LIGHT HORSE INTERCHANGE BUSINESS HUB, EASTERN CREEK URBAN DESIGN GUIDELINES

REV 4 - MAY 2020
[SSD 9667]

Western Sydney Parklands

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LOCATION

Western Sydney Parklands

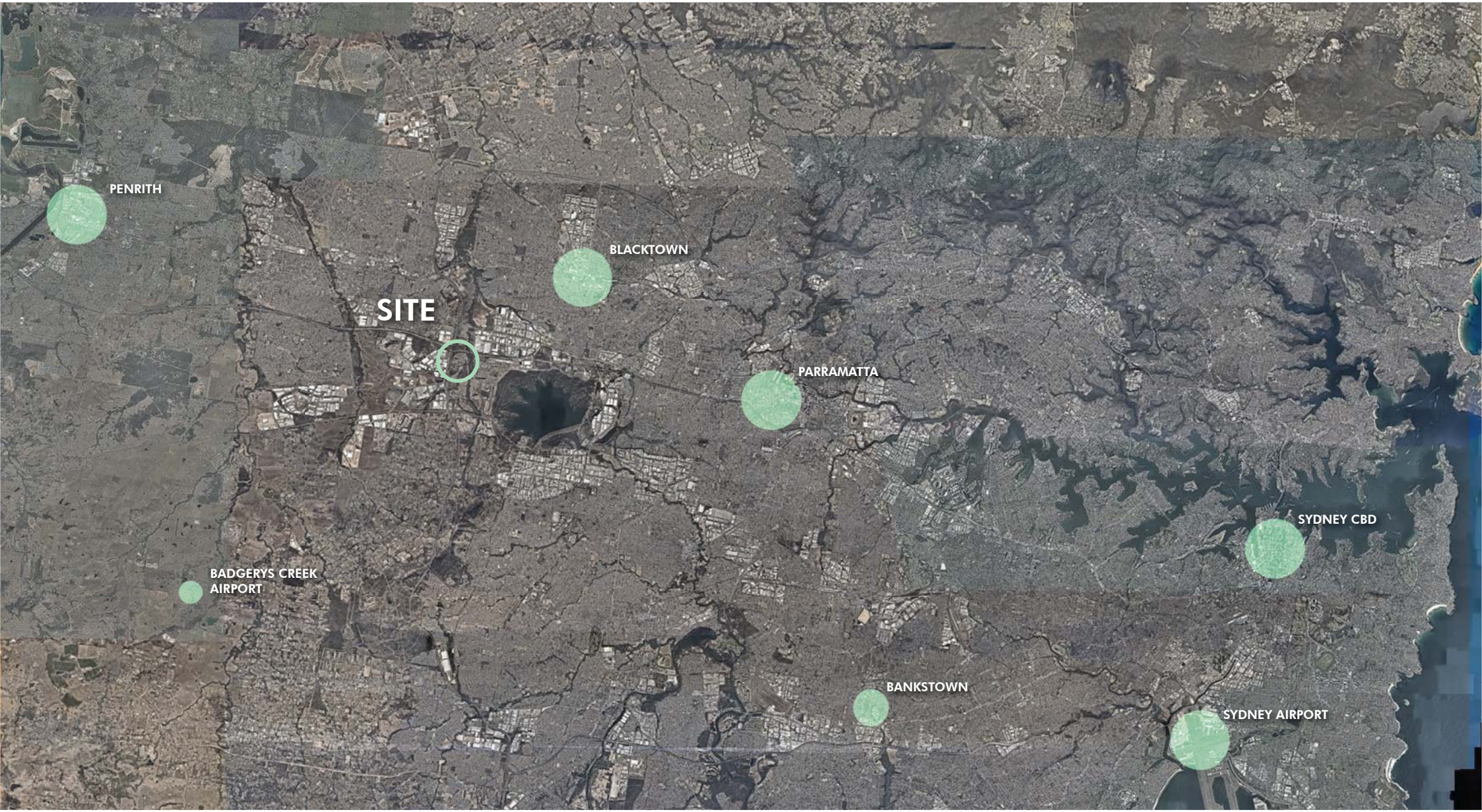

Figure 1: Location Plan

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Figure 2: Locality Plan

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INTRODUCTION

The Light Horse Interchange Business Hub is located at the intersection of the Westlink M7 and M4 Western Motorway.

