resources, PPE, surfaces, vehicles, systems, plant, components, tools and equipment required to achieve the performance criteria and performance evidence.

Qualifications

Editorial requirements	Comments by the editor
Standard 9: The structure of the information for qualifications complies with the qualification template.	The structure of the information for the AQF qualification complies with the qualification template. All mandatory fields are used The one optional field (entry requirements) is not used. The qualification template states that under the packaging rules, the qualification: 'Lists all core and elective unit codes and titles, including prerequisite units where they apply.' (page 6 of the <i>Standards for Training Packages 2012</i>) Under the packaging rules for the qualification, the following is provided: 'Prerequisite units of competency An asterisk (*) against a unit code below indicates that there is a prerequisite requirement that must be met. Prerequisite units must be assessed before assessment of any unit of competency with an asterisk. Check the unit of competency for information on specific prerequisite requirements. All prerequisite requirements are packaged in the qualification.'

Editorial requirements	Comments by the editor
	It is my opinion that the 'structure of the information for qualifications' does not comply with the qualification template because the prerequisite units that apply are not listed, they are only identified by an asterisk and there is no evidence that they are available in the qualification other than the statement 'All prerequisite requirements are packaged in the qualification.' The reader is expected to trust the SSO on this point. This opinion has been provided to the SSO.
Standard 10: Credit arrangements existing between Training Package qualifications and Higher Education qualifications are listed in a format that complies with the credit arrangements template.	Artibus Innovation has provided a document that indicates that at the time of endorsement, no credit arrangements exist between the <i>CPC Construction, Plumbing and Services Training Package Release 7.0</i> concreting qualification and higher education qualifications.

Companion Volumes

Editorial requirements	Comments by the editor
Standard 11: A quality assured companion volume implementation guide is available and complies with the companion volume implementation guide template.	Artibus Innovation has produced a <i>Companion Volume Implementation Guide</i> for the <i>CPC Construction, Plumbing and Services Training Package Release 7.0</i> , which will be available at the time of endorsement. This Guide has undergone internal and external editing and proofreading processes, and complies with the Companion Volume Implementation Guide (CVIG) template.

3. Proofreading

Editorial requirements	Comments by the editor
Unit codes and titles and qualification codes and titles are accurately cross-referenced throughout the training package product(s) including mapping information and packaging rules, and in the companion volume implementation guide.	Unit codes and titles, and qualification codes and titles have been cross-referenced throughout the Training Package products, including in the mapping information, packaging rules and the CVIG.
Units of competency and their content are presented in full.	All units are available and submitted in full.

Editorial requirements	Comments by the editor
<p>The author of the Editorial Report is satisfied with the quality of the training products, specifically with regard to:</p> <ul style="list-style-type: none"> absence of spelling, grammatical and typing mistakes consistency of language and formatting logical structure and presentation of the document. compliance with the required templates 	<p>Artibus Innovation has been very responsive to editorial suggestions and comments. Consequently, as the author of the editorial report I am confident that the advice I have provided to Artibus Innovation, prior to the material proceeding to quality audit, will result in material that:</p> <ul style="list-style-type: none"> does not have spelling, grammatical or typing mistakes uses consistent language and formatting uses a logical structure in its presentation complies with the required templates. <p>It must be noted, however, that post this editorial report additional changes may be made to the training products as a result of the quality report, State/Territory Training Authority (STA) comment, unforeseen issues the Skills Service Organisation (SSO) needs to address and/or AISC comment/request. Depending on the timeline I may or may not be asked for editorial advice about any further changes. Consequently, the final text will always be the responsibility of Artibus Innovation.</p>

Equity Report: Concreting project

Section 1 – Cover page

Information required	Detail
Training Package title and code	<i>CPC Construction, Plumbing and Services Training Package Release 7.0</i>
Number of new qualifications and their titles	Nil
Number of revised qualifications and their titles	One new qualification: <ul style="list-style-type: none"> • CPC30320 Certificate III in Concreting.
Number of new units of competency and their titles	Two new units of competency: <ul style="list-style-type: none"> • CPCCON3056 Conduct concrete pump delivery operations • CPCCON3057 Core concrete.
Number of revised units of competency and their titles	Eighteen revised unit of competency (replacing superseded units in the CPC Construction, Plumbing and Services Training Package): <ul style="list-style-type: none"> • CPCCOM1016 Identify requirements for safe precast and tilt-up work • CPCCON2021 Handle concreting materials and components • CPCCON2022 Select, use and maintain concreting plant, tools and equipment • CPCCON3035 Determine concrete supply requirements • CPCCON3036 Plan concrete work and brief team • CPCCON3041 Place concrete • CPCCON3042 Finish concrete • CPCCON3043 Cure concrete • CPCCON3044 Apply decorative finishes to concrete • CPCCON3046 Repair and rectify concrete • CPCCON3047 Cut concrete • CPCCON3048 Construct tilt panels on site • CPCCON3049 Apply and finish sprayed concrete • CPCCON3050 Carry out high-performance concreting • CPCCON3051 Conduct off-form vertical concrete operations • CPCCON3053 Slump-test concrete • CPCCON3054 Operate concrete agitator trucks • CPCCON3055 Install topping slabs
Confirmation that the draft training package components meet the requirements in Section 2 <i>Equity checklist of draft training package components</i>	It is my opinion that the draft Training Package components meet the requirements in Section 2.
Is the Equity Report prepared by a member of the Quality Assurance Panel? If 'yes' please provide the name.	Kerry Jennings
Date of completion of the report	7 April 2020

Section 2 – Equity checklist of draft training package components

Equity requirements	Equity reviewer comments Provide brief commentary on whether the draft endorsed components meet each of the equity requirements
<p>The training package component(s) comply with Standard 2 of the <i>Standards for Training Packages 2012</i>. The standard requires compliance with the <i>Training Package Products Policy</i>, specifically with the access and equity requirements:</p> <ul style="list-style-type: none"> • Training Package developers must meet their obligations under Commonwealth anti-discrimination legislation and associated standards and regulations. • Training Package developers must ensure that Training Packages are flexible and that they provide guidance and recommendations to enable reasonable adjustments in implementation. 	<p>The <i>Training Package Products Policy</i> (Item 1.5. Training Package access and equity) states:</p> <ul style="list-style-type: none"> • ‘Training Package developers in preparing training package products, and the Australian Industry and Skills Committee (AISC) in approving Training Packages for implementation, must meet their obligations under Commonwealth anti-discrimination legislation and associated standards and regulations. • Training Packages must be flexible and the Companion Volume Implementation Guide must provide guidance and recommendations to enable reasonable adjustments in implementation.’ <p>I am not in a position to confirm or deny whether the Training Package developer and the AISC ‘meet their obligations under Commonwealth anti-discrimination legislation and associated standards and regulations’. This is an incredibly expansive statement, and, in my opinion, beyond the role of an equity review report. To make any further comment I would require advice from the Department.</p> <p>The <i>Training Package Products Policy</i> does not define flexibility. It would appear to me that the Training Package developers have followed the required development, consultation and endorsement processes, and have supported industry involvement in ensuring the training products being submitted for endorsement reflect the flexibility industry has told them it requires for its vocational education and training (VET) products. In my opinion, this is confirmed by the Construction, Plumbing and Services Industry Reference Committee (IRC) supporting the submission of the Training Package components put forward in the Case for Endorsement (CPE) and the signing of this support by the Chair of the Construction, Plumbing and Services IRC.</p> <p>Reference to reasonable adjustment can be found in the <i>Companion Volume Implementation Guide for the CPC Construction, Plumbing and Services Training Package Release 7.0</i>. This text discusses ‘reasonable adjustment’ in the context of the <i>Disability Standards for Education 2005</i> and refers Registered Training Organisations (RTOs) to these Standards as well as the <i>Disability Standards for Education Guidance Notes</i>, for further information.</p>

Section 3 - Training Package Quality Principles

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

Do the units of competency meet the diversity of individual and employer needs and support equitable access and progression of learners?

What evidence demonstrates that the units of competency and their associated assessment requirements are clearly written and have consistent breadth and depth so that they support implementation across a range of settings?

Are there other examples that demonstrate how the key features of flexibility are being achieved?

Equity requirements	Equity reviewer comments
<p>1. What evidence demonstrates that the draft components provide flexible qualifications/units of competency that enable application in different contexts?’</p>	<p>The design of the draft qualification supports flexibility in that:</p> <ul style="list-style-type: none"> • it uses a core and elective model • units have been imported from other <i>CPC Construction, Plumbing and Services Training Package</i> qualifications • the packaging rules allow for two elective units to be selected from any currently endorsed Training Package or accredited course where the unit is packaged in a Certificate III or Certificate IV level qualification. <p>Flexibility is evident in the draft Qualification Description when it states that qualification can be applied in residential and commercial contexts: ‘This is a qualification for concreters working in concreting operations on residential and commercial projects.’</p> <p>Flexibility is also evident in the packaging of the core units. As outlined in the Qualification Description, the draft CPC30320 Certificate III in Concreting ‘has core unit of competency requirements that cover common skills for the construction industry, as well as the specialist field of concreting’.</p> <p>These common skills are identified by the code CPCCOM or CPCCCM. Five of seventeen core units are coded CPCCOM, one is coded CPCCCM and one is coded CPCCWHS (work health and safety). Consequently, this means seven of the seventeen or just under half of the core units can be expected to be relevant to other qualifications and hence sectors, in the construction, plumbing and services industry.</p>
<p>2. Is there evidence of multiple entry and exit points?’</p>	<p>There are no entry requirements for the qualification.</p> <p>As per policy, learners who exit before achieving the qualification will receive a statement of attainment for any unit achieved.</p> <p>The units and qualification clearly reflect the industry’s position that entry to construction worksites requires achievement of a specific work health and safety unit of competency.</p>
<p>3. Have prerequisite units of competency been minimised where possible?’</p>	<p>Yes, prerequisite units have been minimised in the draft CPC30320 Certificate III in Concreting where the same prerequisite unit (<i>CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry</i>) applies to all of the core units and the majority of the elective units.</p>

<p>4. Are there other examples of evidence that demonstrate how the key features of the flexibility principle are being achieved?</p>	<p>The companion volume implementation guide (CVIG) covers access and equity considerations, and reasonable adjustments, and explains how the units of competency comply with the Foundation Skills field in the template.</p> <p>The CfE also states that:</p> <p>‘The proposed components have been developed in close consultation with industry and stakeholders to:</p> <ul style="list-style-type: none"> • provide a qualification that is accessible in content, format and logic • support learner mobility within and across organisations and residential and commercial settings • support national implementation and delivery and assessment in a wide variety of contexts • support sound assessment practice to ensure that assessment is fair, reliable and evidenced by knowledge, skills and work performance that meet agreed industry standards.’
---	--

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

Support learner transition between education sectors.

Equity requirements	Equity reviewer comments
<p>1. What evidence demonstrates 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?</p>	<p>The CVIG pathways advice is that the CPC30320 Certificate III in Concreting is suitable for an Australian Apprenticeship pathway.</p> <p>The CfE outlines that:</p> <p>‘The qualification includes several core units that are common across the construction industry, for example ‘read and interpret plans and specifications’ and ‘carry out measurements and calculations’.</p> <p>Additional elective options through the formwork units also support flexibility for individuals in a range of workplace contexts and pathways into other construction occupations.’</p>

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

Support implementation across a range of settings and support sound assessment practices.

Equity requirements	Equity reviewer comments
<p>1. Does the Companion Volume Implementation Guide include advice about:</p> <ul style="list-style-type: none"> • Pathways • Access and equity • Foundation skills? <p>(see Training Package Standard 11)</p>	<p>As already stated, the CVIG includes text about pathways, access and equity, and foundation skills.</p> <p>It is my opinion that the twenty units of competency and their assessment requirements are clearly written. The assessment requirements are specific about what competency looks like in the workplace.</p> <p>The intended target audience is specified in the Application. While not a member of that audience, it is my opinion that the content would be relevant to that audience because it is expressed clearly and concisely.</p>
<p>2. Are the foundation skills explicit and recognisable within the training package and do they reflect and not exceed the foundation skills required in the workplace?</p>	<p>Examples of foundation skills – language, literacy, numeracy and employment skills – being explicit or clearly expressed in performance criteria, and reflecting but not exceeding the foundation skills required in the workplace (that is, being reasonable workplace expectations), include:</p> <ul style="list-style-type: none"> • read work instructions and clarify requirements with relevant persons (CPCCON2021) • identify handling characteristics of concreting materials from SDSs and regulatory requirements (CPCCON2021) – in my opinion, it is clear that to do this, workers would need to read the SDS and regulatory requirements • finish concrete and check compliance with specifications and workplace requirements (CPCCON3042) – in my opinion, it is clear that to do this, workers would need to read the specs and workplace requirements • interpret specifications for concrete placement and clarify requirements with relevant persons (CPCCON3041) – in my opinion, it is clear that to do this, workers would need to read, think critically and then communicate with others • measure sample for conformity with tolerance levels and carry out re-sampling when sample is outside tolerance (CPCCON3053) – in my opinion, it is clear that to do this, workers would need sufficient numeracy skills to take measurements and understand tolerances • check total volumes of concrete supply for areas and features requiring identical properties and confirm accuracy (CPCCON3035) – in my opinion, it is clear that to do this, workers would need sufficient numeracy skills • many units have a performance criteria that requires workers to clear work area and dispose of, reuse or recycle materials in accordance with regulatory and workplace requirements – in my opinion, it is clear that to do this workers would need ‘employment skills’, that is, in this case, the skills to fit in with how the industry expects the work environment to operate • many units have performance criteria that requires works to select and fit required personal protective equipment – in my opinion, it is clear that to do this workers would need literacy and clear thinking skills • performance criteria often states that work needs to be carried

	<p>out in accordance with work specifications, or manufacturer and workplace requirements – in these cases while I think the foundations skills are clear, I think that the performance criteria are also allowing for flexibility because workers could either read about these things or communicate with others to find out about them.</p>
--	--

Quality report

A quality report has been undertaken Trish Gamper.

Quality Report Template

Section 1 – Cover page

Information required	Detail
Training Package title and code	CPC Construction, Plumbing and Services Training Package (Release 7.0) – Concreting
Number of new qualifications and their titles ¹	N/A
Number of revised qualifications and their titles	<p>One (1) revised qualifications:</p> <ul style="list-style-type: none"> • CPC30320 Certificate III in Concreting
Number of new units of competency and their titles	<p>Two (2) new units of competency:</p> <ul style="list-style-type: none"> • CPCCON3056 Conduct concrete pump delivery operations • CPCCON3057 Core concrete
Number of revised units of competency and their titles	<p>Eighteen (18) revised units of competency:</p> <ul style="list-style-type: none"> • CPCCOM1016 Identify requirements for safe precast and tilt-up work • CPCCON2021 Handle concreting materials and components • CPCCON2022 Select, use and maintain concreting plant, tools and equipment • CPCCON3035 Determine concrete supply requirements • CPCCON3036 Plan concrete work and brief team • CPCCON3041 Place concrete • CPCCON3042 Finish concrete • CPCCON3043 Cure concrete • CPCCON3044 Apply decorative finishes to concrete • CPCCON3046 Repair and rectify concrete • CPCCON3047 Cut concrete • CPCCON3048 Construct tilt panels on site • CPCCON3049 Apply and finish sprayed concrete • CPCCON3050 Carry out high-performance concreting • CPCCON3051 Conduct off-form vertical concrete operations

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

	<ul style="list-style-type: none"> • CPCCON3053 Slump-test concrete • CPCCON3054 Operate concrete agitator trucks • CPCCON3055 Install topping slabs
<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>I confirm that I am independent of:</p> <ul style="list-style-type: none"> • the Training Package or Training Package components review – Yes • development and/or validation activities associated with the Case for Endorsement – Yes • undertaking the Equity and/or Editorial Reports for the training package products that are the subject of this quality report – Yes
<p>Confirmation of the Training Packages or components thereof being compliant with the <i>Standards for Training Packages 2012</i></p>	<p>Training Package components are compliant with the <i>Standards for Training Packages 2012</i></p>
<p>Confirmation of the Training Packages or components thereof being compliant with the <i>Training Package Products Policy</i></p>	<p>Training Package components are compliant with the <i>Training Package Products Policy</i></p>
<p>Confirmation of the Training Packages or components thereof being compliant with the <i>Training Package Development and Endorsement Process Policy</i></p>	<p>Training Package components are compliant with the <i>Training Package Development and Endorsement Process Policy</i></p>
<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 	<p>The Case for Endorsement outlines the consultation and validation processes for the review and development of one (1) qualification and twenty (20) units of competency.</p> <p>A nationally representative group of industry technical experts was established as a Concreting Working Group (CWG) and used to provide advice and technical input into the draft qualification and units of competency to ensure their relevance to industry.</p> <p>Extensive consultation and validation processes were undertaken via face-to-face meetings, phone and email consultations, online surveys and webinars with a wide range of industry stakeholders. These processes are fit for purpose and commensurate with the scope of the project.</p> <p>The estimated impact of changes has also been identified in the Case for Endorsement, noting <i>'the impact for enterprises and RTOs is expected to be a positive one. The proposed components will provide enterprises with a workforce that can apply job-relevant skills and knowledge across the concreting industry'</i></p>

	<p><i>nationally. As the qualification has been deemed equivalent to its previous iteration, RTOs will have the updated version added to their scope automatically by ASQA'.</i></p> <p>Registered Training Organisations (RTOs) will need to review the two (2) new units of competency and develop supporting resources.</p>
Name of panel member completing Quality Report	Trish Gamper – Gamper Consulting Services
Date of completion of the Quality Report	14 April 2020

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>Yes</p>	<p>The CPC Construction, Plumbing and Services Training Package (Release 7.0 – Concreting) consists of the following:</p> <ol style="list-style-type: none"> 1. ASIC endorsed components: <ul style="list-style-type: none"> • one (1) qualification • twenty (20) units of competency and associated assessment requirements • credit arrangements are not applicable as no credit arrangements currently exist between the qualification and higher education. 2. A quality assured companion volume implementation guide. <p>The Editorial Report confirms these components.</p>
<p>Standard 2</p> <p>Training Package developers comply with the <i>Training Package Products Policy</i></p>	<p>Yes</p>	<p>Artibus Innovation has complied with the <i>Training Package Products Policy</i>. Qualification and unit of competency releases were reviewed and corrected. The draft qualification and units of competency comply with coding and titling requirements, access and equity have been addressed, foundation skills are explicit and recognisable within the Training Package components, and clear mapping tables are provided. The Editorial and Equity Reports also confirm compliance with the <i>Training Package Products Policy</i>.</p>
<p>Standard 3</p> <p>Training Package developers comply with the AISC <i>Training Package Development and Endorsement Process Policy</i></p>	<p>Yes</p>	<p>Artibus Innovation has complied with the AISC <i>Training Package Development and Endorsement Process Policy</i>. Industry consultations were conducted, key industry stakeholders consulted and kept informed throughout the project, draft components validated, and editorial and equity reviews undertaken. The Case for Endorsement confirms the development, consultation, feedback and validation processes in the development and review of the components.</p>
<p>Standard 4</p> <p>Units of competency specify the standards of performance required in the workplace</p>	<p>Yes</p>	<p>A review of the Training Package components confirms clearly written units of competency that specify the 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>A review of the units of competency confirms compliance with the unit of competency template. Compliance is also confirmed in the Editorial Report.</p>

