Field Planning and Construction

Review of *Core Construction* and *Core Plumbing, Gasfitting and Drainlaying* and *Drainlaying* unit standards

Subfield	Domain	ID
Construction Trades	Core Construction	2138
Plumbing, Gasfitting and	Core Plumbing, Gasfitting	1099, 1122, 21879, 21881-
Drainlaying	and Drainlaying	21883, 25425, 27333, 27346
	Drainlaying	1100-1102, 1104, 1106-1109,
		1112, 1114-1118, 1120, 1121,
		21904, 23846

The Plumbing, Gasfitting and Drainlaying Industry Training Organisation Ltd has completed the review of the unit standards listed above.

Date new versions published

March 2011

Planned review date

31 December 2017

Summary

Unit standards were reviewed in parallel with the development of new standards for a new qualification that is aligned to changes to statutory specifications for drainlaying. The regulatory body for drainlaying endorsed the creation of a qualifications pathway leading to eligibility for licensing as a certifying drainlayer. Unit standards in the National Certificate in Drainlaying [Ref: 0077] aligned with the prior licensing class, were reviewed ahead of their planned review dates to check level appropriateness for that licensing class. Continued fitness for purpose checks resulted in two standards being expired and replaced, and adjustment to some ranges as technologies have changed.

The industry membership body, the regulator and the SSB's national industry advisory body approved the structure of the revised qualification and new unit standard outcomes. Ten organisations with consent to assess met with industry moderators and affected SSBs to comment on proposed changes to the registered standards and new standards. An onsite feedback session was held with Canterbury assessors. The standards were then progressively checked and refined as a result of these feedback sessions and subsequent emailed feedback.

Moderation feedback and direct online feedback from assessors informed the changes in range statements and the clarification of the scope and depth of some standards.

Credit values were adjusted to reflect changes to outcomes and more realistic learning times. Changes to titles, purposes statements, explanatory notes and some evidence requirements were made at industry request, or to reflect changes to statutory specifications for drainlaying.

New unit standards were developed as a result of the review to cover identified skill gaps.

Main changes

- Unit standards 1099, 1100, 1102, 1104, 1106, 1108, 1109, 1112, 1115, 1116, 1118, 21882, 21904, and 21846 had changes made to the purpose statements to reflect their outcomes as reviewed.
- Unit standards 1100, 1106, 1112, 1114, 1115, 1117, 21879, 21882, 21904 and 23846 had decreases in credits.
- Unit standards 1112, 1118, and 21904 had changes of title to pluralise for consistency with other unit standards.
- Unit standards 1100, 1115, 21879, 21882 and 23846 had changes of title to reflect industry terminology or alterations to outcomes.
- Five new unit standards were created to better align with Plumbers, Gasfitters and Drainlayers Board competencies for licensed drainlayers and to distinguish between those competencies and those of the new drainlaying licensing class. Two of the new standards (27332 and 27334), required for eligibility for licensing, were created by absorbing the knowledge outcome of a number of reviewed unit standards.
- Unit standards 1101 and 1107 will expire and will be replaced by new unit standards (27336 and 27341).
- Entry information related to the Plumbers, Gasfitters and Drainlayers Board statutory role has been updated at their request.
- Explanatory notes have been modified to update legislation and compliance documents.

Category C unit standards will expire at the end of December 2014

Current consent for			Consent extended to			
Nature of	Classification or ID	Level	_evel Nature of Classification or I			
consent			consent			
Domain	Core Plumbing, Gasfitting and Drainlaying	2	Standard	27333	3	
Domain	Drainlaying	3	Standard	27336	4	
Domain	Drainlaying	4	Standard	27341	5	
Standard	1107	4	Standard	27341	5	

Impact on existing organisations with consent to assess

Impact on Consent and Moderation Requirements (CMR)

The CMR has been updated to include the impact on moderation requirements of new unit standards 27332 and 27334.

Impact on registered qualifications

Key to type of impact				
Affected The qualification lists a reviewed classification (domain or subfield) in an elective set				
The qualification lists a standard that has changes to level or credits				
	The qualification lists a C or D category standard			
Not materially affected	The qualification lists a standard that has a new title			
	The qualification lists a standard that has a new classification			

The following Plumbing, Gasfitting and Drainlaying Industry Training Organisation Ltd qualifications are impacted by the outcome of this review and will be updated when they are reviewed in 2012 (plumbing and gasfitting) under the mandatory review of

qualifications. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
0077	National Certificate in Drainlaying	1100, 1101, 1106 ,
		1107, 1112, 1114, 1115, 1117, 1118,
		21879, 21882,
		21904, 23846
0201	National Certificate in Gasfitting	21879, 21882
0202	National Certificate in Plumbing	21879, 21882

