#### FIELD ENGINEERING AND TECHNOLOGY

Review of Civil Construction Supervision, Civil Plant Management, Civil Works and Services, Pavement Surfacing, and Rural Contracting qualifications

National Certificate in Civil Construction Supervision (Level 4) [Ref: 1324]

National Certificate in Civil Infrastructure (General Introductory Skills) [Ref: 1125]

National Certificate in Civil Plant Management [Ref: 0253]

National Certificate in General Contracting (Training and Assessment) [Ref: 1061] National Certificate in Pavement Surfacing (Application) (Level 2) with strands in Asphalt, and Chipseal [Ref: 0465]

National Certificate in Pavement Surfacing (Multiple Sites Supervision) (Level 5) with strands in Asphalt, and Chipseal, and with an optional strand in STMS Level 2 and 3 Roads [Ref: 1426]

National Certificate in Pavement Surfacing (Single Site Supervision) (Level 4) with strands in Asphalt, and Chipseal [Ref: 1430]

National Certificate in Rural Contracting (Introductory Skills) [Ref: 0228]

National Certificate in Rural Contracting (Management) with strands in Agrichemical Application, and Agricultural Contracting [Ref: 1003]

InfraTrain New Zealand has completed the review of the qualifications listed above.

## Replacement qualifications

National Certificate in Infrastructure Works (Level 2) with optional strands in Earthworks, Pavement Surfacing, Roads, Rural Contracting, and Utilities [Ref: 1660] National Certificate in Infrastructure Works Supervision with optional strands in Asphalt Surfacing, Chipseal Surfacing, Civil Works and Utilities, Road Works, Water, and Wastewater [Ref: 1658]

National Certificate in Infrastructure Works Supervision (Level 5) with optional strands in Civil Plant Management, Civil Works, Pavement Surfacing, Roadmarking, Road Works, and Rural Contracting [Ref: 1659]

### Date new versions published

May 2011

The next qualification review is planned to take place during 2016.

#### **Summary of review and consultation process**

This review provided a chance for InfraTrain to address the suitability of its entry-level and supervision qualifications.

To ensure that all sectors of the industry participated in the review, InfraTrain assembled a Joint Industry Advisory Group (JIAG) comprising representatives from stakeholders – including large, medium and small companies in various sectors of the industry – trainers, assessors, and training advisors.

The JIAG met in August 2009 to establish the strategic outcomes required from the review and a number of writing groups were formed to address them. The writing groups met in late-August 2009 to clarify the target groups for the qualifications, agree on a model for the new replacement qualifications, develop a job skills analysis methodology, and determine how sectors were to be represented in the qualifications. In September and October 2009

there were further meetings to agree on and define the purpose, and titles, and outline content of new qualifications to meet these strategic outcomes.

An analysis of infrastructure works qualifications confirmed that there was substantial overlap between the National Certificate in Civil Infrastructure (General Introductory Skills) (Level 2) [Ref: 1125] (GIS) and a number of other qualifications in infrastructure works.

In some cases, depending on the unit standards selected, candidates would require only a small number of additional credits to achieve a different qualification. Examples of these qualifications were the National Certificate in Pavement Surfacing (Application) (Level 2) [Ref: 0465], and National Certificate in Rural Contracting (Introductory Skills) (Level 1) [Ref: 0228] which are now subsumed by the revised National Certificate in Infrastructure Works (Level 2) with optional strands in Earthworks, Pavement Surfacing, Roads, Rural Contracting, and Utilities [Ref: 1660].

The GIS also includes a wide range of unit standards in domains such as horticulture, mechanical engineering, motor industry, painting, and construction trades, which are areas that are outside of the SSB's coverage and that are difficult to support.

Feedback from industry confirmed that, although the GIS is widely used, it has not met industry requirements as an introductory/entry level qualification. Candidates were able to choose unit standards from domains without level restriction, in some cases selecting level 4 or 5 unit standards. Nor did it provide a clear or appropriate pathway to the technical qualifications at Levels 3 and 4.

Further feedback indicated that the National Certificate in Civil Construction Supervision (Level 4) [Ref: 1324] and the National Certificate in Rural Contracting (Management) with strands in Agrichemical Application, and Agricultural Contracting [Ref: 1003] are restrictive for some candidates and do not meet industry requirements. Research into the qualifications available for supervisors and managers in the industry determined that the National Certificate in Civil Construction Supervision (Level 4) [Ref: 1324] does not reflect the two distinct levels of supervisory authority and responsibility within the industry. The appropriateness of the National Certificate in Civil Plant Management [Ref: 0253] and the National Certificate in General Contracting (Training and Assessment) [Ref: 1061] as stand-alone qualifications was also questioned.