Standard 6 Assessment requirements specify the evidence and required conditions for assessment	Yes	A review of the assessment requirements confirms they clearly specify the evidence required and provide required conditions for assessment.
Standard 7 Every unit of competency has associated assessment requirements. The structure of assessment requirements complies with the assessment requirements template	Yes	A review of the units of competency confirms that every unit of competency has associated assessment requirements and the structure complies with the assessment requirements template. The Editorial Report also confirms compliance with this Standard.
Standard 8 Qualifications comply with the Australian Qualifications Framework specification for that qualification type	Yes	A review of CPC30320 Certificate III in Concreting and the AQF level specifications confirms that the qualification complies with the AQF specification for the qualification type.
Standard 9 The structure of the information for the Australian Qualifications Framework qualification complies with the qualification template	Yes	A review of the qualifications confirms that the structure of the qualifications complies with the qualification template. The Editorial Report notes that units with prerequisites are marked with an asterisk (*) with no evidence that they are available in the qualification. However, a review of the units and their prerequisite/s identifies that one unit <i>CPCWHS2001 Apply WHS requirements, policies and procedures in the construction industry</i> , is the prerequisite and is included in the qualification.
Standard 10 Credit arrangements existing between Training Package qualifications and Higher Education qualifications are listed in a format that complies with the credit arrangements template	N/A	No credit arrangements exist between the CPC30320 Certificate III in Concreting and higher education qualifications. Artibus Innovation provided separate documentation which complies with the required template.
Standard 11 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.	Yes	A quality assured Companion Volume Implementation Guide has been produced and will be available at the time of endorsement. The Editorial Report confirms that the Companion Volume Implementation Guide complies with the relevant template and has been quality assured in line with Artibus Innovation's internal processes and has been edited and proofread.
Standard 12 Training Package developers produce other quality assured companion volumes to meet	N/A	

the needs of their stakeholders as required.		
---	--	--

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	<p>The Case for Endorsement notes that the reviewed qualification and units of competency were developed in close consultation with industry and stakeholders to:</p> <ul style="list-style-type: none"> • provide a qualification that is accessible in content, format and logic • support learner mobility within and across organisations and residential and commercial settings • support national implementation and delivery and assessment in a wide variety of contexts • support sound assessment practice to ensure that assessment is fair, reliable and evidenced by knowledge, skills and work performance that meet agreed industry standards.
<p>Compliant and responds to government policy initiatives</p> <p>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:</p> <ul style="list-style-type: none"> • ensure obsolete and superfluous qualifications are removed from the system • ensure that more information about 	Yes	<p>A review of the Training Package components, the Case for Endorsement, the Companion Volume Implementation Guide, and Editorial and Equity Reports confirms the Training Package components are compliant and respond to government initiatives by:</p> <ul style="list-style-type: none"> • ensuring the revised qualification meets skill demand across residential and commercial sectors of the concreting industry • developing units of competency that are written to reflect industry expectations of training delivery with clearly written performance criteria and enhanced performance and knowledge evidence • providing flexibility in the qualifications to enable elective choices for a range of workplace contexts and pathways into other construction occupations

<p>industry's expectations of training delivery is available to training providers to improve their delivery and to consumers to enable more informed course choices</p> <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 		<ul style="list-style-type: none"> • where appropriate relevant cross-industry and cross-sector units have been imported to minimise duplication of units in the system.
<p>Reflect contemporary work organisation and job profiles incorporating a future orientation</p>	<p>Yes</p>	<p>The Case for Endorsement notes that the revised qualification and associated units of competency were developed to better reflect current and emerging work outcomes by:</p> <ul style="list-style-type: none"> • better reflecting current industry practices • including technical detail sought by industry and to support enhanced quality of training and assessment • providing a range of electives choices that reflect a range of occupational outcomes • providing vocational outcomes for specialist contractors.

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 Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Support movement of skills within and across organisations and sectors	Yes	The revised CPC30320 Certificate III in Concreting provides flexible elective options, including the allowance to select two units from other Training Packages or accredited courses at Certificate III or Certificate IV level, which supports movement of skills within and across organisations and sectors.
Promote national and international portability	Yes	The allowance to select additional units of competency from other Training Packages or accredited courses within the qualifications promotes national portability of skills and knowledge.
Reflect regulatory requirements and licensing	Yes	The Case for Endorsement notes that licensing, legislative, regulatory or certification may apply to some units of competency in some states and territories. Users are advised to check with the relevant regulatory authority before delivery.

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	Support for the revised qualification and units of competency is contained within the Case for Endorsement.
Recognise convergence and connectivity of skills	Yes	The incorporation of common and sector-specific CPC Construction, Plumbing and Services units of competency and the allowance to import units of competency recognise the convergence and connectivity of skills.

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 qualification provides flexibility and choice of units of competency to meet the diversity of individual and employer needs.
Support equitable access and progression of learners	Yes	The Equity Report confirms that the Training Package components support equitable access and progression of learners.

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	N/A	Pathways from school and to higher education are not applicable to this qualification. The CPC30320 Certificate III in Concreting is suitable for an Australian Apprenticeship pathway.

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	The flexibility within the qualification supports implementation across a range of settings. Implementation advice is also contained within the Companion Volume Implementation Guide.

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 sound assessment practice	Yes	<p>A review of the units of competency and their associated assessment requirements confirms they support sound assessment practices.</p> <p>The Editorial Report also confirms units of competency and their associated assessment requirements are clearly written and have consistent breadth and depth. The performance evidence and knowledge evidence reflect work tasks and knowledge requirements and include appropriate volume and frequency of requirements.</p>
Support implementation	Yes	<p>Implementation advice is provided in the Companion Volume Implementation Guide. The Case for Endorsement also provides advice to Registered Training Organisations (RTOs) regarding relevant changes required for implementation.</p>

Declaration

Artibus Innovation declares that the proposed components adhere to the requirements of the *Standards for Training Packages 2012*, the *Training Package Products Policy*, the *Training Package Development and Endorsement Process Policy* and the AQF.

The *CPC Construction, Plumbing and Services Training Package Version 7.0 Companion Volume Implementation Guide* can be located on the VETNet website at:

- <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>
- Artibus Innovation official website, through an external link: www.artibus.com.au.

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

Supporting COAG Industry Skills Council reforms to training packages

The table below demonstrates the alignment of the concreting components of the CPC Construction, Plumbing and Services Training Package Release 7.0 with the COAG Industry Skills Council reforms to training packages:

Reform	Evidence of reform being addressed
1. Remove obsolete and superfluous qualifications from the system	Not applicable. The vocational outcome for the qualification meets skill demand across residential and commercial sectors of the concreting industry.
2. Include information about industry's expectations of training delivery	The proposed training package components are written to reflect industry expectations of training delivery with clearly written performance criteria and enhanced performance and knowledge evidence. An updated <i>Companion Volume Implementation Guide</i> will be available on endorsement to provide training providers and consumers with additional implementation information.
3. Improve qualification design to enable individuals to upskill and move easily from one related occupation to another	The qualification includes several core units that are common across the construction industry, for example 'read and interpret plans and specifications' and 'carry out measurements and calculations'.
4. Improve the efficiency of the training system through the creation of units of competence that can be owned and used by multiple industry sectors	Where appropriate relevant cross-industry and cross-sector units have been imported to minimise duplication of units in the system.
5. Foster greater recognition of skill sets	Skill sets were not deemed relevant under this review.

Evidence of completion of the training package development work

This Case for Endorsement will be put forward to the AISC June 2020 meeting.

Evidence that training package components are prepared for publication

The proposed components meet the requirements of the *Standards for Training Packages 2012* and are currently in pre-publishing mode on the Training Package Content Management System (TPCMS) awaiting release on training.gov.au (TGA) once endorsed.

Approximate publication timeframe

The proposed components will be ready for publication on endorsement and the official release of the AISC communiqué.

H. Proposed training package components

Qualification mapping

Qualification mapping information			
CPC Construction, Plumbing and Services Training Package Release 7.0	CPC Construction, Plumbing and Services Training Package Release 6.0	Comments	E/N
CPC30320 Certificate III in Concreting	CPC30318 Certificate III in Concreting	Supersedes and is equivalent to CPC30318 Certificate III in Concreting. Core and elective packaging arrangements changed. Core units increased from 15 to 17 with total number of units required for the qualification increased from 20 to 22.	E

Units of competency mapping

Unit mapping information			
CPC Construction, Plumbing and Services Training Package Release 7.0	CPC Construction, Plumbing and Services Training Package Release 6.0	Comments	E/N
CPCCOM1016 Identify requirements for safe precast and tilt-up work	CPCCCM1016 Identify requirements for safe tilt-up work	Supersedes but is not equivalent to CPCCCM1016 Identify requirements for safe tilt-up work. Code, title and outcome changed to incorporate requirements for safe precast work. Edited for clarity and updated to reflect current industry practice.	N
CPCCON2021 Handle concreting materials and components	CPCCCO2021 Handle concreting materials	Supersedes and is equivalent to CPCCCO2021 Handle concreting materials. Code changed with minor change to title. Edited for clarity and updated to reflect current industry practice, materials and components.	E
CPCCON2022 Select, use and maintain concreting plant, tools and equipment	CPCCCO2022 Select, check and maintain concreting plant, tools and equipment	Supersedes and is equivalent to CPCCCO2022 Select, check and maintain concreting plant, tools and equipment. Code changed with minor change to title. Edited for clarity and updated to reflect current industry practice, plant, tools and equipment.	E

Unit mapping information			
CPC Construction, Plumbing and Services Training Package Release 7.0	CPC Construction, Plumbing and Services Training Package Release 6.0	Comments	E/N
CPCCON3035 Determine concrete supply requirements	CPCCCO3035 Assess and specify concrete supply requirements	Supersedes and is equivalent to CPCCCO3035 Assess and specify concrete supply requirements. Code changed with minor change to title. Updated to better clarify workplace outcome and reflect current industry practice and terminology.	E
CPCCON3036 Plan concrete work and brief team	CPCCCO3036 Plan concrete work and brief team	Supersedes and is equivalent to CPCCCO3036 Plan concrete work and brief team. Code changed. Edited for clarity and updated to reflect current industry practice and terminology.	E
CPCCON3041 Place concrete	CPCCCO3041 Place concrete	Supersedes and is equivalent to CPCCCO3041 Place concrete. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3042 Finish concrete	CPCCCO3042 Finish concrete	Supersedes and is equivalent to CPCCCO3042 Finish concrete. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3043 Cure concrete	CPCCCO3043 Cure concrete	Supersedes and is equivalent to CPCCCO3043 Cure concrete. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3044 Apply decorative finishes to concrete	CPCCCO3044 Apply decorative finishes to concrete	Supersedes and is equivalent to CPCCCO3044 Apply decorative finishes to concrete. Code changed. Unit redeveloped to reflect current industry practice and decorative concrete finishing techniques. Element and performance criteria structure changed, and assessment requirements modified.	E

Unit mapping information			
CPC Construction, Plumbing and Services Training Package Release 7.0	CPC Construction, Plumbing and Services Training Package Release 6.0	Comments	E/N
CPCCON3046 Repair and rectify concrete	CPCCCO3046 Repair and rectify concrete	Supersedes and is equivalent to CPCCCO3046 Repair and rectify concrete. Code changed. Elements, performance criteria and assessment requirements modified to clarify requirements. Updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3047 Cut concrete	CPCCCO3047 Cut and core concrete	Supersedes but is not equivalent to CPCCCO3047 Cut and core concrete. Code changed. Skills and knowledge associated with coring concrete removed. Title changed to reflect modified outcome. Updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	N
CPCCON3048 Construct tilt panels on site	CPCCCO3048 Construct tilt panels on site	Supersedes and is equivalent to CPCCCO3048 Construct tilt panels on site. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3049 Apply and finish sprayed concrete	CPCCCO3049 Apply and finish sprayed concrete	Supersedes and is equivalent to CPCCCO3049 Apply and finish sprayed concrete. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3050 Carry out high-performance concreting	CPCCCO3050 Carry out high performance concreting	Supersedes and is equivalent to CPCCCO3050 Carry out high performance concreting. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E

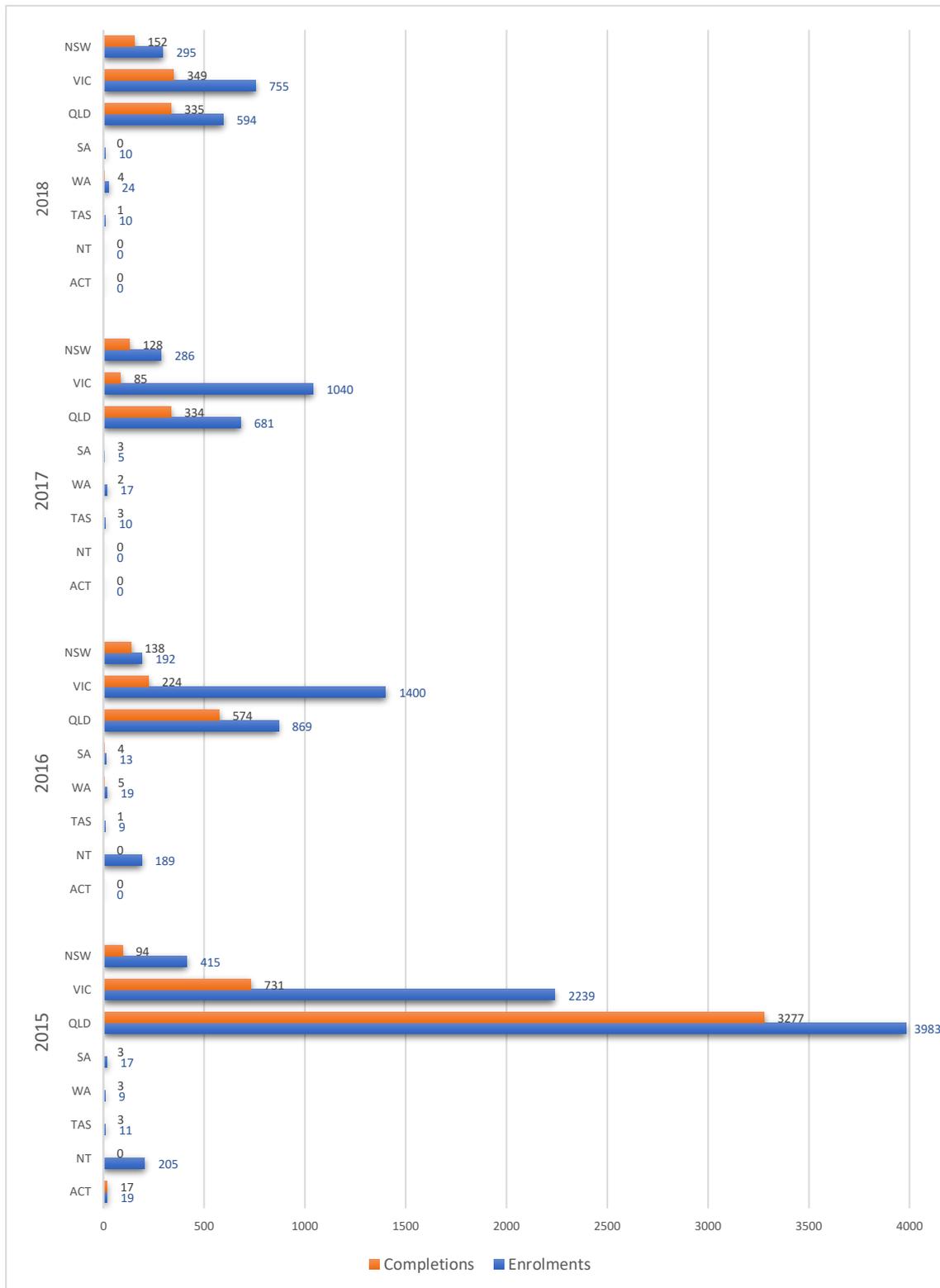
Unit mapping information			
CPC Construction, Plumbing and Services Training Package Release 7.0	CPC Construction, Plumbing and Services Training Package Release 6.0	Comments	E/N
CPCCON3051 Conduct off-form vertical concrete operations	CPCCCO3051 Conduct off-form vertical concrete operations	Supersedes and is equivalent to CPCCCO3051 Conduct off-form vertical concrete operations. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3053 Slump-test concrete	CPCCCO3053 Slump test concrete	Supersedes and is equivalent to CPCCCO3053 Slump test concrete. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3054 Operate concrete agitator trucks	CPCCCO3054 Operate concrete agitator trucks	Supersedes and is equivalent to CPCCCO3054 Operate concrete agitator trucks. Code changed. Edited for clarity and updated to reflect current industry practice, tools and equipment.	E
CPCCON3055 Install topping slabs	CPCCCO3055 Install topping slabs	Supersedes and is equivalent to CPCCCO3055 Install topping slabs. Code changed. Edited for clarity and updated to reflect current industry practice, terminology, tools and equipment. Technical knowledge evidence enhanced.	E
CPCCON3056 Conduct concrete pump delivery operations		New unit. No equivalent unit. Unit created to cover the work performed by a line/hose hand.	
CPCCON3057 Core concrete		New unit. No equivalent unit. Unit created through the separation of cutting and coring concrete into two discrete workplace outcomes.	

Imported units of competency

The proposed qualification does not contain units imported from other training packages. It does contain several cross-sector units from CPC Construction, Plumbing and Services Training Package to support mobility within the broader construction industry.

Appendix A: Enrolment and completion figures (2015-2018)

CPC30318 Certificate III in Concreting



Appendix B: Summary of stakeholder consultation and engagement processes

Consultation activities	Stakeholder engagement
July 2019: Establish project and consultation processes	
<p>Identified changes made and issues raised during 2018 review.</p> <p>Communicated review commencement and established project stakeholder listing.</p> <p>Gathered initial stakeholder feedback on qualification and units.</p>	<p>Initial phone and email contact with key industry stakeholders to inform them of the review and seek assistance in identifying industry representatives for consultation [including Master Concreters Australia, MBA offices (national, Victoria, Queensland and NSW), Housing Industry Association (HIA), Concrete Institute of Australia (CIA), Concrete Pumping Association of Australia (CPAA), Steel Reinforcement Institute of Australia] and training advisory bodies [such as the NSW Industry Training Advisory Board (ITAB), the Skills Advisory Council NT (ISACNT), Construction Industry Training Council, Construction Industry Training Board, Construction Training Fund] and peak bodies [such as Concrete Sawing & Drilling Association Australia].</p> <p>Project page established on the Artibus Innovation website.</p>
August–September 2019: National stakeholder consultation round 1	
<p>Survey 1 and Draft Pack 1 available to all stakeholders via Artibus website.</p> <p>12/8/19 Artibus Innovation newsletter.</p> <p>Face-to-face meetings in every state/territory.</p> <p>Direct engagement using phone and email communication in every state/territory.</p> <p>21/8/19 Email communication to 171 stakeholders listed on the project register.</p>	<p>Project information disseminated nationally via newsletter. Two survey responses received.</p> <p><i>Employers:</i></p> <ul style="list-style-type: none"> • face-to-face consultations with 43 representatives • phone consultations with an additional 16 representatives • email communication with over 100 representatives <p><i>Peak bodies/associations/STAs/ITABs/Unions:</i></p> <ul style="list-style-type: none"> • face-to-face consultations with representatives from 7 bodies/associations/unions • phone and email consultations with representatives from 18 bodies. <p><i>Regulators</i></p> <ul style="list-style-type: none"> • face-to-face consultation with Consumer and Business Services SA • phone and email consultations with WorkSafe VIC, Victorian Registration and Qualifications Authority, Training Accreditation Council WA, and Queensland Building and Construction Commission. <p><i>RTOs:</i></p> <ul style="list-style-type: none"> • face-to-face consultations with 9 RTO representatives • some phone discussions and email communication with 95 RTOs.
18/9/19 Established Concreting Working Group (CWG).	CWG established with Marie Paterson (IRC) as Chair and comprising 18 representatives across each state/territory (except NT).