It comprises a discrete parcel of land which is seperated from the broader parklands. It is surrounded by estabished and developing employment generating land uses to the north & west

Objectives

The key objectives of these design guidelines are:

- to provide an urban design framework that guides the development of the land for the purpose of employment generating development
- to provide environmentally attractive and sustainable industrial business hub
- to ensure high quality built form in a parkland setting

Figure 3: Vehicle Access & Circulation

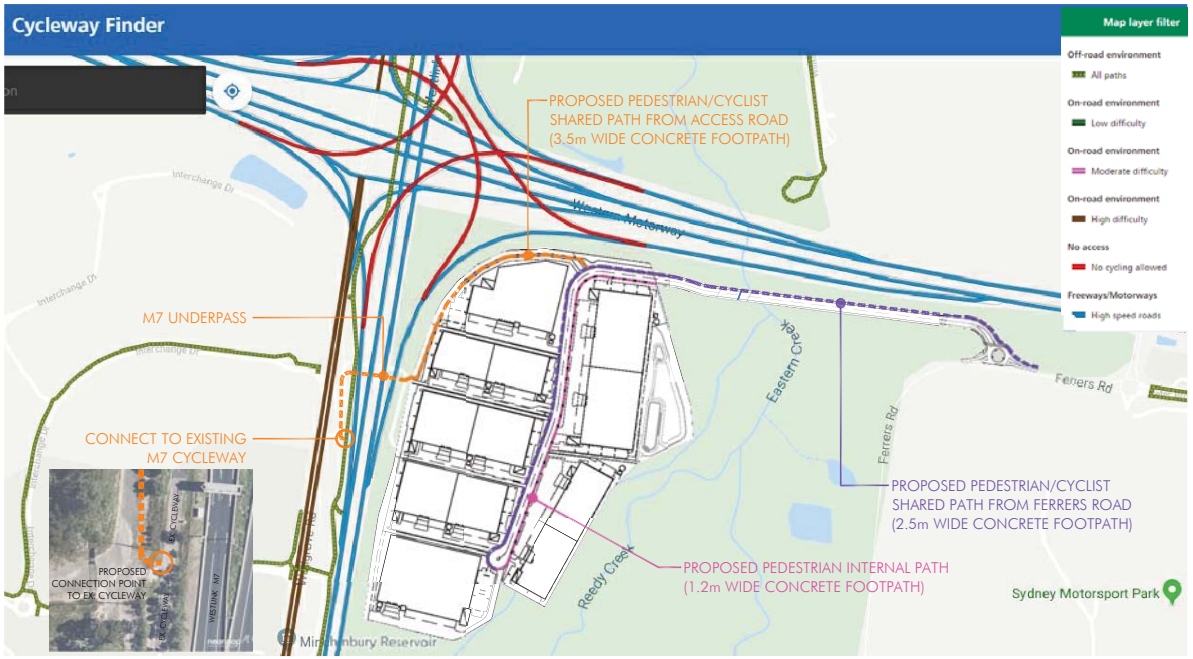

Figure 4: Pedestrian / Cyclist Access & Circulation (background source: Cycleway Finder - NSW Transport - RMS)

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URBAN DESIGN PRINCIPLES

The following design principals provide the foundation for the urban structure and development of the business hub

Land Use

The business hub will offer flexible business premises suitable for future industrial and light industrial users