This confirmed that, on the whole, current national qualifications for the infrastructure works industry do not provide clear career pathways from entry to management or from one part of the industry to another. Industry assisted the SSB in redefining the career pathways and this has led to a change of classification names (subfields and domains).

The major changes to subfield and domain names have affected most of the infrastructure works industry qualifications and all of the unit standards. InfraTrain is managing the transfer of unit standards to new subfields and domains in stages over the next few years as and when the standards are required for qualification reviews such as this one.

Draft qualifications were developed and distributed widely for feedback and approved by the JIAG in December 2009. In February and March 2010 the writing groups met to review the unit standards proposed for the Level 2, Level 4 and Level 5 qualifications. The drafts were distributed widely for comment from March to July 2010, and the unit standard classifications were updated when the new classifications were published in July 2010.

Subsequent feedback from a concurrent joint review with AgITO (Water Industry Training) of the National Certificate in Civil Construction Works (Infrastructure Pipelaying) with an optional strand in Gas Distribution Pipelaying [Ref 1282] and the National Certificate in Water Reticulation (Supervisor) (Level 4) with strands in Water, and Wastewater [Ref: 1259] was incorporated in this review. Feedback from the review of the National Certificate in Civil Works and Services (Road Opening - Site Co-ordination) [Ref: 1001] was also incorporated in this review. The subsequent amendments were confirmed by the JIAG In February 2011.

#### Main changes resulting from the review

- The National Certificate in Civil Infrastructure (General Introductory Skills) (Level 2)
   [Ref: 1125], the National Certificate in Pavement Surfacing (Application) (Level 2)
   [Ref: 0465], and the National Certificate in Rural Contracting (Introductory Skills)
   (Level 1) [Ref: 0228] were replaced by the National Certificate in Infrastructure Works
   (Level 2) with optional strands in Earthworks, Pavement Surfacing, Roads, Rural
   Contracting, and Utilities [Ref: 1660].
- The National Certificate in Civil Construction Supervision (Level 4) [Ref: 1324], and the National Certificate in Pavement Surfacing (Single Site Supervision) (Level 4) with strands in Asphalt and Chipseal [Ref: 1430] were replaced by the National Certificate in Infrastructure Works Supervision with optional strands in Asphalt Surfacing, Chipseal Surfacing, Civil Works and Utilities, Road Works, Water, and Wastewater [Ref: 1658]
- The National Certificate in Civil Plant Management [Ref: 0253], the National Certificate in Rural Contracting (Management) with strands in Agrichemical Application, and Agricultural Contracting [Ref: 1003], the National Certificate in Pavement Surfacing (Multiple Sites Supervision) (Level 5) with strands in Asphalt and Chipseal, and with an optional strand in STMS Level 2 and 3 Roads [Ref: 1426], and the National Certificate in General Contracting (Training and Assessment) [Ref: 1061] were replaced by the National Certificate in Infrastructure Works Supervision (Level 5) with optional strands in Civil Plant Management, Civil Works, Pavement Surfacing, Roadmarking, Road Works, and Rural Contracting [Ref: 1659].
- Overall the new replacement qualifications have been configured in to one compulsory section, one elective section and optional strands.

National Certificate in Rural Contracting (Introductory Skills) [Ref: 0228] National Certificate in Pavement Surfacing (Application) (Level 2) with strands in Asphalt, and Chipseal [Ref: 0465]

National Certificate in Civil Infrastructure (General Introductory Skills) [Ref: 1125]

National Certificate in Infrastructure Works (Level 2) with optional strands in

Earthworks, Pavement Surfacing, Roads, Rural Contracting, and Utilities [Ref: 1660]

Review category	C	See Key to Qualification Review Categories at the end of report	
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It is recommended that those candidates transferring from the replaced qualifications choose the following optional strands contained in this qualification:

Transferring from	Recommended Optional strand
National Certificate in Rural Contracting (Introductory Skills) [Ref: 0228].	Rural Contracting
National Certificate in Pavement Surfacing (Application) (Level 2) with strands in Asphalt, and Chipseal [Ref: 0465]	Pavement Surfacing

This qualification contains standards that replace an earlier standard. For the purposes of this qualification, people who have gained credit for the expiring standards are exempt from the requirement to gain credit for the replacement standards – see table below.

