Title	**Operate a hydro-excavator on an infrastructure works site**		
Level	**3**	**Credits**	**8**

Purpose	People credited with this unit standard are able to: demonstrate knowledge of hydro-excavators; prepare for hydro excavator operations; operate a hydro-excavator for infrastructure works; and complete post-operational procedures for a hydro-excavator.

Classification	Infrastructure Works > Civil Plant Operation

Available grade	Achieved

Prerequisites	Class of driver licence required for the vehicle being driven.

Guidance Information

1 Legislation relevant to this unit standard includes: Health and Safety at Work Act 2015 and Health and Safety in Employment Regulations 1995.

2 Assessment against this unit standard must take place in a workplace environment, and the candidate must be familiar with the type and weight of plant to be used for assessment. Assessment parameters will depend on company and site-specific equipment, procedures, and practices. Practices must reflect industry best practice and comply with legislative requirements.

3 This unit standard assesses the operation of the hydro-excavator and does not assess the driving of the truck which carries the excavator.

4 Definitions
Company requirements include the policy, procedures, and methodologies of the company. They include legislative and regulatory requirements applicable to the company or a specific site. Requirements are documented in the company's health and safety plans, traffic management plans, contract work programmes, quality assurance programmes, policies, and procedural documents.
Job instructions are those given to the operator before undertaking a job. They may include site safety instructions, contract drawings, and written memos.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of hydro-excavators.

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Performance criteria

1.1 Hydro-excavators and their attachments and controls are described in terms of purpose and function, and correct operation.

1.2 Types and capacities of hydro-excavator are described in terms of their capabilities and limitations, and suitability for specific infrastructure works tasks.

1.3 Hydro-excavators are described in terms of their safety features and requirements for safe use.

Outcome 2

Prepare for hydro-excavator operations.

Performance criteria

2.1 Job instructions are confirmed in accordance with company requirements.

2.2 Area to be excavated is checked and location of underground services is verified in accordance with company requirements.

2.3 Pre-start check of machine is carried out prior to starting work and any required action is taken in accordance with company requirements.

Range machine operation, damage, wear and tear.

2.4 A hazard check of site and machine is carried out, and any identified hazards are eliminated or minimised in accordance with company requirements.

2.5 Site communication protocols are confirmed in accordance with company requirements.

Outcome 3

Operate a hydro-excavator for infrastructure works.

Performance criteria

3.1 Water tank is filled in accordance with company procedures and regulatory requirements.

3.2 Hydro-excavator is operated, and hydro-excavation task is completed in accordance with job instructions, and company requirements.

3.3 Waste from vehicle is emptied in accordance with company requirements.

3.4 Holding tank is cleaned in accordance with company requirements.

Outcome 4

Complete post-operational procedures for a hydro-excavator.

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Performance criteria

4.1 Hydro-excavator is parked, shut down safely and secured, and daily maintenance is carried out, in accordance with company requirements.

4.2 Hydro-excavator is inspected, and any faults are reported in accordance with company requirements.

Planned review date	31 December 2027

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 February 2015	31 December 2021
Review	2	27 September 2018	N/A
Rollover and Revision	3	29 January 2026	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 Energy and Infrastructure Industry Skills Board qualifications@energyinfra-skills.nz if you wish to suggest changes to the content of this unit standard.

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