Consultation activities	Stakeholder engagement
25/9/19 CWG Meeting 1.	11 attendees (8 industry, 1 IRC and 2 Artibus Innovation representatives) considered qualification packaging and feedback from first round of national consultation. Packaging arrangements modified to better align with job role and workers in residential and commercial workplaces. Also enhanced technical content for units of competency provided.
October 2019: National stakeholder consultation round 2	
8/10/19 CWG Meeting 2.	9 attendees (6 industry, 1 IRC and 2 Artibus Innovation representatives) - remaining members provided input out of session by phone and email. Agreed modifications to the qualification packaging, significant revisions to the decorative and repair concrete units, and approved Draft Pack 2 for national consultation.
17/10/19 Artibus Innovation newsletter.	Project information disseminated nationally via newsletter.
Survey 2 and Draft Pack 2 available to all stakeholders via Artibus website.	11 survey responses received.
22/10/19 Email communication to 210 stakeholders listed on the project register.	All stakeholders urged to provide feedback. Ongoing phone and email communication to gather feedback and discuss issues with a range of stakeholders.
November–December 2019: Ongoing consultation and communication	
6/11/19 Email communication to 213 stakeholders listed on the project register.	All stakeholders again urged to provide feedback. Ongoing phone and email communication to gather feedback and discuss issues with a range of stakeholders.
20/11/19 CWG Meeting 3.	7 attendees (4 industry, 1 IRC and 2 Artibus Innovation representatives) – remaining CWG members provided input out of session by phone and email. Discussed consultation feedback and agreed packaging associated with levelling, excavation, formwork electives and inclusion of ‘white card’ unit in the core. Also discussed and agreed technical changes to units including the decorative and repair concrete units.
January-February 2020: National stakeholder validation	
23/1/20 Email to CWG.	CWG members requested to review latest draft materials prior to their dissemination for national stakeholder validation.
14/2/20 Email communication to 272 stakeholders on the project register.	National validation process – all stakeholders invited to provide validation feedback.

Consultation activities	Stakeholder engagement
Survey 3 and Draft Pack 3 available for stakeholder validation via Artibus Innovation website.	9 survey responses received. Ongoing phone and email communication to gather feedback and discuss issues with a range of stakeholders.
27/2/20 Validation webinar.	National validation webinar held to give all stakeholders an opportunity to discuss updates to materials and provide feedback – 6 stakeholders registered and 5 attended.
March-May 2020: Ongoing consultation and communication	
4/3/20 CWG Meeting 4.	5 attendees (4 industry and 1 Artibus Innovation representative) – remaining CWG members provided input out of session by phone and email. Discussed validation feedback and issue of minimum performance evidence for place/finish/cure concrete – 100 sqm vs 60 sqm. Consensus was reached that 100 sqm is the minimum industry benchmark necessary to ensure quality/employability and demonstration of competent placing and finishing skills over two loads plus using mechanical trowelling methods. Approved other minor changes to draft components.
13/3/20 Email communication to 272 stakeholders on the project register.	All stakeholders notified of the validation results and next stages of project.
Ongoing phone and email communication with stakeholders.	Consultation with a range of stakeholders continued through to project completion to respond to questions and explain modifications to components and impact on implementation.
Artibus Innovation newsletter.	Project information disseminated nationally via newsletter.
5/6/20 CWG Meeting 5.	15 attendees (11 industry, 1 IRC member and 3 Artibus Innovation representative). Discussed and resolved issues raised by the CFMMEU associated with packaging of formwork units and the question of whether the qualification is an apprenticeship or traineeship.

Appendix C: Industry stakeholders

Concreting Working Group (CWG)

CWG member name	Stakeholder category/organisation	Jurisdiction
David Lingard	Peak body (Master Concreters Australia)	National
Jennifer Lawrence/Max Rafferty	Industry body (MBA)	National
Marie Paterson (Chair)	Industry body (Construction Industry Training Board/IRC)	National/SA
Robert Belmonte	Employer (CB Concreting)	ACT
Graeme Teece	Employer and trainer/assessor (Teece Constructions)	NSW
Tony Sergi	Employer (Diverse Concreting)	NSW/ACT
Conan Butler	Employer (East Coast Concrete)	NSW/QLD
Lee Ryan	Employer and trainer/assessor (LD & MM Ryan Training and Assessments/Lee Ryan Concreting)	QLD
Billy Shelton	Employer (Anycrete)	QLD
Chris Jones	Employer and MCA (QR Contracting)	QLD
Jeff Piotto	Employer (Piotto Bros Cement Flooring)	SA
Joseph Bagnara	Employer (PSI Paving)	SA
Ben Waller	Employer (B&A Concreting)	TAS
Brook Noble	Concrete Institute of Australia & Cement Australia	TAS
Peter Russell	Trainer/assessor (Bendigo Kangan) and concreting specialist	VIC
Jaquie Conley	MBA	VIC
Mark Woodyard	Employer (Concretus)	WA
Tony Pisano	Employer (Concretus)	WA

Validation webinar registrations

National Webinar held 2.00pm (Eastern Daylight Time), Thursday, 27 February 2020				
Registrant	Organisation	Category	Jurisdiction	Attended
Irina Ferouleva	Department for Innovation and Skills	STA	SA	<input type="checkbox"/>
Paul Muenchow	Department of Training and Workforce Development	STA	NT	<input type="checkbox"/>
Judd Kruse	TasTAFE	RTO	TAS	<input type="checkbox"/>
Quentin Sickerdick	North East Vocational College	RTO	SA	<input type="checkbox"/>
Jennifer Lawrence	Master Builders Australia	Industry body	National	<input type="checkbox"/>
Neda Aleksic	Industry Skills Advisory Council NT (ISACNT)	STA	NT	-

Survey respondents

Survey	Respondent	Organisation	Category	Jurisdiction
1: Draft pack 1	Chris Jones	QR Contracting	Employer	QLD
	John Moss	Bess Concrete	Employer	QLD
2: Draft pack 2	Chris Sampson	EXCOWA	Employer	WA
	Mark Woodyard	Concretus	Employer	WA
	Chris Jones	QR Contracting	Employer	QLD
	Joseph Bagnara	PSI Pavements	Employer	SA
	Lee Ryan	Lee Ryan Concreting/LD & MM Training and Assessments	Employer/RTO	QLD
	Judd Kruse	TasTAFE	RTO	TAS
	Michael Hurley	Construction Training College	RTO	QLD
	Michelle Curro	CSTC	RTO	QLD
	Andrew Kelly	S/T Construction Techniques	RTO	QLD
	Quentin Sickerdick	North East Vocational College	RTO	SA
Geoff Hogan	GOTAFE	RTO	VIC	
3: Draft pack 3 - validation	Shannon Gilliland	KPA Concrete Construction Group	Employer	VIC
	Chris Jones	QR Contracting	Employer	QLD
	Justin Fyfon	Create Concreting The Management Edge	Employer RTO	VIC
	Matthew Hague	Bendigo TAFE/Kangan	RTO	VIC
	Michael Hurley	Construction Training College	RTO	QLD
	Quentin Sickerdick	North East Vocational College	RTO	SA
	Judd Kruse	TasTAFE	RTO	TAS
	Andrew Mellas	TasTAFE	RTO	TAS
Lance Armstrong	Major Training Group	RTO	QLD	

Full list of stakeholders consulted throughout the project

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
Robert Belmonte	CB Concreting	Employer	ACT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Joel Sykes	Betta Getta Concreta	Employer	ACT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Rosa Marcantonio	Gungahlin Concrete Services	Employer	ACT	-	-	<input type="checkbox"/>	-
Jamie Richardson	JMG Concreting	Employer	ACT	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Dale Vickers	JMG Concreting	Employer	ACT	<input type="checkbox"/>	-	<input type="checkbox"/>	-
David Nguyen	JMG Concreting	Employer	ACT	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Tony Costanzo	CPS Concretors	Employer	ACT	-	-	<input type="checkbox"/>	-
Aaron Meneghel	Artistic Concrete	Employer	ACT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Julian Borg	Holcim Concrete	Employer	ACT	-	-	<input type="checkbox"/>	-
Graeme Mauger	Lendlease	Employer	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Ross Trethewy	Lendlease	Employer	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Peter Stephanoski	Restiron Concreting	Employer	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Stephen Flack	Advanced Decorative Concreting	Employer	NSW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Con Manouras	Diverse Concreting	Employer	NSW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Daniel Goodchild	DGR Concreting Services	Employer	NSW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Tony Sergi	Diverse Concreting	Employer	NSW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Bill Maidment	BM Concreting	Employer	NSW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Luke Thompson	Shoreline Building Contractors	Employer	NSW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Jerome Harris	Lendlease	Employer	NSW	-	-	<input type="checkbox"/>	-
John Chichkan	Azzurri Concrete	Employer	NSW	-	-	<input type="checkbox"/>	-
Conan Butler	Eastcoast Concrete Contractors	Employer	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Michael McNamara	Eastcoast Concrete Contractors	Employer	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Craig Bourke	Craig Bourke Concreting	Employer	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Peter Di Prinzie	Di Prinzie Concreting	Employer	NSW	-	-	<input type="checkbox"/>	-
Graeme Teece	Teece Constructions	Employer/RT O	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carlos Nikolakis	CN Advanced Concreting	Employer	NT	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Pedro Rigas	T&M Concretors	Employer	NT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
George Alexopoulos	JGA Concreting	Employer	NT	-	<input type="checkbox"/>	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
John Prior	JLM Civil Works	Employer	NT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Ben Hunter	Bear Claw Concreting	Employer	NT	-	-	<input type="checkbox"/>	-
Chris Jones	QR Contracting	Employer	QLD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peter Roebig	AES Solutions (builder)	Employer	QLD	-	-	<input type="checkbox"/>	-
Jonathan Rowlands	GVK Group (steel fixing)	Employer	QLD	-	-	<input type="checkbox"/>	-
Tony Saad	Compliance Assist (builder)	Employer	QLD	-	-	<input type="checkbox"/>	-
Kylie-ann Sharpe	East Coast Concreting	Employer	QLD	-	-	<input type="checkbox"/>	-
Michael Stewart	Cogent Scaffolding	Employer	QLD	-	-	<input type="checkbox"/>	-
John Moss	Bess Concrete	Employer	QLD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Peter Forsingdal	Hutchinson Builders	Employer	QLD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Abbie Williamson	JPD Concreting Specialists	Employer	QLD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Graeme Gillespie	Empire Concreting	Employer	QLD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Lee Ryan	Lee Ryan Concreting/LD & MM Ryan Training & Assessments	Employer/RT O	QLD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brad Nairn	Manly Concrete	Employer	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Peter Zocaro	Cemento Concrete	Employer	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Billy Shelton	Anycrete	Employer	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Shaun Fuller	McGinn Concrete	Employer	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Lady Penelope	Thunderbird Demolition	Employer	QLD	-	-	<input type="checkbox"/>	-
Jenny Sutton	City Concrete Pumping	Employer	SA	-	-	<input type="checkbox"/>	-
Dawn Treloar	Moons Earthworks & Foundations	Employer	SA	<input type="checkbox"/>	-	<input type="checkbox"/>	-
John Cicchiello	Bianco Precast	Employer	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Jeffrey Piotto	Piotto Bros Cement Flooring	Employer	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Michael Donnelly	Kerb Tec	Employer	SA	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Joseph Bagnara	PSI Pavements	Employer	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Matt Tringrove	Tringrove Concrete Contractors	Employer	TAS	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Ben Waller	B&A Concreting	Employer	TAS	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Wayne Barrett	W.B. Maintenance and Concreting	Employer	TAS	-	-	<input type="checkbox"/>	-
Todd Jones	BSF Concrete Creations	Employer	TAS	-	-	<input type="checkbox"/>	-
Chris Watson	Probuild	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Blair Sherwood	Mid Central Concrete	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
Leigh Pope	ARP Concreting	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Charles Harris	Probuild	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Chris Green	Integrated Green Construction	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Zac McGuane	Prestige Concrete Services	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Simon Smith	Straight Cut Slabs	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Matthew Christodoulou	MLC Concrete Construction	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Win Law	MLC Concrete Construction	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	-	-
Nick Talevski	MLC Concrete Construction	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	-	-
Nigel Hunt	McLaren Property Development	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Anthony Millicer	Pomeroy Pacific	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Peter Free	Probuild	Employer	VIC	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Will Katrivessis	Probuild	Employer	VIC	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Peter Hall	AAA Access Concrete & Civil Work	Employer	VIC	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Ahmed	Concreters Melbourne	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Rocky Pisanelli	Dynamic Concreters	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Martyn Mulholland	ATJ Concreting Services	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Brian Galvin	K&B Concreting & Formwork	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Patrick Willmore	Westvic Concreting	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Nathan Wigmore	Whitchurch Builders	Employer	VIC	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Joe Davies	Davies Concreting	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Rosemary Pacquola	KPA Concrete	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Shannon Gilliland	KPA Concrete	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Justin Fyson	Create Concreting/The Management Edge	Employer	VIC	-	-	<input type="checkbox"/>	-
Glenn Mackay	Groundhog Earthmoving	Employer	VIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Peter Hynes	Peter & Justin Hynes Concreting	Employer	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Paul McGuinness	Perkins Builders	Employer	WA	-	-	<input type="checkbox"/>	-
Mark Woodyard	Concretus	Employer	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Tony Pisano	Concretus	Employer	WA	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Miles Tonkin	Concretus	Employer	WA	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Chris Sampson	ExCo WA	Employer	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Sam Sangrigoli	Concept Concreting	Employer	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
Gino Cataldo	Warner Brook	Employer	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Phil Hobbs	BCG Concrete	Employer	WA	-	-	<input type="checkbox"/>	-
David Lingard	Master Concreters Australia	Peak body	National	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tony Lopez	Housing Industry Association	Industry body	National	-	-	<input type="checkbox"/>	-
Jennifer Lawrence	Master Builders Australia	Industry body	National	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alex Waldren	Master Builders Australia	Industry body	National	-	-	<input type="checkbox"/>	-
-	Cement Concrete & Aggregates Australia	Industry body	National	-	-	<input type="checkbox"/>	-
Scott Munter	Steel Reinforcement Institute of Australia	Industry body	NSW	-	-	<input type="checkbox"/>	-
Ash Power	Master Painters	Industry body	QLD	-	-	<input type="checkbox"/>	-
Adam Profke	MBA Qld	Industry body	QLD	-	-	<input type="checkbox"/>	-
Alan Davis	Construction Training Fund	Industry body	SA	-	-	<input type="checkbox"/>	-
Mark Gosden	Construction Industry Training Board	Industry body	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
-	Master Builders SA	Industry body	SA	-	-	<input type="checkbox"/>	-
Marie Paterson	Construction Industry Training Board/IRC	Industry body	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brook Noble	Concrete Institute of Australia/Cement Australia	Industry body	TAS	-	<input type="checkbox"/>	<input type="checkbox"/>	-
John Darcy	MBA VIC	Industry body	VIC	-	-	<input type="checkbox"/>	-
Neil Du Rand	Master Builders Association of WA	Industry body	WA	-	-	<input type="checkbox"/>	-
Elaine McGrath	Construction Training Fund	Industry body	WA	-	-	<input type="checkbox"/>	-
Adam Smith	Construction Training Fund	Industry body	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Michael McLean	MBA WA	Industry body	WA	-	-	<input type="checkbox"/>	-
-	Chamber of Minerals and Energy of Western Australia	Industry body	WA	-	-	<input type="checkbox"/>	-
Debra Baxter	ASQA	Regulator	QLD	-	-	<input type="checkbox"/>	-
Sue Kesby	Queensland Building and Construction Commission	Regulator	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Krystle Bobrige	Consumer and Business Services	Regulator	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Brian Chamberlin	WorkSafe VIC	Regulator	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Barry Dunn	WorkSafe VIC	Regulator	VIC	-	-	<input type="checkbox"/>	-
Cameron Ellis	WorkSafe VIC	Regulator	VIC	-	-	<input type="checkbox"/>	-
Christine Croker	Victorian Registration and Qualifications Authority	Regulator	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Matt Sinkinson	WorkSafe VIC	Regulator	VIC	-	-	<input type="checkbox"/>	-
Morena Stanley	Training Accreditation Council	Regulator	WA	-	-	<input type="checkbox"/>	-
Peter Russell	Defence	RTO	ACT	-	-	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
John (Charlie) Waites	MBA ACT & Southern Training Organisation	RTO	ACT	-	-	<input type="checkbox"/>	-
Lynne Sheffield	Quality Training in Construction	RTO	ACT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Nawal Sami	ANET Training	RTO	NSW	-	-	<input type="checkbox"/>	-
Katrinna Madden	Construction Trade Qualifications	RTO	NSW	-	-	<input type="checkbox"/>	-
Hanna Alam	Best Option Training	RTO	NSW	-	-	<input type="checkbox"/>	-
Darin Grace	Master Builders Association of NSW	RTO	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
David Thompson	Masters in Building Training	RTO	NSW	-	-	<input type="checkbox"/>	-
Rod Jackson	TAFE NSW	RTO	NSW	-	-	<input type="checkbox"/>	-
Robert Stephens	TAFE NSW	RTO	NSW	-	-	<input type="checkbox"/>	-
Katherine Jagger	TAFE NSW Infrastructure, Energy and Construction SkillsPoint	RTO	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Fletcher Austin	ERGT Australia	RTO	NT	-	-	<input type="checkbox"/>	-
Robert Buttery	Charles Darwin University	RTO	NT	-	-	<input type="checkbox"/>	-
Luis Espinoza	Charles Darwin University	RTO	NT	-	-	<input type="checkbox"/>	-
Cola Maurirere	Site Skills Training	RTO	NT	-	-	<input type="checkbox"/>	-
Nicole Aleckson	Australian Trade Training College	RTO	QLD	-	-	<input type="checkbox"/>	-
Natasha Vinter	Affordable Training	RTO	QLD	-	-	<input type="checkbox"/>	-
Grant Nicholas	Ascent Training Solutions	RTO	QLD	-	-	<input type="checkbox"/>	-
Corey Bowles	Major Training Group	RTO	QLD	-	-	<input type="checkbox"/>	-
Ben Jones	ASTRA Group Services	RTO	QLD	-	-	<input type="checkbox"/>	-
Leasa Vanohr	Australian Consolidated Training	RTO	QLD	-	-	<input type="checkbox"/>	-
Andrew Pevats	Australian Construction Training Services	RTO	QLD	-	-	<input type="checkbox"/>	-
Paul Scaysbrook	Australian Skills Group	RTO	QLD	-	-	<input type="checkbox"/>	-
Simone Roos	Ballinger Training and Consultancy	RTO	QLD	-	-	<input type="checkbox"/>	-
Rebecca Gladys Lynch	Building Industry Training	RTO	QLD	-	-	<input type="checkbox"/>	-
Paul Simmons	Noble Training Group	RTO	QLD	-	-	<input type="checkbox"/>	-
Andrew Shea	City-Wide Building & Training Services	RTO	QLD	-	-	<input type="checkbox"/>	-
Simon Gardner	Construction Industry Training	RTO	QLD	-	-	<input type="checkbox"/>	-
Christina Monk	Construction Training College	RTO	QLD	-	-	<input type="checkbox"/>	-
Michelle Curro	Construction Skills Training Centre	RTO	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Anthony Chan	Everthought Education	RTO	QLD	-	-	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
Joanne Brooks	Foundation Training Australia	RTO	QLD	-	-	<input type="checkbox"/>	-
Graeme Lynch	Construction Training Institute	RTO	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Rajat Saraswat	Step Into Training Services	RTO	QLD	-	-	<input type="checkbox"/>	-
Tammy Foat	Training and Assessment Mentor	RTO	QLD	-	-	<input type="checkbox"/>	-
Richard Franks	Specialised Career Solutions	RTO	QLD	-	-	<input type="checkbox"/>	-
Karen Twyford	Gold Coast Trades College	RTO	QLD	-	-	<input type="checkbox"/>	-
Natalie Smulders	Master Builders Queensland	RTO	QLD	-	-	<input type="checkbox"/>	-
Stephen Evelyn	Realistic Training Options	RTO	QLD	-	-	<input type="checkbox"/>	-
Cherie Rudzitis	RudTek	RTO	QLD	-	-	<input type="checkbox"/>	-
Andrew Kelly	S/T Construction Techniques	RTO	QLD	-	-	<input type="checkbox"/>	-
Louise Vause	Staysafe Industry Training	RTO	QLD	-	-	<input type="checkbox"/>	-
Julie Healy	TAFE Queensland	RTO	QLD	-	-	<input type="checkbox"/>	-
Stephen Harding	Training Professionals	RTO	QLD	-	-	<input type="checkbox"/>	-
Vicki Marston	IPS Institute	RTO	QLD	-	-	<input type="checkbox"/>	-
Giles Markey	WH&S More Skills	RTO	QLD	-	-	<input type="checkbox"/>	-
Mark Christie	CSTC	RTO	QLD	-	-	<input type="checkbox"/>	-
Patrick Cran	Crane Safe CICA	RTO	QLD	-	-	<input type="checkbox"/>	-
Warren Dennis	MTO Group	RTO	QLD	-	-	<input type="checkbox"/>	-
Malcolm Dickens	Dickens Assessment and Training	RTO	QLD	-	-	<input type="checkbox"/>	-
Mandy Fallon	Construction Skills Queensland	RTO	QLD	-	-	<input type="checkbox"/>	-
Garry Matthias	Corrsafe Enterprises Pty Ltd	RTO	QLD	-	-	<input type="checkbox"/>	-
Jamie Mulvihill	CSTC	RTO	QLD	-	-	<input type="checkbox"/>	-
Mathew O'Shannessy	SWQ Training	RTO	QLD	-	-	<input type="checkbox"/>	-
Richard Seaborn	WH&S More Skills	RTO	QLD	-	-	<input type="checkbox"/>	-
Andrew Watt	CQR (Chain of Responsibility)	RTO	QLD	-	-	<input type="checkbox"/>	-
Tony Nation	Ballinger Training and Consultancy	RTO	QLD	-	-	<input type="checkbox"/>	-
Michael Hurley	Construction Training College	RTO	QLD	-	-	<input type="checkbox"/>	-
Lance Armstrong	Major Training Group	RTO	QLD	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Robert Finelli	North East Vocational College	RTO	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Quentin Sickerdick	North East Vocational College	RTO	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adam Wiles	North East Vocational College	RTO	SA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
Warren Douglas	Access Training Centre	RTO	SA	-	-	<input type="checkbox"/>	-
David Vertue	TAFE SA	RTO	SA	-	-	<input type="checkbox"/>	-
Rob Beckett	Adelaide Training & Employment Centre	RTO	SA	-	-	<input type="checkbox"/>	-
Andrew Mellas	TasTAFE	RTO	TAS	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Judd Kruse	TasTAFE	RTO	TAS	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chris Smith	TasTAFE	RTO	TAS	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Michael Krupa	Bendigo Kangan Institute	RTO	VIC	-	-	<input type="checkbox"/>	-
Lupa Borah	Frontier Training and Technology	RTO	VIC	-	-	<input type="checkbox"/>	-
Sue Grayson	Gordon Institute of TAFE	RTO	VIC	-	-	<input type="checkbox"/>	-
Franklin O'Carroll	Holmesglen Institute	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Stelios Tsiolas	Australian Industrial Systems Institute	RTO	VIC	-	-	<input type="checkbox"/>	-
Damian Faulkhead	Platinum Institute Australia	RTO	VIC	-	-	<input type="checkbox"/>	-
Anthony Lane	The Management Edge	RTO	VIC	-	-	<input type="checkbox"/>	-
Mathew Ma	Workplace Health & Safety Services	RTO	VIC	-	-	<input type="checkbox"/>	-
Elizabeth Jansz	Holmesglen Institute	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Alan Plant	DLI Training	RTO	VIC	-	-	<input type="checkbox"/>	-
Dean Osborne	Remedial Training	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Ian Sojan	Defence	RTO	VIC	-	-	<input type="checkbox"/>	-
Mark Wellsmore	Defence	RTO	VIC	-	-	<input type="checkbox"/>	-
David West	ActiveTec	RTO	VIC	-	-	<input type="checkbox"/>	-
Peter Rippingale	GoTAFE	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Teresa Signorello	CMM Building Industries	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Matt Hague	Bendigo Kangan Institute	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Peter Russell	Bendigo Kangan Institute	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geoff Hogan	GOTAFE	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Susan Fechner	Holmesglen Institute	RTO	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Mike Bezaud	North Metropolitan TAFE	RTO	WA	-	-	<input type="checkbox"/>	-
Daniel Baldwin	WA Training Institute	RTO	WA	-	-	<input type="checkbox"/>	-
Kamal Hadda	Skills Training and Engineering Services	RTO	WA	-	-	<input type="checkbox"/>	-
Michael Jez	Construction Skills Training Centre (CSTC)	RTO	WA	-	-	<input type="checkbox"/>	-
Clinton Kieswetter	Skills Training and Engineering Services	RTO	WA	-	-	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
Annette Thompson	Perth Training Centre	RTO	WA	-	-	<input type="checkbox"/>	-
Enzo Multari	North Metropolitan TAFE	RTO	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Rob Whitehurst	North Metropolitan TAFE	RTO	WA	<input type="checkbox"/>	-	<input type="checkbox"/>	-
David Taylor	North Metropolitan TAFE	RTO	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Mark Bowen	North Metropolitan TAFE	RTO	WA	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Sandeep Ahuja	North Metropolitan TAFE	RTO	WA	<input type="checkbox"/>	-	<input type="checkbox"/>	-
Lauren Hollows	Nara Training and Skills Hire	RTO	WA	-	<input type="checkbox"/>	<input type="checkbox"/>	-
-	CFMEU	Union	National	-	-	<input type="checkbox"/>	-
Garrett Purtill	Unions ACT	Union	ACT	-	-	<input type="checkbox"/>	-
-	CFMEU	Union	ACT	-	-	<input type="checkbox"/>	-
Stuart Maxwell	CFMEU	Union	NSW	-	-	<input type="checkbox"/>	-
Brian Humphrey	CFMEU	Union	QLD	-	-	<input type="checkbox"/>	-
Bob Williams	CFMEU	Union	QLD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Anne Duggan	CFMEU Training Unit	Union	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Barry Kearney	CFMEU Training Unit	Union	VIC	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Jodie Kafer	ACT STA	STA	ACT	-	-	<input type="checkbox"/>	-
Enoch Wong	NSW STA	STA	NSW	-	-	<input type="checkbox"/>	-
Matthew Hatton	NSW STA	STA	NSW	-	-	<input type="checkbox"/>	-
Michael Fletcher	NSW STA	STA	NSW	-	-	<input type="checkbox"/>	-
Susan Bearfield	NSW STA	STA	NSW	-	-	<input type="checkbox"/>	-
Nelson Brown	NT STA	STA	NT	-	-	<input type="checkbox"/>	-
Neda Aleksic	Industry Skills Advisory Council	STA	NT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Yvonne Webb	Industry Skills Advisory Council NT	STA	NT	-	-	<input type="checkbox"/>	-
Fillipa Ross	QLD STA	STA	QLD	-	-	<input type="checkbox"/>	-
Peter Eastment	QLD STA	STA	QLD	-	-	<input type="checkbox"/>	-
Peter Eickenloff	DET Qld	STA	QLD	-	-	<input type="checkbox"/>	-
Guy Valentine	DET	STA	QLD	-	-	<input type="checkbox"/>	-
Marina Borrello	Department for Innovation and Skills	STA	SA	-	-	<input type="checkbox"/>	-
Irina Ferouleva	Department for Innovation and Skills	STA	SA	-	-	<input type="checkbox"/>	<input type="checkbox"/>
Graham Warren	SA STA	STA	SA	-	-	<input type="checkbox"/>	-
Cheryl Bartolo	VIC STA	STA	VIC	-	-	<input type="checkbox"/>	-

