



74 Edinburgh Road, Marrickville

DESIGN REPORT

September 2020



Contents

01 INTRODUCTION	3
Executive Summary	4
02 LOCATION & CONTEXT	5
Site Location	6
Suburb Character	7
Vehicular Road Network	8
03 PLANNING FRAMEWORK	9
Marrickville Local Environmental Plan 2011	10
Marrickville Development Control Plan 2011	11
Sydenham Precinct Plan	12
04 SITE CONTEXT	13
The Site	14
Photographic Survey	15
Site Analysis	16
05 DEVELOPMENT STRATEGIES	20
06 DESIGN PROPOSAL	24
Massing Strategy	25
Office Daylight Analysis	28
Key Moves	29
Design Principles	30
Resolution of Design Principles	31
Development Summary	33
Warehouse Component	34
Conceptual Drivers - Office	36
Office Component	37
Conceptual Drivers - Public Domain	39
Public Domain	40



01

INTRODUCTION

Executive Summary

Woolworths is planning a new online customer fulfillment centre to service the growing demand for home delivery of groceries in the inner west and inner city suburbs

nettletontribe have been commissioned by Woolworths Group Limited to prepare this report in accordance with the technical requirements of the Secretary's Environmental Assessment Requirements (SEARs), and in support of the SSD- 10468 for the design, construction and operation of a warehouse and distribution centre with associated offices at 74 Edinburgh Road, Marrickville.

This design report has been prepared to outline the design process from client brief through to the SSD application. This process has been extensive in terms of exploration and inclusive of the stakeholder team input.

We trust that the report assists the Department in their assessment and responds to the criteria requested.





02 LOCATION & CONTEXT

Site Location



Urban Context

The subject site is located in the suburb of Marrickville, approximately 7km from Sydney CBD and 1.2km from Sydenham station.

2 sides of the site interface enjoy street frontages, the main frontage being Edinburgh Road to the north west and Sydney Steel Road to the south west.

At the fringe of general industrial area, the site is situated opposite Marrickville Metro expansion as well as low density residential zone to the north west and Sydney Metro dive site to the south west.



Suburb Character

Marrickville is one of the largest suburbs in the Inner West council LGA, and is situated approximately 7km south west of the Sydney central business district.

A culturally diverse suburb of Marrickville celebrates a unique blend of both low density residential and general industrial areas. A good mixture of architectural style is present predominantly with old brick houses and factories standing next to new contemporary unit developments. In the recent years it has also become a hub for creative industries and manufacturing.



