

Landscape Architecture

LANDSCAPING AND VEGETATION MANAGEMENT PLAN

FOR

HORSLEY DRIVE BUSINESS PARK TWO STAGED SPECULATIVE WAREHOUSE / INDUSTRIAL FACILITY 3

> PROPOSED LOT 3 IN LOT 5 DP1212087 BURILDA CLOSE, WETHERILL PARK

> > FOR



JOB NO: REVISION: DATE: 1623 A 5th Octorber 2016

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1. INTRODUCTION

This Landscape and Vegetation Management Plan has been prepared to detail the landscape and vegetation management measures for the Proposed Lot 3 in Lot DP121087, Burilda Close, Wetherill Park at Horsley Drive Business Park (HDBP) to minimise impact to biodiversity both during its construction and operational phases.

1.1. Typical Conditions Imposed for Consent

The typical conditions proposed development consent relates to the preparation and implementation of a Landscaping and Vegetation Management Plan for the development in consultation with the Fairfield City Council and to the satisfaction of the Secretary. Refer Table 1 for key requirements.

Item No	Requirement	Document Reference
C1 (a)	Be prepared in consultation with Council and submitted to the secretary for approval	
C1 (b)	Detail any landscaping treatments at the site, with particular attention to minimising the visibility of the site from residences and public vantage points and minimising bushfire risk	Refer to Section 4.2 & Appendix 1
C1 (c)	Ensure that the development is undertaken generally in accordance with the Landscape Plans contained in the EIS	
C1 (d)	Ensure landscaping with native species that require minimal water	Refer to Section 4.3
C1 (e)	Demonstrate that planting will be undertaken in accordance with the relevant Australian Standards	Refer to Section 4.3 & Appendix 1
C1 (f)	Comply with the requirements of Agriculture NSW for weed management and the destruction or removal of noxious weeds during construction and operation	Refer to Section 5.1
C1 (g)	Describe the on-going measures (e.g. weed control and regular pruning) that would be implemented to maintain landscaping and vegetation on the site for the life of the development	Refer to Section 5.2 & Appendix 1

Table 1: Typical Development Consent Requirements

1.2. Supplementary Landscape Documentation

Coco Design has been engaged to prepare landscape documentation for the two staged Speculative Warehouse / Industrial Facility 3 at HDBP. Refer Table 2 for document register of the proposed landscape works (Appendix 1), which is to be read in conjunction with the Landscape & Vegetation Management Plan.

Drawing No	Drawing Title	Date (YY.MM.DD)	Revision
LA-00	Coversheet / Legend / Plant Schedule	16.10.02	A
LA-01	Landscape Plan	16.10.02	A
LA-02	Landscape Plan	16.10.02	A
LA-03	Landscape Plan	16.10.02	A

Table 2: Landscape Document Register

2. GOALS OF LANDSCAPE & VEGETATION MANAGEMENT PLAN

2.1. Objectives

The objective of the Landscape & Vegetation Management plan is to provide details of the management practises that will be undertaken at the Speculative Facility 3 at HDBP and to satisfy the requirements set out in Typical Consent Conditions (Landscaping & Vegetation Management Plan).

The scope of the Landscape & Vegetation Management Plan includes new landscape areas to the entire perimeter of the building from the Northern boundary, Eastern Adjacent Warehouse (Speculative Facility 2), Southern Entry Road (Burilda Close), and Western boundary.

Native species have been predominately selected for the following reasons:

- Suits the local site conditions;
- Drought tolerant;
- · Aesthetically pleasing; and
- Screening characteristics.

3. SITE DESCRIPTION & BACKGROUND

3.1. Site Context

The site is situated internally within the HDBP industrial sub-division on the western side of Cowpasture Road and the northern side of Horsley Drive in the suburb of Wetherill Park. The Site is surrounded by industrial lots similar to the proposed use of Speculative Facility 3 warehouse. The site has low existing biodiversity values and hence the removal of some of the vegetation on the site is not considered to significantly impact biodiversity values.

The nearest residential area is located approximately 500 m to the south-east of the proposed site within the suburb of Bossley Park. Refer Image 1.

Image 1: Site location in relation to Bossley Park residential area



3.2. Bushfire Risk

The proposed landscape of the Speculative Facility 3 warehouse centre poses no significant bushfire risk as it is not within the vicinity of any native vegetation areas. The site is therefore deemed to have a low bushfire risk.

4. LANDSCAPE AND VEGETATION MANAGEMENT PLAN

4.1. Existing Vegetation

Prior to development of the Horsely Drive Business Park, the site had been used predominately for agricultural purposes (mainly grazing).