Stakeholder name	Organisation	Category	Jurisdiction	Method of consultation			
				Face to face	Phone	Email	Online meeting
Jacqueline Spencer	VIC STA	STA	VIC	-	-	<input type="checkbox"/>	-
Madeleine Hayne	VIC STA	STA	VIC	-	-	<input type="checkbox"/>	-
Lisa Barron	WA STA	STA	WA	-	-	<input type="checkbox"/>	-
Frances Parnell	WA STA	STA	WA	-	-	<input type="checkbox"/>	-
Paul Muenchow	Department of Training & Workforce Development	STA	WA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Andrew Bryson	NSW Construction and Select Property Services ITAB	ITAB	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-
Greg Cheetham	NSW Construction and Select Property Services ITAB	ITAB	NSW	-	<input type="checkbox"/>	<input type="checkbox"/>	-

Appendix D: Stakeholder feedback and SSO response

Key feedback raised by stakeholders throughout the project and the SSO response is summarised in this section under the following headings:

- summary of stakeholder feedback and response
- summary of CWG meetings.

Summary of stakeholder feedback and response

Qualification implementation issues	
Stakeholder feedback	SSO response
Young people need to be skilled up in an apprenticeship for concreting	Implementation issues – no action taken
Concreting has a bad reputation – people think anyone can do concreting but it is a highly skilled job	
Quality of concreters is an issue – there are a lot of ‘cowboys’ out there	
Quality of workers is a key issue in industry. It is difficult to find concreters with the skills and knowledge to be able to work in residential concreting unsupervised without compromising quality. An example is their ability to see heights/manage gradient when placing concrete and techniques for pouring concrete on slopes. Constant supervision is needed as the qualification is not mandatory and employers can't be sure of the competence of workers.	Implementation issues – no action taken
Skills associated with placing concrete with a fall included in relevant unit	
The qualification should be mandatory to assure quality of concreters and the work they do.	Implementation issues – no action taken
The qualification should be an apprenticeship to ensure availability of skilled workers.	
Difficulty attracting workers to concreting with the right attitude and work ethic – it is seen as a job that anyone can do.	
The qualification should be mandatory and an apprenticeship to attract and keep workers by offering a formal qualification.	
Biggest issue is quality of concreters.	
Strongly support the qualification as an apprenticeship as concreting is a skilled trade.	
The job should be treated as a trade as it takes more than two years to be competent as a concreter	
Two years is not enough time to be a competent concreter	
Huge problems attracting quality workers – we run a permanent ad in Seek and can't get enough people who are actually qualified to perform concreting. More should be done by the government to attract people to concreting which is a highly skilled occupation.	

Qualification implementation issues	
Stakeholder feedback	SSO response
I train my own staff because I can't trust the quality of sub-contractors. Had trouble attracting workers in the past but recently have had more enquiries.	Implementation issues – no action taken
I am continually frustrated at the quality of workers that present (or don't turn up) for concreting work. They are unskilled, uneducated and usually on drugs. Depending on the contract, we require 40-60 concreters at a time and the biggest problem we face is finding skilled people with the right tools and capabilities for the work. The qualification should be mandatory and an apprenticeship to ensure a quality pool of workers in the future.	
Would take on apprentices immediately if the qualification better suited our needs.	
We have apprentices and see value in the qualification as an apprenticeship to provide quality outcomes for concreters. Our apprentices need four years to complete the requirements of the qualification - there's too much required to complete the qualification any sooner. We expect apprentices to be fully competent to run all aspects of a concreting job once qualified.	
There's a lot of work in Tasmania at the moment so a lot of people are working as concreters without the qualification and undermining quality and driving price down. It's disappointing that there are no incentives for people to take up the apprenticeship (eg no tool allowances).	
Quality of concreters is an issue - supportive of the apprenticeship and the qualification. Need to also ensure the quality of training/assessment - just because you have the qualification doesn't mean you were taught properly.	
It's difficult to attract people to concreting and quality of workmanship is a big issue. Concreting should be an apprenticeship with recognition for the skills involved. It takes time to understand different grades of cement, the impact of weather etc but quality concreting is essential to the construction industry and high risk for some projects	
The quality of available concreters is terrible. There are too many operators that are not skilled and out to do quick and dirties. These workers are everywhere in the local area and they're undercutting the work of quality concreters and doing work that has to be demolished and re-done	
Imperative that contractual arrangements are implemented with trusted concreting companies.	
There is a strong need in industry to make the qualification an apprenticeship as there are too many 'cowboys' out there.	
Supportive of the qualification as an apprenticeship but 2 years is not enough as learners are not quite ready - 3 years would be better.	

Qualification implementation issues	
Stakeholder feedback	SSO response
Would like to see the qualification delivered as an apprenticeship - two years is not long enough for the full range of technical skills required by the occupation, eg screeding. Level of education, bookwork etc is an issue for new entrants typically attracted to the occupation. Strong support for apprenticeship as workers want the 'trade'.	
It was raised at the last IRC that the CFMMEU does not support the inclusion of the higher level formwork units as electives in the concreting qualification, and it does not support the qualification as an apprenticeship.	The IRC Chair met with the CWG where the issues raised were discussed and resolved.

Qualification packaging issues	
Stakeholder feedback	SSO response
The qualification includes too many units that are not aligned with AQF 3	Packaging arrangements have been updated to include 'higher level' units
We would consider taking on apprentices if the qualification better suited our needs.	Packaging arrangements have been modified to make the qualification more robust for its alignment with an AQF Certificate III qualification and to ensure packaging options meet the needs of commercial and residential concreters in different workplace settings
CPCCCO3052 needs to be reviewed to take out the high risk components. It should be a unit that meets the requirements of the line hand who is managing the delivery hose, NOT operating the boom	<i>CPCCCO3052 Conduct concrete boom delivery operations</i> has been removed from the qualification as it is a high-risk work function. A new unit has been created to cover the work done by a line/hose hand who manages the delivery pump (<i>CPCCCON3056 Conduct concrete pump delivery operations</i>)
The precast sector is growing and not properly accommodated by the training package - perhaps a skill set is needed. Precast workers require a different range of finishes - sandblast, reconstituted polished granite, etching etc.	The precast sector is not well covered by this qualification. Attempts were made to accommodate precast needs within key units (place, finish, cure concrete and construct tilt panels on site), for example
The qualification is the most relevant to precast workers but does not always suit the precast environment which is a growing industry in Australia.	