Coffee roaster in an old industrial building



Existing substation



Low density residential



Graffiti on wall

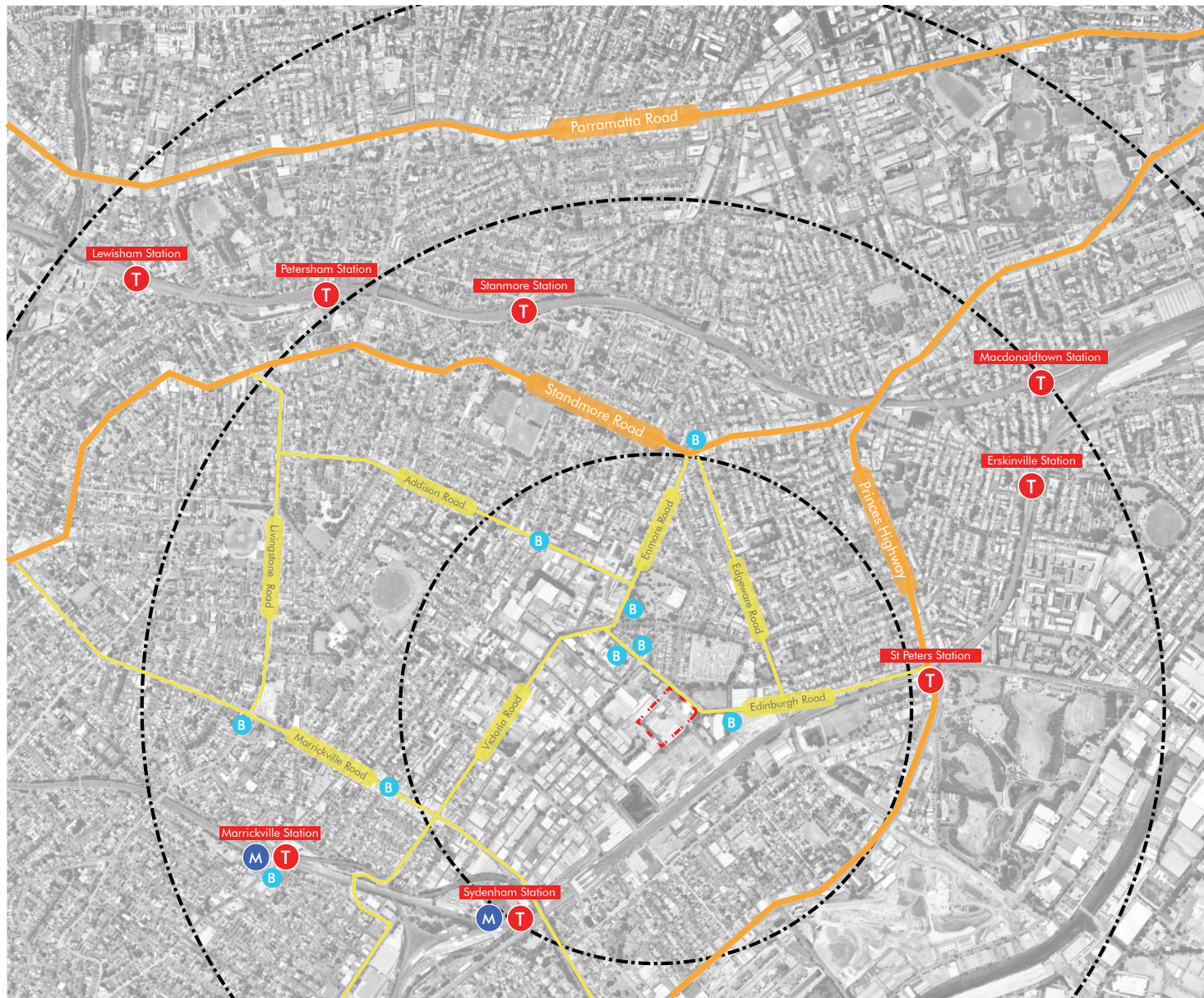


New sport centre



New commercial development

Vehicular Road Network



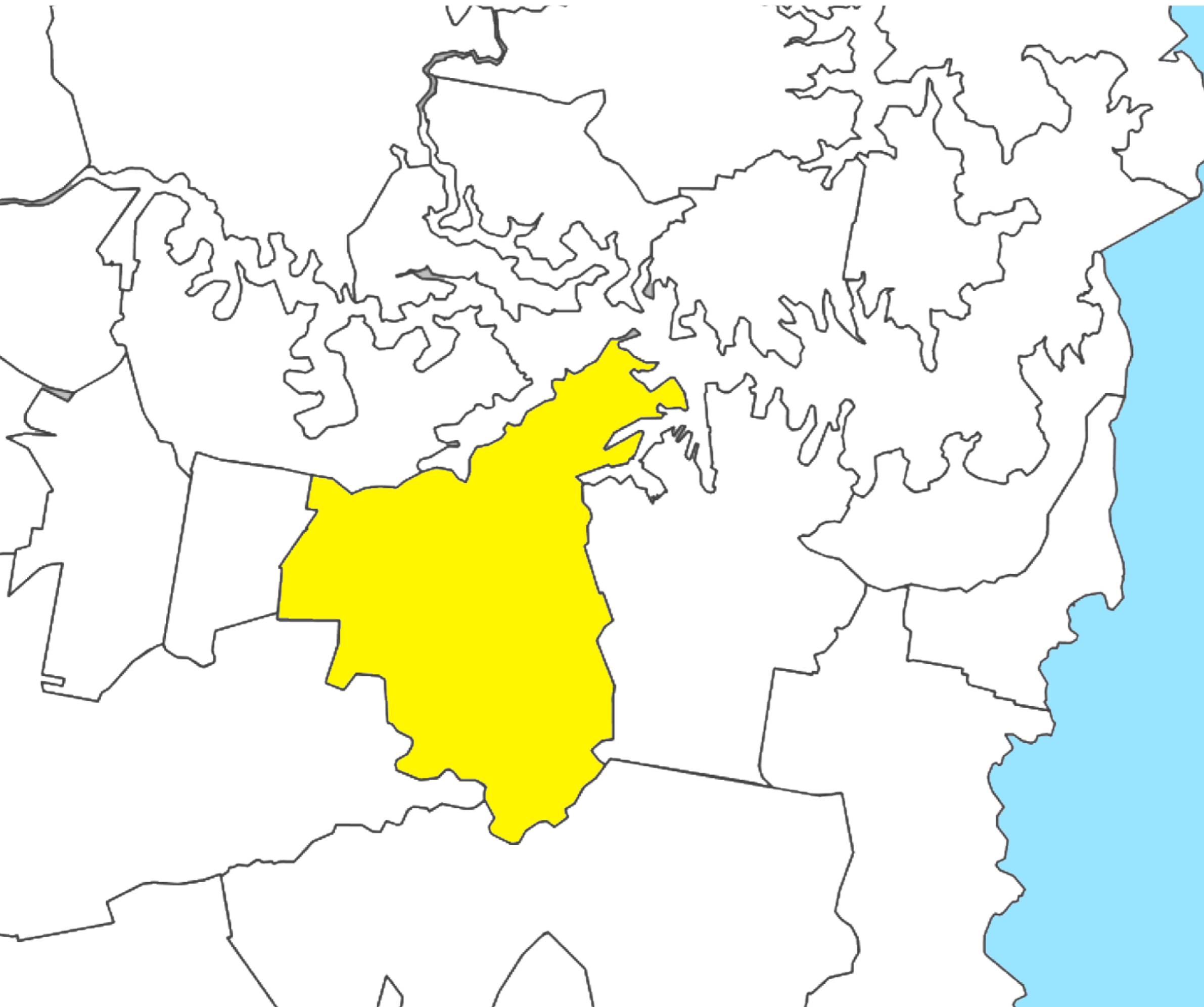
The site is located along Edinburgh Road, fronting Marrickville Metro Shopping Centre.

