



WAIHANGA ARA RAU
Construction and
Infrastructure
Workforce Development Council

Building Pathways

Project Report

December 2025

Delivering an aligned, flexible, and future-ready pathway for building and construction training.

CONTENTS

| | |
|--|-----------|
| ACKNOWLEDGEMENTS | 4 |
| PROJECT SUMMARY | 6 |
| THE ROLE OF SKILL STANDARDS | 7 |
| PROJECT INSIGHTS | 8 |
| REDESIGNING THE BUILDING QUALIFICATION PATHWAY | 10 |
| RECOMMENDATIONS FOR THE FUTURE | 16 |
| IMPLEMENTATION AND TRANSITION | 17 |
| APPENDICES | 18 |
| Appendix 1: Detailed project scope..... | 18 |
| Appendix 2: Consultation and development approach for the Building Pathways project..... | 19 |
| Appendix 3: NZC Carpentry (Level 4) - skill standard progression by GPO..... | 20 |
| Appendix 4: Skill standards as building blocks..... | 22 |
| Appendix 5: Summary of changes..... | 26 |
| REFERENCES AND RESOURCES | 27 |

Publisher

Waihanga Ara Rau Construction and Infrastructure
Workforce Development Council.

Tower B,49 Tory Street,
PO Box 445, Wellington 6140.
Tel: 04 909 0174

This publication is available on the Waihanga Ara Rau
website at waihangaararau.nz



WAIHANGA ARA RAU

**Construction and
Infrastructure**

Workforce Development Council

ACKNOWLEDGEMENTS

The Building Pathways Project was made possible through the collective expertise, commitment, and generosity of individuals and organisations across the construction sector.

Special thanks are extended to the members of the Technical Advisory Groups and the Steering Group, whose guidance and subject matter expertise were critical in shaping the qualification pathways and skill standards. Their willingness to engage in robust discussion and provide constructive feedback ensured that the final products reflect real industry needs.

We particularly acknowledge ConCove Tūhura. Their generous financial supported enabled extensive kanoiki-te-kanoiki (in-person) engagements, and their research supporting vocational education and training in construction and infrastructure was both influential and inspirational.

Finally, we extend sincere thanks to everyone who participated in surveys, workshops, interviews, and targeted engagement activities. Your perspectives have helped build a clearer, more coherent, and future-focused pathway for learners, employers, and the wider construction sector.

Steering Group members

- Shijie (CJ) Chen - Master Builders
- Garry Nott - Certified Builders
- Dave McGuigan - Concrete NZ
- Stacey Mendonca - NAWIC
- Roydon Shaw - Rāranga
- Ali Wright - BCITO
- Roger Gent - Builders Academy
- Kirsty Currie - Otago Polytechnic | Te Pūkenga

Organisations who hosted consultation events

- New Zealand Master Builders Association
- New Zealand Certified Builders Association
- BCITO
- Builder's Academy New Zealand
- Eastern Institute of Technology (EIT)
- Universal College of Learning (UCOL)
- Ara Institute of Technology
- WelTec-Whitirea
- Otago Polytechnic
- Unitec

We have used their collective feedback to provide the recommendations and proposed micro-credentials identified in this report.

Ngā mihi nui



PROJECT SUMMARY

More than 20,000 learners used building qualifications in 2024, making up 34 percent of all vocational construction and infrastructure learners.

The Building Pathways Project was initiated to strengthen the qualification pathway for the building and construction sector.

The project was driven by clear challenges identified in the current system. While these qualifications are among the most widely used in Aotearoa, feedback indicated they were not meeting the needs of all stakeholders.

Issues included limited flexibility, insufficient recognition of skills, a lack of transparency about progress, and concerns about consistency between graduates. At the same time, it was essential these pathways continued to deliver the capabilities required for a thriving industry.

The Building Pathways Project has delivered a qualification framework that builds on existing strengths, while introducing greater adaptability. The reimaged pathway:

- Incorporates flexibility without compromising quality.
- Supports emerging skills and technologies.
- Provides clarity and strengthens industry influence through mandatory skill standards as the foundation for all qualifications and credentials.

The project was completed in stages. It began with an in-depth investigation into the challenges and opportunities within the Carpentry and broader building qualification pathway, with final recommendations and an action roadmap published in March 2025.

Seven deliverables were progressed in 2025.¹

| DELIVERABLE | STATUS |
|--|---------------------|
| Development of graded BCATS skill standards and review of three related qualifications | COMPLETED |
| Development of two new micro-credentials to support environmental sustainability (Reduce Waste, and Sustainable Practices) | COMPLETED |
| Development of Core Construction & Carpentry skill standards replacing outdated, redundant and overlapping unit standards. | COMPLETED |
| Review of five qualifications for Carpentry, Construction 'Pre-trade', and Concrete Construction, integrating skill standards. | Submitted to NZQA |
| Review of five Construction Trades micro-credentials, integrating skill standards. | Submitted to NZQA |
| Development of Concrete Construction skill standards replacing outdated, redundant and overlapping unit standards, and new skill standards to support business acumen, digital, and commercial construction focussed skills. | Submitted to NZQA |
| Development of information for providers to support the transition from current programmes and qualifications to the updated suite of qualifications. | Version 1 COMPLETED |

This report traces the journey of this project and provides key insights from each stage as well as details about the process and outcomes.

It also sets out the vision for 2026 and beyond – innovative and responsive delivery, and a pathway that supports the workforce to develop the skills to learn, lead and grow.

¹ Waihanga Ara Rau. (2025). Building Pathways Investigation, Summary Report. Available from [Waihanga-Ara-Rau-Building-Pathways-report-March-25.pdf](#)

THE ROLE OF SKILL STANDARDS

The introduction of skill standards played a key part in progressing this project.

Aligning all building qualifications with a consistent set of mandatory 'building blocks' provides industry with the opportunity to shape what the workforce will learn and the confidence that all learners will have their skills recognised in the same way.

This is a significant shift from the existing model where there are disconnects between qualifications, programmes and providers.

Skill standards in the redesigned Building Pathway define what graduates need to know and be able to do and have been designed to make it easier to track and understand learner progress, to recognise prior learning, and support multi re/entry points into training.

The role of skill standards in the Building Pathway is shown in more detail in:

Appendix 3: NZC Carpentry (Level 4) - Skill standard progression by Graduate Profile Outcomes

Appendix 4: Skill Standards as Building Blocks.



PROJECT INSIGHTS

BUILDING PATHWAYS INVESTIGATION

The Building Pathways Project began with an in-depth investigation into the challenges and opportunities for the Carpentry and broader building qualification pathway. This work focused on identifying where Waihanga Ara Rau could make the most significant impact, particularly considering the sector’s transition from unit standards to skill standards.