Qualification packaging issues	
Stakeholder feedback	SSO response
<p>The qualification is not highly relevant to the precast environment where work is very structured, more compartmentalised and requires a high level of accuracy.</p> <p>Typically, qualified carpenters do the set out and formwork and the precast concreter will pour, screed and finish panels. Typical panels will be 3x7 or 3x8 metres and on a normal day, they will produce 20-25 panels (the equivalent of 400sqm). To be competent, we would expect something like 20 panels (300sqm) on at least five different occasions. Finishing techniques vary depending on the specs as does the curing technique.</p> <p>Tilt-up panels are too big to cast in a factory (too heavy to move). The slab will be poured, starting with the largest panel and casting bed made, then they use the bed for remaining panels. A crane is then used to pick up and place panels.</p>	<p>modifying the performance evidence to include “100 sqm or its equivalent in a precast environment”. This is not specific/quantifiable, therefore the CWG agreed to remove the statement from units and provide an explanation of the intent in a precast environment in the <i>Companion Volume Implementation Guide</i>. As a national qualification, key units cannot be adequately adapted for precast without undermining technical skills/knowledge required by general concreters in residential and commercial settings.</p>
<p>Big issue is the number of AQF 1 and 2 level units within the qualification given its AQF 3 alignment. Compared to trades such as carpentry, the alignment and packaging of concreting should be more robust.</p>	<p>Packaging arrangements have been updated to require more higher level units to be completed and increase the total number of units for the qualification.</p>
<p>Units have been included in the course structure that have not been endorsed by the AISC suggest removal until the AISC has endorsed the units.</p>	<p>Development and endorsement processes ensure all units within the qualification are endorsed and are the current versions available on the national register at the time of submission to the AISC.</p>
<p>Concrete specifications are set out by engineers and slump managed by suppliers under strict contractual arrangements. Slump is not performed by concreters.</p> <p>Concreters don't perform slump tests</p> <p>Slump tests are done on the concrete supply side to minimise the possibility of placers tampering with the mix and undermining strength parameters</p> <p>Knowledge of the importance of the slump and the impact of adding unspecified water on site can be embedded into key units of competency such as 'place concrete'</p> <p>In 25 years of concreting, never seen a slump performed on site – it should be removed from the core as it's not done in practice – suppliers do slump tests, not concreters</p>	<p>'Slump-test concrete' has been moved out of the core and into the elective listing.</p> <p>New foundation skills for numeracy have been included in key units: 'numeracy skills to calculate concrete volume (m3) and strength grades in megapascals (MPa)'.</p> <p>New knowledge items have been included in key units such as 'place concrete' for example:</p>

Qualification packaging issues	
Stakeholder feedback	SSO response
<p>The slump test is not done by concreters - it can be done, but it won't fix the watering down problem. The issue is more about knowledge of the impact of watering down and how much can be done without compromising cement strength/grade etc. Sometimes cement is over-engineered and impossible to place. The key is knowledge of MPa in relation to cement grades.</p>	<ul style="list-style-type: none"> • purpose and importance of slump testing and the impact to concrete strength and durability of adding water on site: drying shrinkage, early age strength, density, cracking, discolouration.
<p>Slump test should not be a core unit as it's not done by concreters - it's also not an accurate test - concrete strength, mix etc is specified in engineers instructions/plans. I think the intention is right, yes we do want concreters to be aware that adding water can compromise the strength of the concrete. However, the on site slump test alone will not "highlight how concrete strength can be compromised through the adding of unspecified additional water." The compressive strength of concrete is measured by carrying out a "crush test", not a slump test. The two tests are certainly related but I don't believe that carrying out an on site slump test highlights the information we are trying to get across. I think it would be beneficial for the apprentices to see how much the strength of concrete can be compromised when water is added by looking at crush test results, as opposed to carrying out slump tests. I have copy and pasted some text from one of our concrete suppliers websites that does a very good job of summarising the issues caused by adding water to concrete. "Wetness" of concrete as measured by the slump test is directly related to its compressive strength – the 28 day compressive strength of concrete is reduced by about 1.5 MPa for each additional 20mm of slump produced by adding water. To put this another way, each additional 10 litres of water per cubic metre will reduce the strength of concrete by about 2.5 MPa." By incorporating this information into the knowledge section I think we would raise awareness without carrying out irrelevant site slump testing done by concreters.</p>	
<p>CPCCON3053 Slump-test concrete should remain as a core unit as it is an important knowledge and skill base that every concreter should have.</p>	<p>Industry feedback has overwhelmingly supported moving the slump test unit out of the core. Key knowledge associated with the slump and impact of adding water on site have been incorporated into the 'place concrete' unit.</p>
<p>My concern is having white card as a core unit. Trainees have this before they start the qualification so I don't see the value of it being added here.</p> <p>This creates an additional impost on RTOs as many students are already working with employers when they commence training, therefore they already have the white card. RTOs then have to reassess a unit the apprentices already have. The future impact is that employers will likely not sign up apprentices until they commence training. Also there is so much focus on WHS (eg they already have to do WHS2001 plus WHS is embedded in each unit), technical skills training gets lost</p>	<p><i>CPCWHS1001 Prepare to work safely in the construction industry</i> was included in the core listing in the Draft Pack 2 (IRC decision at the time,</p>

Qualification packaging issues	
Stakeholder feedback	SSO response
<p>Including the white card in the core creates challenges for RTOs in delivery and assessment and Bendigo Kangan trains 80% of concreters in Victoria. The commercial guys will be OK but many residential concreters work on site without the white card. They will have to deliver/assess the unit outright as running an RPL process is problematic and inefficient. He reiterated his support for the qualification as an apprenticeship - feels this is a necessary foundation point. He noted Victoria is bringing in licensing for many construction qualifications but it will be a 5 year process. I support the qualification and units and their endorsement (my objection in the survey response is simply about the inclusion of CPCCWHS1001).</p>	<p>which related to all construction qualifications from Certificate I to Certificate III). Post validation, its inclusion was rejected by the AISC – consequently, the unit has been removed from the core of the qualification and the packaging rules adjusted accordingly.’</p> <p><i>CPCWHS1001 Prepare to work safely in the construction industry</i> was included in the core listing in the Draft Pack 2 (IRC decision at the time, which related to all construction qualifications from Certificate I to Certificate III). Post validation, its inclusion was rejected by the AISC – consequently, the unit has been removed from the core of the qualification and the packaging rules adjusted accordingly.’</p>
<p>My other concern is having white card as a core unit. Trainees have this before they start the qualification so I don't see the value of it being added here.</p>	
<p>The main concern we have with the proposed changes in the inclusion of CPCCWHS1001 Prepare to work safely in the construction industry (white card) as a core unit.</p> <p>The majority of trainees (and apprentices) begin employment before the commencement of formal training. For them to be able to access a construction site, they must have their white card. In this situation, the trainee/apprentice will already hold this unit upon enrolment into the qualification with a training provider. For this to be recognised as a credit transfer on their record, they must provide the RTO with a copy of their transcript – which they do not always have/is not always issued. Due to the nature of the unit and SafeWork NSW requirement, RTO's are unable to offer RPL for this unit. This means that either the student will be required to re-do the unit or, their employer will hold off the commencement of their employment until they have started training as the unit is part of the qualification.</p> <p>Also, in NSW, to obtain the white card, the assessment must be conducted by a SafeWork NSW approved assessor. Therefore to include this as a core unit in this (and possibly other trade qualifications) will have a huge impact on when classes can run and the ability of RTOs to assess it.</p> <p>As white card is a legislative requirement for anyone conducting construction work, we believe it should either be listed as an entry requirement for the qualification or, not mentioned at all as it is an industry requirement not a training requirement.</p>	
<p>We would also like to raise that the inclusion of CPCCWHS1001 (White card) as a core unit. White card is an industry requirement for construction work, not a training requirement for a Concreter and the inclusion of the unit does not benefit or contribute to the outcome for the students.</p>	

Qualification packaging issues	
Stakeholder feedback	SSO response
Strongly disagree on the inclusion of the CPCWHS1001. IF this is a core unit and an apprentice (I very much support this change) is relying on the RTO training for the unit they could be working on a site for up to 3 months with out this vital information. The other issue will be that there will be students who have the CI Card and will still have to undertake the unit as they may not be able to evidence that they have completed the unit, the issue of the CI Card is not always enough evidence of holding the unit.	
The inclusion of CPCWHS1001 in the core of the qualification causes significant issues for RTOs in delivery and assessment	
Changes made to the qualification are positive and excavation should be a core requirement.	
Excavation skills are essential for concreters, especially so that they learn to do it safely	
Excavation comes under the scope of concreting work and while we sometimes sub-contract the excavation out to earthmovers, most times we do it ourselves. Excavation is a skill that is currently lacking for concreters and needs to be a core in the qualification. There are many examples of commercial projects (hospitals, warehouses etc) where the concreters are responsible for excavation.	<i>CPCCCM2002 Carry out hand excavation</i> has been included in the core listing
It is difficult to find concreters who can finish stairs – this is a skills gap issue and training not currently provided by the qualification. Many concreters are unable to do concrete stairs, kerbs and crossovers.	Additional formwork units have been included as elective options: <i>Construct, erect and dismantle formwork for stairs and ramps</i> <i>Erect and dismantle formwork to suspended slabs, columns, beams and walls</i>
Setting out skills are essential for concreters.	<i>CPCCCA3002 Carry out setting out</i> has been included in the core listing
Absolutely supports the 'determine concrete supply requirements' as a core function - otherwise how do regular workers learn these fundamental skills so that they can have a pathway into supervisory roles.	<i>CPCCON3035 Determine concrete supply requirements</i> has been included in the core.
Being able to determine concrete supply and order requirements is very important. There is no course for this and no other way to learn unless workers are given the opportunity to do it. Workers that are keen to further their skills and progress in the job are especially keen to learn how to do orders. Supervisors take these workers around the site to teach them set out and methods for determining what materials are needed, where they have to be placed, how to order etc. Even workers who want to stay as labourers get some basic instruction in material supply requirements - it's key to doing their jobs well	Employers in the CWG fully support CPCCON3035 as a core function that workers do on the job and employers want their workers to know how to do and to be able to actually do it. This unit was also considered to provide skills that support worker career progression.
CPCCON3035 Determine concrete supply requirements should be an elective as the requirements are above and beyond the majority of the trainees abilities and responsibilities and they will be unable to meet the performance requirements.	

Qualification packaging issues	
Stakeholder feedback	SSO response
CFMEU Victoria wants it noted on the record that they do not support <i>CPCCON3035 Determine concrete supply requirements</i> as a core unit as it is not a function performed by supervisors and isn't accessible to workers, especially in commercial concreting. They believe it is a 'filler' unit used to 'puff up' qualifications.	
Work at heights needs to be included as an elective option	<i>Work safely at heights</i> has been included in the elective grouping.
CPCCCM2006 Carry out basic levelling should remain rather than CPCCCA3023 Carry out levelling operations as the requirements of the latter are more in-depth and use equipment not required by a concreter.	In an effort to strengthen the qualification, in Draft Pack 2 <i>CPCCCM2006 Carry out basic levelling</i> was replaced in the core with <i>CPCCCA3023 Carry out levelling requirements</i> . This decision was overturned and in Draft Pack 3, CPCCCM2006 reinstated because it was evident that CPCCCA3023 contained equipment and levelling methods not used by concreters.
CPCCON3034 Cure concrete should be an elective as in the Sydney metropolitan area, curing is done by pest management specialists as they can provide a certificate to the builder - which a concreter cannot. Also, in cold regions, curing is not required.	This was not supported by any other industry stakeholders. Cure concrete is considered an essential concreting function and remains in the core listing of the qualification.
Suggest that you simplify the wording in the packaging rules, something like: <ul style="list-style-type: none"> ○ 3 units must be selected from Group A ○ the remaining 2 elective units may be selected from Group A and/or Group B or from any currently endorsed Training Package or accredited course at Certificate III or IV level 	Packaging rules have been simplified as suggested.
It was raised at the last IRC that the CFMEU does not support the inclusion of the higher level formwork units as electives in the concreting qualification, and it does not support the qualification as an apprenticeship.	The final working group meeting made the recommendation to the IRC that there were sufficient formwork units available. The issue of support for the qualification as an apprenticeship relates to implementation.

Unit of competency issues	
Stakeholder feedback	SSO response
<p>A full review of the Foundation Skills field is recommended. There is an attempt to address Oral Communications within the Units of Competency however the full range of skills is not included.</p> <p>Example CPCCCO3046 Repair and rectify concrete, could include: initiative skills to act on faults with material processes (performance criteria 1.8, 2.5)</p> <p>Range of Conditions A full review of the Range of Conditions field is recommended. While this is an optional field it has not been populated in any of the developed or reviewed Units of Competency.</p> <p>Example CPCCCO3043 Cure Concrete and CPCCCO3046 Repair and rectify concrete. These Units of Competency relate to work that is only ever conducted outdoors without cover from the elements. This is an essential operating condition.</p> <p>Knowledge Evidence A full review of the Knowledge Evidence field is recommended.</p> <p>Example CPCCCO3046 Repair and rectify concrete could include dust suppression.</p>	<p>All units have undergone a detailed review to ensure accuracy and relevance to meet industry needs, <i>Standards for Training Packages 2012</i> and SSO template requirements.</p> <p>SSO template requires foundation skills to be made explicit in the performance criteria, only listing essential core skills that are implicit, such as specific numeracy requirements. As an optional field, the Artibus Innovation template does not include Range of Conditions.</p> <p>Technical knowledge has been strengthened in units of competency, e.g. risks associated with silica dust, impact of adding water to concrete on site, effects of weather and low humidity, basic science of concrete.</p>
<p>Concreters are watering down concrete – knowledge of the risks associated with watering down concrete needs to be included in key units</p>	<p>The ‘place concrete’ unit has a new knowledge point: <i>‘Purpose and importance of slump testing and the impact to concrete strength and durability of adding water on site: drying, shrinkage, early age strength, density, cracking, discolouration’</i></p>
<p>Review pcs and ensure they are written to a standard and are assessable.</p>	<p>All performance criteria have been edited and approved through an independent quality process.</p>
<p>CPCCON3035 Determine concrete supply requirements - application statement requires review as it is contradictory e.g. “with a high degree of self-direction under the direction of a supervisor”. Performance evidence needs to be less generic and provide a measurable outcome.</p>	<p>The statement in the application has been modified consistent with other units and based on CWG advice that these workers do not need to be supervised. The CWG also agreed to clarify the performance evidence by removing the words ‘requiring different concrete strengths’ because three different projects will inevitably involve different products.</p>
<p>‘Determine concrete supply requirements’ is a skill demanded by employers. Workers don’t get this training anywhere else. They can do this without supervision. It’s about understanding what’s required, reading plans and specs and ordering the correct materials for the job.</p>	<p>Having consulted with CWG members, feedback is that placing the order, which can be simulated, is a key part of the skill requirement and what separates the unit from</p>

Unit of competency issues	
Stakeholder feedback	SSO response
Concreters can determine concrete supply requirements but should not place the order with a supplied.	similar functions included in the 'place concrete' unit. Hopefully given the simulation option this will not pose too many difficulties.
Placing the order with the supplier is key. Otherwise workers don't learn these skills.	
CPCCCO3048 Construct tilt panels on site P.C 5.4 is a duplication of P.C 3.3	Performance criteria 5.4 has been deleted and 5.5 renumbered accordingly.
CPCCCO3049 Apply and finish sprayed concrete: Foundation skills are not explicit related to P.C 2.3	Foundation skills have been modified to incorporate the following, which is consistent with the 'place concrete' unit: <ul style="list-style-type: none"> • <i>'numeracy skills to calculate concrete volume (m3) and strength grades in megapascals (MPa)'</i>.
Currently there is no mention of understanding and checking compatibility of curing compounds to specified floor finishes. It could be argued that this is implied, however from a business perspective not understanding this presents risks as certain curing compounds are incompatible with particular types of flooring. This could be added as a performance requirement under element 1 and/or under the Knowledge Evidence 'Cure concrete' needs knowledge of 'compatibilities of curing compounds with different floor finishes including vinyl, timber and natural stone products'	Performance evidence has been modified to support national application, specify key curing techniques. Several new knowledge points have been included to improve technical content e.g. <i>'compatibilities of curing compounds with different floor finishes including vinyl, timber and natural stone products'</i> .
Methods of curing concrete are changing, eg. using plastic to cure (rather than water), and increasing use of additives in concrete.	
Key knowledge relates to AS 3600 and AS 3972 for durability and strength grades as per the NCC	All units have been reviewed to reference Australian Standards and NCC compliance where relevant.
CPCCCO3055 Install topping slabs pc 2.2 duplicate of pc 1.5, Elements 2 and 3 could be combined.	Edits made as suggested.
CPCCON3056 Conduct concrete pump delivery operations, volume and frequency related to P.C 5.3 is problematic and not clear that it is captured in the Performance Evidence.	No change made. Unit is consistent with requirements in recently endorsed high-risk unit <i>CPCCCO3052 Conduct concrete boom delivery operations</i> . Performance evidence requires the candidate to meet 'the elements and performance criteria of this unit ...' which inherently requires a minimum of one defective part to be removed and replaced (PC 5.3).
CPCCON3049 Apply and finish sprayed concrete, Element 2 only covers the apply and does not cover the finishing aspect, reword the element to reflect apply and finish as per unit title and application.	Element 2 has been modified as suggested to cover finishing.

Unit of competency issues	
Stakeholder feedback	SSO response
<p>Knowledge of the basic science of concrete needs to be embedded in key units such as place, finish and cure concrete</p> <p>Knowledge of the impact of weather, climate, humidity etc needs to be embedded in key units</p> <p>Need skills/knowledge around managing weather and time constraints when placing, finishing and curing concrete</p> <p>Important for concreters to know the impact of weather, eg wind, shrinkage – products to mitigate risks such as use of alcohol</p>	<p>New knowledge items have been included in all units, including the following in units where concrete is being placed, finished and/or cured:</p> <ul style="list-style-type: none"> • <i>‘basic science of concrete involving cement chemical reaction (hydration) dependent on water content, temperature and time:</i> <ul style="list-style-type: none"> - <i>effect on plastic state performance (benefits and non-benefits of admixture types and doses; plastic shrinkage cracking risk</i> - <i>effect on hardened state performance: early age and later age strength development; drying shrinkage and cracking’</i> • <i>‘effects of temperature, wind and low humidity on the properties of concrete: detrimental effect of water addition to concrete properties; precautions that should be taken to minimise any potential adverse effects when placing concrete’</i>
<p>In all the units, there is a knowledge component that relates to ‘compliance requirements ... work health and safety’. Where CPCWHS2001 is a prerequisite, is this really required in every unit additionally? Also, the way it sits as a hanging list, from a compliance perspective, we are required to cover the compliance requirements of legislation AND regulations AND codes AND Australian Standards relating to each item.</p>	<p>In all units where CPCWHS2001 is a prerequisite this knowledge point has been revised and simplified, consistent with units in other CPC Construction, Plumbing and Services Training Package qualifications such as carpentry.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>CPCCON2022 Select, use and maintain concreting plant, tools and equipment</p> <p>Knowledge evidence:</p> <p>Request that the following tools are removed from the list. They are not specific to concreting and to be assessed on the uses, maintenance and limitations of all of these common tools does not value for the student and will consume a large proportion of time</p> <ul style="list-style-type: none"> ○ hand tools: <ul style="list-style-type: none"> <input type="checkbox"/> bolt cutters <input type="checkbox"/> crow bars <input type="checkbox"/> cutting knives <input type="checkbox"/> edging tools <input type="checkbox"/> floats <input type="checkbox"/> grinders <input type="checkbox"/> hammers <input type="checkbox"/> jointers <input type="checkbox"/> kneel boards <input type="checkbox"/> levelling equipment <input type="checkbox"/> long handled shovels <input type="checkbox"/> measuring tapes <input type="checkbox"/> nail bags <input type="checkbox"/> picks <input type="checkbox"/> pinch bars <input type="checkbox"/> pliers <input type="checkbox"/> rakes <input type="checkbox"/> sledge hammers <input type="checkbox"/> steel fixing reels <input type="checkbox"/> string lines <input type="checkbox"/> wire brushes <p>Workplace requirements for selecting, using and maintaining ... (This is covered by the list above where you are required to identify the uses, maintenance and limitations)</p>	<p>No change. This listing of hand tools was discussed by the CWG. It was agreed that while the listing is extensive, all of the tools are used by concreters.</p> <p>Knowledge of <i>'workplace requirements for selecting, using and maintaining ...'</i> is different to the knowledge associated with the <i>'uses, maintenance and limitations of ...'</i> tools and equipment required for the function.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>Repair and rectify concrete contains ambiguities – what is a ‘minor’ and a ‘major’ repair?</p> <p>Repairing and rectifying concrete should be limited to not include “underpinning concrete”. This is highly engineered/specialised and beyond the scope of the unit – this is where the line in the sand could be drawn in terms of what the unit does not cover, ie major structural repairs and underpinning concrete. The unit should require repairs and rectifications to meet manufacturer or engineer specifications.</p> <p>Would like to see inaccuracies removed from some units, eg repair and rectify concrete. PE should be 3 minor repairs selected from refinishing, resurfacing and retopping as the other options are not readily available in WA</p> <p>Concreters shouldn't be 'assessing' concrete defects to determine possible causes etc.</p> <p>It's critical that concreters can conduct aesthetic repairs and structural repairs to engineer's specifications.</p> <p>It's the concreter's role to look at the problem and decide what needs to be done and what advice should be sought</p> <p>It is important for concreters to know rectification procedures – how to minimise the need for rectification, not over-vibrating (burn).</p> <p>Key skills and knowledge relate to impact of the weather and cracking, maths skills to understand tolerances, and curing methods (eg using alcohol) especially for coloured concrete.</p> <p>Cutting and coring concrete are two separate functions. The cut and core concrete unit is unusable as most concreters do not core concrete – there are whole businesses specialising in this function and it requires specialist equipment.</p> <p>The cutting unit should include knowledge of soft cutting and expansion cutting techniques</p> <p>New trends include using soft cut saws.</p> <p>Cutting concrete is important and dangerous – check WHS requirements. Coring is a specialist function.</p>	<p>Unit has been modified to clarify ambiguity in the processes for repairing and rectifying concrete and to ensure quality and safety. Performance evidence has been changed to specify the types of defects that must be repaired and rectified. Application specifies the unit does not cover structural defects requiring underpinning concrete or specialist works involving highly engineered solutions.</p> <p>‘Place concrete’ covers skills and knowledge required for correct vibration.</p> <p>Relevant units have been updated to incorporate comments.</p> <p>The unit ‘cut and core concrete’ has been split into two discrete functions as elective options in the qualification: ‘cut concrete’ and ‘core concrete’.</p> <p>Technical knowledge in the units has been enhanced including safety requirements and soft cutting and expansion cutting techniques in ‘cut concrete’.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>Need skills/knowledge to see heights/manage gradient when placing concrete and techniques for pouring concrete on slopes. It is essential to ensure that any water on a concrete surface will run toward a specified drainage point instead of forming a puddle. The standard states that it's 10 mm per metre - as long as it's at least this but needs to be accurate due to not creating a hazard for wheelchair access where applicable.</p>	<p>Performance evidence in the 'place concrete' unit now includes the requirement that one site must be placed with 'a fall of 25 mm over 1 metre in distance'</p> <p>Units of competency reference Australian Standard where relevant.</p>
<p>In commercial concreting the focus is on placing and finishing. Issues focus on skills/knowledge required to understand percentages of falls, maximum grades on driveways, where to start and finish, levels and tolerances etc</p>	
<p>CPCCON3041 Place concrete Performance evidence: Suggest reducing the size of the project to align with majority of work in metro areas where large numbers of granny flats are being built and block sizes are reducing, making 100 square metres harder to meet. Granny flats can be a maximum of 60 square metres and we believe that reducing the size to this, would not reduce the technical requirements but would allow more flexibility to students. Knowledge evidence: Types, characteristics, uses and limitations of plant, tools, equipment and materials used to place concrete (Is this required where it has already been covered in CPCCON2022 Select, use and maintain concreting plant, tools and equipment?)</p>	

