

Keyhole Estate Development Control Plan

July 2024



KEYHOLE LANDS - URBAN DESIGN REPORT

Hatch Roberts Design Group

TABLE OF CONTENTS

1)	INTRODUCTION.....	3
1.1	- Strategic Background and Purpose of this Development Control Plan	3
1.2	- Name of This Development Control Plan	3
1.3	- Aims and Objectives of this Development Control Plan	4
1.4	- Land to which this Development Control Plan Applies	4
1.5	Relationship of this Development Control Plan to other Plans, Codes and Policies	5
1.5.1	Exempt and Complying Development.....	7
1.6	- Interpretation	7
1.7	- Consent Authority	7
1.8	- Development Application Process	7
1.9	- Structure of This Plan	7
2)	DEVELOPMENT CONTROLS.....	8
2.1	Subdivision Layout	8
2.2	Built form and Estate layout	9
2.2.1	Site Coverage and Building Setbacks.....	9
	Controls.....	9
2.2.2	Landscape Design	10
2.2.3	Building Height	11
2.2.4	Building Layout and Design	12
2.2.5	Storage Areas	12
2.2.6	Materials and Finishes	13
2.2.7	Cut and Fill	14
2.2.8	Fencing.....	15
2.2.9	Signage and Estate Identification.....	15
2.2.10	Lighting.....	16
2.2.11	Transmission Lines	17
2.3	Estate Interface	17
3	TRANSPORT ACCESS AND PARKING	19
3.1	Road network, Traffic and Parking.....	19
3.2	Loading.....	22
3.3	Pedestrian and Cycling	22
3.4	Car Parking	23
3.5	Public Transport.....	24
4.	STORMWATER AND FLOODING	25
4.1	Flood Management	25
4.2	Stormwater Quality Management	26
4.3	Stormwater Drainage Management	28
4.4	Rainwater Harvesting and Re-use	29
4.5	Soil Erosion and Sediment Control	29
5.	INFRASTRUCTURE AND SERVICES	31
5.1	General Provisions	31
6.	ENVIRONMENTAL MANAGEMENT	34

6.1	Biodiversity and Riparian Land	34
6.2	Heritage Conservation	36
6.2.1	Aboriginal Archaeology	36
6.3	Ecologically Sustainable Development	36
6.4	Noise and Vibration	37
6.5	Air Quality and Odour.....	38
6.6	Waste Management	39
6.7	Site Contamination.....	40
6.8	Soil Salinity.....	41
6.9	Bushfire Risk Management.....	42

FIGURES

Figure 1 – Keyhole Industrial Estate.....	5
Figure 2 – Preferred Access Option.....	19
Figure 2a -Indicative Estate Road and The Horsley Drive Signalised Intersection.....	20
Figure 3 - Typical Local Industrial Road.....	21
Figure 4 – Indicative Site Layout Plan.....	46

TABLES

Table 1 – Affected Land Parcels.....	5
Table 2 – Minimum Lot Size.....	8
Table 3 – Building Setbacks.....	9
Table 4 – Landscape Setbacks.....	10
Table 5 – Design Vehicle Criteria.....	22
Table 6 – Utility Providers.....	31

1) INTRODUCTION

1.1 - Strategic Background and Purpose of this Development Control Plan

The Keyhole estate is located 40 km south-west of the Sydney CBD and is located 5 km west of the Wetherill Park Industrial Estate, that is one of the greatest concentrations of industrial lands in the Southern Hemisphere. The Keyhole estate is bounded by the Western Sydney Parklands, on the western edge of the Fairfield Local Government Area being one of the most culturally diverse cities in Australia.

The Western Sydney Parklands (The Parklands) is a large state owned regional park operated under the Western Sydney Parklands Act 2006 and managed by the Greater Sydney Parklands Authority (GSP). The Parklands covers 5,280 Hectares stretching 27km over three Council areas (Blacktown, Liverpool, and Fairfield). The Keyhole estate is surrounded by The Parklands, but does not form part of The Parklands.

Key strategic planning documents applicable to the Keyhole Estate are 'A Metropolis of Three Cities – The Greater Sydney Region Plan' and the 'Western City District Plan', both prepared by the Greater Sydney Commission (GSC) and adopted in March 2018.

Council has prepared a Local Strategic Planning Statement (LSPS) that sets out the 20-year vision for land-use in the local area, which includes how the special character and values that to be preserved in these areas and how change will be managed into the future.

Fairfield City Council has taken a proactive approach in preparing and implementing a number of strategic studies with the aim of facilitating ongoing improvement to Council's Biodiversity and open space. The Fairfield City Biodiversity Strategy 2020 builds upon Council's strong work in preserving biodiversity within the City and identifies key actions that will assist in addressing key issues relating to biodiversity such as biodiversity loss and offsetting.

Delivery of LSPS outcomes, informed by the Study is being implemented by amendments to the Fairfield Local Environmental Plan 2013 (FLEP 2013) and this Development Control Plan (Plan).

The purpose of this DCP is to assist landowners/developers to prepare development applications. Council staff and relevant planning authorities must consider it when assessing these development applications. The DCP provisions align with the Planning Proposal (**Map Amendment Number 9**) adopted by Council on (**23 July 2024**) and gazetted by the Department of Planning, Housing and Industry (DPH&I) in the NSW Local Government Gazette on 28 August 2024.

However, compliance with the provisions of this plan alone does not guarantee that consent will be given, as the document must be considered in conjunction with a number of other State Legislation and Local Policies and Plans discussed below.

1.2 - Name of This Development Control Plan

This plan is known as the Keyhole Industrial Estate Development Control Plan (DCP) was adopted by Fairfield City Council on **23 July 2024** and came into force on **10 January 2025**.

1.3 - Aims and Objectives of this Development Control Plan

The Primary purpose of the Development Control Plan (DCP) is to facilitate redevelopment of the land to which this DCP applies, which is zoned E4 General Industrial under the provision of the Fairfield Local Environmental Plan (2013) (Fairfield LEP 2013). This DCP has been prepared in accordance with the provision of Division 6 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and Part 3 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

- a) To support the implementation and attainment of the aims and objectives set out in the relevant clauses of the Fairfield LEP 2013.
- b) To deliver environmentally, economic and socially sustainable development.
- c) To ensure orderly and economic development of land within the keyhole estate by providing the release of land capable of being utilised for a range of employment generating land uses including major warehousing, distribution, freight transport, industrial, high technology and research facilities.
- d) To provide suitably located industrial land to support the economic growth of the City.
- e) To provide for the coordinated delivery of land, services and utilities and roads within the DCP area.
- f) To ensure the orderly development of industrial sites to minimise their environmental impact while maximising their operational potential.
- g) To ensure that traffic generated by the industrial development does not adversely impact upon local or regional traffic networks and has adequate onsite parking and manoeuvring areas.
- h) To minimise and contain environmental impacts within the keyhole estate and ensure minimal impact to the Western Sydney Parklands.
- i) To facilitate development that is integrated with local road and freight networks.

1.4 - Land to which this Development Control Plan Applies

This Plan applies to all the land located within the Keyhole Industrial Estate as indicated in Figure 1 below.

The land parcels affected are outlined in Table 1 below.

Lot	Deposited Plan
Lot 58B DP17288	211-217 Chandos Road
Lot 58B DP17289	211-217 Chandos Road
Lot 58A DP17288	203-209 Chandos Road
Lot A DP347034	203-213 Redmayne Rd
Lot 57 DP13961	187-201 Chandos Road
Lot 56 DP13961	171-185 Chandos Road
Lot A DP361393	155-169 Chandos Road
Lot B DP361393	137-153 Chandos Road
Lot 54 DP13961	121-135 Chandos Road
Lot 59B DP362022	143-155 Redmayne Road
Lot 59A DP362022	157-165 Redmayne Road
Lot 1 DP505934	171-185 Chandos Road
Lot 2 DP505934	185-193 Redmayne Road

Lot	Deposited Plan
Lot 61B DP17288	195-201 Redmayne Road
Lot B DP347034	215-223 Redmayne Road
Lot 63 DP13961	225-245 Redmayne Road
Lot 77 DP13961	120-134 Redmayne Road
Lot B DP357890	136-142 Redmayne Road
Lot A DP357890	144-150 Redmayne Road
Lot B DP377249	152-170 Redmayne Road
Lot A DP377249	172-180 Redmayne Road
Lot 74B DP17288	182-190 Redmayne Road
Lot 74A DP17288	200-206 Redmayne Road
Lot 78B DP347873	1671 The Horsley Drive
Lot 79A DP17288	1667 The Horsley Drive
Lot 79B DP17288	1657 The Horsley Drive
Lot 1 DP849699	1637-1647 The Horsley Drive
Lot 81A DP348110	1627A The Horsley Drive
Lot 81B DP348110	1617 The Horsley Drive
Lot A DP394855	208-220 Redmayne Road
Lot B DP394855	222-230 Redmayne Road
Lot D DP398446	1677 The Horsley Drive



Figure 1 - Keyhole Industrial Estate

1.5 Relationship of this Development Control Plan to other Plans, Codes and Policies

This DCP has been prepared in accordance with Division 3.6 of the Environmental Planning and Assessment Act 1979 NSW and should be read in conjunction with this Act and other applicable environmental planning instruments.

Additionally, other plans and policies (developed by both Council or state agencies) may have an impact on the form, design or planning of any development and must be considered in conjunction with this DCP. Over time these plans and policies may be superseded. Prospective applicants should contact the relevant consent authority to identify all relevant policies applying to development permitted in the Keyhole Lands at the time the development application is being prepared.

State and Federal Acts and Statutory Planning Instruments may also take precedent over this Development Control Plan.

State Environmental Planning Instruments - In some cases a State Environmental Planning Policy or other statutory Plan may also apply to land. It is advisable to check the impact of this prior to use of the DCP.

Fairfield Local Environmental Plan 2013 - The Fairfield LEP 2013, land use zoning and objectives, schedules, and specific clauses apply to development within the Fairfield City Centre.

Regional and District Policies

- A Metropolis of Three Cities – The Greater Sydney Region Plan
- Western City District Plan 2018

Local Plans and Policies - Fairfield City Wide Development Control Plan 2013. This plan adopts certain provisions contained within particular chapters/appendices of the Fairfield City Wide Development Control Plan 2013 (FCWDCP2013), the chapters are:

- Chapter 2 Requirements for Development Application Submission
- Chapter 3 Environmental Managements and Constraints
- Chapter 10 Miscellaneous Development
- Chapter 11 Flood Risk Management
- Chapter 12 Car Parking, Vehicle and Access Management
- Chapter 13 Child Care Centres
- Appendix A Definitions
- Appendix B Notifications Policy
- Appendix C Signage
- Appendix E Waste Not DCP to Manage Demolition and Construction Waste
- Appendix F Landscape Planning
- Appendix G Heritage and Development
- Appendix H Aboriginal Heritage

Note: The Keyhole industrial Estate DCP will prevail where there are any inconsistencies with the FCWDCP 2013.

