

Title	Plan for and lift, move, and place loads using mobile plant, in infrastructure works environments		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to plan for and lift, move, and place loads using mobile plant in an infrastructure works environment.
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Classification	Infrastructure Works > Generic Infrastructure Works
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Available grade	Achieved
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Guidance Information

- 1 Learning and assessment within this unit standard must be carried out in an infrastructure works environment and in accordance with the following, as relevant to their role, and any subsequent amendments:
 - Health and Safety at Work Act 2015;
 - NZ Gazette, No. 104 – 24 September 2015, Exemption of Equipment Capable of Load-lifting, available from <https://gazette.govt.nz/notice/id/2015-go5666>;
 - Approved Code of Practice for Load-lifting Rigging, December 2012, available from <https://worksafe.govt.nz/>.

- 2 Definitions

Capability refers to the ability of the machine to lift a load safely. Capability may be obtained from plant load charts and manufacturers operators manuals.

Industry best practice refers to minimum standards for works as described in codes of practice, guidelines, and manuals relevant to specific types of work. These may organisational procedures

Lifting gear means the equipment used to link the object or material being lifted to an attachment on a machine.

Loads are any objects that need to be mechanically lifted and moved. For this unit standard, loads do not include loose materials such as aggregates.

Included lift angle refers to the top angle between the slings or chains that must not exceed 120 degrees due to the increase in load placed on the slings or chains.

Organisational procedures refer to instructions to staff and procedures which are documented in memo or manual format and are available in the workplace. These procedures include but are not limited to – site specific procedures, laboratory procedures, manufacturers' specifications, product quality specifications and reference to legislative or regulatory procedures relevant to the industry.

- 3 Assessment parameters will depend on company and site-specific equipment, procedures, and practices. Practices must reflect industry best practice and comply with legislative requirements. The mobile plant operator manual must be available during assessment.

Outcomes and performance criteria

Outcome 1

Plan for lifting, moving and placing loads using mobile plant in an infrastructure works environment.

Performance criteria

- 1.1 Risk is assessed and control measures are identified in accordance with organisational procedures.
- Range risks may include but are not limited to – instability, weakness, crushing, jamming, communication failure, incorrect centre of gravity of load, rigging failure, pendulum swing, unusual sounds, positioning, attaching, detaching and securing loads, environment, location, proximity hazards, overload, fixed installations.
- 1.2 Pre-and post-operational checks, including inspections of lifting gear and attachments prior to use, are completed in accordance with organisational procedures.
- Range may include but is not limited to – inspections of hooks, lifting points, clutches.
- 1.3 A safe working platform is provided in relation to site conditions.
- Range site conditions – slope, unstable ground, near vertical face, wet ground;
may include – beside trench.
- 1.4 A safe working area is set up in accordance with industry best practice.
- Range includes but is not limited to – underground services, overhead obstructions, capacity based on site conditions, adjacent structures, traffic, people.
- 1.5 The relationship between the size, weight, and configuration of a machine is considered in terms of lifting capacity, capability, reach, and stability.
- 1.6 Checks are completed in terms of the type and capability of the machine, and the lifting capacity, in accordance with the load chart requirements.
- 1.7 A test lift is completed, and any readjustments completed in terms of the load stability, balance and chain or sling placement.
- 1.8 Lifting hooks, lifting beams, and plant attachments are checked regularly and used safely in terms of requirements for rating, mounting, and certification.

Outcome 2

Lift, move and place loads using mobile plant in an infrastructure works environment.

Performance criteria

2.1 The weight of the object being lifted and the included lift angle is checked in accordance with the manufacturer's instructions.

2.2 Factors for walking a load are considered in accordance with industry best practice.

Range factors include but are not limited to – speed, danger zones, visibility, vehicle brakes.

2.3 Agreed hand signals are used during the mobile operation in accordance with industry best practice.

2.4 Directions are taken from one person when operating plant in accordance with industry best practice.

2.5 Audible communication methods are used in accordance with industry best practice.

Range methods may include – radio, telecommunication, verbal.

2.6 Risks and control measures are reviewed in terms of organisational procedures and legislative requirements.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 July 2018	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 Connexis Infrastructure ITO qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.