Primary vehicular access to the site is from Edinburgh Road and Sydney Steel Road.

Other significant roads in the greater context include the Princes Highway intersecting Edinburgh Road to the west and Standmore Road intersecting Enmore Road to the north.

The site is also situated within close proximity to train stations and future metro stations.

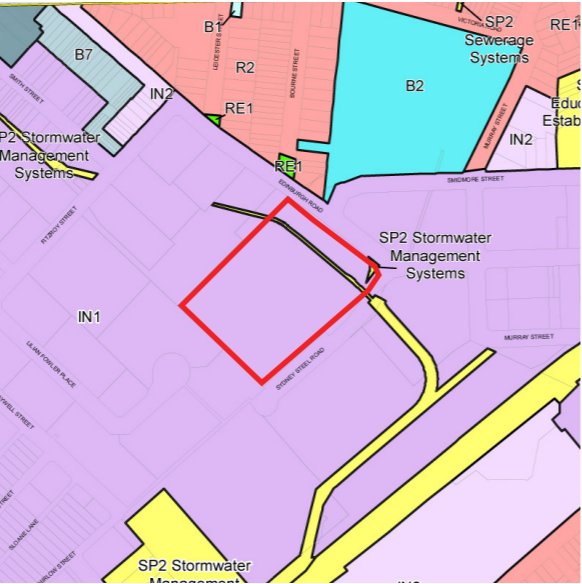
- Site
- T Train Station
- M Metro Station
- B Bus Stop
- Main Road
- Secondary Road



03

PLANNING FRAMEWORK

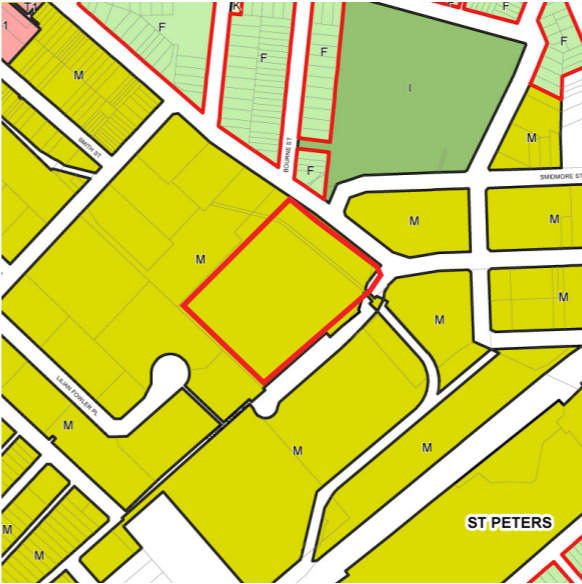
Marrickville Local Environmental Plan 2011



