

PART L80**MAINTENANCE OF NATIVE GRASSES****CONTENTS**

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1. GENERAL

- .1 This Part specifies the requirements for maintenance of native grasses. It includes replacement of defective, damaged or dead plants, watering of plants, weed control, slashing, pest/disease control, maintenance of marker stakes and tree guards, maintenance of weed mats and mulch, follow-up fertiliser, and removal of marker stakes and tree guards.
- .2 The Contractor shall be responsible for maintenance for the period stated in the Contract.
- .3 Maintenance shall mean the continued care of native grasses within the Extent of Works area indicated on the Drawings 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.
- .4 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.
- .5 The Contractor shall nominate when treatments are considered necessary and shall obtain the approval of the Principal prior to proceeding with the treatment.
- .6 Documents referenced in this Part are listed below:
 - (a) Part L10 "Planting".

2. REPLACEMENT OF DEFECTIVE, DAMAGED OR DEAD PLANTS

- .1 The Principal will determine whether or not a plant is defective, damaged or dead. All replacement of native grasses shall be carried out in accordance with Part L10 Landscaping, "Planting" of this Specification and shall be approved by the Principal.
- .2 Where plants within the Extent of Works area indicated on the Drawings have become damaged, defective or have died as a result of the Contractor's operations or negligence, they shall be replaced with the same species and provenance, within a 12 month period after the propagation of suitable species and when climatic conditions are appropriate. Replacement plants shall be established to healthy vigorous growth, at the Contractor's expense.
- .3 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.

3. WATERING OF PLANTS

- .1 It shall be the Contractor's responsibility to 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 oversupply of water.
- .2 The Contractor shall use the following watering methods:
 - (a) **Hand Watering:** Following planting and initial watering, each plant shall receive a minimum of 10 litres of clean potable water according to the following schedule.

At both urban and rural sites, and unless directed otherwise by the Principal, summer active grasses shall receive one watering per month during summer, viz. from November to April.

At urban sites, and unless directed otherwise by the Principal, winter active grasses shall receive two waterings per month during summer, viz. from September to May.

At rural sites, and unless directed otherwise by the Principal, winter active grasses shall receive one watering per month during summer, viz. from September to May.

If sufficient rainfall is considered to have fallen to maintain soil moisture for the continued growth and health of young plants, the Contractor shall seek approval from the Principal to alter the frequency of watering to reflect seasonal conditions.

- (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.

It shall be the Contractor's responsibility to 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**

- .1 The Contractor shall maintain a weed-free environment to assist with native grass establishment and survival.
- .2 The Contractor shall use the following weed control methods:
 - (a) **Knockdown Herbicide:** Native grass planting areas (including the area inside tree guards) 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 be made good by the Contractor at the Contractor's expense. Weeds growing inside the tree guard shall be hand-pulled. Disturbance to the soil shall be minimised.
 - (b) **Pre-Emergent Herbicide:** Ronstar shall be applied in accordance with the manufacturer's instructions and recommended rates.

5. **SLASHING**

General

- .1 The Contractor shall slash the grass sward and remove the cut thatch in accordance with the Clauses in this Specification.
- .2 Each plant shall receive 10 litres of potable water immediately following slashing.

Maintenance Requirements by Species

- .3 The Contractor shall conform to the following species maintenance requirements:
 - (a) Group 1: Summer Active Grasses (C4 Species)
 - .1 *Aristida* sp: Cut to 150 mm in December/January to remove seed heads and thatch.
 - .2 *Chloris* sp: Cut to 100-150 mm in December/January to remove seed heads (or later if seeding is not a problem at the location).
 - .3 *Enneapogon* sp: Cut to 100-150 mm in December/January to remove seed heads (or later if seeding is not a problem at the location).
 - .4 *Themeda* sp: Cut to 150-200 mm in February/March to remove seed heads and thatch.
 - .5 *Eragrostis* sp: Cut to 100 mm in November/December to remove seed heads and thatch.
 - (b) Group 2: Winter Active Grasses (C3 Species)
 - .1 *Neurachne* sp: Low growing grass – slashing may not be needed.
 - .2 *Austrostipa* sp: Cut to 150-200 mm in December/January to remove seed heads and thatch.