Vehicle Access & Circulation

- Provide a well defined entry to the business hub through 2 connection points (figure 3):
    - Primary access - main traffic connection from Ferrers Road
    - Emergency access - emergency traffic access point through existing M7 underpass from Wallgrove Road
- The traffic circulation for the business hub include the following elements as illustrated in Figure 3:
    - An internal access road comprising 15.5m wide carriageway for its full length to enable two travel lanes
    - Round-a-bout access point from Ferrers Road to facilitate main traffic movement

Pedestrian Access & Circulation

- Connect with existing bicycle and pedestrian networks via shared footpath to promote connectivity and permeability (Figure 4)
    - Provide 2.5m/3.5m wide pedestrian / cyclist shared footpath connecting between Ferrers Road and existing M7 cycleway
    - Provide 1.2m wide internal pedestrian footpath along eastern side of Access Road

Environment and Conservations

- Incorporate environmentally sustainable design principals
- Provide landscaping with appropriate setbacks
- Use Water Sensitive Urban Design principles to manage stormwater
- To incorporate best practice Western Sydney Parklands Design Manual measures

Concept Built Area

- Figure 5 (next page) illustrates concept building footprints within the business hub

DEVELOPMENT DATA	
OVERALL SITE AREA	344,013m²
LOT 8 (RESIDUAL) - ESTATE BIO-BASIN/OSD	21,511m²
ACCESS ROAD RESERVE (PART OF LOT 11)	22,076m²
TOTAL DEVELOPABLE AREA (LOT 1 TO 7)	300,426m²
TOTAL BUILDING AREA	165,500m²
FLOOR SPACE RATIO	55.1%

DEVELOPABLE LOT	W/H AREA	OFFICE AREA	TOTAL
LOT 1 SITE AREA (48,059m²)	19,000	1,000	20,000
LOT 2 SITE AREA (34,141m²)	16,900	800	17,700
LOT 3 SITE AREA (41,112m²)	23,200	1,200	24,400
LOT 4 SITE AREA (38,686m²)	21,400	1,000	22,400
LOT 5 SITE AREA (44,193m²)	24,700	1,300	26,000
LOT 6 SITE AREA (38,406m²)	20,000	1,000	21,000
LOT 7 SITE AREA (55,829m²)	32,400	1,600	34,000
TOTAL	157,600	7,900	165,500

CARPARK PROVISIONS	
TOTAL CARPARK REQUIRED RMS - Warehouse: 1 space/300sqm Office: 1 space/40sqm	723 spaces
TOTAL CARPARK PROVIDED	782 spaces

LEGENDS

ESTATE SITE BOUNDARY

LIMIT OF WORKS

Client

NSW GOVERNMENT Western Sydney Parklands Trust

Light Horse Interchange Business Hub
Eastern Creek NSW [SSD 9667]

Concept Masterplan

1:3000@ A3 or 1:1500@A1

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Figure 5: Concept Masterplan

Office Facade Treatment

Material Pallette (External)

Metal Sheeting

Translucent Wall Cladding

Prefinished CFC Sheeting

Glazing

Metal Cladding

DESIGN GUIDELINES

Built-forms & Architecture

Objectives:

- To ensure that built-forms are consistent and are of an appropriate scale for an employment area with consideration for market trends
- To ensure building envelope and facade enhances the visual character of the business hub and response to market trends
- To use land efficiently

Design Guidelines:

- The total maximum floor space (GFA) for the business hub should be 165,500m^2
- The minimum developable lot size should be 5,000m^2
- Dynamic forms and accent materials should be incorporated at corners of prominent elevations
- Corporate identification colours should be expressed with subtlety on the corners of warehouses and office components
- Building facades to public road frontages should be articulated using architectural elements such as:
    a. Varying facade alignments and heights
    b. Variation in materials and colours
    c. Regular breaks in material and patterns
- Avoid roof top A/C units on building facades to public road frontages
- A pallette of materials that enhances the parklands character of the business hub