01 Land Zoning

The subject site

B1	Neighbourhood Centre
B2	Local Centre
B4	Mixed Use
B5	Business Development
B6	Enterprise Corridor
B7	Business Park
IN1	General Industrial
IN2	Light Industrial
R1	General Residential
R2	Low Density Residential
R3	Medium Density Residential
R4	High Density Residential
RE1	Public Recreation
RE2	Private Recreation
SP1	Special Activities
SP2	Infrastructure
W1	Natural Waterways
W2	Recreational Waterways



02 Floor Space Ratio

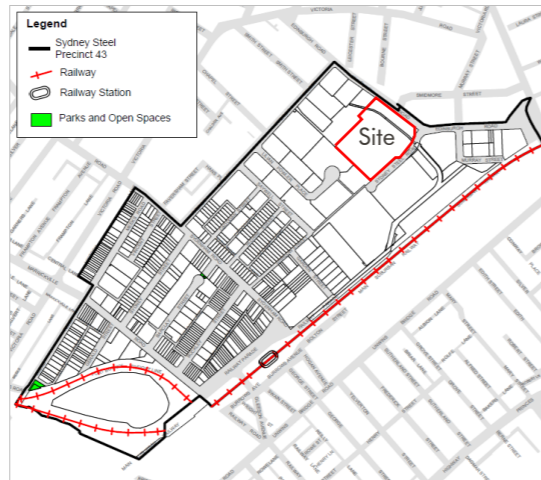
The subject site

F	0.60	S1	1.50
H	0.70	S2	1.60
I	0.75	S3	1.70
J	0.80	S4	1.75
K	0.85	S5	1.80
L	0.90	S6	1.85
M	0.95	S7	1.90
N	1.00	T1	2.00
O	1.10	T2	2.05
P	1.20	T3	2.10
Q	1.30	T4	2.20
R	1.40	T5	2.30

Marrickville Development Control Plan 2011

9.43 Sydney Steel (Precinct 43)

Map of precinct



Desired Future Character

The desired future character of the area is:

1. To protect the identified Heritage Items within the precinct.
2. To protect the integrity and on-going retention of the existing industrial zoned land, particularly those identified as being of State significance.
3. To retain the existing employment generating land uses.
4. To ensure new development is compatible with the operations of Sydney Airport.
5. To protect significant streetscapes and/or public domain elements within the precinct including landscaping, fencing, open space, sandstone kerbing and guttering, views and vistas and prevailing subdivision patterns.
6. To enhance existing streets and encourage pedestrian activity, where appropriate, through improvements to road infrastructure and landscaping.
7. To support pedestrian and cyclist access, activity and amenity including maintaining and enhancing the public domain quality.
8. To facilitate efficient parking, loading and access for vehicles that minimises impact to streetscape appearance, commercial viability and vitality and pedestrian safety and amenity.