The Building Pathways Investigation delivered a summary of key findings, recommendations and an action roadmap published in March 2025.

The investigation was informed by three key sources:

1. Analysis of existing data, including qualification duration, learner completion rates and learner volume over time. While this provided valuable insights, it was clear that data alone could not capture the full picture; understanding the story behind the numbers was essential.
2. Existing research and publications into pathways, learner experiences and industry aspirations. One example, “Where’s the Front Door?”, a study by ConCOVE Tūhura², highlighted barriers to entering construction careers and the disconnect between training programmes and apprenticeships. Waihanga Ara Rau’s Workforce Development Plans, Kaitaka Paepaeroa Māori Workforce Development Plan³ and Unleashing Pacific Talent: Workforce Development Plan for Pacific Peoples⁴, reaffirmed that there were opportunities to strengthen the accessibility and relevance of the current pathway.
3. Targeted conversations across the motu to test assumptions and gather rich insights from stakeholders working in diverse areas of the building industry.

The investigation confirmed that the Carpentry qualification remained highly valued and identified several opportunities for improvement.

Opportunities for improving the qualification pathway

| We need... | So that... |
|---|--|
| Common skill standards across qualifications⁵ | <ul style="list-style-type: none"> • Transferable skills and knowledge are recognised and open up more employment options during times of insecure work. |
| Smaller credentials | <ul style="list-style-type: none"> • Workers/learners can achieve smaller credentials if they are employed in business that have a specialised scope of work. |
| Support to step away from and return to learning pathway without penalty | <ul style="list-style-type: none"> • As a worker accumulates skills and knowledge and it is recognised, they have more to offer another employer should they move workplaces. • Workers/learners can have their progress and achievement recognised but step away from learning to focus on addressing life challenges. • If a worker/learner starts to experience challenges sustaining their learning or loses their job, their current learning is recognised and reported, and at the right time they can return to the learning pathway without being penalised. |

² Scarlatti (2023). Where is the front door? An investigation of the workforce entry points into the construction and infrastructure sectors Auckland. ConCOVE
³ Waihanga Ara Rau. (2024). Kaitaka Paepaeroa – Māori Workforce Development Plan for Construction and Infrastructure. Wellington. Waihanga Ara Rau
⁴ Waihanga Ara Rau. (2024). Unleashing Pacific Talent: Workforce Development Plan for Pacific Peoples. Wellington. Waihanga Ara Rau

Opportunities to support meaningful recognition and progress

Feedback on meaningful recognition and progress was summarised using an adapted version of the “Poutama Model for Construction Training”.⁵ Each working learner profile aligns to a stage of skill development and level on the New Zealand Qualification and Credentials Framework (NZQCF).⁶



Pia or new starter
NZQCF Level 2-3

Someone new to the trades who is developing new worker skills, learning from others and needs direct supervision.



Taura or apprentice (early stages)
NZQCF Level 3

Someone who has fundamental building skills and knowledge. They are working towards being able to do familiar or routine building work without direct supervision.



Tauira or apprentice towards qualifying
NZQCF Level 3/4

Someone who applies knowledge and is working towards performing a broad range of skills for the trade, is technically proficient, and meets the level of performance needed to contribute productively.



Micro-credentials for the Tohunga, advanced tradesperson, or specialist tradesperson
NZQCF Level 4/5

This person is trade qualified. They are competent, and the quality and level of their work is up to the standard expected of a “well-rounded carpenter”. They can be developing advanced or specialist technical skills.

Opportunities for alignment

The close relationship between Carpentry and Concrete construction became clear during the Building Pathway investigation, especially in commercial environments. The Level 3 and Level 4 Concrete construction qualifications were brought into scope of the recommendations and the Building Pathways Project.

The investigation also reinforced the need for clear information about how skills overlap between trades and qualifications, ensuring that learners’ prior achievements are recognised as they progress, including those from previous versions of qualifications. This ‘transition’ information was needed support providers to ensure that learners are not disadvantaged.

[A roadmap of recommended actions](#) was identified that aimed to create a more flexible and aligned building qualification pathway, that meets the evolving needs of the industry.

⁵ Kalan, J. (2024). Beyond tuakana teina | Exploring Māori vocational pathways. Wellington: Ako Aotearoa.
⁶ For more information about the NZQA qualifications and Credentials Framework (NZQCF) [About the NZQCF - NZQA - NZQA](#)

REDESIGNING THE BUILDING QUALIFICATION PATHWAY

Following the investigation, the project moved into a comprehensive review and redevelopment of the building qualification pathway, with a particular focus on Carpentry and Concrete provision across NZQCF Levels 3 and 4.

Our approach to conducting the review is described in more detail in *Appendix 2: Consultation and development approach for the Building Pathways Project*.

Seven deliverables were progressed during 2025 (see *Appendix 1* for full scope of the review).

| Workstream | Deliverables | Value |
|-------------------------------------|---|---|
| Sustainability | Two new micro-credentials using existing core construction skill standards. | Responds to the emerging need for skills to support environmental sustainability in the construction workforce |
| NZC Carpentry L4 | Reviewed Carpentry qualification that reflects outcomes valued by industry and includes mandatory skill standards. | Maintains the relevance of this well-regarded qualification. The skill standards provide clarity about progression of skills and support consistency. |
| NZC Construction Trades Skills L3 | Reviewed Construction Trades Skills qualification that reflects outcomes aligned to a clear qualification purpose. Mandatory skill standards will recognise both core construction skills and areas of trade specialisation. Confirm the need for a NZ Programme for the qualification. | Supports consistency across programmes and the recognition of "Allied Trades". Creates clear recognition of skills when graduates progress into apprenticeships in the construction trades. |
| Micro-credentials | Reviewed Construction Trades micro-credentials that include new requirements and mandatory skill standards. | Supports awareness of existing micro-credentials that align with recommendation from the Building Pathways Project. Reviewed micro-credentials provide a seamless pathway to the Carpentry or Concrete qualifications. |
| | Confirmed the need, viability and value of further micro-credentials to supplement existing pathway | The viability of the proposed micro-credentials related to trade skills are documented to inform future development. |
| NZC Concrete Construction (L3 & L4) | Reviewed L3 and L4 Concrete Construction qualifications that reflect outcomes valued by industry and include mandatory skill standards, | Maintains the relevance of the qualifications and aligns them with other qualifications. Skill standards provide clarity about progression of skills and support consistency. |
| NZC BCATS (L1-3) | Reviewed L1-3 qualifications that reflect their intended purpose. Graded skill standards will be mandatory in the qualification or suitable for use in school-based (or similar) courses. Guidance information to support implantation and assessment. | Maintains the currency of this well-regarded suite of qualifications and standards. Responds to the need for the BCATS standards to have greater parity with other 'academic' subjects that award grades for performance. Supports consistency of awarding grades for the graded skill standards. |
| Transition Guidance | Programme Guidance information that include transition relationships for: <ul style="list-style-type: none"> unit standard-based programmes and skill standard-based programmes, BCATS programmes to new skill standards, Pre-trade programmes to new skill standards. | Supports a consistent approach to recognition of prior learning and a quality assured direction for exemptions between programmes to support the transition to skill standards. |

KEY THEMES

The review process generated strong themes from employers, providers and apprentices about what they needed from a fit-for-the-future qualification pathway. These perspectives shaped the re/design of qualifications, micro-credentials and skill standards and also provide important insights into how delivery can better respond to learners and their employers.

