

<b>Title</b>	<b>Install and maintain stormwater handling systems</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>4</b>

<b>Purpose</b>	<p>This unit standard is for people who work in the drainlaying industry.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>- determine position for the installation of stormwater handling systems;</li> <li>- select, install, and complete surface water handling systems; and</li> <li>- maintain stormwater handling systems.</li> </ul>
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<b>Classification</b>	Plumbing, Gasfitting and Drainlaying > Drainlaying
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<b>Available grade</b>	Achieved
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## Guidance Information

### 1 References

Building Act 2004;  
 Health and Safety at Work Act 2015;  
 Plumbers, Gasfitters, and Drainlayers Act 2006;  
 Plumbers, Gasfitters, and Drainlayers Regulations 2010;  
 Resource Management Act 1991;

AS/NZS 3500.3:2015 *Plumbing and drainage – stormwater*, available at  
<http://www.standards.govt.nz>;

The following guides, which are available at <http://www.worksafe.govt.nz/worksafe>:  
*Good practice guidelines – Excavation safety*, Wellington: WorkSafe New Zealand, 2016;  
*Guide for Safety with Underground Services*, Wellington: Department of Labour, 2002.

The following clause, current version, and any related compliance documents, which are available at <https://www.building.govt.nz>:  
 New Zealand Building Code Clause E1 Surface Water;  
 and all subsequent amendments and replacements.

### 2 This unit standard requires the application of theory as included in the Plumbers, Gasfitters, and Drainlayers Regulations 2010.

### 3 Definitions

*Job specifications* – instructions (oral, written, graphic) and may include any of the following: manufacturer instructions; design drawing detail specifications; specifications from a specialist source such as an architect, designer, engineer, or a supervisor; and site or work specific requirements. Where job specifications are in conflict with applicable legislation, standards, and/or codes, such legislation, standards, and/or codes shall take precedence for the purpose of assessment.

*Stormwater handling systems* – drainage systems for the disposal of stormwater that will be constructed to convey surface water to an appropriate fall, using gravity flow where possible, and include –

*surface water intake and outfall structures* – pre-cast and in-situ;

*surface water collection systems* – pre-cast concrete, in-situ, open drains, kerbs, and channels;

*sub-soil systems* – to capture and redirect subsurface water;

*sumps* – which include silt traps.

4 This unit standard requires a drainage installation including a minimum of four different fittings.

5 Candidates must hold a current limited certificate or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.

6 All practical activities are to be carried out in a way that avoids harm to people and damage to property, environment, existing installed services, materials, tools, and equipment.

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## Outcomes and performance criteria

### Outcome 1

Determine position for the installation of stormwater handling systems.

#### Performance criteria

1.1 Establish line and gradient to measurements in accordance with job specifications.

1.2 Position stormwater elements to measurements in accordance with job specifications and relevant legislation and codes.

### Outcome 2

Select, install, and complete surface water handling systems.

Range includes – appropriate components and fittings, bedding material, jointing methods, and materials.

**Performance criteria**

- 2.1 Select and install surface water intake and outfall structures in accordance with job specifications.  
 Range evidence of one structure (intake or outfall) is required.
- 2.2 Complete surface water intake and outfall structures in accordance with job specifications.  
 Range may include but is not limited to – intake grills, outfall baffles, keying in.
- 2.3 Select and install surface water collection systems in accordance with job specifications.
- 2.4 Complete surface water collection systems in accordance with job specifications.
- 2.5 Select and install sub-soil drainage in accordance with job specifications.  
 Range field tiles, slotted drains, perforated pipes.
- 2.6 Complete sub-soil drainage in accordance with job specifications.
- 2.7 Select and install sumps in accordance with job specifications.  
 Range trapped, untrapped.
- 2.8 Complete sumps in accordance with job specifications.

**Outcome 3**

Maintain stormwater handling systems.

**Performance criteria**

- 3.1 Identify system faults in terms of causes and means of rectification.
- 3.2 Rectify faults in accordance with maintenance requirements and job specifications.

<b>Replacement information</b>	This unit standard, unit standard 30577, and unit standard 30579 replaced unit standard 1100, unit standard 1104, unit standard 1108, and unit standard 1109.
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**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	28 September 2017	31 December 2028
Review	2	30 May 2024	31 December 2028

<b>Consent and Moderation Requirements (CMR) reference</b>	0003
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.