Credit for	Exempt from
6457	26717, 26718

National Certificate in Civil Construction Supervision (Level 4) [Ref: 1324]

National Certificate in Pavement Surfacing (Single Site Supervision) (Level 4) with strands in Asphalt, and Chipseal [Ref: 1430]

National Certificate in Infrastructure Works Supervision with optional strands in Asphalt Surfacing, Chipseal Surfacing, Civil Works and Utilities, Road Works, Water, and Wastewater [Ref: 1658]

Review category C		See Key to Qualification Review Categories at the end of report
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It is recommended that those candidates transferring from the replaced qualifications choose the following optional strands contained in this qualification:

Transferring from	Recommended Optional strand
National Certificate in Pavement Surfacing	Either Asphalt Surfacing or Chipseal
(Single Site Supervision) (Level 4) with strands in	Surfacing
Asphalt, and Chipseal [Ref: 1430]	

National Certificate in Civil Plant Management [Ref: 0253]

National Certificate in Rural Contracting (Management) with strands in Agrichemical Application, and Agricultural Contracting [Ref: 1003]

National Certificate in General Contracting (Training and Assessment) [Ref: 1061] National Certificate in Pavement Surfacing (Multiple Sites Supervision) (Level 5) with strands in Asphalt, and Chipseal, and with an optional strand in STMS Level 2 and 3 Roads [Ref: 1426]

National Certificate in Infrastructure Works Supervision (Level 5) with optional strands in Civil Plant Management, Civil Works, Pavement Surfacing, Roadmarking, Road Works, and Rural Contracting [Ref: 1659]

Review category	С	See Key to Qualification Review Categories at the end of report
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It is recommended that those candidates transferring from the replaced qualifications choose the following optional strands contained in this qualification:

Transferring from	Recommended Optional strand
National Certificate in Civil Plant Management [Ref: 0253]	Civil Plant Management
National Certificate in Rural Contracting (Management) with strands in Agrichemical Application, and Agricultural Contracting [Ref: 1003]	Rural Contracting
National Certificate in Pavement Surfacing (Multiple Sites Supervision) (Level 5) with strands in Asphalt, and Chipseal, and with an optional strand in STMS Level 2 and 3 Roads [Ref: 1426]	Pavement Surfacing

The last date for entry into training programmes or a course for the replaced qualifications is 31 December 2011. The last date of assessment for Ref: 1324 is December 2015. The last date for assessment for Refs 0228, 0253, 0465, 1125, 1003, 1426, 1430, and 1061 is 31 December 2013.

People currently working towards achievement of the replaced qualifications may either complete the requirements for those qualifications or transfer their results to this qualification. However, there are substantial differences between the new and replaced qualifications, and it is recommended that candidates complete the qualification in which they are enrolled. Candidates who do wish to transfer to this qualification should choose the standards and strands that best fit their training requirements. For assistance please contact InfraTrain New Zealand Ltd at the contact details given below. Transferring candidates will need to gain credit for the additional standards required.

Any person who feels disadvantaged by these transition arrangements should contact InfraTrain New Zealand at the address below.

InfraTrain New Zealand Ltd PO Box 2759 Wellington 6140

Telephone 0800 486 626

Email <u>askus@infratrain.co.nz</u>
Website <u>www.infratrain.co.nz</u>

# **Key to Qualification Review Categories**

Category A	Changes are made to SSB name, contact details or purpose statement
The qualification is published as a	No change is made to title, rules or components of the qualification
new version with the same NQF ID	No transition arrangements are required
Category B	Changes are made to title, rules or components
The qualification is published as a	The new version of the qualification recognises a similar skill set to that
new version with the same NQF ID	recognised by the previous version
	The SSB is confident that people awarded the new or previous version are
	comparable in terms of competence
	Transition arrangements are required if candidates must gain additional/different
	credits for the new version
Category C	Significant changes are made to the qualification in terms of components,
A new (replacement) qualification is	structure, type or level
published with new NQF ID	The SSB views people with the replacement qualification as being significantly
	different in terms of competence from those with the replaced qualification
	Transition arrangements are required
	Transition may be limited to phase-out dates
Category D	Qualification is no longer required by industry
Qualification will expire.	The qualification is designated as expiring and a last date for meeting the
There is no replacement	qualification requirements is set
qualification	