Employer perspectives were clear and consistent. Employers wanted learners to enter the workforce with strong core skills, confidence in applying health and safety practices, and practical experience under real site conditions, not just theoretical knowledge. They also emphasised the need for consistency across training providers, so that expectations of learner capability remain the same regardless of where training occurs.

Training providers echoed these priorities. They highlighted the importance of preparing learners for the realities of the workplace, noting that their reputation is linked to the competence of graduates. Providers also called for clear, structured learning pathways that show how qualifications connect, particularly between Levels 3 and 4.

Learner feedback added another critical dimension. Learners expressed a strong preference for learning that connects directly to on-site work, valuing practical experience as the point where understanding "clicks." They wanted to see the relevance of what they were learning and how it applied to their daily tasks. Challenges were also noted, such as limited opportunities to complete certain tasks depending on the employer's scope of work, which can make achieving outcomes difficult.

Learners spoke positively about options like night classes or day release to fill gaps in work-based training, and the importance of support from tutors, training advisors, and supervisors. They also valued smaller, achievable milestones - an approach that aligns well with the introduction of skill standards and micro-credentials.



NEW BUILDING QUALIFICATION PATHWAY IN ACTION

Entering the trade – Level 3 (Developing under limited supervision)

Felix begins a Level 3 programme in Carpentry with no prior construction experience.

The skill standards focus on a clear foundation of working safely, using tools, understanding materials, and carrying out basic tasks under limited supervision. He also learns core site practices such as reading plans and reducing waste. As he builds his skills, Felix can see how each step fits into the bigger picture of the trade. By the end of Level 3, he's confident on-site and well prepared to transition into employment, with his completed skill standards contributing directly to his next stage of learning.

Building a flexible career – micro-credentials

Jimmy is working in the industry and wants to 'step up' without committing to a full qualification yet. Micro-credentials allow him to gain specific skills like renovation tasks or exterior cladding and apply them immediately. Over time, he can stack these towards a qualification or use them to shift into new roles. As he grows, he can see clear pathways and wants to move on to an apprenticeship in Carpentry.

Growing into independence – Level 4 (Becoming a tradesperson)

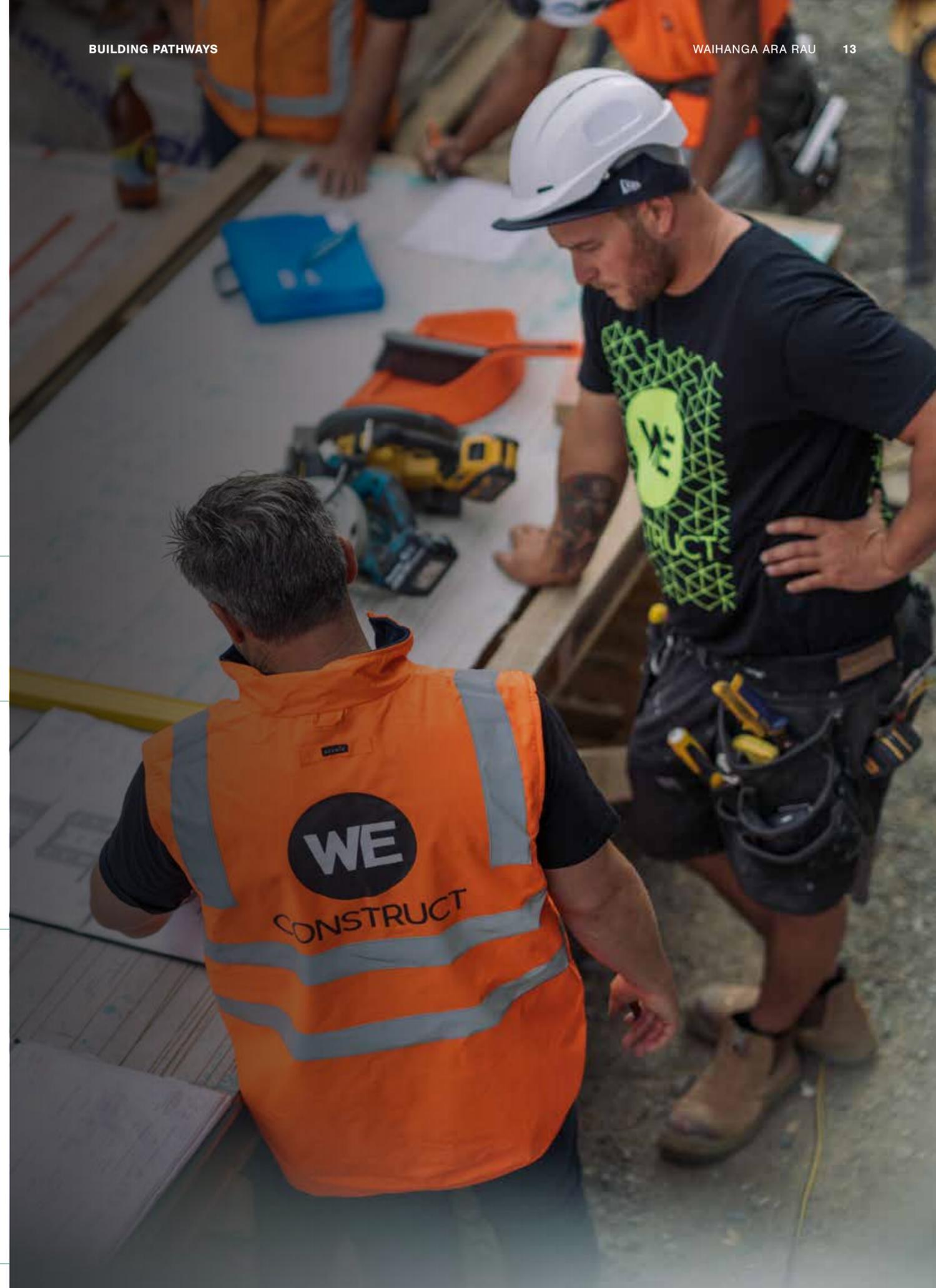
Dylan is midway through his apprenticeship and working towards the Level 4 NZ Certificate in Carpentry. The structure helps him understand exactly what "working independently" looks like when planning tasks, coordinating materials, solving problems, and applying the same core skills across residential and commercial environments. Electives let him focus on the type of work his company does, while still becoming a well-rounded carpenter. As he nears completion, Dylan is not just doing the work, he's thinking like a tradesperson.

