**PART L60**

**MAINTENANCE OF PLANTS**

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**1. GENERAL**

This Part specifies the requirements for maintenance of tubestock, general nursery stock, aquatic plants, and advanced trees. This includes replacement of defective, damaged or dead plants, watering of plants, weed control, pest/disease control, follow-up fertiliser, maintenance of marker stakes, tree guards, weed mats, mulch, and the removal of marker stakes and tree guards.

Maintenance shall mean the continued care of plants within the Extent of Works area indicated on the Drawings or in the **Contract Specific Requirements** to promote healthy and vigorous growth by implementing accepted horticultural practices, as well as rectifying any defects that become apparent in the works under normal conditions and according to the season.

The Contractor is responsible for maintenance for the period stated in the Contract. The following Clauses describe maintenance work appropriate for normal conditions. The Contractor shall perform various operations to suit seasonal and/or other conditions affecting the condition of the Extent of Works area indicated on the Drawings or in the **Contract Specific Requirements**.

The Contractor shall nominate when maintenance treatments are considered necessary and shall obtain approval to proceed.

**2. REPLACEMENT OF DEFECTIVE, DAMAGED OR DEAD PLANTS**

Replacement of plants shall be carried out in accordance with **Part L10 "Planting".**

Where plants within the Contract area have become damaged, defective or have died as a result of the Contractors operations, they shall be replaced immediately with the plants of the same species and provenance and shall be established to healthy vigorous growth, at the Contractor’s expense.

Where the plants have become damaged, defective or have died as a result of vandalism, they shall be replaced immediately with plants of the same species and provenance and shall be established to healthy vigorous growth, at the Principal’s expense. If the same species and provenance is not available, the Contractor shall seek prior approval to replace the plant with an alternative.

**3. WATERING OF PLANTS**

The Contractor shall ensure that all plants maintain growth and are free from water stress at all times. Water stress may include the lack of appropriate available water or an over supply of water.

Water shall be of adequate quality.

The Contractor shall provide at least one working days prior notice of the intention to alter the watering frequency to the Principal.

Refer to the **Contract Specific Requirements** for the watering method.

(a) Hand Watering

After the initial watering each plant shall receive a minimum of 10 litres of clean potable water on a fortnightly basis.

The Principal shall be advised at least one day prior to watering. The Principal may adjust the frequency of watering subject to:

* sufficient rain; or
* hot and/or dry weather conditions.

The watering dish shall be kept intact at all times, unless otherwise directed by the Principal.

(b) Irrigation System

If an irrigation system has been installed as part of the Contract, the Contractor shall use the system to water the native grass plants to maintain good health and growth.

The irrigation system shall be used to water native grasses in the following manner, unless directed otherwise by the Principal:

* Summer active grasses shall receive one watering of 2 hours duration per month during summer, viz. from November to April.
* Winter active grasses shall receive two waterings of 2 hours duration per month during summer, viz. from September to May.

The Contractor shall ensure that the irrigation system is fully operational at all times and that all plants are receiving the correct amount of water.

**4. WEED CONTROL**

Weeds growing inside a tree guard or within the plant structure shall be hand-pulled. Disturbance to the soil shall be minimised.

For tubestock and general nursery stock, an area of 1 200 mm diameter around all plants shall be kept free of weeds by spraying with a knockdown herbicide (Roundup) incorporating a herbicide marker. Roundup Biactive shall be used around wetlands and waterways. The herbicide shall be used according to the manufacturer's recommended rates. Any off-target damage shall rectified by the Contractor.

For advanced trees and palms refer to the **Contract Specific Requirements** for weed control requirements.

**5. PEST/DISEASE CONTROL**

Insect pests, fungus and disease shall be controlled by means of appropriate treatment.

All chemicals shall be used in accordance with the manufacturer's recommendations and shall be approved by the Principal. Any off-target damage shall be made good by the Contractor at the Contractor’s expense.

Refer to **Contract Specific Requirements** for pest/disease control methods.

(a) Pest/Disease Control Method Specified by Principal

The method of pest/disease control for the project shall be as specified by the Principal in the **Contract Specific Requirements**.

Chemicals and application rates required to be used for the project shall be as specified in the **Contract Specific Requirements**.

(b) Pest/Disease Control Method Recommended by Contractor

The Pesticide Schedule in the **Contract Specific Requirements** shall be completed by the Contractor as required during the Contract period recommending preferred methods of pest/disease control for the specific project, and chemicals and application rates to be used.

**6. MAINTENANCE OF MARKER STAKES, TREE GUARDS, TREE STAKES, TREE TIES AND WEED MATS**

Where marker stakes, tree guards, tree stakes, tree ties or weed mats within the within the Extent of Works area indicated on the Drawings or in the **Contract Specific Requirements** have become damaged or defective, they shall be replaced immediately by the Contractor with the same product which shall installed in accordance with the manufacturer's instructions.

**7. MAINTENANCE OF MULCH**

Mulch shall be maintained to the original specified type, extent and depth.

**8. FORMATIVE PRUNING**

This Clause only applies to Advanced Trees. The Contractor shall selectively remove specific branches to enhance form and improve structure, and to directionally shape the young tree. With smaller diameter branches it may be necessary to reduce the branch to a dormant bud. Formative pruning shall aim to reduce the development of structural weaknesses and to accommodate site constraints and reduce encroachment on utilities or buildings as the tree grows.

**9. FOLLOW-UP FERTILISER**

The Contractor shall apply follow-up application(s) of fertiliser when specified in the **Contract Specific Requirements**.

(a) Slow Release Tablets

(b) Slow Release Granule

(c) Complete Organic

(d) Complete Mineral

(e) Soluble Mineral

(f) Liquid

**10. REMOVAL OF MARKER STAKES AND TREE GUARDS**

Tree guards and marker stakes shall be removed at the end of the Maintenance Period. They shall be bundled in groups of 50 and delivered to the DPTI Depot, Bridge Road, Walkley Heights during office hours (8.00 am - 4.00 pm Monday to Friday). The Contractor shall provide 2 working days notice prior to delivery.

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