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Ke	ey to review category
Α	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
В	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
С	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Planning and Construction > Construction Trades > Core Construction

ID	Title	Level	Credit	Review Category
2138	Demonstrate knowledge of asbestos and safety procedures	2	1	В

Planning and Construction > Plumbing, Gasfitting and Drainlaying > Core Plumbing, Gasfitting, and Drainlaying

ID	Title	Level	Credit	Review Category
1099	Excavate and trench for plumbing, gasfitting, or drainlaying	3	9	В
1122	Establish line, level, and gradient for plumbing or drainlaying	3	4	В
21879	Determine job requirements and describe job pricing factors for plumbing, gasfitting, or drainlaying	3	3	В
	Determine job requirements for plumbing, gasfitting, or drainlaying		2	
21881	Describe ethical and legal considerations for plumbing, gasfitting, or drainlaying services	2	2	В
21882	Interpret drawings and specifications and draw drawings for plumbing, gasfitting, or drainlaying Interpret job documentation, draw as-built drawings and record variations to plumbing, gasfitting or drainlaying jobs	4	6 5	В
21883	Demonstrate knowledge of hazards and precautions for working with gas in plumbing, gasfitting, or drainlaying	2	3	В

ID	Title	Level	Credit	Review Category
25425	Apply mathematics in a plumbing, gasfitting, or drainlaying situation	2	3	В
27333	Demonstrate knowledge of conservation and environment practices relevant to a licensed plumber, gasfitter or drainlayer	3	2	New
27346	Prepare schedules of quantities and cost jobs for plumbing, gas or drainage systems	5	10	New

Planning and Construction > Plumbing, Gasfitting and Drainlaying > Drainlaying

ID	Title	Level	Credit	Review Category
1100	Install storm water intake and outfall structures Install surface water intake and outfall	4	3	В
4404	structures		2	
1101 27336	Install domestic waste interceptor traps Demonstrate knowledge of sewer gas	3 4	3 2	С
	interceptor traps			
1102	Install trade waste interceptor traps	3	4	В
1104	Install sub-soil drainage	3	4	В
1106	Perform drain maintenance	3	6 5	В
1107	Demonstrate knowledge of retention and detention tank installation, commissioning, and	4	4	С
27341	maintenance Demonstrate knowledge of retention and detention systems	5	4	
1108	Install and maintain sumps	3	4	В
1109	Install surface water collection systems, and demonstrate knowledge of their maintenance	3	4	В
1112	Install and commission a septic tank, and explain maintenance of septic tanks Install and commission septic tanks, and explain maintenance of septic tanks	4	8 6	В
1114	Install drains	4	10 8	В
1115	Demonstrate knowledge of access chambers and their installation Demonstrate knowledge of drain access	4	4 2	В
	points			
1116	Install wet and dry inspection chambers	3	4	В
1117	Install thrust, anti-scour, and anchor blocks Install thrust/anchor and anti-scour blocks	3	4 2	В
1118	Install a sewage pump station Install sewage pump stations	4	4	В
1120	Identify and describe hand tools and checking equipment for drainlaying	2	2	В
1121	Identify and describe trade equipment and power tools used for drainlaying	2	2	В

ID	Title	Level	Credit	Review Category
21904	Install and maintain pumps, filters, and controls for a non-potable water supply and disposal system	4	6	В
	Install and maintain pumps, filters, and controls for non-potable water supply and disposal systems		4	
23846	Install an effluent distribution chamber and disposal field, and demonstrate knowledge of their maintenance	3	5	В
	Install, commission and maintain effluent disposal systems		4	
27332	Apply legislation and compliance documents relevant to a licensed drainlayer	4	8	New
27334	Demonstrate knowledge of aspects of theory related to drainage systems	3	8	New
27335	Install, commission and maintain proprietary on-site drainage disposal systems	4	6	New
27337	Design excavations and trenches for drainlaying	5	12	New
27338	Design drainage systems discharging to sewers, roads or water courses	5	15	New
27339	Design on-site waste water treatment and surface water disposal systems	5	20	New
27340	Design on-site industrial liquid waste drainage systems	5	6	New
27342	Demonstrate knowledge of pumps and alternative systems for drainage control and discharge	5	5	New
27343	Interpret and apply legislation and compliance documents relevant to a certifying drainlayer	5	6	New
27344	Apply regulatory requirements related to conservation and environmental practices in the design of drainage systems	5	4	New
27345	Manage installation effects of plumbing, gas or drainage systems on structures and other building services	5	4	New