Seeing the skill levels in action

Dave runs a small building company and has recently taken on Jimmy as an apprentice.

What stands out to Dave is how clearly the skill standards describe the different levels of capability. At the beginning, the apprentice is expected to work under limited supervision, focusing on core tasks and learning the fundamentals. Dave can see exactly which tasks are appropriate at this stage and where support is needed. As Jimmy progresses, the shift is obvious. The skill standards outline the point at which the apprentice should start taking on tasks independently, planning ahead, coordinating materials, reading plans, and managing parts of the job with less oversight. Dave can track this progression and plan site work that matches the apprentice's growing capability. The clarity around levels makes it easier for Dave to see the apprentice's development from a supervised learner to an emerging tradesperson.

By the time Jimmy is nearing completion, Dave can see genuine readiness, the ability to work independently, think ahead on the job, and take on more responsibility across a range of tasks.



KEY OUTCOMES

Our consultation with industry and providers generated several outcomes which achieve a mix of continuity and evolution and address major pain points.

Several areas for further development were also raised as part of the process. These require further work to be well-defined and are discussed below in our Recommendations for the future – 2026 and beyond.

More detail about the changes made to existing qualifications and micro-credentials can be found in *Appendix 5: Summary of Changes*.

Maintaining the well-rounded carpenter

Preserving the integrity of the trade was a consistent theme. The qualification remains comprehensive, ensuring every graduate achieves a solid, all-round Carpentry skill set.

Early discussions raised the question of whether the Carpentry qualification should be split into separate strands for residential and commercial work. After careful analysis, it was clear that while scale, materials, and methods do vary, the fundamentals don't.

Alignment and clarity through skill standards

The introduction of shared set of skill standards, scaffolded from NZQCF Level 2-4 provides a clear way to track learner progress:

- Level 2 describes essential skills that are valuable across construction trades.
- Level 3 focusses on developing competence in the right techniques and essential skills. Learners can perform standard processes in accordance with accepted construction trade practice under supervision. The Level 3 standards support learners in 'pre-trade' programmes or early apprenticeship stages.
- Level 4 emphasises independence, ensuring graduates can perform tasks unsupervised to current and relevant legislation, standards, and codes (including safety), and within acceptable timeframes. At Level 4, learners will have developed competence to apply skills to authentic everyday trade operations.

This approach provides clarity for learners, employers, and providers about how progress will be measured and ensures all training providers use the same benchmarks. Cross-crediting between Construction Micro-credentials, the Construction Pre-trade (Level 3) and NZC Carpentry (Level 4) will be clear, simple and nationally consistent.

Introduction of emerging skills

Industry feedback highlighted the need to incorporate skills that reflect modern construction practices. New elements include:

- digital literacy
- sustainability practices like waste reduction and material efficiency
- business awareness to prepare learners for leadership roles or future self-employment.

These additions ensure graduates are equipped for contemporary building environments while retaining the core competencies of the trade.

Environmental sustainability skill standards and micro-credentials

The importance of environmental sustainability practices and skills was highlighted as a priority for the construction sector. New mandatory skill standards recognise practical skills to make environmental sustainability part of building.

Two sustainability-focused micro-credentials were also developed as stand-alone options for people who already hold a qualification or for workplaces seeking targeted upskilling.

- Reduce Material Waste in a Construction Environment (Level 2) focuses on practical actions to minimise material waste.
- Contribute to Sustainable Practices in a Construction Environment (Level 4).

Micro-credentials and flexible pathways

Support for existing Construction Micro-credentials (see *Appendix 1*) was confirmed and they were strengthened by removing low priority content, and to use the same skill standards as other qualifications in the building pathways.

In many cases learners and employers were not aware of the existing micro-credentials, but supported them as an option to recognise focused skills without committing to a full qualification. These were also endorsed as an alternative pathway into the workforce, better suited to career changers or periods where rapid upskilling was needed.

Concrete Construction

The concurrent review of Concrete Construction qualifications at Level 3 and Level 4 focused on:

- Defining overlapping and distinct skills between Concrete Construction and Carpentry, particularly within commercial construction contexts.
- Defining the progression of skills between Level 3, and Level 4.

At Level 3, the scope was clarified to focus on straightforward tasks using familiar materials, tools, and techniques under supervision, similar to Carpentry.

Level 4, by contrast, emphasises higher-level coordination, a broader scope of application, and technical problem-solving skills.

BCATS (Building Construction and Allied Trades Skills)

BCATS qualifications at Levels 1, 2, and 3 are an important entry point for learners, particularly in secondary schools. The updated skill standards for BCATS now include graded achievement—Achieved, Merit, and Excellence, allowing contributions to NCEA endorsements. These standards are supported by learner resources and assessments provided through BCITO, with workshops and webinars offered to schools in late 2025 to introduce the changes.

Alignment with the broader Building Qualification Pathway was a key consideration, ensuring that relevant BCATS achievements can be cross-credited when learners transition into further training. This information will be detailed in Programme Guidance, supporting questions such as “Does this count toward my apprenticeship?” and “Can learners start their apprenticeship at school?”

RECOMMENDATIONS FOR THE FUTURE – 2026

The review also considered the training pathway beyond the Level 4 qualification. Industry stakeholders emphasised the importance of lifelong learning and a desire for clear next steps after apprenticeship completion. Future pathways included advanced specialisations, leadership roles, and business management and ownership.

Feedback highlighted that these post-apprenticeship pathways vary across different parts of the sector, reflecting the diversity of roles, business models, and regional contexts. In several cases, there was strong in principle support for further credentials but a lack of consensus on the detail.

These themes merit further attention by the Construction & Specialist Trades ISB to further explore and confirm the specific needs and viability of these potential pathways, ensuring any future developments are genuinely industry-led and sustainable.

BUSINESS SKILLS

One proposal was a 'Basic Business Skills' micro-credential. While there was support in principle, no clear consensus emerged on what it should include or when it should be introduced. Some essential skills have been incorporated into the Carpentry apprenticeship, but further work is needed to ensure timely access to the skills required for starting and sustaining construction businesses.

LEADERSHIP

There was consistent support for more options to access formal people leadership skills, including for leading hands and/or small teams. Noting that there are several existing qualifications and training options in this space, more work is required to understand what the barriers to uptake are and to test the viability of new or alternative pathways.