Additional Local provisions/policies:

- Local Strategic Planning Statement 2020
- Fairfield Indirect (7.12) Development Contribution Plan 2011
- Retail Centres Policy 2015
- Fairfield Stormwater Drainage Policy 2017
- Employment Lands Study 2022
- The Building Code of Australia (BCA)
- Section 10 of the Austroads Guide to Traffic Practice Part 14 Bicycles and AS 2890.3
- Disability Discrimination Act, and
- Crime Prevention through Environmental Design (CPTED) Principles

In the event of an inconsistency between this Plan and any other Council DCP or Policy the provisions of this DCP apply to the extent of the inconsistency.

1.5.1 Exempt and Complying Development

Exempt and Complying Development may be undertaken on land within the DCP area in accordance with the relevant provisions of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

1.6- Interpretation

Unless otherwise stated in this DCP, terms used have the same meaning as those defined in the Fairfield LEP 2013 or Standard Instrument – Principal Local Environmental Plan.

A reference in this DCP to any Australian Standard or legislation includes a reference to any amendments or replacement as made.

1.7- Consent Authority

Unless otherwise authorised or required by the EP&A Act 1979 or a relevant Planning Instrument, Fairfield City Council is the consent authority for all development on the land to which the DCP relates.

1.8- Development Application Process

All local Development Applications in NSW are lodged via the NSW Planning Portal.

Development forms and fact sheets may be downloaded from the Fairfield City Council website at:

<https://www.fairfieldcity.nsw.gov.au/Planning-and-Building/Application-Guide/Forms-and-Fact-Sheets-Planning-and-Building>

1.9 - Structure of This Plan

The structure and format of the DCP has been established to enable the user to efficiently find the relevant provisions in a logical manner.

Section 1 – Introduction: includes administrative provisions including land to which the plan applies, relationship to other planning instruments, plans and policies and identification of the relevant consent authority.

Section 2 – Development Controls: Describes the relevant existing development including site constraints (where relevant) and provides detailed controls in relation to subdivision, staging, urban design principles, built form and streetscape and landscape design.

Section 3 – Transport Access and Parking: Addresses matters of Transport and Traffic, including anticipated traffic generation, network capacity and planned upgrades, car parking requirements for future development, public transport, walking and cycling.

Section 4 – Stormwater and Flooding: Outlines the stormwater and flooding issues, including flood management, stormwater quantity, quality management, and rainwater harvesting and re-use.

Section 5 - Infrastructure and Services: Identifies existing and required service and utility capacity together with locations of existing connections within the context of the DCP area and necessary extensions and upgrades on Councils local roads and state roads required to service the land.

Section 6 - Environmental Management: Describes the key environmental issues relevant to the site and its context and the potential impacts arising from future development including, biodiversity, heritage conservation, ecologically sustainable development, noise and vibration, air quality and odour, waste management and environmental risk management.

2) DEVELOPMENT CONTROLS

This DCP makes provision for an appropriate subdivision layout that achieves a high degree of access for all forms of transport and safe access for pedestrians.

2.1 Subdivision Layout

Objective

- a) To provide a subdivision layout, that will accommodate industrial buildings that have a suitable format and footprint, while minimising the impacts on the natural topography and biodiversity significance of the land.
- b) To provide an internal road network with a high level of access for all forms of transport which connects to the estate road network.
- c) To provide for a coordinated approach to an onsite stormwater detention, including water quantity and water quality control measures, which meet the likely needs of future industrial development.
- d) To ensure that subdivision results in lots that are suitable for a range of industrial developments

Controls

- a) Industrial lots are to be sited and configured to achieve the criteria listed in Table 2. The lot sizes and frontages may be varied where required for utility installations or utility undertakings e.g. electricity substations or environmental protection works (e.g. water quantity and quality control measures), or ancillary development, including retail and commercial activities (such as cafes), supporting employment land uses on the site.

Control	Requirement
Minimum Lot Size	930m ²
Minimum Frontage (Street)	30 metres

Table 2 – Minimum Lot Size

- b) Lots are to be sited and designed to enable the retention of the natural features of the site, including remnant vegetation and important fauna habitats.
- c) The main internal estate road connection with The Horsley Drive will be signalised to allow access in all directions. The internal estate road network is to be designed and constructed to accommodate all traffic, with primary access to industrial lots being from the internal road system. No direct access to individual lots is permitted from the Horsley Drive.
- d) Suitable water quality and quality control measures are to be implemented with future development to avoid detrimental impacts on the natural watercourses and downstream properties. These measures should be designed to be above the 1% AEP flood event.

- e) Where a strata or community title subdivision is proposed, any space for parking or other purposes forming part of the sole occupancy unit must be included in the same strata lot as the unit.
- f) A landscape plan showing landscaped areas including walls and extents shall be submitted with any subdivision and/or built form application. When visible from public roads, particular consideration shall be given to landscaping and stepped retaining wall treatments, with high quality materials utilised to reduce visual impact.
- g) Where a residue lot is created through subdivision, the applicant must demonstrate that future development of that residue lot can meet the controls of the DCP. Where a residue lot is created that is not capable of delivering development in line with the DCP, the principles of site isolation will apply.
- h) Where a subdivision plan includes battle axe lots, the area of the access handle is not to be included in the calculation of minimum lot size.

2.2 Built form and Estate layout

2.2.1 Site Coverage and Building Setbacks

Objective

- a) To ensure suitable site density of development.
- b) To provide landscaped setbacks which minimise the potential visual impact of the development having regard to the location of the site which comprises an important gateway into the established urban area of Fairfield City.
- c) To ensure buildings are appropriately sited and designed to respect the indigenous cultural heritage, environment and scenic value of the Western Sydney Parklands by minimising the visual impact of the development.
- d) To minimise visual impacts on neighbouring residential properties.

Controls

- a) Buildings and structures are to maintain minimum setback as set out in **table 3 below**.

Building Setback Control	Requirement
Front Setback (The Horsley Drive)	25 metres
Front Setback (Estate Roads)	10 metres
Front Setback (Redmayne Road)	10 metres
Front Setback (Chandos Road)	15 metres

Table 3 – Building Setbacks

- b) Reduced setbacks may be considered on the secondary road frontage for buildings located on a corner allotment.
- c) Reduced setbacks may also be considered where it is demonstrated that there would be minimal impacts and a consistent building line has not been established.
- d) Walls and facades should be articulated where possible to provide more varied streetscapes when viewed from public roads.
- e) Service areas and related infrastructure (e.g. water tanks) should not be located within front setback areas, unless or if appropriately screened.

2.2.2 Landscape Design

Objectives

- (a) To provide landscaping within developments that enhances the streetscape aesthetics and character of the estate.
- (b) To provide landscape character and amenity that is appropriate to the scale and nature of the industrial development.
- (c) To provide landscaping within developments that softens and screens the visual impact of industrial structures, infrastructure, storage areas and large expanses of hard paved surfaces, and;
- (d) To respect the scenic, cultural and historic use of the site for agriculture and animal grazing.
- (e) To provide a visual buffer between the industrial development and surrounding rural residential land uses, and;
- (f) To provide robust and low maintenance landscaping within developments that contributes to biodiversity, sustainability, and water efficiency.

Controls

- (a) A landscape plan, prepared by a Landscape architect is to be prepared and submitted with development applications for the construction of new buildings and/or major alterations and additions to existing buildings.
- (b) Landscaping setbacks should be provided as **per table 4** below

Setback Frontage	Landscape Setback Distance
The Horsley Drive	25 metres
Chandos Road	10 metres
New internal Road	10 metres
Redmayne Road	10 metres
Rear and Side Setbacks	4 metres

Table 4 – Landscape Setbacks

- (c) A landscape plan must include the following details at a minimum:
 - i. Scale of 1:100 or 1: 200 showing a north point, adjoining properties, notations on the plan reflecting adopted landscape planning principles.
 - ii. Show a soft works zone which is landscaped with gardens, lawns, shrubs and trees accompanied by a list of plants shown on the plan including either their botanical name or common name and the numbers of plants proposed.
 - iii. Show a hard works zone containing paved areas, driveways and parking.
 - iv. Show the location of utility areas such as garbage bin areas and appropriate screening details.
 - v. Show existing features of the site such as rock outcrops, heritage items and creeks and other watercourses.
 - vi. Show all existing vegetation including provisions for protection of trees (has a height of more than 4 metres and a spread of more than 3 metres) and is to be identified in development plans submitted to Council, with vegetation to remain and vegetation to be removed shown. All species names and common names must be shown.

- (d) Landscaped front setbacks should include canopy trees, shrubs and ground covers to provide shade and to minimise the visual impacts of warehouse/logistics development on the site.
- (e) Island planter beds are to be provided throughout the carpark to provide shade, help reduce the urban heat island effect and incorporate vegetation across the hardstand area. It is recommended that 1 planter bed per 10 car parking spaces is considered to provide shading to reduce heat impacts.
- (f) Vegetation screening is to be provided along The Horsley Drive interface to screen future industrial development.
- (g) Outdoor recreation areas for staff should be integrated with the landscaped areas to provide shade at an appropriate level of amenity and comfort.
- (h) Open car parking areas should be landscaped to reduce the impact of hard paving and allow maximum pervious area across the site. Established tall trees with wide spreading canopy provide desirable shade reducing the effects of heat.
- (i) Water sensitive urban design (WSUD) elements should be incorporated into landscaping where possible
- (j) Each lot is to have a minimum tree canopy coverage of 20% and a minimum pervious area of 15%. However, variations to these minimum requirements will be considered if an estate wide compliance can be demonstrated.
- (k) Outdoor recreation areas for staff should be integrated into landscaped areas to provide shade and an appropriate level of amenity and comfort.
- (l) Locally endemic indigenous species are encouraged for all landscape plantings, however non-native species may be considered in limited use to external courtyard areas to achieve seasonal climate management.
- (m) Non-native species listed as biosecurity matters under the biosecurity Act must not be used. Appendix F of the Fairfield City Wide DCP 2013 is to be used to determine appropriate non-native species plantings.
- (n) Where a watercourse occurs through or adjacent to the site, a riparian vegetated zone in accordance with **Section 6.1** will be required.

2.2.3 Building Height

Objective

- (a) To provide for an appropriate scale of development that responds to the topography of the site, position within the Western Sydney Parkland gateway location into the urban areas of Fairfield City.
- (b) To minimise the potential impact of development on views, particularly from nearby rural/residential development.

Controls

- (a) The maximum Height of Buildings for a warehouse or general industrial building is 25 metres above ground level.

- (b) The maximum building height set out in (a) may be increased (subject to requirements) for refrigerated warehouse developments associated with plant material located on the roof.
- (c) Achieving maximum building height is subject to a merit based assessment on the visual impact assessment and impacts to neighbouring land uses including the Western Sydney Parklands and gateway location into urban areas of Fairfield City.
- (d) Where development involves alteration of ground levels, building height (for the purposes of compliance with this section) will be measured from the post-development finished ground level.
- (e) Landscaping species should be selected having regard to the proposed building height, and opportunities to screen the building. Particular consideration is to be given to any zone boundary interfaces and rural residential development.

2.2.4 Building Layout and Design

Objectives

- (a) To encourage flexible building design and layout; and
- (b) Promote and encourage positive streetscape elements.