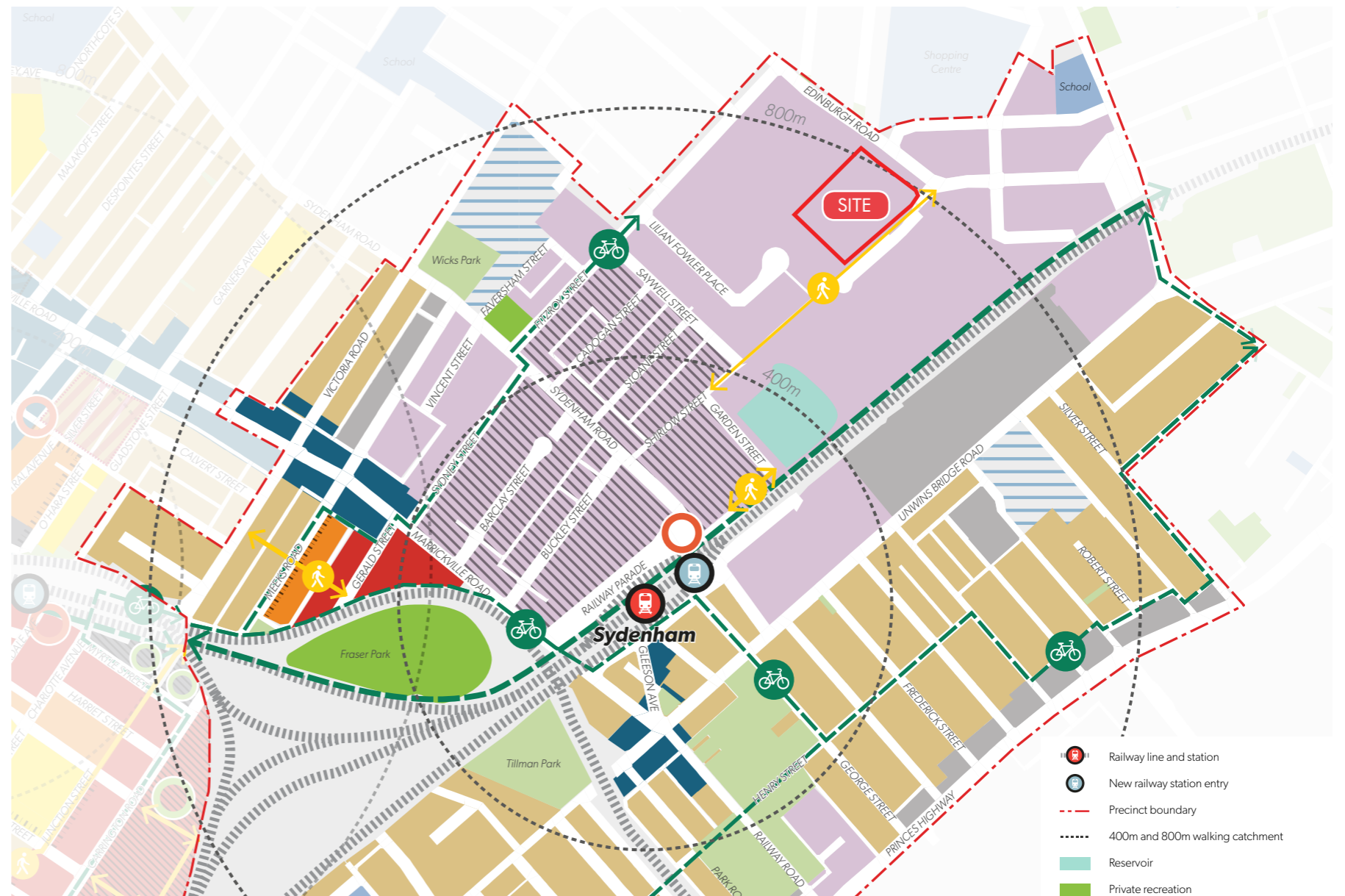
Sydenham Precinct Plan

Planning Strategy

The Sydenham Station Precinct plan is first part of the Sydenham to Bankstown Urban Renewal Corridor Strategy. It is intended to provide a core planning strategy to guide future development around the area.

The Site

The subject site is situated in the industrial area with new pedestrian connection to/ from Sydenham Station.



"The Revised Land Use Plan - Sydenham Station Precinct. Source: Sydenham to Bankston Urban Renewal Corridor Strategy"