SPECIALISATION

Several suggestions were made about advanced technical skills that could be recognised through post-apprenticeship or complementary micro-credentials. These best supported of these were:

- Longrun Roofing Installation
- Light Steel Frame Assembly
- Quality Assurance and Compliance in a Commercial Construction Environment
- Commercial Construction Building Methods

'ADVANCED TRADES'

There was strong support for reintroducing an 'Advanced Trade' qualification, though no clear consensus emerged on what this should include in a contemporary context. ConCOVE Tūhara research suggests adopting elements of the German Meister model, which incorporates three components: Advanced Technical Skills, Training, and Business Acumen. This model offers valuable insights albeit within a socio-cultural context that differs from New Zealand. Our recommendation is that the ISB design of a more detailed proposal and tests its viability rather than undertaking further open-ended consultation.

IMPLEMENTATION AND TRANSITION

TRANSITION TIMELINE AND SUPPORT

The building qualification is widely used, and these changes will have an impact on many learners.

To support this transition, Waihanga Ara Rau is developing comprehensive Programme Guidance, including mapping from unit standards to skill standards and clarifying how standards are shared across qualifications and micro-credentials.

We have also ensured that transition can be carefully managed. There will be no sudden cut-off; and current qualifications will have a "last date for assessment," giving providers up to five years to complete delivery for existing learners.

Providers will have the opportunity to roll-out new qualifications and micro-credentials once they are approved by NZQA (anticipated to be during the first quarter of 2026).

Programme Guidance

Programme Guidance will provide clarity on expectations, reduce administrative load, and support providers in integrating new and emerging skills into their programmes. This resource is designed to help providers plan effectively and maintain quality during the transition.

The Construction and Specialist Trades Industry Skills Board will also be able to update and confirm the Programme Guidance over time, ensuring it remains current, responsive, and reflective of ongoing industry needs.

OPPORTUNITIES FOR PROVIDERS

The transition to skill standards and micro-credentials presents an opportunity for providers to refresh and modernise programmes to reflect current industry practices.

Stakeholders shared a wide range of ideas to extend or enhance delivery including greater access to block courses, night classes and other structured learning, and improvements to the interactivity and quality of learning materials (i.e. multi-media).

The new structure offers greater flexibility, enabling providers to design learning that meets the needs of their learners and local industry requirements. It also simplifies the recognition of prior learning, allowing learners to move more smoothly between programmes or even between providers.

OPPORTUNITIES FOR LEARNERS

Motivation and success – scaffolded skill standards create clear checkpoints for progress and recognition. Supporting learners to experience success throughout their journey will strengthen learner motivation and encourage completion and long-term engagement with the industry.

Flexibility and recognition - The redesigned building qualification pathway supports learners who change trades or need to pause training. Learners can re-enter training with confidence that previous achievements are retained or applied to other relevant qualifications or micro-credentials.

APPENDICES

APPENDIX 1: DETAILED PROJECT SCOPE

This project primarily focused on the Carpentry & Concrete Construction sector but includes the wider construction sector because it includes entry-level and pre-employment micro-credentials and qualifications targeted at a range of trades including Concrete Placing & Finishing, Joinery, Painting & Decorating, Interior Plastering Brick & Block, Scaffolding & Tiling.

We reviewed the following qualifications:

- New Zealand Certificate in Building, Construction & Allied Trade Skills (Level 1) [3843-1]
- New Zealand Certificate in Building, Construction & Allied Trade Skills (Level 2) [3844-1]
- New Zealand Certificate in Building, Construction & Allied Trade Skills (Level 3) [3845-1]
- New Zealand Certificate in Construction Trade Skills (Level 3) [2834-2]
- New Zealand Certificate in Carpentry (Level 4) [2738-2]
- New Zealand Certificate in Concrete Construction Skills (Level 3) [4189-1]
- New Zealand Certificate in Concrete Construction (Commercial and Civil Infrastructure) (Level 4) [4188-1]

We further investigated potential new micro-credentials and reviewed these existing micro-credentials:

- Basic Construction Skills (Micro-credential) [4571-1]
- Demolition and Renovation Skills (Micro-credential) [4572-1]
- Introductory Exterior Envelope Skills (Micro-credential) [4573-1]
- Introductory Interior Linings and Joinery Skills (Micro-credential) [4574-1]
- On-site Assembly Skills (Micro-credential) [4575-1]

New and reviewed credentials are based on newly developed skill standards:

[Core Construction Skill Standards](#)

[Carpentry Skill Standards](#)

These skill standards replaced a range of unit standards in the following domains:

- Carpentry
- Carpentry Theory
- Core Construction
- Concrete Construction
- Concrete Core Skills

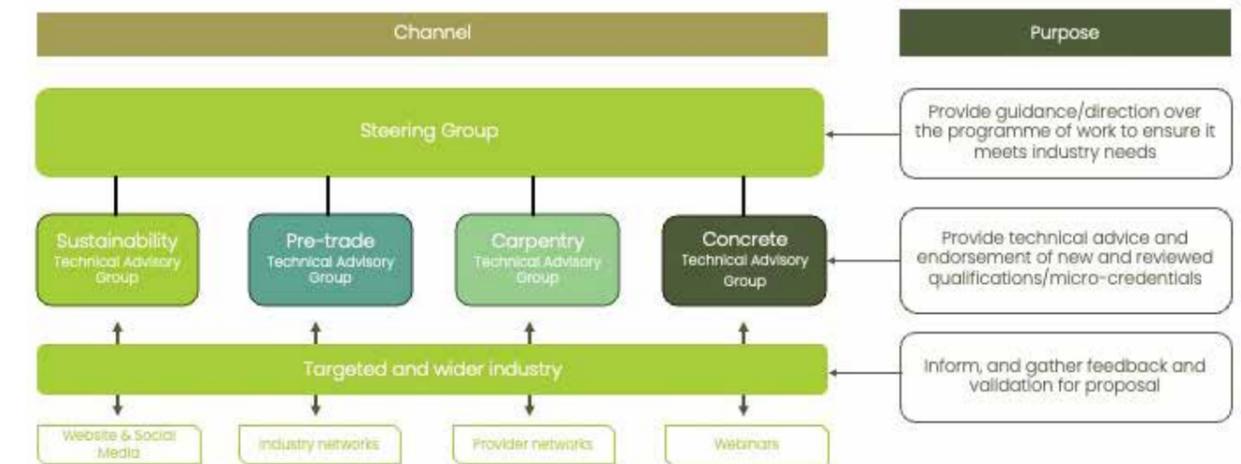
New skill standards were also developed for:

- Concrete Construction
- Further Core Construction skills in Construction Processes, Digital Skills, Business Acumen

APPENDIX 2: CONSULTATION AND DEVELOPMENT APPROACH FOR THE BUILDING PATHWAYS PROJECT

Translating the insights from the Building Pathways investigation into qualification design required extensive engagement with employers, providers, and learners. These conversations helped shape a pathway that reflects real-world needs and supports success for all stakeholders. The process also involved drafting, testing ideas with subject matter experts, and reviewing feedback to ensure the final design was both practical and achievable.

