

APPENDIX B - SPECIFICATION FOR ESTABLISHMENT MAINTENANCE OF NEW TREES

The following routine maintenance works are specified to ensure new tree plantings in a maintained in a healthy and vigorous condition and ensure normal growth and development throughout the Establishment Maintenance period.

Definitions:-

Qualified Horticulturist – A person with a minimum qualification of Australian Qualification Framework (AQF) Level 3 in Horticulture (Parks & Gardens)

Qualified Arborist – A person with a minimum qualification of Australian Qualification Framework (AQF) Level 3 in Arboriculture

Rootball – mass of roots and soil material

Root Zone – area of soil surrounding the tree where root growth is predominant

Monitoring and inspection

A Qualified Horticulturist shall inspect the trees on a regular basis to check for pest & disease infestation, signs of moisture stress, irregular growth patterns or similar problems. An inspection shall be conducted at least twice during each season (i.e. eight times per annum). A short report detailing any problems observed and any proposed corrective action shall be supplied to the principal within a week of each site inspection. Where necessary, corrective action shall be carried out promptly to minimise damage to plant material and avoid death or loss of trees.

Watering

Water trees on a regular basis throughout the establishment maintenance period to ensure that the rootball is maintained in a moderately moist condition and the trees are free of moisture stress. Regular monitoring of soil moisture levels should be carried out by a Qualified Horticulturist to ensure optimum soil moisture levels are maintained throughout the Establishment Maintenance period.

Mulch Replenishment

Organic mulches, such as composted materials and woodchip, shall be replenished as required to ensure a minimum coverage of 50mm thickness and a maximum of 75mm thickness to the area surrounding the tree to the extent (in area) as originally specified. Mulches shall not be placed in direct contact with the plant stem. The mulch material used shall be the same as the original mulch cover specified at planting.

Fertilising

Prior to application of fertilizers, temporarily rake back the mulch to expose the topsoil. Supply and apply a 6-8 month Controlled Release Fertilizer in early autumn. The fertilizer shall be a balanced formulation containing all essential macro-nutrients and trace elements for normal plant growth. Modify the formulation where required for Phosphorus sensitive species. A slow release formulation using micro-prill technology such as Osmocote® or Nutricote® shall be used. The fertilizer shall be applied evenly to the Root Zone by hand broadcasting at the manufacturer's

recommended rate. Following fertilizer application, replace the mulch and replenish mulch cover as required.

Weed Control

Control weed growth within the root zone area on a regular basis to minimise weed competition. Weeds shall be eradicated before they reach 100mm in height. Weeds shall be removed manually by hand or using hand held implements ensuring minimal soil disturbance. Alternatively weeds shall be removed by applying non-selective herbicides containing the active constituent Glyphosate, sprayed directly onto the weeds at the Manufacturers recommended rate. Spraying shall only be undertaken when the weather conditions are fine and calm and there is no anticipated rainfall within the ensuing 24 hours.

Pest and Disease Control

Control pests and diseases as required to ensure that trees are maintained in a healthy and vigorous condition and growth rate is not compromised. Minor pest infestations shall be controlled by hand removal of the insects or alternatively spraying with a low-toxicity contact pesticide such as Pyrethrin. Where systemic pesticides or fungicides are required, apply to the infestation evenly at the manufacturers recommended rate. Spraying shall only be undertaken when the weather conditions are fine and calm and there is no anticipated rainfall within the ensuing 24 hours.

Mowing & edging near trees

Use of line trimmers (e.g. Whipper-snipplers) shall not be carried out in proximity to the plant stem. All trees damaged as a result of mowing and line trimming works shall be replaced at the Contractors cost. Minimise potential for damage during mowing operations by maintaining the full extent of mulch cover around the tree as originally specified. Replace stakes damaged in mowing operations as required.

Adjustment and Replacement of Stakes and Ties

Check and adjust stakes and ties on a regular basis to ensure no damage or injury occurs to the plant stem, branches or foliage. Adjust ties as required to ensure sufficient movement of the plant stem to allow natural strengthening under normal weather conditions. Remove ties when sufficient anchorage and increase in stem taper and caliper has developed for the tree to support itself without overturning or excessive bending of the stem. Maintain stakes where necessary to protect trees from damage during mowing operations.

Pruning

Remove dead branches of greater than 10mm in diameter as required.

Selectively remove branches as required to promote proper form and branching habit, typical for the natural growth habit of the species. For species with an excurrent branching habit, ensure the development of a dominant central leader. Remove lesser competing leaders where required. Ensure that no greater than 25% of the total foliage area is removed at any one time.

Remove broken and defective branches as required.

Remove crossing and rubbing branches to ensure proper form and branching habit as required.

Remove lower branches as required to ensure adequate vehicular and pedestrian clearance. Remove branches progressively as the tree matures to ensure that no greater than one-third of the total height of the tree is removed at any one time.

Use only clean, sharp pruning implements for all pruning work, ensuring that cuts are made without damage, tearing or bruising of vascular tissue.

Prior to pruning, ensure compliance with the relevant Local Government Authority's Tree Preservation Order.

All pruning shall be carried out in accordance with the Australian Standard No 4373-2007 *Pruning of Amenity Trees* and the NSW WorkCover Authority *Code of Practice for the Amenity Tree Industry* (1998) to ensure works are carried out to acceptable safety standards in accordance with current best practice. All pruning shall be carried out by a Qualified Arborist.

Replacement

Plants that die due to improper or inadequate maintenance during the establishment maintenance period shall be replaced with the same species in accordance with the original planting specification at the Contractors cost.

Litter Removal

Remove litter and debris from the root zone as required. Dispose of all waste material at a licensed Waste Transfer facility.