The site is currently undergoing redevelopment for industrial purposes. Frasers Property has completed infrastructure works for the wider estate including tree removal & bulk earthworks. Two (2) Industrial Facilities (Martin Brower & Survitec) have been recently completed along the eastern portion of the site.

4.2. Landscape & Vegetation Treatments

4.2.1. Minimising visibility of site from residences & public vantage points

Given the large scale of the proposed industrial development and the distance between adjacent residential areas there are limited viewing opportunities from the existing residential areas and the site. The primary viewing points of the site are from the adjacent farmland along the northern boundary.

The loading dock and driveways that are located along the Southern, western & eastern boundaries which will be screened utilising predominately locally endemic Cumberland Plain Woodland species of trees, large shrub screen planting and native grasses. Species include; *Tristaniopsis 'Luscious', Cupaniopsis anarcoides, Waterhousia floribunda, Banksia ericifolia, Dodonaea viscosa, Grevillea 'Sandra Gordon', Dianella 'Little Rev', Lomandra 'Katrinus' & Lomandra 'Verday'.*

4.2.2. High quality landscape finishes along active frontages

The southern portion of the site is located at the end of the HDBP Entry Road (Burilda Close). It is therefore important that landscape frontage is of a high quality, consistent with the landscape typology of the other HDBP estate warehouses and engages with the adjacent estate infrastructure. Some principles of the proposed landscape include;

- Utilising semi-mature hedges to provide consistent screening along boundary / fence lines.
- Utilising larger tree stock & formal planting to define / identify pathways and entrances to the site for staff and visitors.

4.2.3. Generous shade trees for car parking areas

Due to the large hardstand areas for parking it is important that the landscape provides adequate shade for staff and visitors. Species such as *Magnolia 'Exmouth', Cupaniopsis anacaroides, Tristaniopsis 'Luscious' & Waterhousia floribunda* have been selected for the wide & dense canopy. These species also have clear trunks, which will enable a clear sight line through the internal carpark for security purposes.

4.3. Proposed Plant Species

In the final stages of construction, landscape & revegetation will be undertaken on the site in accordance with the approved landscape plans prepared by Coco Design (refer Appendix 1). Proposed plant species within the Speculative Facility 3 are predominately native with local indigenous species incorporated where practical and suitable. Refer table 3 for proposed plant schedule.

Scientific Name	Common Name	Native / Exotic	Height	Size	Density
Trees					
Cupaniopsis anacaroides	Tuckeroo	Native	12M	100L	23
Elaeocarpus reticulatus	Blueberry Ash	Native	16M	100L	10
Maxnolia 'Exmouth'	Exmouth	Exotic	10M	200L	23
Tristaniopsis 'Luscious'	Water Gum	Native	10M	100L	12
Waterhousia floribunda	Weeping Lily Pily	Native	6M	45L	33
Mix Type 1					
Acmena 'Sublime'	Sublime	Native	ЗM	300mm	2/ lin m
Syzigium 'Alyn Magic'	Alyn Magic	Native	1.5M	300mm	3 / lin m
Viburnum oddotissorum	Sweet Viburnum	Exotic	4M	300mm	3 / lin m
Mix Type 2					
Buxus japonica	Japanese Box	Exotic	0.6M	200mm	3/m2
Callistemon 'Little John'	Little John	Native	0.8M	140mm	4/m2
Lomandra 'Verday'	Tanika	Native	0.4M	140mm	4/m2
Nandina 'Gulf Stream'	Gulf Stream	Exotic	0.6M	200mm	3/m2
Philodendron 'Xanadu'	Xanadu	Native	1.2M	200mm	3/m2
Rhapelepsis 'Snow Maiden'	Indian Hawthorne	Exotic	0.8M	200mm	3/m2
Syzigium 'Alyn Magic'	Alyn Magic	Native	1.5M	300mm	3/m2
Trachelospermum jasminoides	Star Jasmine	Exotic	0.2M	140mm	4/m2
Mix Type 3					
Banksia ericifolia	Heath-leaved Banksia	Native	2M	200mm	1/2m2
Doryanthes excelsa	Gymea Lily	Native	5M	200mm	1/2m2
Dodonaea viscosa	Hop Bush	Native	ЗM	200mm	1/2m2
Grevillea 'Sandra Gordon'	Sandra Gordon	Native	3.5M	200mm	1/2m2
Carex appressa	Tall Sedge	Native	0.8M	Tube	6/m2
Dianella 'Little Rev'	Little Rev	Native	0.3M	Tube	6/m2
Dianella longifolia	Blue Berry Flax	Native	1.2M	Tube	6/m2
Lomandra 'Katrinus'	Katrinus	Native	0.8M	Tube	6/m2
Lomandra 'Katie Belles'	Katie Belles	Native	0.8M	Tube	6/m2

Table 3: Proposed Plant Schedule

Given the large scale of the proposed industrial development and the distance between adjacent residential areas there are limited viewing opportunities from the existing residential areas and the site. The two (2) primary viewing points of the site are from

- Chandos Road / Trivet Street along the northern boundary; and
- Western Sydney Parklands along the western boundary.