Setbacks from M4/M7 Motorways & Access Road

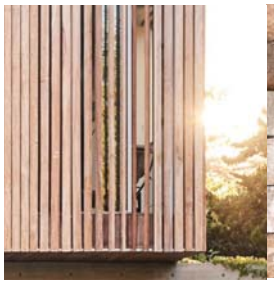
Objectives:

- To provide adequate distance between development and road alignments
- To provide visual screening via landscape buffer

Design Guidelines:

- Provide 10m landscape setbacks along the motorways
- Provide 20m building setbacks along the motorways
- Provide 7.5m building setbacks along the internal Access Road

Sustainable materials



Timber

Bricks / Pavers

Green Wall

Outdoor Areas

Rain Water Tank

DESIGN GUIDELINES

Sustainable Building Design

Objectives:

- To ensure that developments are environmetally sustainable to minimise energy and water consumption in buildings

- To encourage use of building materials to minimise impact to the environment

- To ensure that developments incorporate water conservations and re-use measure into the design and operation

- To provide a healthy, safe and comfortable working environment

Design Guidelines:

- Developments shall install rainwater tanks to supply grey-water to serve areas such as toilets, laundry and outdoor areas

- Developments shall use energy efficient materials

- Windows/glazing should be protected from summer sunlights by mean of shading device including eaves, landscaping and sunshade structures

- Developments shall minimise energy consumption and mechanical cooling with architectural strategies including:

    a. Passive solar access to internal & outdoor recreation areas

    b. Natrual light penetration and cross ventilation

    c. Use of landscaping to minimise thermal loads

Vegetative buffer planting to boundaries

Estate road street tree planting

Gabion entry feature and signage

On site amenity landscaping

Carpark planting

Amenity areas

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DESIGN GUIDELINES

Landscaping

Objectives:

Incorporate relevant guidelines and controls (refer below):

- To create a sense of arrival/place through entry statements and considered planting
- To provide visual and shade amenity for workers and visitors to the sites
- To reinstate/enhance vegetative buffer; increase native vegetation around site perimeter to ameliorate the views into site and soften proposed built form
- To use endemic species where possible
- To incoroporate WSUD principles where possible
- Provide street tree planting and onsite planting.

Design Guidelines:

The following controls and guidelines should be incorporated to the landscape design:

- Street Trees to meet Blacktown City Council Tree Planting Policy Criteria
- Street Trees to be compatible with the tree species throughout the broader parklands (which are described in the WSPT Design Manual 2018)
- Buffer Trees to incorporate endemic species and to be compatible with the tree species throughout the broader parklands (which are listed in the WSPT Design Manual 2018)
- Vehicle Entry Feature to be compatible with the Entry Features throughout the broader parklands (which are described in the WSPT Design Manual 2018)
- Bioretention planting as per Blacktown City Council & Biofilter/bioretention basin Planting Guide

Water Sensitive Parking Areas

Seperated Loading Docks & Employee Car Parking

DESIGN GUIDELINES

Parking & Water Sensitive Urban Design

Objectives:

- To design car parking, driveways and servicing areas so that they are efficient, safe, convenient and easily indentified

- To provide a sustainable level of on-site car parking

- To provide off-street parking facilities that do not detract from the overall visual amenity and character of the business hub

- To incorporate best practice Water Sensitive Urban Design measures

Design Guidelines:

- Carpark design to meet the minimum requirements as prescribed in the Traffic Report including parking for people with disabilities

- Vehicle access should be designed to avoid conflicts with pedestrians and cyclists

- Loading docks should be positioned so they do not interfere with visitor and employee parking spaces

- The following Water Sensitive Urban Design strategies should be incorporated into large parking layouts of 100 car spaces or more:
    a. Permeable pavements and sphalt to be considered to assist with detention of stormwater
    b. Planting pits with flush kerbs and wheel stops that allow overhang of cars into planting pit
    c. Parking areas to incorporate a minimum of 1 tree per 10 carking spaces

