Title	**Plan for, manage, and perform quality control on a cable harvesting operation**		
Level	**5**	**Credits**	**15**

Purpose	People credited with this unit standard are able to: interpret the job prescription or harvest plan and determine the production target and resource requirements of the cable harvesting operation; develop a felling plan, an extraction plan, a processing plan, and develop and establish a temporary traffic control plan for a cable harvesting operation; manage a cable harvesting operation; and perform quality control on a cable harvesting operation.

Classification	Forestry > Forest Operations Management

Available grade	Achieved

Guidance Information

1 This unit standard is intended for crew foremen or operations managers within contracting companies managing the felling, extraction and processing in a cable harvesting operation. They are responsible for all personnel involved in the operation. Personnel involved in the operation may include tree fallers, breaker-outs, cable hauler operators, log makers, chainsaw operators and loader operators. Cable harvesting operations use motor manual felling, cable haulers to extract stems and motor manual or mechanised systems for log processing.

2 Legislation relevant to this unit standard includes the: Health and Safety at Work (HSW) Act 2015, Resource Management Act 1991; the Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018; and the Heritage New Zealand Pouhere Taonga Act 2014, and any subsequent amendments.

3 References
Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from http://www.worksafe.govt.nz
New Zealand Forest Owners Association, *Forest Practice Guides (2019)*, and any subsequent amendments, available from http://www.nzfoa.org.nz
NZ Transport Agency (Wellington, November 2012), *Transit Code of Practice* refers to the *Code of Practice for Temporary Traffic Management*, and any subsequent amendments. Available from NZ Transport Agency at http://www.nzta.govt.nz/resources/, or NZ Transport Agency, PO Box 5084, Wellington 6145

Safetree, *Temporary Traffic Control (2015),* and any subsequent amendments, available from https://safetree.nz/wp-content/uploads/2015/02/safetree_safetycard_temp_traffic_control.pdf.

4 Definitions

Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
Harvest plan – a document usually supplied by the forest manager. The harvest plan will include detailed information on how the stand is intended to be harvested. It will include information on any environmental requirements for the stand.
Job prescription – a document usually supplied by the forest manager detailing the requirements for the job. It will include stand details, operational requirements, quality standards, health and safety and environmental requirements for the stand.
Operational plan – the plan developed by the contractor. It details the way the contractor will work the stand to meet their production and quality targets while complying with the requirements of the forest manager.
Stand is a commonly used term in forestry. It describes an area containing trees that are the same species and were planted at the same time for the purpose of harvesting.
Stand map – a map of a block of trees that are similar or the same in age and species.
Worksite procedures – documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

5 Assessment information

This unit standard must be assessed on-job.
All activities and performance criteria must meet the requirements of worksite procedures and accepted industry practice.

Outcomes and performance criteria

Outcome 1

Interpret the job prescription or harvest plan and determine the production target and resource requirements of the cable harvesting operation.

Performance criteria

1.1 Boundaries of the area to be harvested are located in accordance with the job prescription or harvest plan.

1.2 The direction of extraction and the location of the landings are identified from the job prescription or the harvest plan.

1.3 Features of the area are identified and any relevant features missing from the stand map are marked.

Range natural features, cultural features, physical structures.

1.4 Operational constraints are identified from the job prescription or the harvest plan.

Range machine, environmental, manpower.

1.5 Hazardous areas are identified and recorded on the stand map.

1.6 Production target of the cable harvesting operation is determined.

Range production target to be expressed as tonnes per day.

1.7 Resources required to meet average daily production are determined.

Range machinery, equipment, manpower.

Outcome 2

Develop a felling plan for a cable harvesting operation.

Performance criteria

2.1 The felling plan is developed to meet the operational requirements in accordance with the Forest Practice Guides.

Range may include but is not limited to – production target, setting boundaries, backline stumps, guyline anchor stumps, hazard identification and risk control, felling pattern and/or direction, timing of felling, communication, environmental management.

Outcome 3

Develop an extraction plan for a cable harvesting operation.

Performance criteria

3.1 Requirements for the log extraction operation are determined.

Range may include but is not limited to – drag size, haul distance, backline locations, number of breaker-outs, terrain conditions, weather conditions, forest owner requirements, environmental constraints.

3.2 An extraction plan is developed to meet operational requirements in accordance with Forest Practice Guides.

Range may include but is not limited to – backline requirements, setting boundaries, method for monitoring ground conditions, hazard identification and risk control, environmental management, interface with felling, interface with processing, communication.

Outcome 4

Develop a processing plan for a cable harvesting operation.

Performance criteria

4.1 A processing plan is developed to meet operational requirements.

Range may include but is not limited to – manpower, machinery, location of processing area, location of surge stacks, location of log stockpiles, loadout requirements.

Outcome 5

Develop and establish a temporary traffic control plan for a cable harvesting operation.

Performance criteria

5.1 The temporary traffic control plan required for the operation is developed in accordance with the Temporary Traffic Control guidelines and/or the Transit Code of Practice.

5.2 The temporary traffic control plan is established in accordance with the Temporary Traffic Control guidelines and/or the Transit Code of Practice.

Outcome 6

Manage a cable harvesting operation.

Performance criteria

6.1 The requirements of the operational plan are communicated to crew in a pre-start meeting.

Range requirements include but are not limited to – safety, environmental, production, quality.

6.2 The set-up of the cable harvesting system is managed to meet the requirements of the operational plan.

6.3 The work of the breaker-outs and cable hauler operator is managed to meet the operational plan in accordance with Forest Practice Guides.

Range may include but is not limited to – daily production target, communication, quality, environmental constraints.

6.4 Rope shifts are pre-planned and directed to meet operational requirements.

6.5 A process is put in place to ensure guyline and backline anchors are checked daily and a hauler log book is maintained.

Outcome 7

Perform quality control on a cable harvesting operation.

Performance criteria

7.1 Felling quality is assessed against job prescription requirements and the operational plan.

Range may include – damage to standing crop, breakage of felled trees, stump height, butt log damage.

7.2 Extraction quality and efficiency is monitored against job prescription requirements and operational plan.

Range may include – stems per drag, drags per hour, salvage requirements, landing congestion.

7.3 Processing quality control is monitored against the cutting instruction and the operational plan.

Range may include – log making quality, landing efficiency.

7.4 Quality control results are recorded and communicated to the crew and other interested parties.

Range other interested parties may include but are not limited to – supervisor, contractor, forest owner.

7.5 Strategies for managing health and safety risks and quality issues identified during quality control checks are described in accordance with the job prescription and the company health and safety plan.

Range evidence of at least three strategies.

Replacement information	This unit standard replaced unit standard 1266.

Planned review date	31 December 2028

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 February 2011	31 December 2017
Review	2	10 December 2015	N/A
Review	3	23 July 2020	N/A
Rollover	4	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	0173

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

Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.