

**U16602****Establish plants outdoors**

## Unit Descriptor:

This unit is about planting, using established plants and seeds. You will be working under limited supervision only.

This unit may apply to the following types of plants:

- turf
- woody plants
- herbaceous
- bedding plants

The types of activities you may carry out may include:

- Choosing, using and maintaining the equipment you need for the job
- Clearing the site of debris and unwanted plants
- Surface leveling
- Preparing the ground using hand tools and powered equipment (for example, rotavator, tractor mounted equipment etc)
- Applying fertilizers by hand and distributors
- Checking plant material to make sure it meets the planting specification
- Transporting, handling and preparing the plant material
- Planting to the correct position, depth and at the correct time by hand and with powered equipment (for example, seed drills)
- Sowing seeds manually or mechanically
- Watering and feeding by hand and using distributors
- Weeding by hand or chemically
- Providing supports and ties

Use of equipment, chemicals and all other activities must meet the requirements of the law and industry codes or practice.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Prepare ground for establishing plants	<p><i>To be competent you must achieve the following:</i></p> <p>1.1 Select and use the <b>equipment</b> and <b>materials</b> you need to prepare the ground efficiently.</p> <p>1.2 Ensure the <b>equipment</b> is correctly maintained before, during and after your work.</p>

- 1.3 **Prepare** the ground in a way that is appropriate to the plants being established, the soil type and ground condition.
  - 1.4 Keep damage, unnecessary waste and unwanted impact to the site to a minimum.
  - 1.5 Keep damage, unnecessary waste and unwanted impact to the site to a minimum.
  - 1.6 Maintain the health and safety of yourself and others at all times.
  - 1.7 Store your **equipment** and **materials** safely and securely following use.
2. Establish plants in soil
- 2.1 Select **plant material** as requested.
  - 2.2 Transport, handle and prepare the **plant material** in a way that maintains its health and condition according to the prevailing conditions.
  - 2.3 Select, use and maintain **equipment** efficiently and correctly.
  - 2.4 Plant at times most likely to encourage establishment and growth.
  - 2.5 Position the plant material and provide nutrients and **aftercare** to meet the planting specification.
  - 2.6 Provide accurate and clear labels or records.
  - 2.7 Maintain the health and safety of yourself and others at all times.
  - 2.8 Store your **equipment** and materials safely and securely following use.

**RANGE STATEMENT**

*You must cover the items below:*

**Element 1: Prepare ground for establishing plants****A. Select, use, maintain and store one of the following types of equipment:**

- (i) non-powered hand-held tools
- (ii) powered hand-held tools

**B. Select, use and store two of the following materials:**

- (i) organic matter
- (ii) fertilizer
- (iii) perennial weed herbicides

**C. Use four of the following methods to prepare the ground:**

- (i) clearance
- (ii) minor leveling
- (iii) achieving correct tilth
- (iv) consolidation
- (v) provision of nutrients

**Element 2: Establish plants in soil****A. Select and establish both of the following types of plant material:**

- (i) established plants
- (ii) seeds

**B. Select, use, maintain and store one of the following types of equipment:**

- (i) manual
- (ii) powered

**C. Provide three of the following types of aftercare:**

- (i) provision of water
- (ii) protection
- (iii) staking
- (iv) initial pruning **or** cutting

**UNDERPINNING KNOWLEDGE AND SKILLS**

1. The equipment and materials necessary to clear and prepare ground for planting.
2. The correct methods of using, maintaining and storing this equipment.
3. The hazards arising from services on site and how to avoid these.
4. The range of different clearance and preparation methods which may be used.
5. How to achieve correct tilth, consolidation and nutrient levels.
6. How to identify a representative sample of plants relevant to your workplace.
7. How to ensure that preparation is suitable to the plants, soil type, ground conditions and the type of site.
8. The effect of soil type and condition, climate, weather and ground conditions, previous treatment and existing services and structures on clearance and preparation methods.
9. The control of perennial weeds.
10. How to minimize damage and unnecessary waste when working.
11. What unwanted impacts to a site may occur when preparing ground and how to avoid them.
12. The correct methods to deal with accidental damage and pollution.
13. The relevant health and safety legislation and codes of practice.
14. How to transport and handle plants in a way which minimizes damage and maintains health.
15. How to prepare plant material in a way that is appropriate to the plant conditions.
16. How to select equipment correctly for different plant types and conditions
17. The safe use of such equipment.
18. The correct procedures for maintenance, cleaning and storage of tools and equipment.
19. The importance of timing and seasonality to planting.

**EVIDENCE GUIDE**

*For assessment purposes:*

**(1) Critical Aspects of Evidence**

Assessment should involve observation of work processes at intervals when the ground is being prepared for establishing plants and establishing plants in soil and questioning related to underpinning knowledge.

Performance evidence should be provided for all of the performance criteria in this unit. However, supplementary evidence will be accepted for Performance Criteria 5.

You must be able to select, use, maintain and store one **type in each category** of the following types of equipment:

- a. Hand-held tools
- b. Hand-held powered tools

You should also be able to select, use and **properly** store **all** of the following materials:

- c. Soil amendment
- d. Fertilizer
- e. Pesticides

You must demonstrate the ability to use all of the following methods to prepare the ground the minimum size of which should be 15m<sup>2</sup>:

- f. Clearance
- g. Minor leveling
- h. Achieving correct tilth
- i. Consolidation
- j. Application of nutrients
- k. Application of soil amendment

You must be able to select and establish **two out of three** of the following types of **plant material**:

- l. Containerised established plants
- m. Non-containerised established plants
- n. Seeds

You must also be able to provide **three** of the following types of **aftercare**:

- o. Provision of water
- p. Protection
- q. Staking
- r. Initial pruning **or** cutting

With respect to the underpinning knowledge you should be able to identify a representative sample of at least **thirty-five** plants relevant to your workplace.

Use of equipment, chemical and all other activities must meet the requirements of the law and relevant codes of practice.

**(2) Methods of Assessment**

Observation by your assessor of you:

- Choosing, using and maintaining the equipment you need for the job
- Preparing the ground using hand-held non-powered tools and hand-held powered tools (example, rotavator, tractor mounted equipment etc.)
- Planting to the correct position, depth by hand and with powered equipment (for example, seed drills)
- Sowing seeds manually or mechanically
- Watering and feeding by hand and using distributors
- Providing supports and ties

Answers to written or oral questions from your assessor.

**(3) Context of Assessment**

Evidence from simulations **is** acceptable for this unit.