



Australian Government

Department of Education, Employment and Workplace Relations

RTF4006A Plan a tree pruning program

Release: 1

RTF4006A Plan a tree pruning program

Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of planning a tree pruning program. Planning includes planning the program, communicating its intent to other personnel, and monitoring the implementation of the program.

The planning of a tree pruning program is likely to be undertaken without supervision, with only general guidance on progress sought by management and/or the client. Responsibility for and limited organisation of the work of others engaged in the pruning program may be necessary.

The planning of a tree pruning program requires a broad range of horticultural skills and the application of extensive knowledge in tree identification, tree physiology, CODIT principles and tree pruning techniques.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Undertake site assessment	1.1 Specific species are identified and their fruiting, flowering and foliage characteristics recorded according to enterprise guidelines. 1.2 Trees are assessed to determine suitability for pruning based upon the overall health and vigour of specimens. 1.3 Branches are examined and their vitality and integrity of attachment ascertained to ensure the program can be safely implemented. 1.4 Site conditions are assessed for equipment, personnel and access requirements. 1.5 Site environmental concerns are assessed in relation to relevant legislation and/or regulations that may impact on a tree pruning program. 1.6 Existing and/or potential OHS hazards are identified, risks assessed and suitable controls recommended.
2 Plan a pruning program	2.1 Pruning requirements including appropriate pruning techniques are determined according to management and/or client needs and the site assessment. 2.2 Appropriate pruning tools, equipment and machinery are determined according to the pruning requirements and site assessment. 2.3 Pruning strategies are planned with regard to mass energy ratios and compartmentalisation of decay in trees (CODIT) principles to ensure pruning is undertaken with minimum stress to trees, and without damage to property or personnel. 2.4 Pruning program is documented and communicated to relevant personnel in accordance with enterprise guidelines.

- 3 Monitor a pruning program
 - 3.1 Completed program is assessed to ensure pruning has been undertaken according to the identified program.
 - 3.2 Pruned trees are monitored over time to ensure they are able to sustain growth and are restored to their natural habit and form.
 - 3.3 Any pruning that causes stress is rectified.
 - 3.4 Treatments undertaken during monitoring are recorded for later reference.

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in planning a tree pruning program requires evidence that a person can plan the program, document and communicate its intent to other personnel, and monitor the implementation of the program over a period of time.

The skills and knowledge required to plan a tree pruning program must be **transferable** to a different work environment. For example, this could include different tree species, pruning equipment and locations.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

tree pruning techniques appropriate to the pruning requirements of the species

principles and applications of risk assessment in tree structure

CODIT principles

implications of pruning cuts and the way trees respond

tree morphological and physiological processes

OHS risks of working in hazardous situations and handling of debris

the effect of adverse outdoor climatic conditions (e.g. rain, hail, or very high ultraviolet radiation), which may prevent or impede the pruning program

relevant legislation and/or regulations that may impact on a tree pruning program.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- plan operations in such a way that no damage occurs to equipment, property, environment, trees or personnel
- calculate pruning program resources and relevant costs
- document a program in a clear and concise manner for ease of interpretation
- communicate with personnel to ensure understanding of requirements of the program
- use of tree management databases.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can communication of ideas and information (3) be applied?

Communication of ideas and information may be applied when undertaking a site assessment in response to management and/or client requests.

2. How can information be collected, analysed and organised (3)?

Information may need to be collected, analysed and organised when assessing pruning strategies for a large pruning program.

3. How are activities planned and organised (3)?

Activities may need to be planned and organised according to seasonal and prevailing weather conditions.

4. How can team work (3) be applied?

Planning a tree pruning program may involve working with other members of a team to complete and achieve the program outcomes.

5. How can the use of mathematical ideas and techniques (3) be applied?

Mathematical concepts may be used to calculate pruning program resources and

associated program costs.

6. How can **problem-solving skills (3)** be applied?

Problem solving skills may need to be applied if the pruning program, planned and implemented, causes undue stress to trees.

7. How can the **use of technology (3)** be applied?

The use of technology may be applied in the documenting of the program.