Controls

- (a) Industrial and warehouse facades orientated towards a street frontage must:
 - (i) Be articulated using architectural elements and avoid long expanses of unbroken blank walls where practical and appropriate.
 - (ii) Use a variety of materials and finishes (refer to **section 2.3.5**)
- (b) Where industrial and warehouse components incorporate commercial office space or showroom areas, building facades should include large windows at least every 20 metres.
- (c) Above groundwater tanks and plant are to be located behind the front façade of any development.
- (d) Rooftop structures such as plant rooms, solar panels, air conditioning and ventilation systems are to be incorporated into the design of the building or located within well-designed, integrated rooftop element.

2.2.5 Storage Areas

Objectives

- (a) To mitigate the visual impact of storage areas on adjacent properties, and
- (b) To identify and manage environmental impacts associated with the use of outdoor storage areas.

Controls

- (a) Where practical and appropriate, storage areas should be provided within buildings.

- (b) Where screening of outdoor storage areas is required, the applicant will need to demonstrate consistency with the fencing provisions of section 2.3.8. Where practical additional landscaping may be provided to ensure visual amenity is preserved.
- (c) Where open storage areas are proposed a development application may be required to provide suitable technical assessment to support the use. This may include an air quality assessment to manage dust and/or acoustic impacts associated with the use.
- (d) Open storage areas must not be located on areas designated for parking or truck/vehicle manoeuvring.

2.2.6 Materials and Finishes

Objectives

- (a) To ensure that industrial development uses a high standard of architectural design through the selection of high standard and appropriate building materials and finishes that complement and enhance the architecture of the building.
- (b) To provide an attractive and interesting streetscape that integrates the architectural design of the building with the landscape design of the setbacks and surrounding areas.
- (c) To minimise the perceived bulk and scale of the industrial buildings and reduce the potential visual impact on the public domain.
- (d) To encourage the use of sustainable building materials and fixtures to minimise the potential environmental impacts.

Controls

- (a) Front elevations and street facing elevations are to be designed to present a building form that is of an appropriate quality and architectural merit with varying materials to break up the expanse of large walls where practical and appropriate.
- (b) Other building elevations are to be designed with consideration of their potential for public view. Including use of different materials and colours, where appropriate and necessary to moderate the potential visual impact of the building.
- (c) Ancillary offices and administration areas are to be designed as an architectural feature which enhances and enlivens the streetscape, with a clear and identifiable entry and adequate natural surveillance.
- (d) The siting, design and materials within industrial buildings are to consider the location of the landscaped areas and setbacks and/or complement the architectural style of the building.
- (e) Outdoor storage areas should be screened from public view by walls or screens that are of a compatible design with the industrial building and/or landscaping that is consistent with the treatment in other parts of the site.
- (f) Materials used should achieve a balance between solid surfaces (that may include coloured metal cladding, masonry or brick and render) and vertical walling which contains large areas of glass.

- (g) Where metal cladding is used on walls or roofs, colour selection should avoid those of high reflectivity.

2.2.7 Cut and Fill

Objectives

- (a) To ensure adequate information is submitted with a development application to determine the impact of future development by means of changes in levels and land,
- (b) To ensure that cut and fill of land does not cause adverse impact on adjacent properties by way of altering flooding characteristics of the site
- (c) To ensure that cut and fill of land has considered the future finished ground levels of adjacent land, including upgrades to the Horsley Drive.
- (d) To reduce streetscape dominated by retaining walls and fences.

Controls

- (a) Excavation and fill in excess of 1 metre may be permitted to allow for the establishment of a level construction pad providing the excavations are adequately retained and drained in accordance with engineering requirements.
- (b) Cut and fill batters shall not:
 - i. Exceed a slope of 1:4 (v:h) unless geotechnical reports result in the consent authority being satisfied with adequate site stability being achieved. All batters are to be provided with both short term and long-term stabilization to prevent soil erosion.
 - ii. Extend onto Councils Road reserve
- (c) Retaining walls in excess of 3 metres that are visible from adjacent land, such as those along street edges or external boundaries, should be in a stepped form with landscaped areas in between level changes to soften the visual impact of the retaining wall.
- (d) Where fill material is required to be imported to site, all material is required to be excavated Natural Material and is to be accompanied by chain of custody documents to be provided to the Fairfield City Council Public Health and Environmental Branch.
- (e) Where fill material is proposed to be re-used on site, material must first be validated by a suitably qualified contamination consultant as clean.
- (f) Development applications involving cut and fill must be accompanied by a detailed survey of the site prepared by a registered surveyor combined with detailed cut and fill plans including quantities of material required to create an appropriate construction pad.
- (g) Applications for bulk earthworks shall be accompanied by detailed Geotechnical investigations to include:
 - i. Subsurface conditions, including the locations of the base of the existing stockpiles, where possible.
 - ii. Depth of proposed excavation including below the groundwater table if applicable.

- iii. Site reactivity and its effects on earthworks and foundations.
 - iv. Excavatable, with particular reference to deep cuttings.
 - v. Groundwater Flow, soil erosion and soil permeability, and their effects on site drainage
 - vi. Foundation design
 - vii. Pavement thickness design
- (h) Any material brought to a development site must comply with the EPA's Resource Recovery Orders and exemptions and any other relevant regulation.
- (i) Any fill that is being transported from a development can only be transported to sites that are lawfully able to receive such material. The EPA guidelines should be consulted and consent should be sought for any such activity where required.
- (j) Any VENM, ENM or material received under an EPA Resource Recovery Order and Exemption must be validated by a suitably qualified person to demonstrate that is for its intended use.
- (k) Any proposed retaining walls are to be clearly identified and suitably landscaped.

2.2.8 Fencing

Objectives

- (a) To address the security needs of industrial developments while avoiding unacceptable visual impacts on the streetscape and landscape design.
- (b) To ensure that fencing is of a consistent high quality of construction and uses appropriate materials
- (c) To maintain appropriate lines of site from the street

Controls

- (a) Where security fencing is required, it shall be located behind the landscape setback. Fencing shall be constructed of black plastic coated 'chain-link' fence or an approved alternative such as a metal palisade type fence.
- (b) The overall height of fencing shall be no more than 2.4 metres, chain link or similar fences are not suitable to the site frontage.
- (c) Service yards and external storage areas shall be screened from public view by a solid fence or wall located behind the building line.
- (d) Fencing along street frontages should provide open style fencing, which does not obstruct views of landscaping from the street or reduce visibility. Solid fences above 1 metre, chain link or similar style fences are not suitable to the site frontage.

2.2.9 Signage and Estate Identification

Objectives

- (a) To provide for business identification signage that is appropriate for the industrial use of the land, including the need for legible way finding signage for vehicle drivers and visitors.

- (b) To deliver signage that is of an appropriate appearance and quality and is consistent and compatible with the built form and landscape character of the precinct.
- (c) To avoid signage design and positioning from causing a safety hazard for motorists and pedestrians.
- (d) Signage height to be minimised to avoid being viewed from the western Sydney parklands.

Controls

- (a) All signage is to be constructed of high quality and durable materials that are compatible with the architectural design and construction of the associated industrial building.
- (b) A maximum of one building identification sign per elevation shall generally be provided for each tenant.
- (c) An estate entrance wall and high-quality estate signage may be provided at access entries to the precinct on the Horsley Drive or Chandos Road outside of the road reserve.
- (d) Sky signs and other roof signs that project vertically above the roof of a building are not permitted.
- (e) Flat mounted wall signs for business identification signage are to be no higher than 15 metres above existing ground level.
- (f) Where illuminated signage is proposed
 - i. A maximum of one illuminated sign is permitted on each elevation of each building, and
 - ii. Should be orientated away from residential properties
- (g) Signage is to be installed and secured in accordance with relevant Australian Standards
- (h) Signage in the forms of banners, flags and other fabric signs are not permitted
- (i) Other forms of signage not provided for in this section may be permitted under another EPI and will be subject to an assessment on merit.

2.2.10 Lighting

Objectives

- (a) To provide lighting that improves the safety and amenity of the industrial uses and the public domain.
- (b) To located and design lighting in such a way that it does not have significant detrimental off-site impacts, particularly for rural-residential dwellings.
- (c) To minimise impacts on flora and fauna within the adjoining western Sydney parklands ensuring that light spill does not occur into the eastern creek riparian corridor.

Controls

- (a) External lighting within industrial lots is to comply with the provisions of *Australian Standard AS4282-1997 Control of Obtrusive Effects of Outdoor Lighting*.
- (b) Street lighting along the internal roads is to be provided in accordance with the provisions of Australian Standard *AS1158 Lighting for Roads and Public Spaces*.
- (c) Lighting design should address the principles of Crime Prevention Through Environmental Design having regard to the operating hours of individual tenants and any safety and security issues.
- (d) Lighting design should seek to avoid unnecessary energy consumption and is to be powered by solar or other forms of renewable energy. Sensor lighting should be incorporated for both internal and external spaces, where appropriate.
- (e) As part of any Development Application neighbouring a residential area, the development is to be designed to avoid light spill into adjoining dwellings and private open space.

2.2.11 Transmission Lines

Objective

- (a) To ensure that development and use of land does not impact on or prevent access to existing infrastructure, and
- (b) To ensure that developers obtain approval from the relevant authority prior to undertaking works within or adjacent to transmission lines.

Controls

- (a) Land identified as being for the purposes of a transmission line, shall not be permitted to be utilised for the following purposes unless expressly authorised by the relevant energy authority:
 - i. Construction of permanent buildings or fixed plant and equipment
 - ii. Storage of combustible materials, garbage or fallen timber
 - iii. The planting of large trees that grow in excess of 3 metres
 - iv. Driven fence posts or stakes in easements with underground electricity cables, and;
 - v. Installation of unapproved third-party utilities such as telecommunications, Gas water and sewerage.
- (b) All development applications involving land burdened by an easement for the purpose of transmission lines shall ensure comprehensive consultation be undertaken with the relevant energy authority prior to development application lodgement.

2.3 Estate Interface

Objective

- (a) To ensure that development does not adversely impact on the amenity of adjoining and nearby residential development on unzoned land within the Western Sydney Parklands.

- (b) To ensure that development does not adversely impact the environmental values of the Eastern Creek riparian corridor.
- (c) To ensure that new industrial and/or employment development is located, sited, designed, and operated to minimise potential impacts associated with:
 - i. noise
 - ii. odour
 - iii. vibration
 - iv. overshadowing
 - v. privacy and impacts, and
 - vi. excessive bulk and scale
- (d) To ensure that industrial buildings are appropriately sited and setback from residential properties in the Western Sydney Parklands in order to ensure their amenity is preserved.
- (e) To encourage a high standard of aesthetically pleasing and functional industrial developments that sympathetically relate to adjoining and nearby land.
- (f) To ensure that heavy vehicles associated with industrial development do not adversely impact upon residential and environmental amenity.