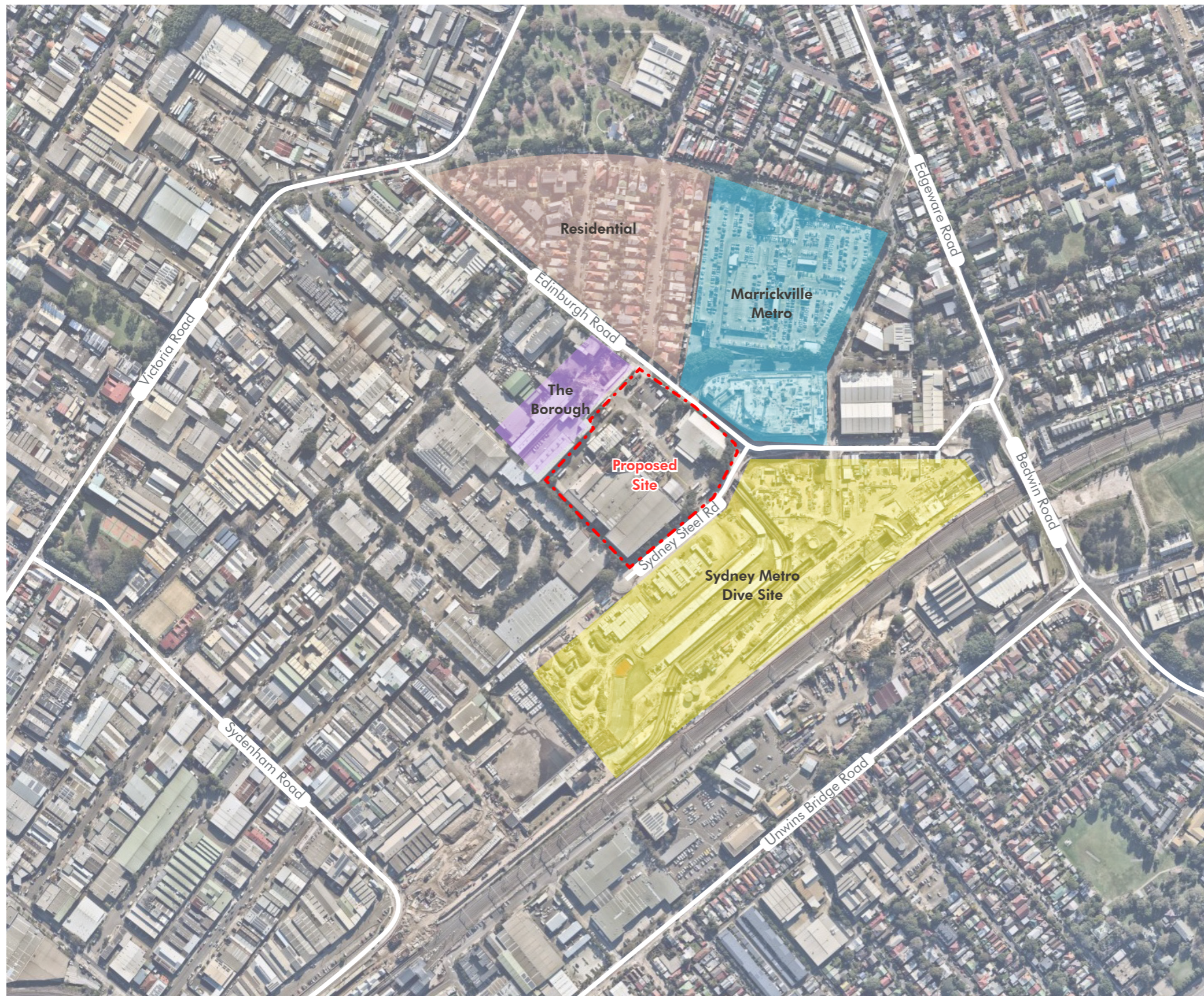


04

SITE CONTEXT



The Site



Local Context

Site Context

Located at the fringe of Marrickville industrial zone, the site has 2 street frontages - Edinbrough Road to the north west, Sydney Steel Road to the south west.

The site is surrounded by a range of diverse land use. In the immediate context, Edinbrough Road frontage is connecting low-density residential and local centre - Marrickville Metro Shopping Centre. Sydney Steel Road is fronting Sydney Metro dive site. East to the site is connecting to general industrial area that consists standalone warehouses as well as industrial units which provides space for small businesses and creative industries.



The Borough



Residential Area



Marrickville Metro



Sydney Metro Dive Site

Photographic Survey

Red Brick



Glazed Facade



Metal



Graphic Wall



Site Analysis



Building Height

There are several new developments under construction next to the proposed site. NE on Edinburgh Road is Marrickville Metro Shopping Centre which consists of 2 levels of retail and 2 levels of car park.

Adjacent to the proposed site is 76 The Borough which is a 5 storey commercial building.



Land Use

The site is situated at the fringe of general industrial zone along Edinburgh Road, interfacing low density residential and local centre - Marrickville Metro.

