

Title	Describe planning requirements for underground utility locating		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to describe planning requirements for underground utility locating.
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Classification	Infrastructure Works > Generic Infrastructure Works
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Available grade	Achieved
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Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with industry requirements.
- 2 Legislation and guidelines relevant to this unit standard include:
 - Health and Safety at Work Act 2015;
 - *Excavation Safety Good Practice Guidelines*;
 - *Guide for Safety with Underground Services*: available from www.worksafe.govt.nz and any subsequent amendments and replacements.
- 3 Definitions

Industry requirements may refer to but are not limited to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents.

Utility locating refers to any application aimed at position or depth determination of man-made objects embedded within the earth. This includes target location of electrical, water, and gas lines. The principal objectives are target identification and accurate measurement of its position and depth.

Utility locator refers to Ground Penetrating Radar (GPR) or Electro-magnetic location (EML).
- 4 Range

Two different locations.

Outcomes and performance criteria

Outcome 1

Describe planning requirements for underground utility locating.

Performance criteria

- 1.1 Sources of information for underground utility locating are described in terms of how they contribute to planning requirements.
- Range beforeUdig, Geographic Information System (GIS) local council, utility owners, asset owner information, client, facility management, Land Information New Zealand (LINZ) aerial imaging, street view.
- 1.2 Roles and responsibilities for communicating information during the planning phase for underground utility location are described.
- Range roles include – site manager, contractor, sub-contractor, person excavating, utility owners, client, designer.
- 1.3 Tools and equipment for the job are described in terms of their purpose.
- Range tools and equipment for the job include – insulated tools, earthing, personal protective equipment, natural fibre clothing, flame retardant overalls, insulated gloves, dielectric boots, face shield, hard hat, client requirements, industry requirements, company requirements.
- 1.4 Tools and equipment for the locator are described in terms of their purpose.
- Range tools and equipment for the locator include – extension cables, traceable rods, sonde, manhole lifter, pit key, barriers, signs, gas detector, marking devices, flags, paint, and cones, tape measures, and some tape, wrenches, screwdrivers, antenna and survey wheel/cart, field notebook, paint colours, type of scanning equipment.
- 1.5 The importance of completing a site visit prior to the start of work is described in terms of what can impact on completing the underground utility locating activity.
- Range site conditions, confirmation of scope, site access, site induction.
- 1.6 The importance of being able to read and interpret plans during the planning phase is described in terms of the information they contain for underground utility locating.
- Range legend, scale, colours, orientation, symbols, line types, inclusions and exclusions, missing information, measurements.

1.7 Information that needs to be obtained from the client is described in terms of planning for the underground utility locating activity.

Range information includes – contact details, keys/pin codes, resource consents, no-go zones, site access, emergency procedures, inductions, permits, consents, service owner stand-over requirements, asbestos procedures, confirmation of the deliverables, clarifying expectations and specific outputs, site safety plan, site specific hazards.

1.8 Planning requirements are described in terms of the scope of work for the underground utility locating activity.

Range clarifying expectations and specific outputs, description of site, the activity being proposed, deliverables, status of site, timeframes, police vetting, insurances, durability of paint, site clean-up, mark out protection.

1.9 Planning requirements are described in terms of assets that a locator is not permitted to locate.

Range critical infrastructure, secure infrastructure, high risk assets.

1.10 Planning requirements are described for environmental considerations that may influence the underground utility locating activity.

Range environmental considerations include – weather, contaminants, historical land use, archaeological sites, terrain, electric fences, water table.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	2 March 2023	N/A

Consent and Moderation Requirements (CMR) reference	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@WaihangāAraRau.nz if you wish to suggest changes to the content of this unit standard.