Controls

- (a) Loading areas, driveways, rubbish storage areas and rooftop equipment shall not be located adjacent to residential properties unless sufficient setbacks, landscaping or screening is provided.
- (b) New buildings or additions to existing buildings shall not unnecessarily overshadow development including private open space, to ensure that an appropriate level of residential amenity is retained. In this regard, Council will require submission of shadow diagrams where it considers development may create potential for considerable overshadowing.
- (c) Site boundaries that immediately adjoin the Western Sydney Parkland must include a continuous landscaped strip planted with vegetation of sufficient height and dimensions to soften the development as viewed from the adjoining Parklands and residential development.
- (d) The depth and width of the required landscaped area shall allow for growth and maintenance of tree species endemic to the locality. Such landscaping strips are to be suitably maintained.
- (e) External lighting shall be positioned to avoid light spillage to adjoining lots. In this regard, Council may require additional information such as light spill diagrams where it considers there is potential for negative impacts on residential amenity for any proposed development.

3 TRANSPORT ACCESS AND PARKING

3.1 Road network, Traffic and Parking

The Keyhole industrial estate DCP area is located between Chandos Road and The Horsley Drive, Horsley Park. The Horsley Drive as the primary site frontage will be upgraded at a future time to incorporate an additional east and west lane. The future Southern Link (state arterial) Road connection will form a link between Mamre Road and the Wallgrove Road/Chandos Road intersection generally along the alignment of Burley Road.

Objectives

- (a) To create a road network that is safe and efficient for all users and minimises development traffic on minor roads, see figure 3 Estate Road Layout.
- (b) To create a road network that provides safe and efficient access to the precinct while avoiding unacceptable impacts on the surrounding road network
- (c) To site and design industrial development to accommodate freight traffic movements
- (d) To provide adequate car parking that meets the expected demand while avoiding unacceptable impacts on the surrounding road network
- (e) To support the complementary use and benefit of public and active transport including cycling.
- (f) To minimise the impact of vehicle access points on the quality of the public domain and streetscape
- (g) To ensure that roads are designed to accommodate heavy vehicles

Controls

- (a) Access to the industrial land (figure 2 below) will be as follows:
 - i. Primary site access from an estate road to The Horsley Drive via a signalised intersection.
 - ii. No access will be provided for heavy vehicles into the surrounding road network from Redmayne Road.
 - iii. No vehicle access will be permitted to the site from Chandos Road.
 - iv. A priority-controlled roundabout will be constructed at the intersection of Redmayne Road and the estate Road. The following assets will be constructed and dedicated to Council.

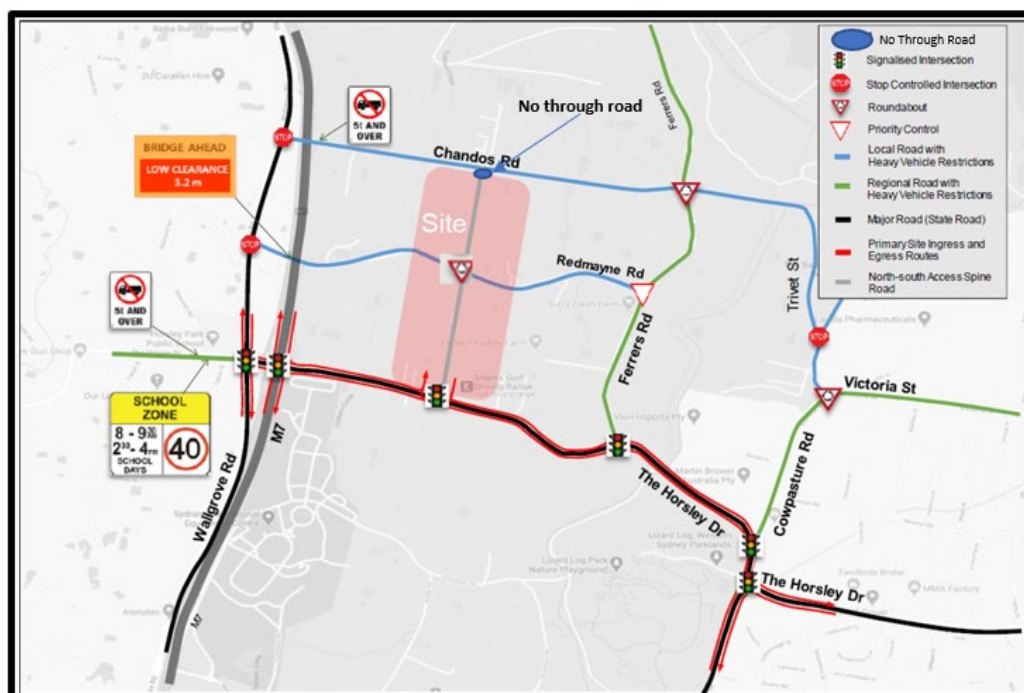


Figure 2 – Preferred Access Option

- (b) In order to achieve the full development outcome of the estate the following assets will be constructed.
- i. Construction of a North-South estate road between Chandos Road and the Horsley Drive, Horsley Park
 - ii. Construction of a roundabout on Redmayne Road at the intersection of the estate road.
 - iii. Internal estate road network to be constructed to facilitate primary access to all lots zoned E4.
- (c) The intersections will be designed in accordance with the relevant Australian Standards and guidelines.
- (d) No direct heavy vehicle access will be permitted to and from individual industrial lots Via the Horsley Drive, Chandos Road and Redmayne Road. Access for any development must be accommodated primarily from the internal estate road network.
- (e) The proposed north-south central spine estate road will be closed to traffic from Chandos Road. No access is permitted from individual lots to Chandos Road.
- (f) All heavy vehicle access is to be provided via the Horsley Drive intersection. No heavy vehicle access is permitted from Redmayne Road or Chandos Road to the site.
- (g) A signalised intersection is to be constructed at the estate road intersection with the Horsley Drive in line with figure 2a below.

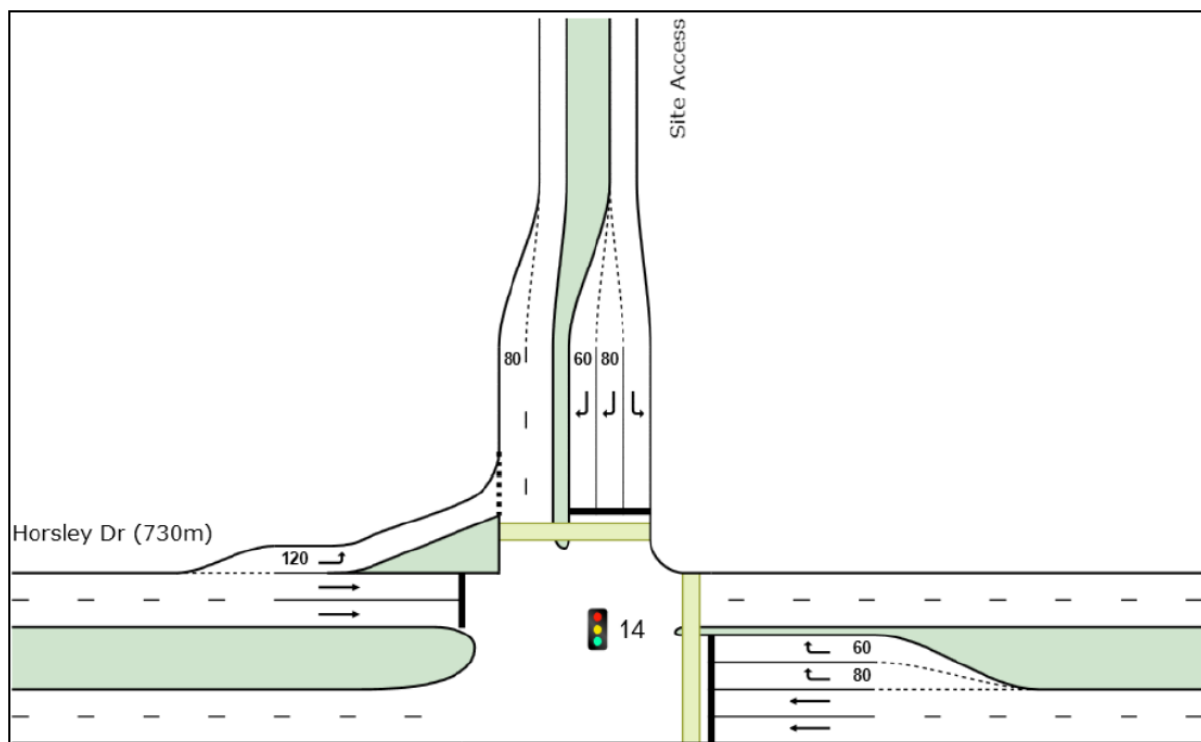


Figure 2a – Indicative Estate Road and The Horsley Drive Signalised Intersection

- (h) The internal industrial subdivision road shall comprise a 24 metre wide road reserve as shown in Figure 4 below and include:
- i. A 4.00 metre verge consisting of
 - o 2.10 metre pedestrian path (including a 0.5m offset from the boundary)
 - o 1.90 metre tree planting
 - ii. A 15 metre road carriage way consisting of
 - o 2 * 4 metre kerb side lanes
 - o 2* 3.5 metre through traffic lanes
 - iii. A 5 metre verge consisting of
 - o 1.90 metre of tree planting
 - o 3.10 metre shared pedestrian cycle path
- (i) Industrial developments shall be sited and designed to accommodate the largest type of vehicle expected to access the site, with adequate manoeuvring areas that enable all entry and exit movements to and from the site being made in a forward direction.

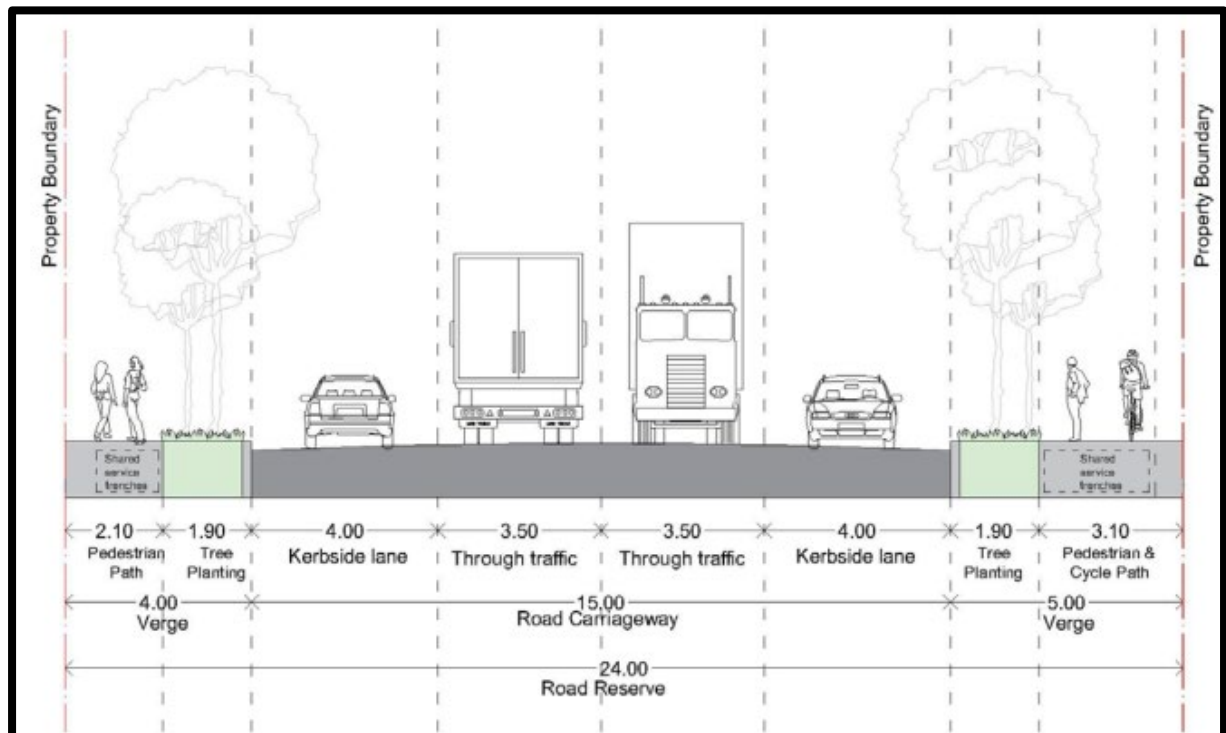


Figure 3 - Typical Local Industrial Road

- (j) Car parking areas are to be designed in accordance with the provisions of relevant Australian Standards AS/NZS 2890.1:2004, AS/NZS 2890.2:2002 and AS/NZS 2890.6:2009.
- (k) Consideration is to be given to the delivery of infrastructure and/or the implementation of management measures that encourage the use of alternative forms of transport, which could include:
- i. Safe storage/parking areas for bicycle facilities
 - ii. Shower and change room facilities for staff
 - iii. Flexible working arrangements to enable start/finish times based on the bus timetable
- (l) All roads and intersections shall be designed to accommodate 26m B-double vehicles as a minimum.