- General Industrial
- Light Industrial
- Local Centre
- Low Density Residential
- Business Park



Topography

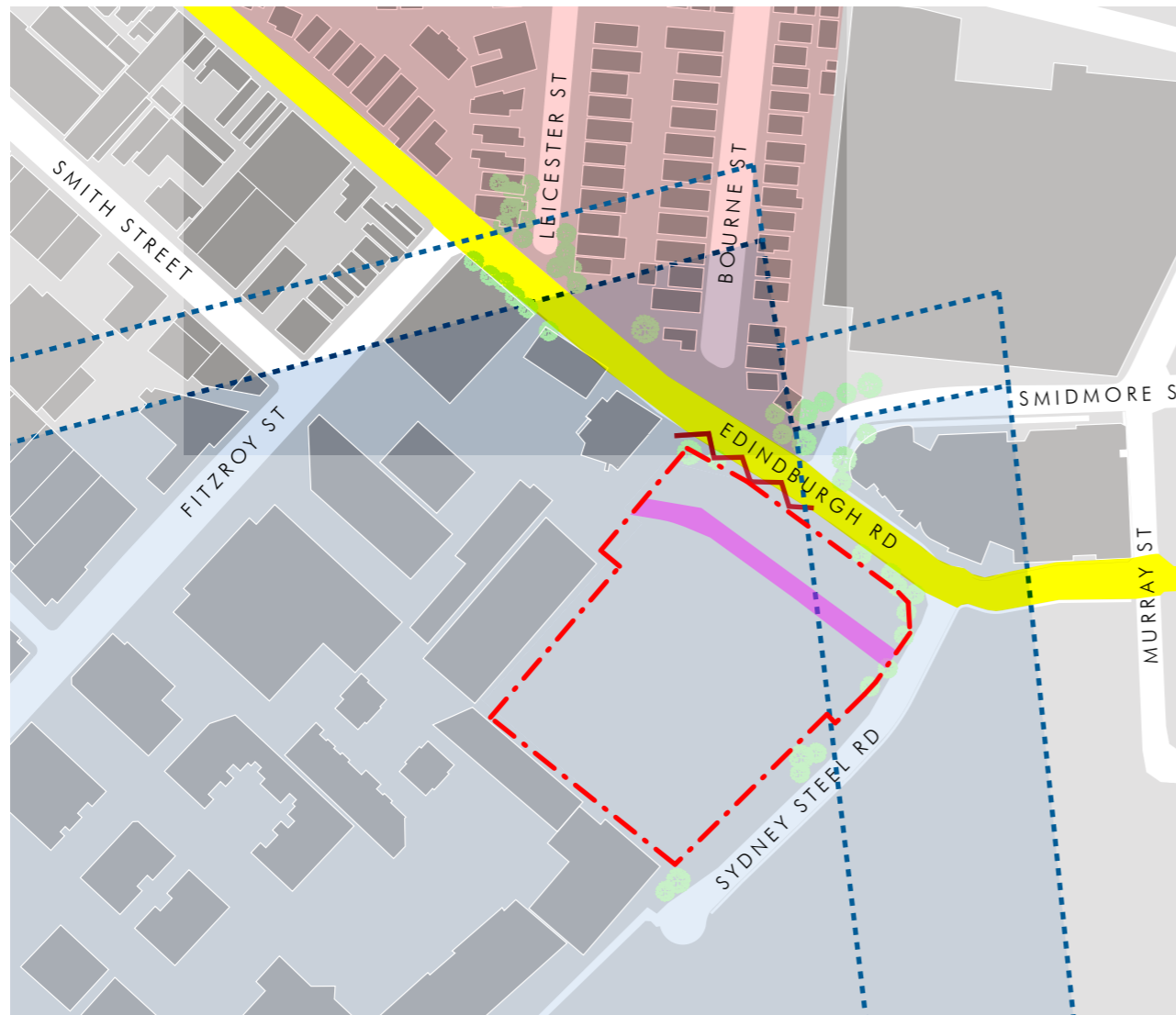
The site is relatively flat given that it is a large developed site, having a gentle slope of about 2.3m difference between the highest and the lowest points falling away from Edinburgh Road.

- - - Site Boundary
- Existing Trees
- Existing Buildings



Street Frontages

The site has two street frontages: major frontage on Edinburgh Road to the north west and a secondary frontage on Sydney Steel Road to the south west.