This collaborative approach ensured the new pathway is grounded in evidence, aligned with industry expectations, and adaptable to future developments.



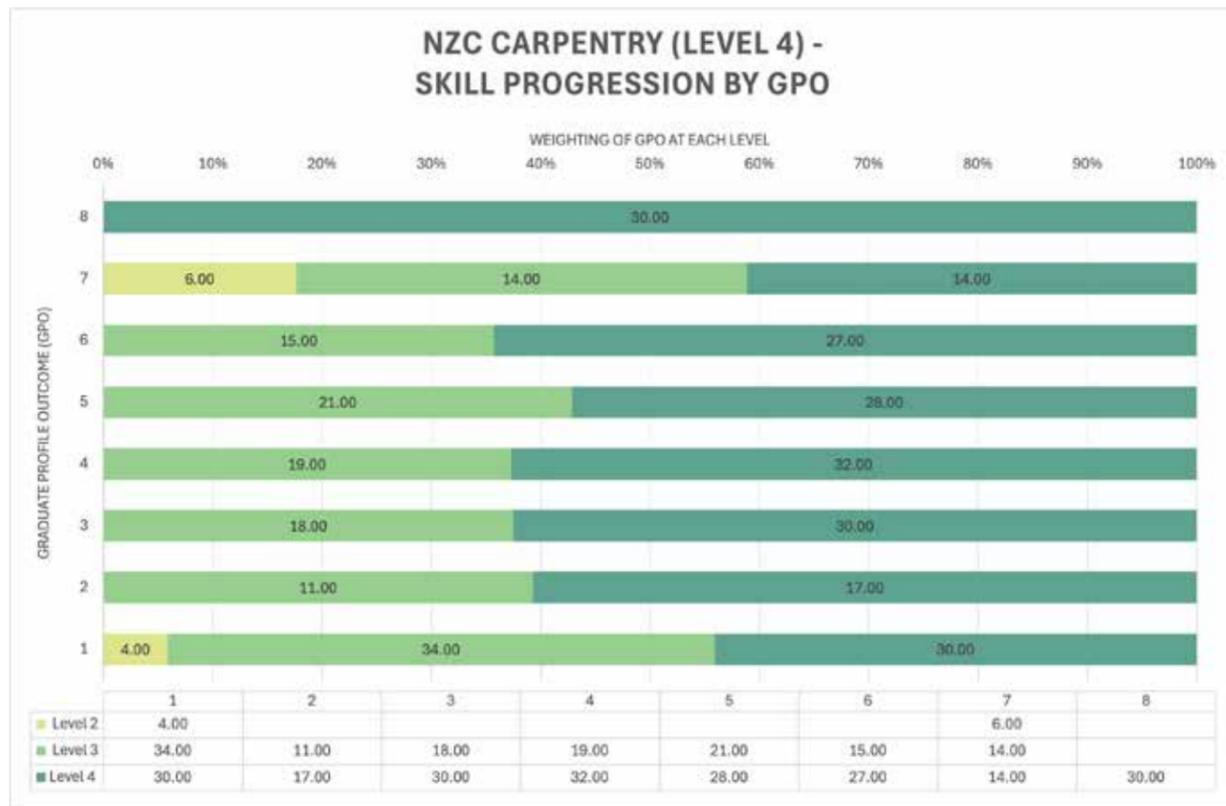
The development process was structured to include multiple channels and targeted consultation:

- Oversight was provided by a Steering Group which maintained visibility across the full suite of deliverables for the Building Pathways Project from July to December 2025.
- Technical input was provided by four dedicated Working Groups, each responsible for developing and refining skill standards at their respective level.
- Sector engagement occurred throughout the duration of the development process using newsletters, emails, surveys, and targeted consultation events to provide updates on progress, gather feedback and validate new and revised qualifications.

Note that this development process project structure does not include BCATS (which has its own development process) and or Core Construction skill standards as this work was undertaken in 2024.

The process ensured that the new building qualification pathway reflects the voices of those who use it most, industry, providers, and learners, while equipping graduates for the future.

APPENDIX 3: NZC CARPENTRY (LEVEL 4) - SKILL STANDARD PROGRESSION BY GPO



| GPO | Outcome | Topic |
|-----|---|------------------------|
| 1 | Apply a broad practical working knowledge of the fundamentals required in the Carpentry trade including tools and equipment, materials, building regulations and compliance requirements, drawings and specifications, building types, methods of construction, building science, building mathematics, and communication. | Fundamentals |
| 2 | Plan and carry out all aspects of establishing and maintaining construction sites including preparatory demolition and set out for buildings. | Set-out |
| 3 | Plan and carry out all aspects of the construction of framed and solid foundations and retaining walls. | Foundations |
| 4 | Plan and carry out all aspects of construction to form the structural elements of buildings. | Frames |
| 5 | Plan and carry out all aspects of construction of exterior wall cladding and joinery to achieve weather proofing requirements for buildings. Apply knowledge of roof cladding methodology and weather proofing compliance requirements for buildings. | Exterior |
| 6 | Plan and carry out all aspects of insulation, linings, finishing trim, joinery, hardware and sound control systems | Interior |
| 7 | Self-manage on-going learning and support the learning of others with a responsibility to maintain the professional standards of the construction industry. Operate competently and unsupervised to the required safety, technical, quality and productivity standards expected in a commercially viable construction environment. | Professional standards |
| 8 | Carry out all aspects of metal roof cladding installation to achieve weather proofing compliance requirements for buildings. | Roof |

APPENDIX 4: SKILL STANDARDS AS BUILDING BLOCKS

Shared skill standards between NZC Carpentry (Level 4) and NZC Construction Trades Skill (Carpentry optional strand) (Level 3)

| Level 2 | Level 3 | Level 4 |
|---------------------|---|---|
| | | 40308 40791 40799 |
| | | 40292 40787 40815 40210 40309 40792 40800 40812 |
| | SS Digital L3 SS Business | 40302 40311 40816 40293 40707 40793 40802 40814 |
| 40289 | 40294 40301 40304 40821 | 40303 40781 40818 40296 40782 40794 40807 40817 |
| 40294 | 40291 40295 40287 40803 | 40307 40788 40789 40298 40785 40795 40809 40820 |
| 40289 | 40299 40297 40288 40813 | 40784 40806 40804 40305 40786 40796 40810 SS Digital L4 |
| 40294 | 40310 40300 40290 40819 | 40783 40808 40805 40306 40790 40798 40811 Work SS Zone |
| SS Hazard awareness | 40286 SS Monitor SS Project SS Site awareness | |