- (m) The minimum design vehicle requirements shall be based on the following site areas, as per Table 5 below:

Site Area	Design Vehicle
Up to 1,500 sqm	Medium Rigid Vehicle
1,500 sqm to 4,000 sqm	Heavy Rigid Vehicle
4,000sqm to 20,000 sqm	Articulated Vehicles
Greater than 20,000 sqm	30m PBS Level 2 Type B

Table 5 – Design Vehicle Criteria

3.2 Loading

Adequate loading and unloading arrangements are required so that the activity, pedestrian amenity and traffic are not unduly impacted.

Objectives

- (a) To ensure that the land can accommodate the servicing and loading provisions of the use, while maintaining amenity, vehicular movements, and the activity operation.
- (b) To ensure that all vehicles and loading trucks and vans have sufficient area to manoeuvre and load.
- (c) Ensure environmental amenity

Controls

- (a) All loading and unloading is to be undertaken on-site and shall be undertaken by service vehicles.
- (b) Loading bays are to be designed in accordance with the relevant Australian Standards, such as AS2890.2 Parking Facilities – Off Street Commercial Vehicle Facilities.
- (c) Off-street loading and unloading facilities are provided for all commercial and industrial premises. The number and size of loading bays will be determined by the consent authority having regard to the:
 - i. Intended use of the premises
 - ii. Frequency of deliveries/collections
 - iii. Size and bulk of goods to be delivered/collected
 - iv. Size of vehicles to be used; and
 - v. Likely impacts on traffic safety and efficiency on adjoining roads.

3.3 Pedestrian and Cycling

Objectives

- (a) To encourage and support the use of active modes of transport where practical
- (b) To ensure safety between pedestrians, cyclists, and vehicles

Controls

- (a) Applicants are encouraged to incorporate, in the design of their buildings, safe storage/ parking areas for bicycles in secure and accessible locations with weather protection, with adequate shower and change facilities provided for staff (where appropriate).

3.4 Car Parking

Objectives

- (a) To provide parking areas that are convenient and sufficient for the use of employees and visitors generated by new developments, and
- (b) To ensure that vehicular access and circulation is safe and efficient and minimises potential vehicular and pedestrian conflict.

Controls

- (a) On-site car parking is to be provided in accordance with the following minimum rates:
 - i. Warehouse/ Distribution Centre: one space per 300m² of Gross Floor Area (GFA) or one space per four employees (whichever is the greater).
 - ii. Factory Industry: One space per 200m² of GFA or one space per two employees (whichever is the greater)
 - iii. One space per 40m² of ancillary office GFA
 - iv. One space for every 100 car parking spaces is to be provided as accessible parking in accordance with the, “*Disability (Access to Premises – Buildings) Standards 2010*”, from the Building Code of Australia.
 - v. Bicycle Parking is to be provided at 1 space per 600 m² of Gross floor area of office and retail space (over 1200m² Gross Floor Area).
 - vi. Bicycle Parking is to be provided at 1 space per 1,000 m² of Gross Floor Area of industrial activities (over 2000m² gross floor area).
 - vii. In accordance with TfNSW Guidelines or if there are no parking guidelines for a specific use, then a site-specific car parking analysis will be required. This may require the applicant to submit a car parking report from a suitably qualified traffic consultant.
- (b) Electric Vehicle Parking and charging stations are to be integrated into car park design on the development site, consideration must be given to:
 - i. Designing electric vehicle parking spaces with associated charging stations within or immediately adjacent to parking spaces.
 - ii. Site on-street charging stations are to be located within the Flex Zone, a minimum of 600mm from the face of the adjacent kerb.
 - iii. Site charging stations clear of pedestrian paths of travel and do not inhibit desire lines.
 - iv. Car parking spaces are designed to be easily converted into electric charging stations.
 - v. Provide charging points for micro mobility devices and prioritise parking for these vehicles.
- (c) Car parking areas are to be designed in accordance with the provisions of relevant Australian Standards AS/NZ 2890.1:2004, AS/NS 2890.2:2002 and AS/NZ 2890.6:2009.

- (d) parking rates are to be applied for the following uses:
- i. Freight transport facilities - 1 per transport vehicle present at peak vehicle accumulation plus 1 per 2 employees, or to be determined by a car parking survey of a comparable facility.
 - ii. Vehicle Body Repair Workshops/ vehicle repair stations – 3 spaces per 100m² of gross floor area or 6 per work bay whichever is the greater
 - iii. Other uses not specified within this DCP – In accordance with TfNSW Guidelines or if there are no parking guidelines for a specific use, then a site-specific car parking analysis will be required. This may require the applicant submit a car parking report from a suitably qualified traffic consultant.

3.5 Public Transport

Objectives

- (a) To encourage the use of public transport by providing clear and safe pedestrian links to public transport and stops; and
- (b) To provide comfortable and safe waiting areas at public transport stops.

Controls

- (a) Consideration is to be given to implementation of a Workplace Travel Plan (WTP) to encourage non-car transport and increase public transport usage. This is to be done at such a time that the necessary infrastructure is in place for the WTP to be successful (i.e., public transport links are improved to the broader area).
- (b) Bus stops should be designed to provide suitable shelter and seating.

4. STORMWATER AND FLOODING

4.1 Flood Management

Objectives

- (a) To avoid development that results in significant adverse flooding impacts
- (b) To minimise the potential impact on flood affected land, including damage to property or risks to loss of life.
- (c) Inform the community of Council's controls and policy for the use and development of flood prone land
- (d) Provide detailed controls for the assessment of applications lodged in accordance with the Environmental Planning and Assessment Act 1979 (NSW) on land affected by potential floods
- (e) Provide different guidelines for the use and development of land subject to all potential hazards in the floodplain, which reflect the probability of the flood occurring and the potential hazard within different areas.
- (f) Apply a merit-based approach to all development decisions which takes account of social, economic and ecological considerations.
- (g) To control development and other activity within the floodplain having regard to the characteristics and level of information available for each of the flood plains, in particular the availability of Flood Risk Management studies and Flood Risk Management Plans prepared in accordance with the Flood Plain Development Manual and the NSW Floodplain Development Manual.
- (h) Deal equitably and consistently with applications for development on land affected by potential floods, in accordance with the principles contained in the Floodplain development manual, issued by the NSW Government.
- (i) Embed Aboriginal cultural knowledge and caring for country practices to minimise the impact of development on flood behaviour and function of the floodplain and avoid adverse impacts to the existing flora and fauna community.
- (j) Enable the safe occupation and efficient evacuation of people in the event of a flood.

Controls

- (a) A flood assessment is to be undertaken for each individual lot that is subject to overland flow paths or flooding from the Eastern Creek Catchment, or on an estate wide basis. The assessment is to demonstrate that the development will not detrimentally increase flood effects.
- (b) Development may be granted for development (including filling) within the 1 in 100 year Annual Exceedance Probability (AEP) event where it is demonstrated that the development does not result in increases to flood hazard or damage to other properties. Development consent will not be granted for development within the high hazard floodway due to its function as the main flow path for flood waters and the potential significant threat to life and property in a major flood.

- (c) The following matters are to be considered by the relevant consent authority with regard to the assessment of development within the 1 in 100 year ARI event:
- i. Floor levels of development are to consider both Eastern Creek and local overland flooding.
 - ii. Flood levels are not increased by more than 0.1m by the proposed filling.
 - iii. Downstream velocities are not increased by more than 10% by the proposed filling.
 - iv. Proposed filling does not redistribute flows by more than 15%.
 - v. The potential for cumulative effects of possible filling proposals in that area is minimal.
 - vi. There are alternative opportunities for flood storage.
 - vii. The development potential of surrounding properties is not adversely affected by the filling proposal.
 - viii. The flood liability of buildings on surrounding properties is not increased.
 - ix. No local drainage flow/runoff problems created by the filling.
- (d) For industrial and commercial buildings, the floor level is to be 0.3 metres above the 1% Annual exceedance probability (AEP) mainstream water level.
- (e) Buildings within a flood prone area are to be constructed with approved materials, resistant to damage by immersion by flood waters for prolonged periods, to the satisfaction of Fairfield City Council.
- (f) Where development occurs on land identified as a flood control lot on Council's Section 10.7 (2) Planning Certificates a proposal will be required to consider the relevant controls contained within the Fairfield City Council Development Control Plan, Chapter 11 - Flood Risk Management Controls, Schedule 6.

4.2 Stormwater Quality Management

Objective

- (a) Mitigate the impacts of development on stormwater quality, and
- (b) Minimise the potential impacts of development and other associated activities on the aesthetic, recreational and ecological values of local creeks.
- (c) Development applications must demonstrate compliance with stormwater flow targets at all times through interim stormwater management measures incorporated within the development.

