SITE IMAGE



Proposed Development

Metcash Warehouse and Distribution Centre Project Huntingwood Drive BUNGARRIBEE INDUSTRIAL ESTATE

Landscape Report

Prepared For: Goodman

Prepared By: Site Image Landscape Architects

Issue – A (March 2010)

1.0 EXISTING VEGETATION

The site currently comprises of various trees and grasslands.

2.0 REFERENCE DOCUMENTATION/ COMPLIANCE

These plans are to be read in conjunction with the following landscape plans by Site Image Landscape Architects

000	Rev A
001	Rev B
101	Rev B
102	Rev B
103	Rev B
104	Rev B
501	Rev A
C001	Rev C
C001	Rev C

The aforementioned plans were compiled with reference to the following documents and correspondence:

- Huntingwood West – Masterplan prepared by EDAW|AECOM; SK11B, SK03F, SK01H, SK02H, SK10H, SK09H, SK08H)

The aforementioned plans where referenced during compilation of landscape plans, particularly in reference to recommended species

- Blacktown City Council's requests (24.08.2010)

1. Building Design and Landscape

(ii) "... to submit more detailed plans"

Site Image has compiled detailed landscape documents.

This documentation (listed above) includes the following;

- Landscape plans
- Plant Species List
- Colour Landscape Masterplan
- Landscape Sections
- Descriptive imagery.

2.0 LANDSCAPE DESIGN

Generally the landscape design aims to:

- Provide visual amenity generally against the built form
- Provide screen amenity for the proposed industrial development
- Provide shade amenity
- Create/ maintain passive surveillance of the site; avoiding anti social behaviour
- Soften the ground plane
- Provide species of mainly low water demands
- Observe and maintain necessary safety and aesthetic sightlines

Huntingwood Drive – Entry Landscape

This is the primary frontage for the development so the landscape statement aims to provide a strong identity and branding through the planting design. In this area lower planting has been used to soften the ground plane whilst ensuring the building internal space is visible. The planting palette consists of structured plantings of low shrubs, native grasses and groundcovers which are completed by larger tree plantings

Species in this zone have been selected for their attractive foliage and flowers as well as their hardiness. The low hedge plantings of *Rhaphiolepsis indica* (Indian Hawthorn) and *Pittosporum "Miss Muffet*' (Dwarf Pittosporum) create a defined edge to the showrooms whilst also retaining views in. Bands of *Lomandra 'Tanika*' (Dwarf Mat Rush) and *Trachelospermum jasminoides* (Star Jasmine). Whilst some species are exotic, most are native, and are of lower water requirement qualities.

Internal Landscaping:

The landscaping within the site (excluding boundary planting – see below)

This landscaping will consist of similar plant species to that of the entry statement. A majority of neat, well maintained species will help soften building forms and the ground plane.

The proposed landscape will be particularly efficient in screening and visually softening the proposed water tanks and multi deck carpark. A mixture of varying height canopies will ensure an effective visual buffer.

Boundary Treatments:

The surrounding boundaries to the development will consist of all native plantings.

A mixture of native shrubs (*Acacia sp, Dodonaea sp, Kunzea sp* etc.) and groundcovers (*Poa labillardieri, Themeda australis*) will complement the tree plantings (*Eucalyptus* sp). Much of this 'buffer' area will be battered; appropriate erosion controls, particularly during plant establishment shall ensure effective growth of planted species. This vegetative batter will help ameliorate views into the site from the Great Western Highway, Brabham Drive and part of Huntingwood Drive. This boundary treatment aims to be of low maintenance requirements, particularly after establishment.

Much of the boundary shall be retained by a interlocking wall system (similar to 'Keystone') and not exceeding 5m*

3.0 DRAINAGE

Due to the large extent of hard surfaces, drainage is to rely on correct falls etc documented by engineers. All new paving is to fall away from buildings.

4.0 IRRIGATION

The irrigation system shall be an automatic fixed drip system, with an irrigation controller self operated via a soil moisture sensor. The system shall be compatible to the type of plant material and rates of water required. The layout of the entire irrigation system is to ensure that each individual plant receives the required amount of water to maintain healthy and vigorous growth.

The extent of the irrigation is to be limited to the presentational landscape on Huntingwood Drive, with the irrigation regime programmed to suit the particular micro-climatic requirements of each precinct, including current soil moisture levels.

Maintain the system for the duration of the establishment maintenance period.

