

Title	Plan, identify and protect underground services during excavation and reinstatement		
Level	3	Credits	10

Purpose	People credited with this unit standard are able to: plan to excavate an underground site; confirm location of existing underground services; and prepare for and monitor excavation and reinstatement to protect underground services.
----------------	---

Classification	Electricity Supply > Electricity Supply - Distribution Networks
-----------------------	---

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable legislative and industry requirements.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of the Health and Safety at Work Act 2015; Electricity Act 1992; Electricity (Safety) Regulations 2010; and any subsequent amendments and replacements; Electricity supply industry codes of practice and documented enterprise procedures, including *Safety Manual – Electricity Industry (SM-EI)* (2015) Wellington: Electricity Engineers' Association available at www.eea.co.nz, *Code of Practice for Temporary Traffic Management* (4th ed.) (2012) available at <http://www.nzta.govt.nz/resources/code-temp-traffic-management/>; *Guide for Safety with Underground Services* (2002) available at <https://worksafe.govt.nz>.
- 3 Definitions
Asset owner refers to a participant who owns or operates assets used for generating or conveying electricity.
Industry requirements include all asset owner requirements; manufacturers' specifications; and enterprise requirements which may include the documented workplace policies, procedures, specifications, business, and quality management requirements relevant to the workplace in which assessment is carried out.
Underground services may include but are not limited to – electricity, gas, water, telecommunications.
- 4 Assessment of practical skills against the outcomes in this unit standard requires three practical observations from three different workplace activities.

Outcomes and performance criteria

Outcome 1

Plan to excavate an underground site.

Performance criteria

1.1 Work instructions are accepted in the form of a job sheet.

1.2 Work instructions and underground service plans are interpreted.

Range site plan clarity, access to documents, existing underground service plans, and reference to any standards or guides for safety underground services.

1.3 Work environment is identified and reviewed.

Range hazards, ground conditions, traffic, work location.

1.4 Safe working zone is established.

1.5 Work equipment is checked.

Outcome 2

Confirm location of existing underground services.

Range electrical cables; gas pipes; telecommunication cables; wastewater, storm water, water pipes; traffic signals; documented local landowner's plant.

Performance criteria

2.1 Location and identity of existing underground services are confirmed.

Range hand digging, visual identification.

2.2 Work instructions are reviewed against actual location of existing underground services, with any proposed changes to instructions identified and relevant parties notified.

2.3 Approval to proceed with excavation is obtained.

Outcome 3

Prepare for and monitor excavation and reinstatement to protect underground services.

Performance criteria

- 3.1 Method of excavation and reinstatement is determined, and machinery, plant, and equipment are selected in accordance with site conditions and work instructions.
- Range manual, mechanical.
- 3.2 Excavation is marked out in accordance with approved route and work instructions.
- 3.3 Excavation and reinstatement process is monitored, and underground services are protected.

Planned review date	31 December 2025
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 June 1997	31 December 2016
Review	2	21 November 2001	31 December 2016
Revision	3	10 September 2004	31 December 2016
Review	4	21 August 2009	31 December 2016
Review	5	18 September 2014	31 December 2022
Review	6	27 February 2020	N/A

Consent and Moderation Requirements (CMR) reference	0120
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Connexis – Infrastructure Industry Training Organisation qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.