Unit of competency issues	
Stakeholder feedback	SSO response
<p>The unit CPCCCO3041 Place concrete requires performance evidence of placing concrete at five different sites and each site must measure at least 100 square metres. Although the current unit also requires this same performance evidence feedback was provided that this could become cost prohibitive for RTOs to deliver.</p>	<p>No change to performance evidence. This issue was discussed by the CWG with a view to identifying the potential for a reduction in the square meterage or a compromise. Members felt strongly that 100 square metres is the minimum industry standard for competence in placing/finishing/curing concrete over more than one load (i.e. 60 cubic metres per load) and to justify use of mechanical troweling (essential for competence). Any concreter only assessed against 60 square metres would be considered unemployable by major employers. The CWG felt that 100 square metres was essential for a learner to 'read' the concrete between loads (check for hot spots, ensure it doesn't 'go off' between loads) etc. Members stated that reducing the minimum of 100 square metres would be to the detriment of industry and counter to major objectives of strengthening the qualification reflect the current job done by all concreters nationally.</p> <p>No change to knowledge evidence as units must stand alone. Therefore, knowledge of the types, characteristics, uses and limitations of plant, tools, equipment and materials must be included in a unit if that underpinning knowledge is required for the outcome, e.g. to place concrete.</p>
<p>CPCCON3042 Finish concrete Performance evidence: Suggest reducing the size of the project to align with majority of work in metro areas where large numbers of granny flats are being built and block sizes are reducing, making 100 square metres harder to meet. Granny flats can be a maximum of 60 square metres and we believe that reducing the size to this, would not reduce the technical requirements but would allow more flexibility to students.</p>	<p>No change to performance evidence (see comments above).</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>CPCCON3043 Cure concrete</p> <p>Performance evidence:</p> <p>Suggest reducing the size of the project to align with majority of work in metro areas where large numbers of granny flats are being built and block sizes are reducing, making 100 square metres harder to meet. Granny flats can be a maximum of 60 square metres and we believe that reducing the size to this, would not reduce the technical requirements but would allow more flexibility to students.</p> <p>Duplicated knowledge point on requirements of Commonwealth ...</p>	<p>No change to performance evidence (see comments above).</p> <p>Duplicated knowledge point removed from knowledge evidence.</p>
<p>I am writing to you today in regards to Certificate III in Concreting - CPC30320 in particular the following units CPCCON3041 Place Concrete, CPCCON3042 Finish Concrete and CPCCON3043 Cure Concrete.</p> <p>My concerns are in the quantity of 100 square meters per job as over the years I have seen the change in the industry as the land sizes have been getting smaller causing the size of the driveways to be smaller and lately there has been an increase of granny flats being built threw out Sydney.</p> <ol style="list-style-type: none"> 1. Concreter specialising in paths and driveways only will struggle to do jobs of 100m2, due to the smaller size blocks of land the concrete driveways are struggling to be 60m2 let alone making 100m2. 2. Concreter specialising in granny flats slabs are only doing 60m2 slabs maximum. <p>I believe that jobs of 100m2 in the 3 units would really disadvantage these concreters in obtaining their qualification for Certificate III in Concreting.</p> <p>Reducing the size from 100m2 down to 50m2 or 60m2 would not reduce the technical requirements of the units but would make it a more achievable outcome for concreters.</p>	<p>No change to units (see comments above).</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>A concreter who cannot finish at least 100 square metres of concrete on their own would not be employed by us - they couldn't be trusted to finish on their own. Finishing 60 square metres doesn't warrant use of a trowel machine which is an essential skill for a qualified concreter. It's a big jump from placing, finishing and curing 60sqm to 100sqm because it requires more than one truck of cement and the concreter must 'read' the concrete between loads, identify hotspots and get into that second load of concrete – check that it's not going off. This learning can't happen with only 60sqm - the learner can't set up a laser, can't finish properly and won't get into the joints which are an essential part of competency. It's also a big jump from a trowelling machine to a ride on laser given the weight and skill involved – this is a massive safety issue if the learner hasn't been deemed competent on a trowelling machine. With 60sqm they won't have to use one.</p> <p>As an industry we need to ensure the minimum standard – even 100sqm is not enough.</p> <p>Concerns are in the quantity of 100 square metres per job as over the years I have seen the change in the industry as the land sizes have been getting smaller causing the size of the driveways to be smaller and lately there has been an increase of granny flats being built threw out Sydney.</p> <ol style="list-style-type: none"> 1. Concreter specialising in paths and driveways only will struggle to do jobs of 100m2, due to the smaller size blocks of land the concrete driveways are struggling to be 60m2 let alone making 100m2. 2. Concreter specialising in granny flats slabs are only doing 60m2 slabs maximum. <p>I believe that jobs of 100m2 in the 3 units would really disadvantage these concreters in obtaining their qualification for Certificate III in Concreting.</p> <p>Reducing the size from 100m2 down to 50m2 or 60m2 would not reduce the technical requirements of the units but would make it a more achievable outcome for concreters.</p> <p>Finish concrete: performance evidence should be changed to require 5 x 75 square metres (not 100). But I understand why industry wants 100sqm.</p> <p>Stakeholder consultation has confirmed that while 100sqm is preferred, 60sqm on 5 occasions is sufficient to demonstrate competence in place, finish and cure concrete.</p>	<p>No change to units (see comments above).</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>New products in the market associated with formwork, such as waffle slabs (polystyrene blocks), floating raft - designed for soil class, eg better energy rating on sand. Also the process is quicker as you don't need an excavator or footings. Speeds up process in terms of engineering</p>	<p>The core unit 'handle concreting materials and components' has been updated to incorporate these products.</p>
<p>New methods include waffle pod system which provides a better energy rating and plastic dome system which is more labour intensive. Placing skills are no different.</p>	
<p>Important skills/knowledge:</p> <ul style="list-style-type: none"> - keeping the slab level - screeding - trends: using teflon blades instead of steel blades gives a nicer, rough/non-slip finish - also ride-on trowels 	<p>Knowledge evidence of key units such as place and finish concrete have been updated to enhance technical knowledge.</p>
<p>Laser screeds and ride-on trowelling machines are becoming more common in commercial and industrial concreting.</p>	<p>The unit 'Select, use and maintain concreting plant, tools and equipment' has been updated to ensure coverage of laser screeds and ride-on trowelling machines.</p>
<p>Concrete is increasingly manufactured with cement replacement products so need knowledge/awareness of risk mitigation/impacts on finish of high cement replacement mixes. Also silica dust risks issues and awareness.</p>	<p>Key units have been updated to enhance technical knowledge.</p> <p>Units requiring handling of cement products have a new knowledge evidence requirement, 'risks associated with silica dust'.</p>
<p>Key skills are:</p> <ul style="list-style-type: none"> - placing - finishing - time management - concrete sets - poor time management costs employers - hosing exposed aggregate - working with coloured concrete. <p>Also need a better focus on WHS and following procedures - people are too prepared to take risks and not follow WHS procedures.</p> <p>Current shortage of decorative concreters - stencilling and polished concrete.</p> <p>Increasing use of ride-on trowels and laser screeding.</p>	<p>Several units have been updated to incorporate this feedback.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>I don't have an issue with adding an additional finish to the decorative unit What I think is more important is that there are many different finishes in our industry and would be great if we could apply some of these different finishes either into a new unit or an existing unit.</p> <p>These are some of the different finishes I can think of and others may add to this list: Burnish finish-A hard durable finish applied to warehouse floors for durability Honed finish-Grinding the top surface of the concrete to expose the aggregate Stairs-The ability to apply a groove to either "Easy stairs" or "formed stairs" Non-slip finish-Generally applied to paving around houses by using a steel trowel of aluminium float Siteworks-Not covered greatly in the concrete sector but having the ability to form, pour and finish kerbs and watertables in the Civil industry</p> <p>These are some of my ideas and happy if anyone is able to increase the list of different finishes in our industry</p>	<p>The unit '<i>apply decorative finishes to concrete</i>' has been restructured (elements and performance criteria) into the standard format for units of competency. Changes incorporate latest industry practices and provide workplace flexibility in the selection of decorative technique/s for assessment. Techniques include exposed aggregate and polished concrete.</p> <p>The unit '<i>finish concrete</i>' has also been updated to incorporate latest industry techniques.</p>
<p>Stamping (called patterned paving) and stencilling are no longer used in SA. Pattern paving is difficult to fix as the stamps are no longer available. Exposed aggregate is 50% of the market and polished concrete huge. Burnished concrete is a specialised finish mainly used in large warehouses. Coloured concrete is still common with 3 techniques: 1. The most expensive, to specify a colour and the concrete arrives to site already coloured. 2. Buy a products such as Dulux colour hardener and put on top of the concrete (comes in a bag), and 3. The cheapest and least reliable option, to mix your own colour with an oxide.</p> <p>The term 'resurfacing' is confusing - what does this mean? Need to ensure the qualification meets the needs of prefab concreters working for pre-construction companies in the workshop - they don't go to site but do a lot of this work and a lot of decorative work, eg acid etching, sandblasting etc.</p>	
<p>Main skill requirement is screeding.</p>	<p>Screeding skills and knowledge are covered in '<i>place concrete</i>'.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
100sqm for a conventional concreter is a lot more difficult than 100sqm in panels for a person working in a precast environment. An option is putting a timeframe around performance but I don't think that would work.	An explanation of the intent of 100 sqm or its equivalent in a precast environment has been included in the <i>Companion Volume Implementation Guide</i> .
Modify construct tilt panels for a precast environment – so that they create the casting bed but are not required to use the bed to create the panels Some of the processes are different (on-site versus precast factory) – need to be careful not to 'dumb down' units to suit the precast workplace. In terms of finishing, precast workers still need to know how to do edging and jointing.	
In regard to the 100m2 and pre-cast. Is it possible that 'or equivalent' can be specified? It seems odd, and potentially an unintended weak point, that this isn't specified.	
I sought views on adjusting units to suit the precast environment. Prefab is a different environment and we doubt the units could be amended to suit precast without degrading skill/knowledge required for general concreters	
Burnishing should not be included in concrete finishing as it's a technique mainly used in industrial jobs	No change required.
'Assess and specify concrete' and 'plan concrete work and brief team' need review to ensure they are appropriate for Certificate III. These were derived from a Certificate IV qualification and still have skills/knowledge too high for level 3.	These units have been revised and modifications made to ensure content is appropriate for the work done by concreters operating at a Certificate III level.
'Apply decorative finishes to concrete' requires 5 techniques – should only require 2 as not all are available in Queensland.	Unit has been restructured (elements and performance criteria) into the standard format for units of competency. Changes incorporate latest industry practices and provide workplace flexibility in the selection of decorative technique/s for assessment. Techniques include exposed aggregate and polished concrete.
Decorative concrete finishes such as "stamped concrete" is no longer a finish of choice and should be taken out of the unit of competency	'NCC' and 'techniques' deleted as suggested. No change to knowledge evidence on joints. CWG members confirmed that construction, control, contraction and expansion joints are in fact four different joints that concreters need to understand and implement.
CPCCON3044 Apply decorative finishes to concrete Knowledge evidence: <input type="checkbox"/> delete NCC (function is not covered by NCC) <input type="checkbox"/> processes, techniques ... (define difference between processes and techniques?) purpose and importance of construction, contraction, control and expansion joints (construction and control joints are the same thing and contraction and expansion joints are the same thing. This list makes it seem like they are four different things, and that is how an auditor will interpret it. Could you please either remove the duplicates or put a / between them to indicate they are the same thing just with different terms)	

Unit of competency issues	
Stakeholder feedback	SSO response
<p>CPCCON3047 Cut concrete</p> <p>Knowledge evidence: purpose and importance of construction, contraction, control and expansion joints (construction and control joints are the same thing and contraction and expansion joints are the same thing. This list makes it seem like they are four different things, and that is how an auditor will interpret it. Could you please either remove the duplicates or put a / between them to indicate they are the same thing just with different terms)</p>	<p>No change to knowledge evidence on joints. CWG members confirmed that construction, control, contraction and expansion joints are in fact four different joints that concreters need to understand and implement.</p>
<p>CPCCON3049 Apply and finish sprayed concrete</p> <p>Knowledge evidence: delete NCC (function is not covered by NCC)</p>	<p>Edits made as suggested.</p>
<p>CPCCON3055 Install topping slabs</p> <p>Knowledge evidence: <input type="checkbox"/> delete NCC (function is not covered by NCC) types, characteristics, uses and limitations of plant, tools, equipment and materials... – remove materials is covered in previous point</p>	<p>Edits made as suggested.</p>
<p>Place, finish and cure units: sub-points in the performance evidence are limiting for national application/all workplaces</p>	<p>Performance evidence of the place, finish and cure units has been updated to reflect latest industry practice and ensure national application.</p>
<p>Need to check that key units include correct vibration techniques</p>	<p>'Place concrete' includes a new knowledge point: • <i>'correct concrete compaction and vibration techniques and risks associated with improper vibration'</i>.</p>
<p>Check that the qualification covers:</p> <ul style="list-style-type: none"> - post-tension and pre-tension concrete - additives - why and how (place concrete unit) - knowledge of concreting for suspended slabs - forming up and concreting stairs, kerbs and gutters - formwork, placing and finishing of retaining walls - rectification - concrete cancer (where the steel is corroded), re-rendering - requires an engineer to assess to what extent it can be rectified or if it needs replacement. A major rectification could be where there is extensive corrosion of steel - there are some people that all they do is restoration work (wharves, jetties, silos etc) 	<p>Key units have been updated to accommodate this feedback. Additional formwork units can be imported using the packaging rules if required to meet workplace needs.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>Shrinkage and strength of concrete post placement is a huge issue. Relates to knowledge of aggregate mix and water absorption rates of different mixes, eg recycled aggregate/crushed rock. Sources of aggregate - river pebble from one part of the state, sand from another. Relationship between substrate and how that impacts (soil/moisture) and preparation - 90% of concreters have no clue. Huge risks and \$ associated with waffle slabs where ground has reacted badly - also variances in levelness of concrete over large areas (low tolerances, eg 0.5mm). These are laser checked. Eg if the floor of a racking facility is not level, issues with the way racks stand up.</p> <ul style="list-style-type: none"> - types of slabs - conventional steel reinforced and post-tension slabs - contamination in concrete an issue, eg tan bark which absorbs water leading to cracks 	<p>Relevant units have been updated to enhance technical knowledge to accommodate this feedback, where relevant, to commercial and residential concreting.</p>
<p>In terms of cutting and coring concrete, not much cutting is done (in some states this is a licensed activity) but coring is definitely a specialist activity not done by concreters</p> <ul style="list-style-type: none"> - curing concrete - knowledge of the impact of incorrect ratios is important - increasingly used are water reducers and additives - knowledge of standards and tolerances (Australian standards) important 	<p>Relevant units have been updated to incorporate this feedback.</p>
<p>Key issues with decorative concrete relate to weather, cracking and curing of coloured concrete and different aggregates. Knowledge of release agents, sealers etc.</p>	<p>Relevant units have been updated to incorporate this feedback.</p>
<p>CPCCCO2021: Australian Standards and NCC do not reference handling of concreting materials CPCCCO2022: Australian Standards and NCC do not reference the selecting, checking and maintaining concreting plant, tools and equipment. The list of plant, tools and equipment is quite extensive within the Knowledge Evidence. While these are not unreasonable to have knowledge of, some items may not be used regularly (e.g. EWPs). However, there might be some overlap in some tools (e.g. Do air or petrol driven screeds differ from mechanical screeds? Do Fresno trowels differ from stick trowels?) CPCCCO3041: As previously mentioned, the references to Australian Standards and NCC are for 'high performance concreting' which perhaps should sit within CPCCCO3050. Nevertheless, such references are almost non-existent anyway. I was able to locate AS 3666 and AS 3845, which were tenuous links as best. AS 5100, which relates to bridges, was the closest standard. CPCCCO3042: Research around magnesium trowels showed more about magnesium floats. The combining of the Knowledge Evidence point for 'levelling and finishing techniques' is a little confusing. Should these be separate points? For example, straight edge relates to levelling; fine and rounded relate to finishing. Fine is a little ambiguous as well – just clarifying if you mean brooming?</p>	<p>Units have been updated to clarify Australian Standards and NCC requirements.</p> <p>Performance criteria, foundation skills and knowledge evidence has been clarified in all units.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>For CPCCCO3044-CPCCCO3055, I haven't had a chance to look at these in depth, but would consider looking at whether the NCC and Australian Standards could be more explicitly referenced, if applicable</p> <p>CPCCCO3035: The Foundation Skills for this unit discusses 'reporting faults in tools, equipment and materials', but the use of these is not a requirement of this unit. The requirements for WHS and environmental legislation relating to assessing and specifying concrete is a bit difficult to link. I'm not sure I understand the references to slump-test measurement being fit for purpose (i.e. ramp/slope and slab). I didn't realise they differ to this degree, but wonder whether this is something that a student on this level needs to know, or just the supplier. If this is a key area, then perhaps the differentiation between ramps/slopes and slabs could be reiterated again in the unit, as this point seems to stand alone.</p> <p>The Knowledge Evidence point regarding 'consistency with formwork'. Do you mean using wood vs steel and how this impacts on the finish? I was struggling to interpret this point, but I may be off the mark, as my example would be more suitable for CPCCCO3042.</p> <p>There seems to be a duplication in the Knowledge Evidence of MPa and additives. I assume the requirements would be the same for both – that is, once you interpret the concrete specifications, you would relay to in your delivery schedule/order. I could be wrong though!</p> <p>The Assessment Conditions require use of PPE, but this unit could take place without accessing the site.</p> <p>I have noted that CPCCON3047 requires knowledge of the NCC and Australian Standards relating to cutting concrete. I have struggled to find relevant NCC section. Also, I am wondering whether the Standards you are referring to are those relating to hearing protection (AS/NZS 1269) and respiratory protective equipment (AS/NZS 1715). Could more specificity be provided please?</p> <p>I have noted that CPCCON3050 requires knowledge of the NCC and Australian Standards relating to high performance concreting. I have struggled to find the relevant NCC section. Also I am wondering whether the Standards you are referring to just relate to bridges (AS 5100) or whether you are also referring to air-handling and water systems (AS 3666) and road barriers (AS 3845). These latter two standards are only very loosely linked to high performance concreting. Could more specificity be provided please?</p>	<p>Units have been updated to clarify Australian Standards and NCC requirements.</p> <p>Performance criteria, foundation skills and knowledge evidence has been clarified in all units.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
I have noted that CPCCON3055 requires knowledge of the NCC and Australian Standards relating to topping slab installations. I have struggled to find the relevant NCC section and Australian Standard. Could more specificity be provided please?	Units have been updated to clarify Australian Standards and NCC requirements.
<p>Repair and rectify concrete: crack repairs are important and are often done to engineer specifications.</p> <p>I have had a look and only found a couple of minor things as follows.</p> <p>Knowledge evidence: Point 3</p> <p>Draft</p> <ul style="list-style-type: none"> · Correct positioning of mesh for different concrete products to ensure mesh is free from movement and within height tolerance. <p>My recommendations</p> <ul style="list-style-type: none"> · Correct positioning of reinforcement for different concrete products to ensure reinforcement is free from movement and has the correct cover within tolerance. <p>Just wanted to check with the three defects, is it your intention that the student has to use three of the methods mentioned or is it that the student can do three repairs using any combination eg repair three discoloured patches of concrete?</p>	Relevant units updated to incorporate feedback.