Controls

- (a) Stormwater quality requirements for developments are to achieve the following pollution load reductions:

- i. 90% reduction in the post development mean annual load total gross pollutant (greater than 5mm)
 - ii. 85% reduction in the post development mean annual load of total suspended Solids (TSS)
 - iii. 65% reduction in the post development mean annual load of Total Phosphorus (TP)
 - iv. 45% reduction in the post development mean annual load of Total Nitrogen
 - v. 90% in the post development mean annual load of hydrocarbons.
- (b) Modelling for the determination of the mean annual loads of land uses must be undertaken in MUSIC and in accordance with associated WSUD Technical Guidelines.
- (c) Any changes to the flow rate and flow duration within receiving watercourses as a result of the development shall be limited as far as practicable. Natural flow paths, discharge point and runoff volumes from the Site should also be retained and maintained as far as practicable.
- (d) A Water Sensitive Urban Design Strategy (WSUD) be prepared in accordance with Fairfield Councils associated technical guidelines and submitted with a development application.
- (e) Impervious areas directly connected to the stormwater system shall be minimised. Where practical, WSUD measures such as directing stormwater runoff to grassed or pervious areas, filter strips, raingardens and other WSUD measures are encouraged to be used on development sites.
- (f) Where stormwater treatment measures are located in riparian corridors, they must be installed in a manner consistent with the requirements of the NSW Natural Resource Access Regulator (NRAR and NSW Office of Water).
- (g) Stormwater treatment measures (including WSUD) for individual development sites must be located on private land under the maintenance of the owner or occupier.
- (h) Future development must assess the potential impacts on groundwater (levels, flow, or quality) and groundwater dependent ecosystems.
- (i) Excavation beneath the established groundwater table should not be permitted without a hydrological assessment.
- (j) Any matters relating to the management of potential salinity set out in Section 6.8 must be addressed.
- (k) Implement measures to collect, treat and manage any seepage waters from basement or underground car parking areas in order to prevent pollution of waters.
- (l) Development applications must include a Water Management Strategy (WMS), the WMS is to provide details of:
- i. The approach to WSUD (including conceptual design details of the stormwater drainage, WSUD systems and onsite detention) and how the approach will be implemented, including detail of ongoing management and maintenance responsibilities. This includes if the system is to be fenced, landscaped, and maintained for the entirety of the operation of the system.

- ii. How the approach to WSUD complies with the water quality and flow objectives contained within Chapter 6 of the Fairfield City Wide DCP 2013.

4.3 Stormwater Drainage Management

Objectives

- (a) To prevent stormwater damage to the built and natural environment by controlling flooding, stabilising the landform and avoiding erosion.
- (b) To avoid generating stormwater discharges that exceed the capacity of the existing drainage network or cause a nuisance to adjoining development.
- (c) To provide a stormwater system that provides an efficient use of land and is compatible with adjoining uses
- (d) To protect the floodplain and avoid exacerbating geomorphic instability

Controls

- (a) Stormwater systems shall be designed and constructed to provide for rainwater events from the 1 in 5 year Average Recurrence Interval (ARI) event up to, and including the 1in 100 year ARI event.
- (b) New developments and redevelopments are not to increase stormwater peak flows in any downstream areas.
- (c) Detention storage is to be located at a level that considers flooding
- (d) On-site detention systems are to be designed using catchment wide approach and having regard to input from Fairfield City Council
- (e) All designs shall be prepared by a suitably qualified civil engineer
- (f) On-site stormwater detention mechanisms are to be designed to restrict post-development flows to pre-development levels and should have a maintenance program in place.
- (g) On-site stormwater detention mechanisms should be placed on title of the relevant allotment/ property to ensure their retention and maintenance.
- (h) Local overland flow and drainage paths need to be integrated into the design at development Application stage. Diversion of local drainage paths is to be completed in accordance with Fairfield Council engineering requirements.
- (i) The post development duration of stream forming flows, commonly referred to as the stream erosion index (SEI), shall be no greater than 2.0 times the pre-development duration of stream forming flows.
- (j) Development shall not cause (or exacerbate) bed and bank instability.

4.4 Rainwater Harvesting and Re-use

Objectives

- (a) To appropriately locate and design rainwater tanks to minimise the visual impact on the rural, scenic or landscape character of the locality.
- (b) To minimise the entry of contaminants into any water that may be harvested for drinking purposes

Controls

- (a) Rainwater tanks are to be sited and designed to be compatible with the architectural style of the industrial building, including materials and colours, and are to have a non-reflective finish.
- (b) Rainwater tanks must utilise prefabricated materials or be constructed from prefabricated elements designed and manufactured for the purpose of construction of a rainwater tank
- (c) The rainwater tank and any stand for the tank must be assembled and installed in accordance with the manufacturers specifications and be structurally sound.
- (d) Rainwater tanks must not collect water from a source other than gutters or downpipes on a building or water supply service pipe
- (e) A rainwater tank must be enclosed and inlets screened or filtered to prevent the entry of foreign matter or creatures.
- (f) The following controls apply to all buildings not covered by SEPP BASIX.
 - i. Development installing any water use fittings must demonstrate minimum standards defined by the water Efficiency Labelling and Standards (WELS) Scheme. Minimum WELS ratings are 4 star dual – flush toilets, 3-star showerheads, 4-star taps (for all taps other than bath outlets and garden taps) and 3-star urinals. Water efficient washing machines and dishwashers are to be used wherever possible.
 - ii. Rainwater tanks are to be installed to meet 80% of non-potable demand including outdoor use, toilets, and laundries
 - iii. Passive cooling methods are to be incorporated that rely on improved natural ventilation to supplement or preclude mechanical cooling.

4.5 Soil Erosion and Sediment Control

Objectives

- (a) To minimise soil erosion and assist in maintaining embankment stability
- (b) To ensure appropriate soil and sediment management

Controls

- (a) Permanent and temporary batter slopes will be no steeper than 1:4 (V:H) and be adequately vegetated or turfed to assist in maintaining embankment stability.
- (b) A Soil Water Management Plan (SWMP) and Erosion and Sediment Control Plan (ESCP) is required for all development sites where there is soil disturbance or stockpiling
- (c) All erosion and sediment controls should be implemented prior to construction for any future development.

5. INFRASTRUCTURE AND SERVICES

5.1 General Provisions

Objectives

- (a) Ensure that construction of utility services/ infrastructure provision occurs in a logical and staged manner, and in sequence with development.
- (b) To develop the estate in a logical manner considering the availability and capacity of existing utility and infrastructure services and any necessary/ required upgrades
- (c) Where planned infrastructure is delayed, that a suitable means of provision has been made to ensure its provision.
- (d) Design and provide utility infrastructure to integrate with and not negatively impact use of the public realm and environment.
- (e) To Ensure development is integrated with water cycle management including service planning for potable water, recycled water and wastewater.

Controls

- (a) The developer is to prepare and submit an indicative layout plan to relevant service providers to confirm suitability as set out in table 6 below.

Utility	Identified Provider
Water	Sydney Water
Sewer	Sydney Water
Electricity	Endeavour Energy
Telecommunications	Telstra and Optus
Gas	Jemena

Table 6 – Utility Providers

- (b) The developer shall submit sufficient evidence at subdivision stage to demonstrate that satisfactory arrangements have been made to ensure the delivery and construction of utilities and service connections.
- (c) All utilities are to be accommodated in the road reserve. The design of the estate roads will need to take this into consideration
- (d) Developers will be required to fund and construct necessary utilities to and throughout the DCP area. Where necessary to enable the development, the developer is also responsible for the amplification of existing utilities and services to ensure there is adequate capacity.
- (e) Future development Applications will be required to demonstrate that satisfactory arrangements have been made with relevant utility providers in **table 6**.
- (f) Applicants are required to demonstrate consistency with any other matters required by this DCP including but not limited to, **Section 6.9 Bushfire Risk**.

- (g) Electricity infrastructure must meet the design requirements as per the *Western Sydney Street Design Guidelines* Section C5.4 Electricity. Electricity supplies must be supplied within the verge.
- (h) Services and utilities (hydrants, NBN boxes etc) are designed and located to:
 - a. Integrate with building design and the public domain
 - b. Not be visible from the public domain unless appropriately screened by landscaping
 - c. Make a positive contribution to the public domain
- (i) New streets integrate utilities within the street reservation, with services located underground and in a manner that facilitates tree planting and is consistent with the *Western Sydney Street Design Guidelines*
- (j) Where services must be located on a street, they do not dominate the pedestrian experience and are designed as an integrated component of the façade, as per the *Western Sydney Street Design Guidelines*.
- (k) Development near a utility service must be in accordance with the relevant service authority's guidelines and requirements and must not adequately affect the function of the service.
- (l) Where development is proposed on land containing or adjacent to easements, applicants are to consult with the organisation responsible for the maintenance and management of the easement.
- (m) Development adjacent to the Jemena gas pipeline easement is subject to a land use risk safety audit with the relevant buffers provided
- (n) Locate infrastructure taking into account any future road widening to minimise relocation of assets.
- (o) Shared utility trenches combine multiple utilities within a compact area of the street verge and future proof service location within road cross sections. Refer to the *Western Sydney Engineering Design Manual* for details of shared utility trenching.
- (p) Demonstrate access to the NBN. Where coverage at time of lot registration is not or will not be above minimum network connectivity speeds, demonstrate how and where allowances for future network augmentation have been made.
- (q) Follow the design guidance as per the *Western Sydney Street Design Guidelines* Section C5.6 Telecommunications and Section C6.3 5G Mobile Telecommunications.
- (r) An Encroachment Safety Management Study must be undertaken (Design and Construction SMS) as per AS2885.6. The encroachment SMS must be conducted to identify all threats posed by construction and ongoing existence of the development with regard to the Eastern Gas Pipeline. All actions arising from the SMS must be addressed and closed. Jemena must provide acceptance of the sign-off report prior to commencement of the development.

- (s) The Encroachment Safety Management Study (Design and Construct) must be undertaken by an appropriately qualified professional and Jemena are to be party to any such study.
- (t) Any costs associated with convening a SMS will be borne by the Applicant/ proponent, along with any additional protection measures or mitigation works that will need to be implemented by Jemena or the proponent as required by the findings of the SMS.

6. ENVIRONMENTAL MANAGEMENT

The DCP Area adjoins land as mapped on the Biodiversity Values Map (BV Map) as defined by Clause 73(3) of the Biodiversity Conservation Regulation 2017 (BC Reg).

Within the DCP area the following Threatened Ecological Communities are identified:

- Forest Red Gum – Rough -barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion.
- Grey Box- Forest *RedGum Grassy Woodland* on flats of the Cumberland Plain , Sydney Basin Bioregion
- Phragmites Australis and *typha orientalis* coastal freshwater wetlands of the Sydney Basin Bioregion.

Various identified threatened fauna species that associate with the TEC identified above have recorded in the locality and include Marsupials, Amphibians, Birds and Bats.

6.1 Biodiversity and Riparian Land

Objectives

- (a) To identify, protect and minimise impacts on areas of high ecological value
- (b) To provide riparian corridors that respond to the location of Eastern Creek
- (c) Minimise stormwater Runoff into Creek or Bushland
- (d) Protect, maintain, and promote Natural vegetated Buffer Areas
- (e) Provide undisturbed areas which maximise connection to adjoining areas of remnant indigenous vegetation retained onsite or on neighbouring sites, and
- (f) Maximise the amount of soft landscaped area and planting with local native species on site.

Controls

- (a) Clearing of native vegetation shall consider the relevant triggers of any relevant Federal or State Legislation such as the NSW Biodiversity and Conservation Act 2016.
- (b) A Biodiversity Development Assessment Report must be prepared, as required under the State legislation, that describes how the development has avoided or minimised environmental impacts and the results of the BAM assessment and calculations.
- (c) Any unavoidable impacts on biodiversity from development shall be offset through the retirement of a credit obligation as calculated by the BAM, and as required by the relevant State or Federal legislation.
- (d) Any future development on waterfront land as defined by the Water Management Act 2000 (WM Act) must consider the Natural Resource Access Regulator (NRAR) 'guidelines for controlled activities on water front land – Riparian Corridors' 2018. . Development within a riparian corridor must comply with the relevant controls outlined in the Water Management Act 2000 (WM Act).