- Parking space should be provided as follows:
    a. Warehouse - 1 space/300sqm GFA
    b. Office - 1 space/40sqm GFA
    c. Industrial - 1 space/77sqm GFA

    (rates are based on RMS min. requirements)

- Accessible parking for people with a disability should be provided 1 space for every 100 carparking spaces or part thereof in accordance with Table D3.5 of BCA for Class 5, 7, 8 or 9C buildings

Tenant Signage & Numbering

DESIGN GUIDELINES

Signage

Objectives:

- To provide businesses the opportunity of identifying their location and activity

- To ensure signage does not detract from the visual appeal of the buildings

- To ensure signage is of a high quality of deisgn and construction and an integral element of the built environment and landscape setting

Design Guidelines:

- Advertising, other than real estate signage should be kept to a minimum and should relate only to the use occuring on the prespective property and is to identify the relevant business name

- Signage should be of a size and location which does not obscure vehicular sightlines and/or control signs

- Warehouse numbering should be applied to give cohesion to the warehouses in the business hub. Signage should be integrated into the feature/accent material expressed at the corners

- Directional signage for car parking, loading docks are to be well designed and located at a convenient point close to the access road

- Signage are not to cause environmental damage to trees or large shrubs

Street Lighting Pole
(Source: WSPT Design Manual)

Palisade Fence

Chain-wire Fence

DESIGN GUIDELINES

Street Lighting

- Appropriate street lighting should be provided throughout the development in accordance with Council's Street Lighting Policy, Endeavour Energy requirements and relevant sections of Australian Stadard AS1158

- Street lighting along the access road and shared path external to the business hub shall incorporate the principles of Western Sydney Parklands Design Manual, especially Section 11.0 - Lighting

- Specific lighting locations, pole type and materials should be determined by a lighting or electrical consultant in close co-ordination with Western Sydney Parklands Trust

Fencing / Safety & Security

- Provide security for employees and visitors and to contribute the amenity of the business hub

- Appropriate lighting should be provided to all pedestrian paths between public and parking areas and building entries

- Where fencing is reuired for safety or security reasons to be forward of the building line, it should be of a standard and style that does not detract the landscaping and main building facades

- Fencing should be sited so it does not impede sight lines for drivers

- The following types of fencing should be incorporated to the develpment:
    - Along Access Road Frontage : Palisade boundary fence in black powdercoated finish
    - Elsewhere : Black PVC coated chain wire fence with 3 x row of barbed wire cover

Architect's Design Statement

The concept approach to the built form of this Business Hub is to build an architectural treatment towards a high quality and cohesive estate for industrial users.

The architectural forms are envisaged as having simple, rational, repetitious and well-proportioned buildings accented with high quality elements around the entry and office components.

The buildings will be set in a discrete parcel of land – unified language of signage, fencing and public domain elements will ensure a consistency to the estate character. Landscaping is one of the main features of the precinct with detail and effect concentrated to the more human areas of the development around office, building and carpark entry points.

Scale:

The scale of the buildings is to be response to market trends and representative of the facilities within the Western Sydney Employment Area directly adjacent the site. The scale of the development (including the overall proposed business hub) is further articulated within the Visual Impact Analysis.

Colour / Materials & Finishes:

The colours, materials and finishes have been selected to consider the surrounding environment and orientation. External walls will be consist of various tones to alleviate the bulk and scale of the built form – contributing to the surrounding streetscape of the area. High quality finishes and expression is applied to the office components will provide a striking break in the bulk of the warehouse buildings.

Summary:

Overall, the concept design of the buildings in the Light Horse Interchange Business Hub look to create a benchmark for industrial development in the future. Care, consideration and imagination has been focused to create conceptual form that blends building landscape and location, with use movement and operation.

APPENDIX: ARTIST EXPRESSION

M4 Western Motorway View
(indicative expression only)