Unit of competency issues	
Stakeholder feedback	SSO response
<p>Repair concrete looks good.</p> <p>WHS knowledge in most units can be rationalised eg JSA and SWMS - don't need both.</p> <p>Handle concrete materials unit needs to include waffle pods</p> <p>GoTAFE is delivering the qualification to a number of candidates as part of a new tunnel project in Benalla which will employ hundreds of people. Many of the key units in the qualification do not support delivery and assessment for precast workers. Examples include performance evidence that specify 100 square metres, and sub-points that provide limitations, eg the 'place concrete' unit requires:</p> <p>placing concrete at five different sites, each measuring at least 100 square metres, with three sites requiring:</p> <ul style="list-style-type: none"> • consideration for planned load bearing walls or columns • set down or wet areas in the slab • multiple levels and temporary formwork. <p>These sub-points might be limiting for general concreters as well. Can we have modifications to units to allow delivery in a precast setting (place, finish and cure concrete plus construct tilt panels on site)? With the construct tilt panels unit, we can construct a casting bed and formwork box, but don't want to have to use the bed/box to make a tilt panel - could the tilt panel formwork be considered a casting box?</p> <p>Finish concrete unit, we just want textured or non-slip and trowel (smooth) finishes. Edging and jointing shouldn't be deemed a type of finish.</p> <p>Plan concrete and brief team unit - application needs to be modified to include a precast environment.</p>	<p>Feedback noted and incorporated into relevant units where possible.</p>
<p>My concern is meeting the requirements in some units eg; CPCCCO3044 Apply decorative finishes to concrete ,Stamp finish is very out of fashion and not performed on regular basis, and 20sp metres is hard to perform at tafe campus, Stencil finish with wet topping mix on dry concrete is not performed by concreters ,as I have never performed in 30yrs . CPCCCO3053A Slump test concrete why in 2018 package (Core Unit), 2020 Package elective unit , My opinion should be a Core unit and replace CPCCON3035 Determine concrete supplies.</p>	<p>'Apply decorative finishes to concrete' has been significantly modified to ensure it is relevant to industry needs.</p> <p>Extensive industry feedback confirmed that 'Slump-test concrete' should be an elective unit, and 'Determine concrete supply requirements' should be a core unit.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>The unit CPCCON2021 Handle concreting materials and components, in the Application statement has the following "Completion of the general construction induction training program specified by the model Code of Practice for Construction Work is required for any person who is to carry out construction work. Achievement of unit CPCCWHS1001 Prepare to work safely in the construction industry meets this requirement." Other units do not contain this statement, either remove from this unit or given the performance evidence specifies sites (e.g 5 different sites) for a number of the concreting units suggest including CPCCWHS1001 as a pre requisite for those units.</p>	<p>This statement is not included in any of the CPCCON coded units in this project.</p> <p>The statement is found in the construction pathways unit <i>CPCCOM1016 Identify requirements for safe precast and tilt-up work</i> and its inclusion in CPCCOM1016 is consistent with other construction pathway units recently endorsed: CPCCOM1012, CPCCOM1013, CPCCOM1014, CPCCOM1015.</p>
<p>Issue of currency of the unit of competency CPCCOM1016 Identify requirements for safe tilt-up work. We would like the unit reviewed to include all prefabricated concrete elements (Tilt-up and precast) in line with Australian Standards (AS 3850) and SafeWork Australia guidance material. This would at a minimum require a change in title and content to include reference to both precast and tilt-up elements (which includes prefabricated panels, columns, beams etc). Braces should be included in the knowledge list, the title of the Australian standard has been updated and we have used the term construction to provide maximum application of the unit across civil and commercial construction (this amendment in particular for workers who wish to complete the Unit as a stand- alone). We have also questioned the appropriateness of the OHS unit CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry as a prerequisite. Many workers for example riggers, who have completed a number of licenses do the current tilt up unit to enhance their skills and knowledge. They have a white card and have also had considerable OHS training integrated into the other units of competency they hold – in particular their licenses. These workers currently view the tilt up unit as an enhancement to their OHS knowledge and are likely to see the proposed prerequisite Apply WHS requirements... as an obstacle to undertaking CPCCOM1016. The cohort that we are talking about are not usually new entrants. So please consider.</p>	<p>Unit updated in accordance with feedback.</p>
<p>The draft unit <i>CPCCOM1016 Identify requirements for safe precast and tilt-up work</i> includes performance evidence requiring the person to demonstrate performance at a construction site. In WA this unit is the white-card for tilt-up work. Workers can't go onto the work site until they have the unit. The statement in the performance evidence to demonstrate 'at a construction site' is an error given the current unit doesn't require it. The draft unit will be modified to remove the requirement for learners to be at a construction site</p>	<p>Edits made as suggested.</p>

Unit of competency issues	
Stakeholder feedback	SSO response
<p>I have just been looking at the unit <i>CPCCCO3049 Apply and finish sprayed concrete</i>. Its coverage is very similar to the proposed unit <i>CPCSPS4006 Apply and finish sprayed concrete for swimming pool and spa shells</i> but the content and requirements are significantly different. This is clearly an area of work where duplication should be avoided. I suggest that <i>CPCCCO3049 Apply and finish sprayed concrete</i> be reviewed with the intent of adding the relevant parts from <i>CPCSPS4006</i> (which can then be removed and replaced with <i>CPCCCO3049</i>).</p>	<p>The two units were checked and discussions held with concreters to establish whether there's a difference between swimming pools and any other structure requiring sprayed concrete. Advice was that swimming pools and spas require a higher level of skills and knowledge because of the regulations involved (depths, stair heights etc), and the need to work carefully around the pool plumbing and electricals. Also, there are differences in materials used because of the waterproofing required. A general concreter working for a council, for example, who might use shotcrete to reinforce or stabilise a structure, could not do this work. The duplication was resolved by better articulating the differences between the units. <i>CPCCON3049</i> was modified to remove references to swimming pools and spas, and <i>CPCSPS4006</i> modified to better clarify its outcome.</p>

Summary of Concreting Working Group (CWG) meetings

Meeting 1: 25 September 2019

Purpose: To examine the main functions of concreters against the qualification packaging arrangements and feedback received during the first round of consultation
To provide advice on technical changes to the qualification units of competency

Discussion/agreement

Updated packaging arrangements noting:

- an increase in the total number of units
- slump test should be moved out of the core
- new core inclusions (setting out, excavation, determine concrete supply requirements and replace the level 2 unit 'apply basic levelling procedures' with the level 3 unit 'carry out levelling operations')
- new elective options (formwork and work at heights)

Units need to include knowledge associated with the science of concrete, impact of weather/climate and latest technologies, tools and equipment and risks associated with silica. CWG to provide advice out of session.

Meeting 2: 8 October 2019

Purpose: To review the latest draft of the qualification and units in preparation for the second round of national stakeholder consultation

Discussion/agreement

- Change core/elective structure of the qualification to increase the number of core units from 15 to 17 and total number of units from 20 to 22
- Introduce new core units to strengthen the AQF 3 alignment and provide essential outcomes for commercial and residential concreters: determine concrete supply requirements and carry out setting out
- Move the slump testing unit out of the core as the function is not performed by concreters
- Embed critical knowledge into the place concrete unit on the purpose and importance of slump testing and risks associated with adding water on site
- Redevelop the decorative finish unit to reflect latest industry practice, environmental issues and growth in demand for finishes such as exposed aggregate
- Remove 'coring' from the cut concrete unit as coring is a specialist function
- Rework CPCCCO3052 to remove high risk and boom operations and better reflect the role of the line/hose hand
- Include the white card unit as an entry or core requirement pending Departmental advice (IRC decision)

Work to redevelop the decorative unit would be reviewed by a sub-group of the CWG out of session.

Meeting 3: 20 November 2019

Purpose: To review feedback and provide advice on issues arising from the second round of national consultation

Discussion/agreement

To reinstate CPCCCM2006 as the levelling unit in the core given concreters do not use equipment listed in CPCCOM3006, requiring calculation of distance using stadia lines etc.

To include two new formwork units as elective options to support workplace flexibility and pathways in response to employer feedback.

To retain excavation as a core requirement for concreters.

Advice on technical modifications to the assessment requirements of units of competency. Agreed to revise the repair and rectify concrete unit to clarify the difference between minor and major repairs and check that the unit is achievable/assessable. Changes to be overseen by a CWG sub-group out of session.

Meeting 4: 4 March 2020

Purpose: To review feedback and provide advice on issues arising from the national validation process

Discussion/agreement

The main issue discussed was whether to reduce the requirement to place, finish and cure concrete for a minimum of 100 square metres to 60 square metres. Members in attendance were adamant that 100 square metres is the minimum industry standard for competence in placing/finishing/curing concrete over more than one load (ie. 60 cubic metres per load) and to justify use of mechanical trowelling (essential for competence). Any concreter assessed against 60 square metres would be considered unemployable by major employers. These arguments were supported by 6 other members who were unable to attend the meeting but provided their feedback via phone. Members felt that 100 square metres was essential for a learner to 'read' the concrete between loads (check for hot spots, ensure it doesn't 'go off' between loads) etc. They stated that reducing the minimum of 100 square metres would be to the detriment of industry and counter to the objective of strengthening the qualification to reflect the current job done by all concreters.

Discussion of the spray concrete unit noted that it requires foundation skills for numeracy to be made explicit and additional technical knowledge items (consistent with the place concrete unit).

Agreed to remove excessive compliance requirements in the knowledge listing of all units – need to ensure safety is covered, but without requiring extensive listings of sub-points given each unit has a prerequisite requirement of CPCWHS2001.

Disagreed with stakeholder feedback that construction and control joints are the same thing, and contraction and expansion joints are the same thing (ie. only two types of joints). Members clearly stated that they are four different types of joints that all concreters should know.

Agreed to remove supervision statement in the application of "Determine concrete supply requirements" – these workers do not need to be supervised. Also agreed to clarify performance evidence by removing the words "requiring different concrete strengths" as three different projects will inevitably involve different products etc.

On the issue of delivering/assessing place, finish and cure concrete in a precast environment, agreed to remove "or its equivalent in a precast environment" from the performance evidence and instead provide options for performance in a non-precast workplace or a precast workplace.

The listing of hand tools in *CPCCON2022 Select, use and maintain concreting plant, tools and equipment* was revised with members considering that while it's extensive, all tools are used by concreters.

Meeting 5: 4 June 2020

Purpose: To discuss and resolve issues raised by the CFMMEU associated with the draft qualification

Discussion/agreement

The main issues discussed related to the packaging of one setting out unit of competency in the core listing, and two formwork units from carpentry within the electives, as well as the question of whether the qualification was suitable as an apprenticeship.

The working group presented strong evidence as to why the setting out unit was required by the concreting industry and should remain in the core of the qualification. It was agreed that the unit *CPCCCA3002 Carry out setting out* remain in the core.

It was agreed to remove the two formwork units from the elective listing given the packaging rules of the qualification would allow for their selection if the learner, their employer and/or RTO decided they were a workplace requirement.

It was acknowledged that the concreting industry recommends the qualification as an apprenticeship, while the IRC recognises the qualification as suitable for an Australian apprenticeship pathway with its implementation a matter for STA consideration.

Appendix E: Summary of survey outcomes

Survey	Draft pack	Timeframe	Respondents
1	Draft Pack 1 – stakeholder feedback on first draft of training package components	12 August – 12 September 2019	2 (both employers)
<p>Key feedback: Emerging trends, changes or challenges over the next 5 years include:</p> <ul style="list-style-type: none"> • cement replacement products • mechanisation/modelling for laser machines • silica dust risk issues <p>Skills/knowledge to meet these trends:</p> <ul style="list-style-type: none"> • knowledge of risk associated with high cement replacement mixes • skill development for machine operators/computer skills • silica dust awareness <p>Current training and education in concreting does not meet the needs of industry for the above reasons and because there is not enough time. Suggested removal of some elective units. Updates should include how weather affects concrete.</p>			
2	Draft Pack 2 – stakeholder feedback on second draft of training package components	17 October – 1 November 2019	11 (5 employers and 6 RTOs)
<p>Key feedback: Overall, respondents were supportive of the review process and changes made. One objection was associated with the proposed inclusion of <i>CPCCWHS1001 Prepare to work safely in the construction industry</i> in the core. Some minor editing comments were noted to check knowledge listings against units that reference NCC and Australian Standards. One respondent stated that '<i>CPCCOM1016 Identify requirements for safe precast and tilt-up work</i>' should be moved to a supervisory course at Cert IV, and that <i>CPCCCO3054 Operate concrete agitator trucks</i>, should not be part of the certificate course - this module should be exclusive only to licensed drivers of concrete agitator trucks, not concreters on site that choose to select it as an elective.' One respondent noted that 'Training for a team leader/supervisor should be the next step from this. This should incorporate a higher level of calculations, plan reading, levels and drains, scheduling reinforcement, concrete technology.'</p>			
3	Draft Pack 3 – stakeholder validation of draft training package components	14 February – 28 February 2020	9 (3 employers and 6 RTOs)
<p>Key feedback: All respondents felt that the proposed qualification and concreting units of competency reflect the current and emerging skills and knowledge required of concreters and support their endorsement. One respondent registered a strong objection to the inclusion of <i>CPCCWHS1001 Prepare to work safely in the construction industry</i> in the core.</p>			

Appendix F: Feedback on performance evidence of place, finish and cure concrete units

Stakeholder	Feedback
RTO, VIC	The unit <i>CPCCCO3041 Place concrete</i> requires performance evidence of placing concrete at five different sites and each site must measure at least 100 square metres. Although the current unit also requires this same performance evidence feedback was provided that this could become cost prohibitive for RTOs to deliver.
RTO, NSW	<i>CPCCON3041 Place concrete, CPCCON3042 Finish concrete, and CPCCON3043 Cure concrete</i> Performance evidence: Suggest reducing the size of the project to align with majority of work in metro areas where large numbers of granny flats are being built and block sizes are reducing, making 100 square metres harder to meet. Granny flats can be a maximum of 60 square metres and we believe that reducing the size to this, would not reduce the technical requirements but would allow more flexibility to students.
Employer, NSW	I own and operate a concrete business out of Western Sydney and surrounding suburbs with over 30 years' experience in the industry. I am writing to you today in regards to Certificate III in Concreting - CPC30320 in particular the following units CPCCON3041- Place Concrete, CPCCON3042- Finish Concrete and CPCCON3043- Cure Concrete. My concerns are in the quantity of 100 square meters per job as over the years I have seen the change in the industry as the land sizes have been getting smaller causing the size of the driveways to be smaller and lately there has been an increase of granny flats being built threw out Sydney. 1. Concreter specialising in paths and driveways only will struggle to do jobs of 100m2, due to the smaller size blocks of land the concrete driveways are struggling to be 60m2 let alone making 100m2. 2. Concreter specialising in granny flats slabs are only doing 60m2 slabs maximum. I believe that jobs of 100m2 in the 3 units would really disadvantage these concreters in obtaining their qualification for Certificate III in Concreting. Reducing the size from 100m2 down to 50m2 or 60m2 would not reduce the technical requirements of the units but would make it a more achievable outcome for concreters.

Appendix G: Letters of support

concreting stakeholders listed below have provided letters of support for *CPC30320 Certificate III in Concreting* and the twenty units of competency and their associated assessment requirements.

Name	Company	Stakeholder type	Jurisdiction
David Lingard	Master Concreters Australia	Peak body	National
Luke Thompson	Shoreline Building Contractors	Employer	ACT/NSW
Robert Belmonte	CB Concrete	Employer	ACT
Tony Sergi	Diverse Concreting	Employer	NSW/ACT
Michael McNamara	East Coast Concrete	Employer	NSW/QLD
Lee Ryan	Lee Ryan Concreting/LD&MM Training and Assessments	Employer RTO	QLD
Chris Jones	QR Contracting	Employer	QLD
Michelle Curro	Construction Skills Training Centre	RTO	QLD
John Moss	Bess Concreting	Employer	QLD
Jeff Piotto	Piotto Bros Cement Flooring	Employer	SA
Joe Bagnara	PSI Pavements	Employer	SA
Quentin Sickerdick	North East Vocational College	RTO	SA
Judd Kruse	TasTAFE	RTO	TAS
Ben Waller	BA Concreting	Employer	TAS
Nigel Hunt	Maclaren Property Developments	Employer	VIC
Peter Rippingale	GoTAFE	RTO	VIC
Matthew Hague	Bendigo Kangan	RTO	VIC
Mark Woodyard	Concretus	Employer	WA

21/02/2020

Artibus Innovation
PO Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Updated CPC30320 Certificate III in Concreting and Units of Competency

My Name is Mark Woodyard, I am the concreting Quality and Training Manager for the ABN Group in Perth, Western Australia. I have been with the ABN Group for the last 10 years and worked as a concreter in the industry for 15 years prior to that.