 NZC Carpentry (Level 4) with Roofing Optional Strand (Level 3) [2738-3]
 NZC Construction Trades Skills (Level 3) with Carpentry Optional Strand [2834-3]
 Shared skill standards between 2738 and 2834

With skill standards for Basic Construction Skills (Micro-credential) [4571-2]

| Level 2 | Level 3 | Level 4 |
|---------|---------------------------------|---|
| | | 40308 40791 40799 |
| | | 40292 40787 40815 40210 40309 40792 40800 40812 |
| | 40819 SS Business 40813 | 40302 40311 40816 40293 40707 40793 40802 40814 |
| | 40310 40301 40304 40821 | 40303 40781 40818 40296 40782 40794 40807 40817 |
| | 40294 40300 40288 40803 | 40307 40788 40789 40298 40785 40795 40809 40820 |
| 40289 | 40291 40295 40287 | 40784 40806 40804 40305 40786 40796 40810 SS Digital L4 |
| 40294 | 40299 40297 40290 SS Digital L3 | 40783 40808 40805 40306 40790 40798 40811 Work SS Zone |

 NZC Carpentry (Level 4) with Roofing Optional Strand (Level 3) [2738-3]
 NZC Construction Trades Skills (Level 3) [2834-3] (compulsory ss for all contexts)
 Shared skill standards between 2738 and 2834

With skill standards for Demolition and Renovation Skills (Micro-credential) [4572-2]

| Level 2 | Level 3 | Level 4 |
|---------------------|---|---|
| | | 40308 40791 40799 |
| | | 40292 40787 40815 40210 40309 40792 40800 40812 |
| | SS Digital L3 SS Business | 40302 40311 40816 40293 40707 40793 40802 40814 |
| | 40294 40301 40304 40821 | 40303 40781 40818 40296 40782 40794 40807 40817 |
| | 40291 40295 40287 40803 | 40307 40788 40789 40298 40785 40795 40809 40820 |
| 40289 | 40299 40297 40288 40813 | 40784 40806 40804 40305 40786 40796 40810 SS Digital L4 |
| 40294 | 40310 40300 40290 40819 | 40783 40808 40805 40306 40790 40798 40811 Work SS Zone |
| SS Hazard awareness | 40286 SS Monitor SS Project SS Site awareness | |

 NZC Carpentry (Level 4) with Roofing Optional Strand (Level 3) [2738-3]
 NZC Construction Trades Skills (Level 3) with Carpentry Optional Strand [2834-3]
 Shared skill standards between 2738 and 2834
 Basic Construction Skills (Micro-credential) [4571-2]

With skill standards for Introductory Exterior Envelope Skills (Micro-credential) [4573-2]

| Level 2 | Level 3 | Level 4 |
|---------------------|---|---|
| | | 40308 40791 40799 |
| | | 40292 40787 40815 40210 40309 40792 40800 40812 |
| | SS Digital L3 SS Business | 40302 40311 40816 40293 40707 40793 40802 40814 |
| | 40294 40301 40304 40821 | 40303 40781 40818 40296 40782 40794 40807 40817 |
| | 40291 40295 40287 40803 | 40307 40788 40789 40298 40785 40795 40809 40820 |
| 40289 | 40299 40297 40288 40813 | 40784 40806 40804 40305 40786 40796 40810 SS Digital L4 |
| 40294 | 40310 40300 40290 40819 | 40783 40808 40805 40306 40790 40798 40811 Work SS Zone |
| SS Hazard awareness | 40286 SS Monitor SS Project SS Site awareness | |

 NZC Carpentry (Level 4) with Roofing Optional Strand (Level 3) [2738-3]
 NZC Construction Trades Skills (Level 3) with Carpentry Optional Strand [2834-3]
 Shared skill standards between 2738 and 2834
 Demolition and Renovation Skills (Micro-credential) [4572-2]

With skill standards for Introductory Interior Linings and Joinery Skills (Micro-credential) [4574-2]

| Level 2 | | Level 3 | | | | Level 4 | | | | | | | |
|---------------------|-------|---------------|-------------|-------------------|-------|---------|-------|-------|-------|-------|-------|-------|---------------|
| | | | | | 40292 | 40787 | 40815 | 40210 | 40308 | 40791 | 40799 | | |
| | | | | | 40302 | 40311 | 40816 | 40293 | 40309 | 40792 | 40800 | 40812 | |
| | | SS Digital L3 | SS Business | | 40303 | 40781 | 40818 | 40296 | 40707 | 40793 | 40802 | 40814 | |
| | | 40294 | 40301 | 40304 | 40821 | 40303 | 40781 | 40818 | 40296 | 40782 | 40794 | 40807 | 40817 |
| | | 40291 | 40295 | 40287 | 40803 | 40307 | 40788 | 40789 | 40298 | 40785 | 40795 | 40809 | 40820 |
| 40289 | | 40299 | 40297 | 40288 | 40813 | 40784 | 40806 | 40804 | 40305 | 40786 | 40796 | 40810 | SS Digital L4 |
| 40294 | | 40310 | 40300 | 40290 | 40819 | 40783 | 40808 | 40805 | 40306 | 40790 | 40798 | 40811 | Work SS Zone |
| SS Hazard awareness | 40286 | SS Monitor | SS Project | SS Site awareness | | | | | | | | | |

- NZC Carpentry (Level 4) with Roofing Optional Strand (Level 3) [2738-3]
- NZC Construction Trades Skills (Level 3) with Carpentry Optional Strand [2834-3]
- Shared skill standards between 2738 and 2834
- Introductory Exterior Envelope Skills (Micro-credential) [4573-2]

Shared skill standards between NZC in Concrete Construction (Building and Infrastructure) (Level 4) [4188-2] and NZC in Concrete Construction Skills (Level 3) [4189-2]

| Level 2 | | Level 3 | | | | Level 4 | | | | | | | |
|---------------------|-------|---------------|-------------|-------------------|-------|---------|-------|-------|-------|-------|-------|-------|---------------|
| | | | | | 40292 | 40787 | 40815 | 40210 | 40308 | 40791 | 40799 | | |
| | | | | | 40302 | 40311 | 40816 | 40293 | 40309 | 40792 | 40800 | 40812 | |
| | | SS Digital L3 | SS Business | | 40303 | 40781 | 40818 | 40296 | 40707 | 40793 | 40802 | 40814 | |
| | | 40294 | 40301 | 40304 | 40821 | 40303 | 40781 | 40818 | 40296 | 40782 | 40794 | 40807 | 40817 |
| | | 40291 | 40295 | 40287 | 40803 | 40307 | 40788 | 40789 | 40298 | 40785 | 40795 | 40809 | 40820 |
| 40289 | | 40299 | 40297 | 40288 | 40813 | 40784 | 40806 | 40804 | 40305 | 40786 | 40796 | 40810 | SS Digital L4 |
| 40294 | | 40310 | 40300 | 40290 | 40819 | 40783 | 40808 | 40805 | 40306 | 40790 | 40798 | 40811 | Work SS Zone |
| SS Hazard awareness | 40286 | SS Monitor | SS Project | SS Site awareness | | | | | | | | | |