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

Range Statement

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available

Where may **trees** requiring pruning be located?

Trees might be located in domestic gardens, streets and roadways, commercial and industrial sites, city parks, institutions (e.g. schools and hospitals), local government parks and reserves, or bushland areas. Tree pruning may also occur near overhead electrical cabling.

How might the **overall health and vigour of trees** be determined?

General health may be determined by leaf drop, leaf discolouration, leaf size (compared to a healthy specimen), die back, dead wood, cavities, decay, structure, condition of ground around the tree, impact of recent work around tree and previous pruning work.

What questions may need to be considered when site conditions are **assessed** for a pruning program?

Questions to consider may include: Is the tree(s) close to buildings or other structures? Will the sections that need to be removed be likely to cause damage when falling? How will the work be staged? What signs and safety barriers need to be erected? Are there above and below ground services? What tools, equipment and machinery will be needed? What safety equipment will you need? How long will the job take? Are there special conditions such as weather, relevant legislation, timing or related work activities that need to be included in the planning of a pruning program?

What **legislation and/or regulations** may need to be considered when planning a pruning program?

Legislation and/or regulations may include National, State and local government legislation and regulations such as the Environmental Protection Act, and Australian Standards for Pruning of Amenity Trees AS4373: 1996, or area specific tree preservation orders and significant tree registers and/or legislation.

What **OHS hazards** are likely to be identified during a site assessment for a

Hazards may include solar radiation, dust, noise, damp conditions, nearby buildings or

pruning program?

structures, slopes, water, rocks, undergrowth, depressions/holes, fire hazards, dead or unstable branches, insect infestation, unstable or protruding root systems, power lines and other above or below ground services.

What **suitable controls** are likely to be recommended to minimise **OHS hazards**?

Suitable controls recommended may include the use of personal protective clothing and equipment such as rubber soled/leather boots, cut resistant trousers, gloves, helmets, goggles, safety harnesses, sun hats, hearing protection, face shields and sunscreen lotion; placement of warning signs, barriers, hazard indicators and a safe drop zone, use of approved ladders and ropes, safe operation and maintenance of machinery and equipment, safe procedures for working outdoors, correct manual handling techniques, placement of rescue equipment on site, and basic first aid training.

What **pruning requirements** may influence the planning program?

Requirements may include size, light, aesthetics, competition, structure, shape, density, growth re-direction, modification of flowering/fruiting behaviour, damage, general clearances, signage and sight lines.

What **pruning techniques** are likely to be utilised in a pruning program?

Pruning techniques may include cleaning out, crown lifting, crown reduction, structural integrity, crown renewal, crown thinning, dead wooding, hedging, branch, epicormic and green shoot removal.

What **tools, equipment and machinery** are likely to be used?

Pruning tools and equipment may include pruners, jacksaws, handsaws, chainsaws, pole saws, poles, steps, epicormic removers, secateurs, chippers and mulchers. Climbing equipment and machinery may include ladders, climbing gear such as ropes and harnesses, elevated platforms and cherry pickers.

What **pruning strategies** are likely to be considered in the planning of a pruning program?

Pruning strategies to take into consideration may include the different response times to pruning of different species (e.g. some trees will recover quickly from severe pruning while others can be killed or suffer a major setback in growth), the varying reasons for

pruning (e.g. crown lifting may be needed for street trees while crown reduction may be used in a garden setting, and some trees require annual pruning for flowering or fruiting while others need pruning as a maintenance measure to reduce potential hazards), and the influence that seasons and weather conditions has on the success of pruning programs (incorrect timing of pruning may lead to new growth being damaged by extremes in temperature or insects and diseases).

What information may be documented in a **pruning program**?

A pruning program may include site and location plans, site assessment details, special instructions and/or conditions, OHS requirements and controls, environmental considerations, pruning requirements and techniques, tools, equipment and machinery requirements, access and removal details, personnel requirements, waste, organic waste and debris disposal, recycling and re-use guidelines.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

Unit Sector(s)

Not applicable.