5.0 MAINTENANCE

Generally

The Contractor shall rectify defects during installation and that become apparent in the works under normal use for the duration of the contract Defects Liability Period.

The Contractor shall maintain the contract areas by the implementation of industry accepted horticultural practices for 52 weeks. The landscape maintenance works shall include, but not be limited to, the following:

- Replacing failed plants,
- Pruning,
- Insect and pest control,
- Fertilising,
- Maintaining mulch,
- Watering,
- Maintaining paved areas, decomposed granite and river rock areas,
- Rubbish removal, and
- Cleaning of the surrounding areas.

Logbook

Keep a Maintenance Logbook recording when and what maintenance work has been done and what materials, including chemical materials, have been used. The records shall show when and where identified chemicals were used and why. Submit the initial logbook for inspection prior to Practical Completion and again at the end of the Defects Liability Period as a prerequisite for granting Practical and Final Completion Certificates.

Plants

Trees, shrubs and groundcovers shall at all times show signs of healthy vigorous growth. Spent flower heads or stalks shall be removed immediately following flowering.

Replace failed plants. A "failed" plant may not mean complete death of soft tissue but failure due to poor growth, appearance, or unacceptable time for plant to re-establish new growth following damage or vandalism. Replacement plants shall be in a similar size and quality and identical species or variety to the plant that has failed. Replacement of plants shall be at the cost of the Landscape Contractor unless advised otherwise. Failure of the plant shall be at the sole discretion of the Landscape Architect.

Pruning

Whatever pruning work is requested by the Landscape Architect shall be performed, including any pruning of damaged growth or miscellaneous pruning considered as beneficial to the condition of the plants. All pruning works shall be undertaken in a manner equal to acceptable horticultural practice.

Spraying

Avoid spraying if ever possible.

Immediately report to the Project Manager any evidence of intensive weed infestation, insect attack or disease amongst plant material. Submit all proposals to apply chemicals and obtain approval before starting this work.

When approved, spray with herbicide, insecticide, fungicide as appropriate in accordance with the manufacturers' recommendations. Record in the logbook all relevant details of spraying activities including:

- Product brand / manufacturer's name,
- Chemical / product name,
- Chemical contents,
- Application quantity and rate,
- Date of application and location,
- Results of application, and
- Use approval authority.

Fertilising

Fertilise gardens with a proprietary slow release fertiliser applied in accordance with the manufacturer's directions and recommendations. Record in the logbook all relevant details of fertilising including:

- Product brand / manufacturer's name,
- Fertiliser / product name,
- Application quantity and rate, and
- Date of application and location.

Stakes and Ties

Adjust and replace as required to ensure plants remain correctly staked. Remove those not required at the end of the planting establishment period (Defects Liability Period).

Mulched Surfaces

Maintain the surface in a clean, tidy and weed free condition and reinstate the mulch as necessary to ensure correct depth as before specified.

Mowing and Top Dressing (Nature Strip)

Mow the turf to maintain a grass height of between 30-50mm. Do not remove more than one third of the grass height at any one time. Remove grass clippings from the site after each mowing.

Top dress to a maximum of 10mm as necessary to fill depressions and hollows in the surface.

Irrigation and Watering

Maintain the irrigation system to sure that each individual plant receives the required amount of water to maintain healthy and vigorous growth, adjust and rectify as required.

Provide additional watering, if necessary.

Erosion Control Measures

Where necessary, maintain the erosion control devices in a tidy and weed free condition and reinstate as necessary to ensure control measures are effective where deemed necessary.

Weeding And Rubbish Removal

During the plant establishment period remove by hand, rubbish and weed growth that may occur or re-occur throughout all planted, mulched and paved areas.

Urgent Works

Not withstanding anything to the contrary in the Contract, the Project Manager may instruct the Landscape Contractor to perform urgent maintenance works that place the completed contract works at risk. If the Landscape Contractor fails to carry out the work within seven (7) days of such notice, the Project Manager (or representative) reserves the right without further notice to employ others to carry out such urgent and specified work and charge it to the Landscape Contractor. Such work shall include but not limited to the inspection and clearing of drains in the pavement and gardens.

6.0 COMPLETION

A final inspection shall be made by the Project Manager, Landscape Contractor and Landscape Architect before the completion of the Plant Establishment Maintenance Period (Defects Liability Period). Any items requiring rectification shall be repaired before completion of the relevant works and finally approved prior to certification.