4.4. Irrigation

A fully automatic drip irrigation system of drip line to mass planting beds / mature trees and pop up sprinklers to turf areas will be installed by a qualified landscape contractor to support plant growth and maintenance of the landscaping. The system will provide full coverage of all planted areas with no more than 300mm between drippers, automatic controller and backflow prevention device and will be connected to a recycled water source, where provided. Irrigation shall comply with both Sydney Water requirements as well as Australian Standards, and be maintained in effective working order at all times. The system will be terminated as planting is established and no longer require irrigation.

Drought tolerant grasses and shrubs that are not reliant on watering to survive will be planted on the site.

5. MANAGEMENT & MAINTENANCE

5.1. Weed Management

Weed management will be undertaken during the Site preparation works to minimise weed establishment and invasions, and will include the following:

- Management of weed species onsite will be in accordance with the Noxious Weeds Act 1993.
- Equipment used for treating weed infestation will be cleaned prior to moving to a new area within the Proposal site to minimise the likelihood of transferring any plant material and soil.
- Soil stripped and stockpiled from areas containing known weed infestations are to be stored separately and are not to be moved to areas free of weeds.

5.2. Landscape Maintenance

Following the completion of the implementation of landscape works – a maintenance schedule will be developed by the landscape contractor in accordance with the landscape technical speciation to ensure regular removal of weed species, re-mulching and replacement of failed plants is completed.

The following landscape maintenance tasks, outcomes and frequencies will be implemented by the landscape contractor to ensure the quality is remained during the defect liability period and beyond for the life of the development.

Maintenance Task	Outcome	Requirement	Frequency
Litter Removal	Maintain all grass areas and garden beds in a neat and tidy condition	Litter, plant and all foreign material to be removed from all grass areas and garden Litter from grass areas shall be collected just prior to mowing to minimise the shredding and scattering of litter.	Weekly
Mowing	To maintain a neat appearance of all grassed areas	Litter on grass areas shall be removed prior to each cutting operation to minimise the shredding and scattering of litter.	Summer: Every 2 weeks Autumn: Every 3 weeks Winter: Every 4 weeks Spring: Every 2 weeks
Edging & trimming	To maintain the edges of all grassed areas adjacent garden beds, paved areas and around the base of trees and other obstacles.	 No grass overgrowing edges where it adjoins hard paved surfaces or mass planting beds. Edging to be completed immediately before or after each grass cut, to maintain sharp definition of lawn edges. All paths and garden beds to be kept clear of clippings or any other debris generated by the edging and trimming operations. 	Summer: Every 2 weeks Autumn: Every 3 weeks Winter: Every 4 weeks Spring: Every 2 weeks

Table 4: Maintenance Outcome / Schedule

Weed control	To maintain grass areas, planting beds, individual tree plantings and paved areas free from weeds.	 No obvious signs of weed infestation in grass areas: Grass areas to be weed free using an approved selective herbicide treatment. Garden areas to be presented 98% weed free with no weeds exceeding 100mm height. 	Summer / Spring: Every 2 weeks Autumn / Winter: Every 4 weeks
Tree maintenance	To maintain the planting free from damaged, stolen and failed plants	 Damaged, diseased (beyond the ability to be restored to an acceptable standard), stolen or failed plants to be removed upon identification and replaced within two (2) weeks or as the season allows. Wherever possible, replacement planting shall be of a size commensurate with the original plant at the time of death / removal 	As required
Pruning & Thinning	To maintain safe access, plant vigour and good plant health.	 Pruning to ensure pathways, roads, lighting and services such as fire hydrants, overhead services and signs are kept clear from encroaching growth of plant material at all times. Remove all damaged, dead or diseased wood by pruning to the nearest lateral shoot or active bud with a neat clean cut. Removal of suckers from base of trunks. Pruning cuts shall be made and close to the bud at a 450 angle to ensure that any water is shed away from the bud. 	As required

6. APPENDIX 1

- LA-00 Coversheet / Legend / Plant Schedule (Revision A)
- LA-01 Landscape Plan (Revision A)
- LA-02 Landscape Plan (Revision A)
- LA-03 Landscape Plan (Revision A)