- (e) Council may require development applications proposing removal or substantial pruning of trees to be supported by an Arboriculture Report prepared by an arborist with a minimum AQF level 5.
- (f) A Fauna sensitive lighting plan shall be submitted for Future development stages in the DCP works area which will consider light and noise spill into the Riparian Area of Eastern Creek. The plan must follow the National Light Pollution Guidelines for wildlife (awe.gov.au).
- (g) A vegetation management plan shall be provided to Council in relation to any future DA and associated BDAR, for the Eastern Creek corridor and is to be provided to Councils satisfaction addressing the following matters:
- i. Subsequent amendments to the VMP required for future development stages in the DCP area.
 - ii. On-going habitat management, weed management and native flora plantings
 - iii. A qualified and experienced ecologist detailing management methods, timeframes and outcomes, including key performance indicators, to undertake the VMP.
 - iv. Any revegetation of woodland riparian area is to be planted with appropriate species, with local provenance using appropriate species from vegetation communities identified by an ecologist.
 - v. All Vegetation Management Plan works shall be maintained throughout the demolition, construction and operational phase of the development in accordance with the approved plan and conditions to ensure restoration of environmental amenity.
 - vi. A biosecurity management plan covering the extent of works is to be provided to Council for assessment and approval prior to the issue of a Construction Certificate.

6.1.1 – Southern Watercourse – Adjacent to the Horsley Drive

- (a) A permanent and stable flow path is to be established for the full extent of the proposed modified southern flow path/watercourse alignment adjacent to The Horsley Drive to the confluence of Eastern Creek.
- (b) Interim solutions such as inter-allotment piping of existing flow paths are not permitted.
- (c) To avoid interim drainage measures and if the ultimate flow path cannot be confirmed at DA stage appropriate re-design of the site layout to maintain a flow path more closely following the alignment of the existing flow paths is to be undertaken, and submitted to the Department of Energy, Environment, Climate Change and Water (NSW DEECCW Licencing and Approvals team) for assessment and approval.
- (d) If interim flow paths are considered, then such options must provide for the same design i.e channel and riparian outcomes along the full length of existing identified onsite watercourses in the event adjoining land zoned E4 is not developed. If all land zoned E4 is developed for industrial purposes, then flow paths from this site can be considered for realignment.
- (e) Additionally, NSW DEECCW (Licencing and Approvals) are to be notified at DA assessment stage should a development proposal or additional works result in:
- Development in the bed of any river, lake or estuary
 - On the banks of any river lake or estuary
 - On land within 40 metres of the highest bank of a river lake or estuary
 - Any excavation which interferes with and aquifer

- (f) Local overland flow paths and drainage paths need to be integrated into the design at Development Application stage. Any diversion to local Drainage paths are to be completed in accordance with relevant NRAR guidelines including Controlled activities – Guidelines for Riparian Corridors on Waterfront Land and Fairfield City Council’s Engineering Guidelines.

6.2 Heritage Conservation

6.2.1 Aboriginal Archaeology

Objectives

- (a) To identify and assess the potential for items and sites of Aboriginal Archaeological significance within the Keyhole Industrial Area.
- (b) To ensure that, prior to development of land within the Keyhole Industrial Estate DCP area, Aboriginal sites, areas of potential archaeological deposit or areas of cultural significance are identified and consultation has occurred with the relevant Local Aboriginal Land Council or registered Aboriginal Parties.

Controls

- (a) Development applications for land identified as an area of archaeological potential are to be accompanied by an Aboriginal Heritage Assessment Report.

Should an Aboriginal object (s) be encountered, work must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object per Section 91 of the National Parks and Wildlife Act 1974 OEHL is to be notified including the Deerubbin Aboriginal land council.

- (b) If any suspected human remains are discovered during any activity, all work must be ceased immediately at that location and not further moved or disturbed. The NSW Police and Heritage NSW’s Environmental Line must be contacted on 131 555 as soon as practicable and provided with details of the remains and their location. Work at the location cannot be recommenced unless authorised in writing by OEHL.
- (c) The proponent should inform Aboriginal stakeholders about the management of Aboriginal cultural heritage sites throughout the life of the project.
- (d) Consultation with the local Aboriginal Land Council must be undertaken to establish whether Aboriginal Archaeological sites, PAD’s or values are present within the study area. Further archaeological assessment such as test excavation may be required. Test excavation should be undertaken in accordance with the *Guide to investigating, assessing and reporting of Aboriginal Cultural Heritage in NSW (OEHL) 2011* and the *Aboriginal cultural heritage consultation requirements for proponents 2010* prepared by DEECW.

6.3 Ecologically Sustainable Development

Objectives

- (a) To encourage development that incorporates measures to minimise potential energy use.

- (b) To include water minimisation initiatives within the proposed subdivision and development of the site.
- (c) Encourage development that incorporates measures aimed at contributing to actions that will minimise the effects of greenhouse gas emissions.

Controls

- (a) Applications for new development or substantial alterations and additions shall be accompanied by water conservation measures in accordance with Section 4 of the DCP and where applicable Section 5 Water Conservation of the *Fairfield City Council, Stormwater Management Policy*, September 2017.
- (b) Water conservation measures provided for developments referred to in (a) above may include:
 - i. The roof area of the development being drained to a tank to meet part of the water use demand of that development, and
 - ii. 50 per cent of water use demand for irrigation of landscape areas and toilet flushing to, where possible, being supplied from sources other than potable mains.
- (c) Applications are to demonstrate consistency with section **6.1 biodiversity** and section **2.3.6 landscape design**, to encourage that capture and retention of carbon dioxide.
- (d) New developments are to incorporate measures that encourage employees to utilise alternative modes of transport – refer to **section 3.2** and **3.4**.
- (e) New developments and significant alterations and additions should be sited and designed to enhance passive solar heating and cooling opportunities and optimise natural light and ventilation.
- (f) All industrial buildings should target a minimum 5 Star Green Star certification or equivalency.

6.4 Noise and Vibration

Objectives

- (a) To avoid significant impacts arising from industrial development that generates noise and vibration.
- (b) To facilitate the appropriate siting and design of industrial buildings to minimise the potential for noise impacts to the sensitive noise receivers within the locality.
- (c) To ensure noise and vibration do not adversely impact human health and amenity.
- (d) To ensure building design adequately protects workers and surrounding receivers from noise and vibration.

Controls

- (a) Any machinery or activity considered to produce noise emissions from a premise shall be adequately sound proofed so that noise emissions are in accordance with the provisions of the Protection of the Environment Operations Act 1997.

- (b) Noise should be assessed in accordance with noise policy for Industry (EPA, 2017) and NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011)
- (c) An acoustic report by a qualified acoustical engineer must be submitted where proposed development, including traffic generated by that development, will create noise and/ or vibration impacts, either during construction or operation, that impacts on adjoining developments or nearby rural-residential areas. The acoustic report should outline the proposed noise amelioration strategies and management methods.
- (d) Acoustic reports for individual developments must assess cumulative noise impacts, including likely future noise emissions from the development and operation of the precinct. The consultant should liaise with the relevant consent authority to determine acceptable amenity goals for individual industrial developments and background noise levels.
- (e) The use of mechanical plant and equipment may be restricted in areas close to sensitive receivers such as adjoining rural residential development and educational establishments.
- (f) Building design is to incorporate noise amelioration features. Roof elements are to control potential breakout noise, having regard to surrounding topography.
- (g) Boundary fences are to incorporate noise amelioration features and control breakout noise having regard to developments adjoining rural residential areas.
- (h) An Acoustic Report should accompany development applications to demonstrate compliance with the EPA's Noise Policy.
- (i) To ensure the noise criteria are achieved the construction certificate should include certification by an appropriately qualified acoustical consultant that any acoustic design measures have been satisfactorily incorporated into the development. Validation of the criteria should be provided by an appropriately qualified acoustical consultant and included as part of the occupation certificate.

6.5 Air Quality and Odour

Objectives

- (a) To avoid adverse impacts arising from new development with regard to existing air quality.
- (b) To manage potential impacts on air quality during the construction phase.

Controls

- (a) A development application seeking approval for the construction of a new building, major alterations and additions to an existing building and/or the occupation of an existing building may be required to be accompanied by an assessment of the potential impacts of the development on air quality in the region.
- (b) All development should be designed to avoid potential air quality impacts, including the appropriate selection of plant and equipment, minimising emissions and the like.
- (c) All development should consider (but are not limited to) the following guidelines when assessing air quality and odour impacts:

- i. The approved methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA 2017).
- ii. The technical framework – assessment and management of odour from stationary sources in NSW (EPA Nov 2006).

6.6 Waste Management

Objectives

- (a) Incorporate well-designed and innovative waste and recycling facilities in the building design stage.
- (b) Minimise the amount of waste separation and resource recovery
- (c) Maximise waster separation and resource recovery
- (d) Provide innovative and best practice waste management collection systems and technologies for reuse recycling, organics collection and product stewardship.
- (e) Provide waste and recycling facilities that do not impact on amenity for residents, neighbours and the public, such as visually unpleasant areas, noise, traffic and odours from waste collection services, while also ensuring facilities are accessible, integrated wholly within the built form and easy to use.
- (f) To facilitate sustainable waste management practices during the demolition, construction and operational phases of the development.
- (g) To ensure development is contributing to the NSW Waste and Sustainable Materials Strategy 2041 Stage 1 plan: 2021 – 2027 which sets targets for diverting waste away from landfill and increasing recycling rates.

Controls

- (a) A waste management plan is to be prepared and lodged with a development application involving demolition, construction and/or changes of use.
- (b) All waste collection and servicing is to occur onsite.
- (c) A waste management plan shall include details regarding:
 - i. The types and volumes of waste and recyclables generated during the demolition, construction and operational phases;
 - ii. Details of on-site storage and/or treatment of waste during the demolition, construction and operational phases;
 - iii. Disposal of waste generated during the demolition and construction phases which cannot be re-used or recycled;
 - iv. Ongoing management of waste during the operational phase of the development
- (d) Any waste generated during demolition and construction needs to be classified in accordance with the EPA's waste classification guidelines and managed in accordance with that classification.

- (e) Any waste stored on site may require the applicant to obtain an environmental protection licence in accordance with the POEO ACT 1997 from the EPA for the storage of waste.
- (f) A waste and resource recovery plan (plan) should be developed by a specialist in environmental and/or waste management. The plan should include a vision and strategy for how waste and recycling can be managed in an integrated way across the development. This includes construction through to the operation stage. The plan should be informed by the following principles which should guide and underpin the planning and design of waste and resource recovery systems.
- (g) Waste storage areas are to be:
- Well lit and ventilated
 - Screened from public view
 - Include water and drainage facilities for clearing the bins and bin storage area
 - Be easily and conveniently accessible for all users and collection contractors
 - Comply with Local Council policy and contractual service provisions
- (h) Collection and loading points are to be:
- Level
 - Located onsite
 - Free of obstructions
 - Easily accessible from the nominated waste and recycling storage areas
 - Be accessible by heavy rigid collection vehicles to permit entry and exit of the site in a forward direction
 - Comply with the Building Code of Australia and Relevant Australian Standards; and
 - Comply with Local Council Policy and contractual service provisions.