- .3 Austroanthonia sp: Cut to 100-150 mm in November to January to remove seed heads and thatch.
- .4 Microleana sp: Generally low growing grass. Cut to 50-100 mm in May to December with line trimmer or mower.
- .5 Poa sp: Cut to 150-200 mm in December/January to remove seed heads and thatch.

6. PEST/DISEASE CONTROL

General

- .1 Insect pests, fungus and disease shall be controlled by means of appropriate treatment.
- .2 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.

Pest/Disease Control Requirements and Responsibilities

- .3 The Contractor shall use conform to the following pest/disease control requirements and responsibilities:
 - (a) Pest/Disease Control Method Specified by Principal: The method of pest/disease control for the project shall be as specified by the Principal.

Chemicals and application rates required to be used for the project shall be as specified by the Principal.
 - (b) Pest/Disease Control Method Recommended by Contractor:

As required during the Contract period, the Contractor shall recommend preferred methods of pest/disease control for the project and chemicals and application rates to be used.

7. MAINTENANCE OF MARKER STAKES

- .1 Where marker stakes within the Contract area have become damaged or defective, they shall be replaced immediately by the Contractor with the same type of marker stake. The Principal will determine if a marker stake is damaged or defective and will need to be replaced. The Principal will pay for the cost of replacement marker stakes, unless damage has resulted from the Contractor's operations.

8. MAINTENANCE OF TREE GUARDS

- .1 Where tree guards within the Contract area have become damaged or defective, they shall be replaced immediately by the Contractor with the same type of tree guard which shall be assembled and installed around the plant in accordance with the manufacturer's instructions. The Principal will determine if a tree guard is damaged or defective and will need to be replaced. The Principal will pay for the cost of replacement tree guards, unless damage has resulted from the Contractor's operations.

9. MAINTENANCE OF WEED MATS

- .1 Where the weed mats within the Contract area have become damaged or defective, they shall be replaced immediately with the same type of weed mat. The Principal will determine if a weed mat is damaged or defective and will need to be replaced. The Principal will pay for the cost of replacement weed mats, unless damage has resulted from the Contractor's operations.

10. MAINTENANCE OF MULCH

- .1 The Contractor shall re-mulch with the mulch as directed by the Principal throughout the Maintenance Period. Where native grasses have been mass planted, mulch shall be maintained at a depth of 20 mm within the whole planting area. Where native grasses have been planted amongst other vegetation, mulch around individual planting holes shall be maintained at a depth of 20 mm and a diameter of 500 mm. The Principal will pay for the cost of replacement mulch, unless damage has resulted from the Contractor's operations.

11. FOLLOW-UP FERTILISER

General

- .1 Where a follow-up application of fertiliser is required, the Principal will nominate the type and quantity to be applied.

- .2 Fertilisers shall be placed around the base of the native grass plant in close proximity to the mulch or soil and shall not come into contact with the foliage of the plant during application.

Fertiliser Types and Application Rates

- .3 The Contractor shall use the following fertiliser types and application rates:
 - (a) **Pelleted Organic Fertiliser:** Pelleted organic fertiliser (Dynamic Lifter) shall be applied at a rate of ¼ cup (approximately 50 mL) per plant.
 - (b) **Slow Release Granule:** 5 g of Nutricote or Osmocote 9-12 Months for natives shall be placed around each plant.

12. REMOVAL OF MARKER STAKES AND TREE GUARDS

- .1 Tree guards and marker stakes shall be removed at the end of the Maintenance Period or as directed by the Principal. 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) to an area designated by the Principal. The Contractor shall give the Principal two working days notice prior to delivery.

13. HOLD POINTS

- .1 There are no Hold Points referenced in this Part.
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