

Title	Operate a precision planter for agricultural contracting		
Level	4	Credits	15

Purpose	People credited with this unit standard are able to: select and prepare tractor and precision planter for sowing seed and/or planting; carry out field preparation; operate the planter; and carry out post-operational procedures.
----------------	---

Classification	Rural Contracting > Agricultural Contracting
-----------------------	--

Available grade	Achieved
------------------------	----------

Pre-requisites	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, available from www.legislation.govt.nz;
 - *Land Transport Rule – Heavy Vehicles 2004*, available from www.nzta.govt.nz;
 - and all subsequent amendments and replacements.
- 3 Definition
Industry requirements refer 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.

Outcomes and performance criteria

Outcome 1

Select and prepare tractor and precision planter for sowing seed and/or planting.

Performance criteria

- 1.1 Tractor and planter appropriate for the crop to be sown and/or planted are selected.
- 1.2 Tractor and planter are checked for correct set up, condition, damage, wear and faults; problems are identified; and corrective action is taken.
- Range ground engaging components, seedmetering devices, monitoring equipment, nuts and bolts, bearings, couplings, alignments, wheels, tyres.

Outcome 2

Carry out field preparation.

Performance criteria

- 2.1 Hazards are identified and controlled.
- 2.2 Logistical readiness is established.
- Range requirements may include but are not limited to – seed supplies and storage, fertiliser supplies and storage, access, fuel and oil supplies and storage, communications; evidence of three requirements is required.
- 2.3 Ground conditions are assessed for suitability for sowing crop in relation to soil type, soil structure, soil depth, fineness of tilth, soil moisture content, and soil temperature.
- 2.4 The sowing work pattern is checked for alignment with customer and field requirements.
- Range requirements may include but are not limited to – contours, ground conditions, line of sight to any ground obstacles, minimisation of empty running, overlaps, unsown or unplanted areas, tramlines, irrigation runs, harvesting and crop maintenance, access and manageability; evidence of five requirements is required.
- 2.5 Planter is calibrated to sow the seed and fertiliser and/or plant at the predetermined rate for the crop, in accordance with contract specifications.
- Range seed and/or plant size, seed and/or plant spacing requirements, seed drill and/or planting depth.
- 2.6 Appropriate equipment and machinery adjustments are made for the work to be carried out.

Outcome 3

Operate the planter.

Performance criteria

- 3.1 Seed is sown and/or planting is done at the predetermined rate or spacing and depth with no overlap and no unsown and/or unplanted areas.
- 3.2 Fertiliser is applied at the predetermined rate and depth with no overlap and no unfertilised areas.
- 3.3 Operation is carried out in accordance with predetermined work pattern and adjustments are made to take account of current conditions.
- 3.4 Tractor and planter are monitored during use, and required adjustments are made.

Range seed and/or plant rate, fertiliser rate, sowing and/or planting depth, fertiliser application depth, ground speed, planter levelling, planter alignment;
evidence of four adjustments is required.

Outcome 4

Carry out post-operational procedures.

Performance criteria

- 4.1 Shut-down procedures are carried out.
- 4.2 Equipment is cleaned and treated.
- 4.3 Lubrication is carried.
- 4.4 Any damage or faults including any missing, bent, broken, or loose parts are identified and are repaired, replaced, or reported.
- 4.5 Equipment and machinery are stored.
- 4.6 Documentation for the operation is completed.

Planned review date	31 December 2026
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 July 1996	31 December 2023
Review	2	5 January 1999	31 December 2023
Review	3	18 January 2000	31 December 2023
Review	4	31 November 2002	31 December 2023
Review	5	25 June 2007	31 December 2023
Review	6	26 August 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 qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.