- NZC Carpentry (Level 4) with Roofing Optional Strand (Level 3) [2738-3]
- NZC Construction Trades Skills (Level 3) with Carpentry Optional Strand [2834-3]
- Shared skill standards between 2738 and 2834
- On-site Assembly Skills (Micro-credential) [4575-2]

With skill standards for Introductory Interior Linings and Joinery Skills (Micro-credential) [4574-2]

| Level 2 | | Level 3 | | | | Level 4 | | | | | | | |
|---------------------|-------|---------------|-------------|-------------------|-------|---------|-------|-------|-------|-------|-------|-------|---------------|
| | | | | | 40292 | 40787 | 40815 | 40210 | 40308 | 40791 | 40799 | | |
| | | | | | 40302 | 40311 | 40816 | 40293 | 40309 | 40792 | 40800 | 40812 | |
| | | SS Digital L3 | SS Business | | 40303 | 40781 | 40818 | 40296 | 40707 | 40793 | 40802 | 40814 | |
| | | 40294 | 40301 | 40304 | 40821 | 40303 | 40781 | 40818 | 40296 | 40782 | 40794 | 40807 | 40817 |
| | | 40291 | 40295 | 40287 | 40803 | 40307 | 40788 | 40789 | 40298 | 40785 | 40795 | 40809 | 40820 |
| 40289 | | 40299 | 40297 | 40288 | 40813 | 40784 | 40806 | 40804 | 40305 | 40786 | 40796 | 40810 | SS Digital L4 |
| 40294 | | 40310 | 40300 | 40290 | 40819 | 40783 | 40808 | 40805 | 40306 | 40790 | 40798 | 40811 | Work SS Zone |
| SS Hazard awareness | 40286 | SS Monitor | SS Project | SS Site awareness | | | | | | | | | |

- NZC Carpentry (Level 4) with Roofing Optional Strand (Level 3) [2738-3]
- NZC Construction Trades Skills (Level 3) with Carpentry Optional Strand [2834-3]
- Shared skill standards between 2738 and 2834
- Introductory Interior Linings and Joinery Skills (Micro-credential) [4574-2]

Visual diagram of the relationship of standards across credentials Skill standards.xlsx

| Level 2 | | Level 3 | | | | Level 4 | | | | | |
|---------|--|---------|----------------|------------------|-------|--------------|------------|--|---------|---------------------|------------------|
| | | | | | | | | | SS Base | SS Place & finish 2 | |
| | | | | | | | | | 40298 | SS Formwork 2 | SS Post-tension |
| | | | | | | | | | 40305 | SS Operate 3 | SS Precast |
| | | | | | | | | | 40306 | 40308 | SS Reinforcing 3 |
| 40310 | | 40300 | SS Formwork 1 | SS Reinforcing 2 | 40296 | SS Work Zone | SS Set out | | | | |
| 40294 | | 40287 | 40304 | SS Operate 1 | | | | | | | |
| 40299 | | 40290 | SS Finishing | SS Operate 2 | | | | | | | |
| 40289 | | 40295 | SS Manufacture | SS Saw & drill | | | | | | | |
| 40291 | | 40303 | SS Post-prod | | | | | | | | |

- NZC in Concrete Construction (Building and Infrastructure) (Level 4) [4188-2]
- NZC in Concrete Construction Skills (Level 3) [4189-2]
- Shared skill standards between

APPENDIX 5: SUMMARY OF CHANGES

The following documents provide a summary of proposed changes for the reviewed qualifications and micro-credentials.

[New Zealand Certificate in Carpentry \(Level 4\)](#)

[New Zealand Certificate in Construction Trade Skills \(Level 3\)](#)

[Construction Trades Micro-credentials](#)

[New Zealand Certificate in Concrete Construction \(Commercial and Civil Infrastructure\) \(Level 4\)](#)

[New Zealand Certificate in Concrete Construction Skills \(Level 3\)](#)

REFERENCES AND RESOURCES

Bradbrook, T., Luke, S., & Smiler, J. I. (2023). What the people said, what does Level 4 Carpentry education and qualification look like for Māori? He Ruku Hohonu. Te Whanganui-a-Tara Wellington. Aotearoa New Zealand. Te Pūkenga. Te Kōrari Rangahau. Available from [He Ruku Hohonu Reduce qualifying time for Māori Level 4 Carpentry apprentices: Full report - Manukau Institute of Technology](#)

Kalan, J. (2024). Beyond tuakana teina | Exploring Māori vocational pathways. Wellington: Ako Aotearoa. Available from [Beyond tuakana teina | Exploring Māori vocational pathways » Ako Aotearoa](#)

Scarlatti. (2022). Where's the Front Door? An investigation of the workforce entry points into the construction and infrastructure sectors. ConCOVE Tūhura. Available from [ConCOVE research reports - Manukau Institute of Technology](#)

Tertiary Education Commission (TEC). (n.d). DPX Ngā kete. Available from <https://www.tec.govt.nz/>

Vaughan, K., & Kear, A. (2024). Good practice in the development and implementation of skill standards-based qualifications. ConCOVE Tūhura. Available from [ConCOVE research reports - Manukau Institute of Technology](#)

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council.

– (2023). Advice to TEC for training investment in construction and infrastructure in 2025. Available from <https://www.waihangaararau.nz/wp-content/uploads/2024/02/Waihanga-Ara-Rau-Advice-to-TEC-for-Training-Investment-in-CI-in-2025.pdf>

– (2024). Kaitaka Paepaeroa – Māori Workforce Development Plan for Construction and Infrastructure. Available from <https://www.workforce.nz/maori-wdp>

– (2004). ON SITE CONSTRUCTION. Advice to the Tertiary Education Commission for training investment in 2026. Available from [Onsite-Construction-TEC-Investment-Advice-2026-Waihanga-Ara-Rau.pdf](#)

– (2024). Unleashing Pacific talent - Construction and Infrastructure Workforce Development Plan for Pacific Peoples. Available from <https://www.workforce.nz/pacific-wdp>

– (n.d.). Workforce Information Platform. Available from <https://wip.org.nz/>

– (n.d.). Workforce skills, data and insights. Available from www.workforce.nz



WAIHANGA ARA RAU
Construction and
Infrastructure
Workforce Development Council

WAIHANGAARARAU.NZ