6.7 Site Contamination

The DCP area is located on multiple landholdings that has supported historic agricultural land uses and associated structures including materials associated with agricultural materials and market garden uses.

Objectives

- (a) To minimise the risk to human health or any other aspect of the environment from the development of potentially contaminated land.
- (b) To provide for the detailed assessment and remediation of potentially contaminated land at the subdivision stage.
- (c) To facilitate sustainable waste management practises during the demolition, construction and operational phases of the development
- (d) To minimise the environmental impacts of waste through waste avoidance, minimisation, re-use and recycling
- (e) To ensure that remediation and management of contaminated land incorporates ecological sustainable development principles including protection of the environment for future generations.

Controls

- (a) Development applications are to be consistent with the provisions of Chapter 4 Remediation of Land – SEPP Resilience and Hazards (2021).
- (b) Development Applications shall be accompanied by a Stage 1 Preliminary Site Investigation, if relevant, prepared in accordance with SEPP resilience and hazards 2021, including remediation of Land and Guidelines made or approved by the NSW EPA under the Contaminated Land Management Act, 1997.
- (c) Where the stage 1 Investigation identifies potential or actual site contamination, a Stage 2 Detailed site Investigation must be prepared in accordance with SEPP 55 Remediation of Land and Guidelines made or approved by the NSW EPA under Contaminated Land Management Act, 1997. The Stage 2 Detailed Site Investigation must include at a minimum, an assessment of soil groundwater, and where required, assessment of other environmental media.
- (d) A remediation Action Plan (RAP) will be required for areas where contamination has been identified or contains contaminants at levels that may pose a risk to human health and the environment. If necessary, the consent authority can require or engage a NSW contaminated site auditor accredited by the EPA to review the works including the RAP and prepare a part B site Audit Statement and Site Audit Report to certify if the land will be suitable for the intended use subject to any remediation plans.
- (e) All investigation, reporting and identified remediation works must be undertaken in accordance with the following policy and guidelines. This includes but should not be limited to the following:
- *Council's protocols/policies – Management of Contaminated Lands*
 - *Chapter 4 Remediation of Land SEPP Resilience and Hazards 2021*
 - *EPA Sampling Design Guidelines (NSW EPA 1995)*
 - *Guidelines for the NSW Site Auditor Scheme (3rd edition) (NSW EPA 2017)*
 - *Guidelines for Consultants Reporting on Contaminated Sites (NSW OEH 2014)*
 - *Guidelines for the assessment and management of Groundwater contamination (NSW DEC 2007)*
 - *The National/ Environment Protection (Assessment of contamination) Measure 1999 (as amended 2013, NEPC 2013)*
 - *Australian and New Zealand Guidelines for Fresh and Marine Water ua/it (ANZG 2018)*
 - *Australian and New Zealand Guidelines for Fresh and Marine Water ualit – Water Quality for Primary industries (ANZECC 2000)*
- (f) Development consent is required for the remediation of all land in the Fairfield LGA.

6.8 Soil Salinity

The Keyhole Site DCP area is mapped in the Salinity Potential in Western Sydney Map (DIPNR 2002) and is indicated as being within an area of moderate to high salinity potential. Areas within this classification exhibit scattered scalding and indicator vegetation, as well as a predisposition to salinity due to soil, geology, and groundwater conditions.

Accordingly, during the design development phase it will be necessary to carry out detailed salinity investigations on the site to quantify the risk and develop management strategies to minimise impact on the development.

Objectives

- (a) To minimise the damage caused to property and vegetation by existing saline soils, or processes that may create saline soils.
- (b) To ensure development will not significantly increase the salt load in existing watercourses
- (c) Provide details to guide subdivision and building applications and works, to minimise the risk of developments increasing the risk of, impacts from, soil and groundwater salinity, and
- (d) To manage and mitigate the impacts of, and on, salinity and sodicity

Controls

- (a) A salinity report should accompany any Development Application that would result in a substantial disturbance of soils, for land within the DCP area identified as having a moderate to high potential for salinity.
- (b) A comprehensive Salinity Management Plan must be submitted where required, based on the findings of the Site Specific investigation, and prepared in accordance with the Western Sydney Salinity Code of Practice 2004 (WSROC).
- (c) Development must comply with Fairfield Councils Building in Saline Environments Policy.
- (d) All subdivision, earthworks and building works are to be in accordance with the Salinity Management Plan.

6.9 Bushfire Risk Management

Objectives

- (a) To minimise the risk to human life and impacts to property from the threat of bushfire, while having due regard to development potential, on-site amenity and protection of the environment.
- (b) To make adequate provision for safety provision for safety and access for emergency personnel, vehicles and equipment.
- (c) To provide defensible space setback from the bushfire prone vegetation wide enough to minimise flame contact on the building(s).
- (d) To protect buildings by appropriate siting, design, choice of materials and construction.
- (e) To enable maintenance of bushfire protection measures for the life of the development.
- (f) To enable the defence of warehouse buildings against bushfire attack by providing adequate water supplies, on-site access and safe access for firefighting operations.

Controls

- (a) Land identified as 'bushfire prone land' on the Fairfield City Council Bushfire Prone Land Map (refer to figure 5 below) is to address the bushfire protection measures in *Planning for Bushfire Protection 2019*.
- (b) A bushfire protection assessment is to be submitted for any development on land identified as being bushfire prone.
- (c) Assessment of threat from bushfire is to examine impacts of the proposal both within and external to the site.
- (d) Fire protection measures are to be capable of being maintained by the owners and the occupants of the land/building
- (e) Asset Protection Zones (APZ's)/ Defendable Spaces and access roads are to be provided in accordance with the Bushfire Assessment referred to in (a) above.
- (f) Asset protection zones and defendable spaces are to be sufficient in width to prevent flame contact, located wholly within the boundaries of a future development site or lot and located and designed to minimise impacts to native flora and fauna.
- (g) Perimeter or fire-access roads should be provided between development and any identified bushfire hazard, unless otherwise varied by a detailed investigation carried out in accordance with Sub Clause (b).
- (h) Hydrants for reticulated water are to be located outside the road carriageway
- (i) APZ's may be accommodated within boundary setbacks
- (j) Public roads are to be designed and located to comply with the relevant provisions of *Planning for Bushfire Protection 2019*.
- (k) Buildings to be constructed in accordance with *Australian Standard 3959 Construction of Buildings in Bushfire Prone Areas*.
- (l) Water supply for fire-fighting operations is to be provided in accordance with *Australian Standard 2419.1 – 2005 Fire Hydrant Installation System Design, Installation and Commission*.
- (m) All development applications for initial construction, substantial modification or redevelopment of a site are to be accompanied by an appropriate management plan for defendable Space to the standard of an "Inner Protection Area" as defined by *Planning for Bushfire Protection 2006* and the NSW Rural Fire Services document "*Standards for Asset Protection Zones*".
- (n) All Development Applications for initial construction are to be accompanied by a Bushfire Emergency Evacuation Plan.

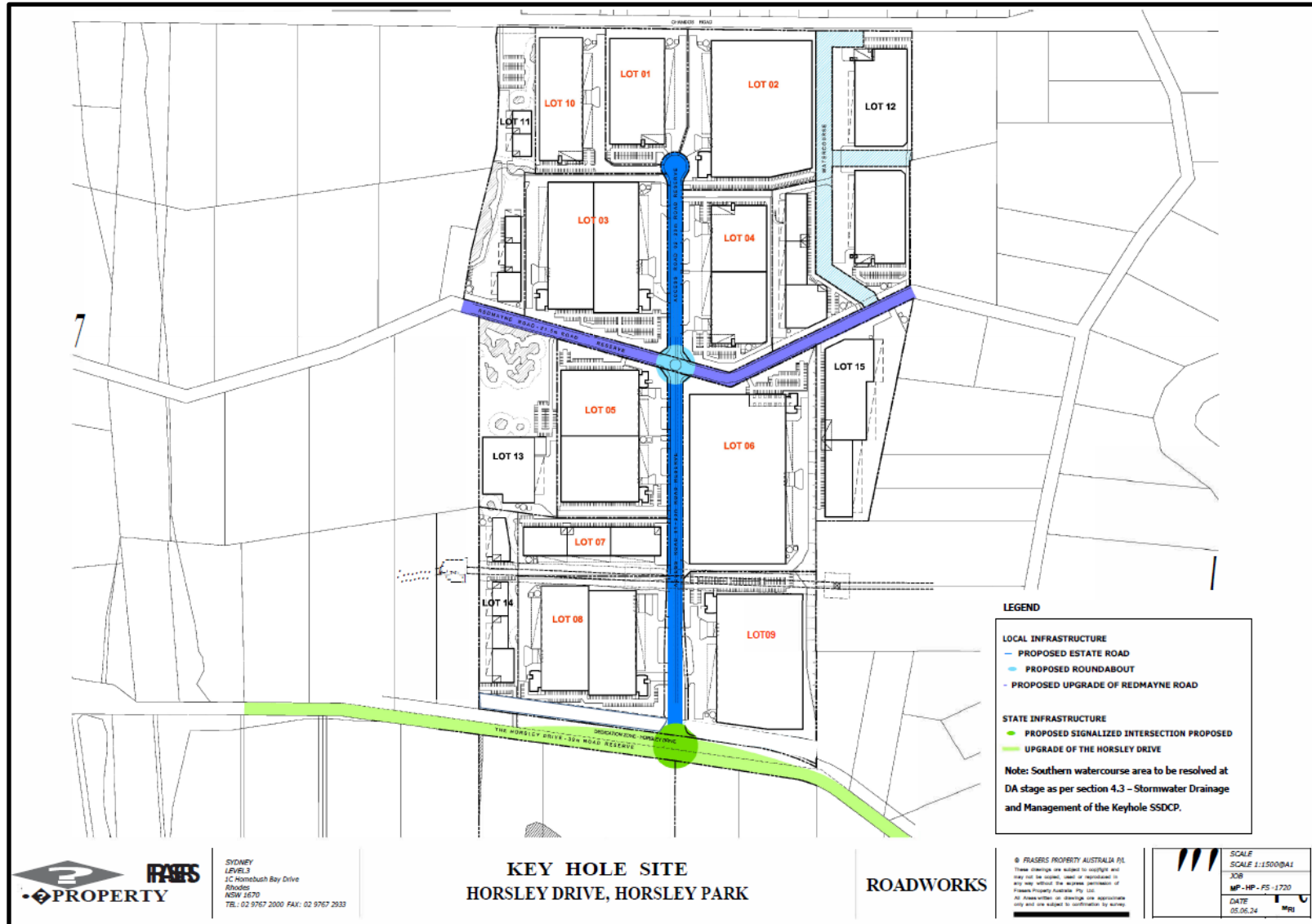


Figure 4 – Indicative Site Layout Plan