Title	Operate an excavator for a bulk dig		
Level	4	Credits	20

Purpose	This unit standard is for an advanced excavator operator working on a bulk dig.
	<ul> <li>People credited with this unit standard are able to:</li> <li>prepare for bulk dig operations;</li> <li>manoeuvre and control an excavator during a bulk dig;</li> <li>excavate, strip, and trim materials for a bulk dig;</li> <li>operate an excavator for cut and fill formations for a bulk dig: and</li> <li>complete post-operational procedures for an excavator.</li> </ul>

Classification	Infrastructure Works > Civil Plant Operation	
Available grade	Achieved	
Prerequisites	Class of driver licence and any driver licence endorsement	

appropriate for the vehicle being driven.

#### **Guidance Information**

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with relevant legislative and industry requirements.
- 2 Legislation and references relevant to this unit standard include: Health and Safety at Work Act 2015; *Excavation Safety – Good practice guidelines,* available from <u>https://worksafe.govt.nz/</u>; and any subsequent amendments.
- 3 Definitions

*Hold points* means the stage of work that requires testing, checking, or certification before work can proceed. Hold points not specified in contract documents may be stated in company requirements.

*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 and Waka Kotahi New Zealand Transport Agency specifications and guidelines.

# Outcomes and performance criteria

## Outcome 1

Prepare for bulk dig operations.

### Performance criteria

- 1.1 Job instructions are confirmed.
- 1.2 Pre-start check of machine, 360 walkaround and ground engaging tools check is carried out prior to starting work and any required action is taken.
  - Range machine operation, damage, wear and tear, track adjustment, ground engaging tools.
- 1.3 A risk assessment of the site and the task is carried out, and any identified hazards are eliminated or minimised.
  - Range access track, emergency exit, suitable work platform, cut batters, ground conditions.

### Outcome 2

Manoeuvre and control an excavator during a bulk dig.

#### Performance criteria

- 2.1 Excavator is manoeuvred on site with adequate clearances in accordance with task instructions.
- 2.2 Machine control levers are used to produce smooth movement of bucket through all movements.
- 2.3 Excavator is controlled on slopes.
- 2.4 Machine production is maintained at maximum usage relative to the task and the safety of the operator.

Range lead times, placement of vehicle being loaded, terrain.

2.5 Site communication protocols are used.

### Outcome 3

Excavate, strip, and trim materials for a bulk dig.

### Performance criteria

3.1 Topsoil is stripped to contour and depth in accordance with task instructions.

3.2 Area for specified task is excavated to depth and level in accordance with task instructions and follow hold points.

### Outcome 4

Operate an excavator for cut and fill formations for a bulk dig.

#### Performance criteria

- 4.1 Excavator is used to prepare access roads, haul roads and loading and unloading areas in accordance with hold points.
- 4.2 Excavator is used to remove material from cut face in accordance with contract specifications.
- 4.3 Excavator is used to load, haul, and unload material at the fill site in accordance with hold points.
- 4.4 Excavator is used to carry out cut and fill formation and to achieve required level in accordance with hold points.
- 4.5 Compaction of fill is carried out to achieve the specified density in accordance with hold points including any required testing.

### Outcome 5

Complete post-operational procedures for an excavator.

#### Performance criteria

- 5.1 Excavator is parked, shut down safely and secured, re-fuelled, and daily maintenance is carried out.
- 5.2 Excavator is inspected, 360 walkaround, and any faults are reported.

Planned review date
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 October 2021	N/A

Consent and Moderation Requirements (CMR) reference	0101			
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 <u>qualifications@connexis.org.nz</u> if you wish to suggest changes to the content of this unit standard.