I am writing in support of the proposed changes to the Certificate III in Concreting and concreting units of competency. I have been consulted at each stage throughout the process and have been more than happy to offer my advice and feedback where required.

I felt that the units of competency were due for review, to keep them relevant and up to date with industry requirements and expectations. I feel that as a group we have now made those necessary changes and I look forward to them being implemented.

In my opinion, the changes that have been made will be of great benefit to our apprentices as they now closer reflect the job, ensuring that they enter our industry with the knowledge and technical skills that will be expected of them in the workplace.

As many of our industries workers have never had any formal training, there is a stark contrast between what some consider to be quality workmanship in comparison to others. I believe that the apprenticeship training should be mandatory for people entering the industry, to help unify the definition of what quality workmanship looks like.

Thank you for involving me in the process and please feel free to let me know if I can be of any further assistance.

Regards,

Mark Woodyard



Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Updated CPC30320 Certificate III in Concreting and Units of Competency

To whom it may concern,

I am the Quality Manager for CSTC Pty Ltd (RTO #0699) and have been one of the stakeholders consulted on the CPC30320 Concreting Training Package project, working with Michelle Mulhall in 2019.

As a Registered Training Organisation, we had encountered several issues with the implementation of the *CPC30318 Certificate III in Concreting* Training Package and successfully submitted an application to ASQA to extend the transition period for the CPC30313 Certificate III in Concreting to 30 September 2020, with the hope that this Artibus project would rectify the problems we were encountering. Some issues included:

- Inclusion of *CPECCO3053 Slump test concrete* as a core unit of competency, which required additional resourcing and up-skilling, as slump testing is not a common task undertaken by concreters
- References to the National Construction Code and Australian Standards in the Knowledge Evidence requirements across several units of competency which were problematic to locate.

Consequently, I am writing in support of the proposed changes to the proposed *CPC30320 Certificate III in Concreting* Training Package and concreting units of competency. CSTC Pty Ltd and our primary TrainerAssessor feel that updates to the unit selection will better reflect the needs of those working in the concreting industry.

Please feel free to contact me if you require any further information.

Kind regards,



Michelle Curro
Quality Manager

Trading as Construction Skills Training Centre, Embark College, and Succession Training and Assessment
A.B.N. 85 078 440 105
www.cstc.org.au

Brisbane T +61 7 3373 8888 A PO Box 51 Moorooka Q 4105
Based in Brisbane with training and assessment throughout QLD and South East Asia
We are here to improve your future

24 February 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Updated CPC30320 Certificate III in Concreting and Units of Competency

I am writing in support of the proposed changes to the Certificate III in Concreting and concreting units of competency. Diverse Concreting employs a team of over 40, specialising in concrete pumping, placing and finishing in Canberra and the surrounding NSW region, on commercial and residential jobs.

We were pleased to be able to participate in the project to update the qualification given our concerns about quality in the industry, and our belief that the qualification should be mandatory and an apprenticeship. The revised qualification and units have made changes that will ensure workers have the skills and knowledge that we expect in the workplace.

Thanks for the opportunity to be involved.

Regards,

Tony Sergi

DIVERSE

- a. 32 Waterloo St Queanbeyan NSW 2620
- t. 0262 812 002 | m. 0406 168 894
- w. www.diverseconcreting.com.au
- e. tony.sergi@diverseconcreting.com.au



B&A Concreting TAS

18 Walsh Lane, Sorell TAS 7172

PH: 0407 510 236 | www.baconcreting.com.au | ben@baconcreting.com.au

2nd April 2020

To Michelle Mulhall,

My name is Ben Waller and I am the owner/operator of B & A Concreting in Tasmania. I have been in the concreting industry now for 20 years and have a wide range of experience in the following areas.

Working for myself has given me the opportunity to really establish a very good understanding of what is required in the concreting industry.

I have looked at and discussed the CPC30320 Certificate III in Concreting qualification with Judd Kruse from Tas TAFE and believe that this new qualification will provide apprentices with a better well rounded qualification and does reflect current industry practice.

One thing that I believe would make the industry better would be if it was regulated so only qualified concreters could perform concreting works. This is one thing that I see in industry unskilled people doing very average work, which essentially is take work away from the people that should be doing it.

- Setting out
- Excavation
- Boxing
- Compaction of base materials
- Place and fixing reinforcement
- Levelling
- Place, finish and curing concrete using a huge range of methods.
- Repairing damaged concrete
- Planning/quoting jobs

Regards,

Ben Waller

B & A Concreting

5 March 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Updated CPC30320 Certificate III in Concreting and Units of Competency

I am writing to support the proposed changes to the Certificate III in Concreting and concreting units of competency.

Shoreline is a Canberra-based construction company which has conducted major commercial and high-end residential projects for over 10 years. Shoreline has also been contracted to manage major contracts on behalf of larger construction companies such as Construction Control, Bloc and Doma Group for projects based in Canberra and Newcastle.

I understand the roles and expectations of concreters on various types of residential and commercial construction jobs and believe the updated qualification and units will give confidence the broader construction industry of the competence of qualified concreters.

Regards,



DIRECTOR

. 2020

10 March 2020 Artibus

Innovation PO Box 547

North Hobart TAS 7002

Re: Draft Updated CPC30320 Certificate III in Concreting and Units of Competency.

I write to support the proposed changes to the Certificate III in Concreting and associated units of competency.

Joseph Bagnara, Managing Director of Psipavements Pty Ltd, in Adelaide, South Australia.

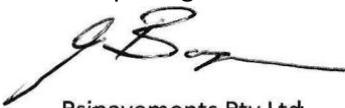
Psipavements Pty Ltd undertakes all aspects of general concrete construction in residential, commercial/ industrial and civil sectors of the industry, including water retaining structures and concrete repairs.

I have been consulted on the project with regular discussions with Michelle Mulhall of Artibus Innovation and other industry people regarding the updated materials and the qualification by telephone and emails.

I believe the updated materials of the Certificate III in Concreting closely reflect the technology and the methods of concrete construction in 2020 going forward. The qualification is one of the most important processes of any building structure constructed, yet not regarded as a trade in my State of South Australia. Also, it should be mandatory that in order to receive your restricted builders licence a person must complete this qualification.

I have had the opportunity to provide feedback on the qualification and the units of competency and believe that the updated materials represent the current concreting occupation and will assist in addressing quality issues across the industry.

Joseph Bagnara



Psipavements Pty Ltd

BLD No. 22124

Mob:0417875947



BESS
CONCRETE PTY LTD
A.B.N. 31 010 986 302
QBCC Act Licence No: 52359

**Golden
Trowel**
Winners 2008, 2009, 2011 and 2016



121 Delta Street
Geebung Qld 4034
Phone: (07) 3865 6736
Fax: (07) 3865 7362
www.bessconcrete.com.au

19 March 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Draft CPC30320 Certificate III in Concreting and Units of Competency

I write to support the proposed changes to the Certificate III in Concreting and associated concreting units of competency. Bess Concrete is one of the top concrete contractors in Queensland and is well known for providing quality results in every aspect of a concreting project ranging from small to large industrial and commercial developments.

I have been kept informed about updates to the qualification and units of competency and have provided feedback during the project. I think the updated materials represent the current occupation and will help to assure quality outcomes for industry. I look forward to their endorsement.

Regards

Bess Concrete Pty Ltd

John Moss

Project Supervisor



To whom it may concern.

My name is Judd Kruse and I work for Tas TAFE as a teacher/assessor. I train and assess apprentice and non-apprentice concreters and carpenters. I have been in this role for about 13 years and in that time I have got to know a lot of employers/apprentices.

Prior to commencing working for Tas TAFE I was contracting to various companies working on a broad range of work including housing and commercial work including precast concrete panels, mainly doing carpentry but would also assist in all slab prep and placement of concrete, and would finish smaller jobs. I have been involved in all stages of this review of the CPC30318 qual to the CPC30320 and have been speaking to the concreting employers that I look after during this process to get there feedback.

I believe that the new qualification CPC30320 does reflect current industry practice and should enable apprentices to be more skilled.

While talking with the employers that I look after one of the common themes that keeps popping up is the need to regulate the concreting industry, as there are way too many people out in industry that are not qualified that are doing su standard work at lower costs which is being detrimental to the industry.

Regards Judd Kruse

l that are doing substandard work a

27/02/2020

LD and MM Ryan Training and Assessments Concreting and Steelfixing
ABN: 86 369 016 096
Lee Ryan Concreting
M 0417 727 002 E lee.mal@bigpond.com

21 February 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

I Lee Ryan from LD & MM Training and Assessments/Lee Ryan Concreting am writing this support letter in favour of the proposed changes to the Certificate III Concreting Qualification.

I have been Concreting and Steelfixing for over 27 years and involved in the training and assessment for the Certificate 3 Concreting and Steelfixing for over 15 years.

I found the team from Artibus especially Michelle Mulhall to be extremely professional and thorough throughout the entire process Of the new Certificate III Concreting qualification.

I was kept informed and asked to provide industry feedback On the amended changes to the package and found the overall industry to be really happy with the amended changes proposed for the qualification.

In all the years I have been working as a trainer and assessor the new changes to the concreting qualification is the first in my opinion that suits the times we are living in and is better able to meet the needs Of the concreting industry.

With this qualification it allows all in the industry to receive the much needed training and or recognition that the industry has lacked for so long.

It would be nice to see Concreting receive the recognition Of a 4 year apprenticeship and be better regulated from industry standards to allow better quality Of works being undertaken in this field.

Please feel free to contact myself to discuss further any of the abovementioned details.

Yours faithfully

LD and MM Ryan Concreting and Steelfixing Assessments



Lee Ryan
Trainer and Assessor

McLaren Developments
Level 19 Suite 3 'St James'
350 St Kilda Rd
Melbourne 3004

24 February 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

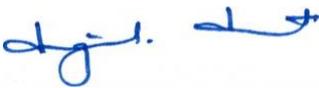
Re: Draft CPC30320 Certificate III in Concreting and Units of Competency

I write to support the proposed changes to the Certificate III in Concreting and associated concreting units of competency.

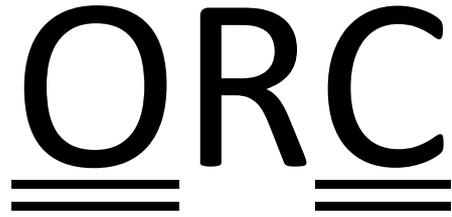
I was pleased to learn that the qualification was being updated to meet current industry requirements and to have an opportunity to provide feedback into emerging practices and key quality issues being experienced in the industry. The updated qualification and units of competency better reflect the technical skills and knowledge required by commercial and residential concreters.

As a major developer in the construction industry over many different sectors, I look forward to the new qualification being implemented in the hope that this will assist quality assurance of concreting outcomes.

Regards



Nigel Hunt
Sole Director



CELEBRATING 30 YEARS

EST 1990

Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Updated CPC30320 Certificate III in Concreting and Units of Competency

I am writing in support of the proposed changes to the Certificate III in Concreting and concreting units of competency.

I am a concrete contractor with over 40 years' experience in the concreting industry. I operate a large commercial and industrial concreting business with operations mainly in Queensland however we have also carried out in NSW and South Australia.

I was invited onto the working party to provide input and feedback on the proposed changes to the qualification and Michelle Mulhall has kept me informed via email throughout the review process. It is my opinion that the updated qualification and units will give concreters instruction and learning in the technical skills and knowledge required to successfully work in our ever-changing industry. Our business has always had a highly developed emphasis on quality, and I believe that this updated qualification will help us achieve greater quality outcomes for our clients.

Finally, it is my contention that this qualification should be made mandatory through regulation, perhaps in Queensland through the QBCC, and that we should look to go even further by making our qualification an apprenticeship.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Chns Jones', is written over a light blue circular stamp.

Chns Jones
Managing Director,
QR Contracting Pty Ltd
President,
Master Concreters Australia



4 March 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

I Michael McNamara from East Coast Concrete am writing this support letter in favour of the changes to the certificate 3 concreting qualification.

I have been working in the concreting industry for approximately 19 years. I have spent the last 16 years working for east coast concrete in multiple rolls. I started as a concrete labourer with east coast then going on to do a traineeship working as a concreter. Over the last 10 years I have moved into safety and training for east coast.

Over the time that I have been with east coast concrete having done the cert 3 and working with other east coast trainees to upskill and help them on their way to completing their cert 3 in concrete. I think that there has been a gap in what the trainees are learning and what they should be learning leaving east coast with under trained workers that are entitled to a higher rate of pay without necessarily being as we see suitably qualified through no fault of the trainees or the trainer and assessors but the lack relevant content in the resent qualification.

I am happy to see that the cert 3 is on the way to being brought into line with where it should be but would like to see an apprentice trade qualification brought in. I believe bringing in an apprenticeship will build the industry standard of training for concreters to where it should be.

Kind regards
Michael McNamara



MASTER

CONCRETORS

24 February 2020

Artibus Innovation
PO Box 547
North Hobart TAS

7002

Re: Draft CPC30320 Certificate III in Concreting and Units of Competency

On behalf of Master Concretors Australia (MCA), I write to support the proposed changes to the Certificate III in Concreting and associated concreting units of competency. MCA is the national industry association (peak body) representing all concrete contractors in Australia.

MCA looks forward to the endorsement of the qualification and its availability for industry training and assessment.

A handwritten signature in blue ink, appearing to read "DL", is positioned above the name of the signatory.

David Lingard
Chief Executive Officer
MCA

I have been kept informed of issues raised through the national consultation processes conducted by Artibus over recent months and have participated in several meetings of the working group that provided technical advice and guided updates to the qualification and units of competency. The revised qualification and units better reflect the work done by concreters across a range of commercial and residential settings, and provide the technical skills and knowledge expected by employers.



neuc

North East Vocational College

17 March 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Draft CPC30320 Certificate III in Concreting and Units of Competency

I write to support the proposed changes to the Certificate III in Concreting and associated concreting units of competency.

North East Vocational College — NEVC is a Private RTO that has been delivering Training and Assessment services for the current Certificate III in Concreting (CPC 30318) along with previous superseded qualifications for the past 5 years.

NEVC have had an opportunity to be included in many discussions/forums over the past months and have provided feedback on the draft qualification and units of competency. We believe that the updated materials represent the current concreting occupation. They will assist in addressing quality issues across the industry and will provide a good platform for current people and new comers to the concreting industry to achieve a nationally recognised qualification which meets the needs of industry at the present time and also into the near future.

Your sincerely
~~Your sincerely~~

Quentin Sickerdick

Construction Training
Manager North East
Vocational College
114 Tolley Road

St Agnes SA 5097

P 8397 9500

F 8397 9599 M

0400 979 818

[quentin.sickerdick@](mailto:quentin.sickerdick@neda.asn.au)

neda.asn.au

neuc

North East College

A division of North East Development Agency (NEDA) inc.

North East Vocational College is a division of North East Development Agency Incorporated .ABN
-17460073 810,

- 1 14 Tolly Road, St Agnes SA 5097
- Tel (08) 8397 9500
- Fax (08) 8397 9599
- Email [nevc@neda.asn.eu](mailto:nevc@neda.asn.au)

CEMENT FLOORING PTY LTD

3B ANTONIO CRT NEVVTON
SA 5074 PO BOX 3046
NEVVTON SA 5074
PHONE 088337 6511 FAX 088337
4139 EMAIL
ADMIN@PIOTTOBROS.COM.AU
LICENCE ABN75C07758714

Artibus Innovation

P.O. Box 547

North Hobart TAS 7002

Re: Updated CPC30320 Certificate III in Concreting and Units of Competency

I am writing in support of the proposed changes to the Certificate III in Concreting and concreting units of competency

We are a major concreting subcontractor in the Adelaide market employing over 40 staff, we specialise in major projects in Adelaide ranging from Multi-storey works to schools, hospitals and Stadiums

We have worked closely with Artibus and other industry contractors to help with the proposed changes to the Certificate III and have helped develop all the changes from the previous competencies required to complete the works

We believe that the updated qualification and units required to complete the Certificate, now better reflect the requirements on site to help become a concrete finisher and develop greater technical skills and knowledge for their day to day works.

After reviewing the final draft, we believe that the standard and quality of those completing the course will significantly improve with the updated qualification. Those completing the course will gain a better understanding on what the requirements are for placing and finishing concrete and should improve the overall skills within the industry.

Currently within the building industry there is a shortage of concrete workers, if the Certificate III was provided as an apprenticeship and it was mandatory for those who wanted to become a concrete worker to complete an apprenticeship we believe that the standard of concrete finishing would improve considerably



Jeffrey Piotto

Managing Director

9th April 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

Matthew Hague
Education Manager
Bendigo TAFE

Re: Draft CPC30320 Certificate III in Concreting and Units of Competency

I write to support the proposed changes to the Certificate III in Concreting and associated concreting units of competency.

My support for the changes to the programme is based on the interactions that I have had with students of the current qualification and their employers.

The students want to be involved in training that will directly benefit the work they are doing now as well as giving them skills to build on for their future in the concreting industry.

The feeling is that student are looking to consolidate knowledge that they may have already gained as well as gaining new skills. The units that are being proposed are much better at delivering this to future students than the current training package. The units that have been removed

The proposed training package core units ensure that every student is working through units that are going to give them the skills required in the field. The extended list includes all the units that someone may need to gain knowledge in to become a competent trade person in the industry.

The elective component of the proposed qualification then allows for training in specialised areas of the trade. This then relieves the burden on students to have to undertake units that have no relevance to them.

As a further comment I would also like to strongly suggest that the qualification is moved form a traineeship to an apprenticeship. Making this change will go a long way in not only falling in to line with all the other trade training in CPC but it will also better reflect the nature and importance of the work, that concreters carry out in the building industry.

I also believe that making this change will have an effect on the attraction of new entries to the trades with the knowledge that with training and work experience they will then be seen as the true trades person they are. Being more preferable than the completion of a traineeship.

Regards



Matthew Hague
Education Manager Construction
Bendigo TAFE.

CB Excavations P/L

PO Box 3071 Belconnen ACT 2617-ACN 008463123

5 March 2020

Artibus Innovation
PO Box 547
North Hobart TAS 7002

Re: Updated CPC30320 Certificate III in Concreting and Units of Competency

I am writing to support the proposed changes to the Certificate III in Concreting and concreting units of competency.

CB Concreting is one of Canberra's leading concrete contractors and excavation companies servicing Canberra and the surrounding NSW region since 1982 in both residential and commercial projects. We specialise in a range of concrete services including foundations, house garage and shed slabs, driveways, pathways and decorative surfaces.

I have been kept informed of changes throughout the project and have had opportunities to provide input as part of a technical working group. In my opinion the updated qualification and units will provide the essential technical skills and knowledge required of concreters in the workplace. I look forward to their endorsement and availability for industry.

Regards,



Robert Belmonte
0402122028