Site Constrains

1. High Traffic Edinburgh Road

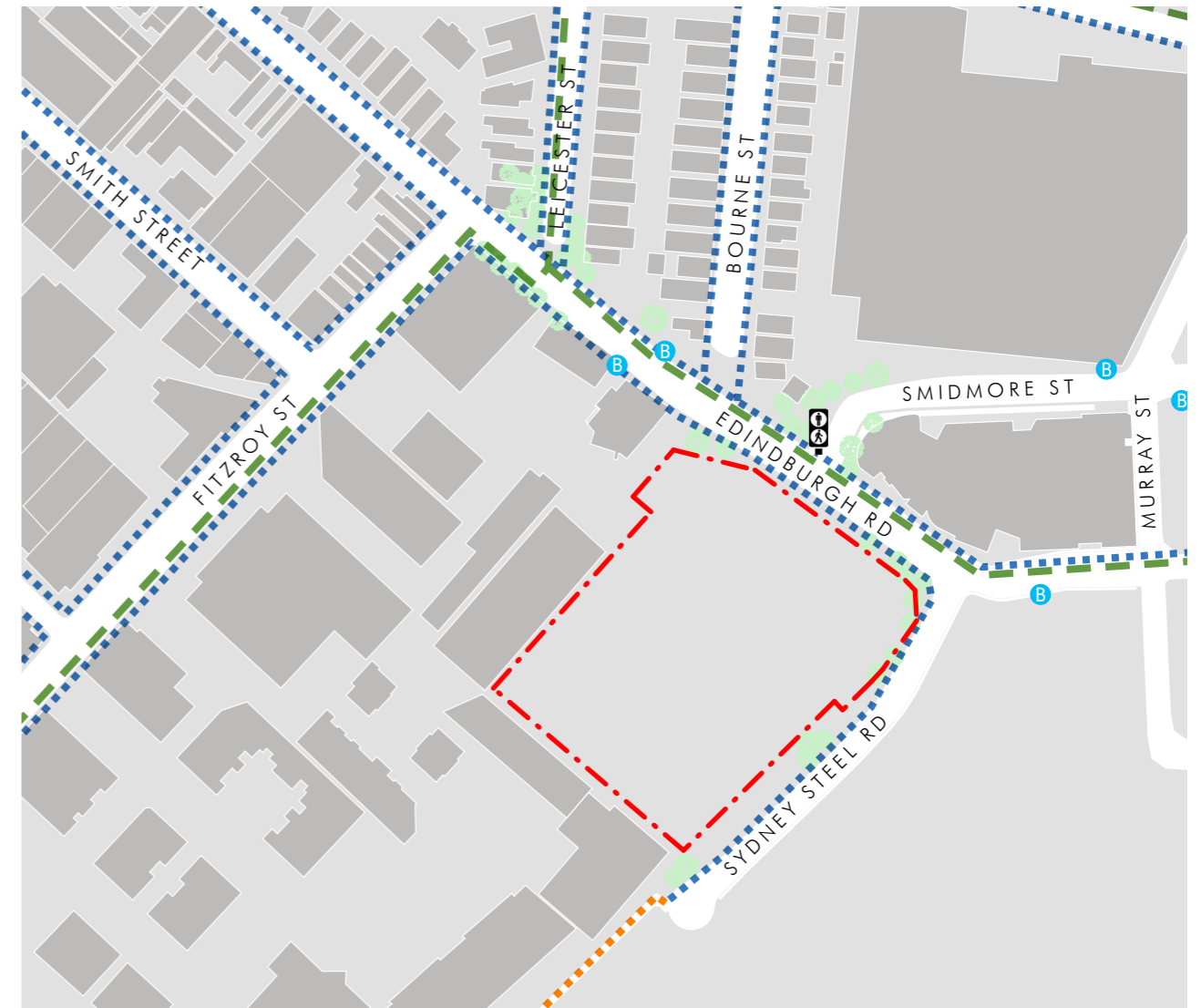
Edinburgh Road is a major road that supports cars, buses and heavy vehicles movement.

2. Industrial zone - Residential Zone Interface

The noise generated from vehicle movement from subject site could be an issue.

3. Within Sydney Airport Protection Heights

Subject site sits under airport protection height limited to 45-50m ADH

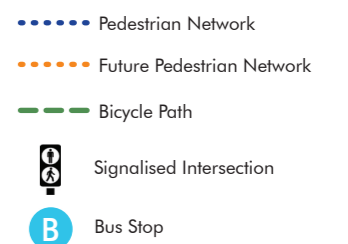


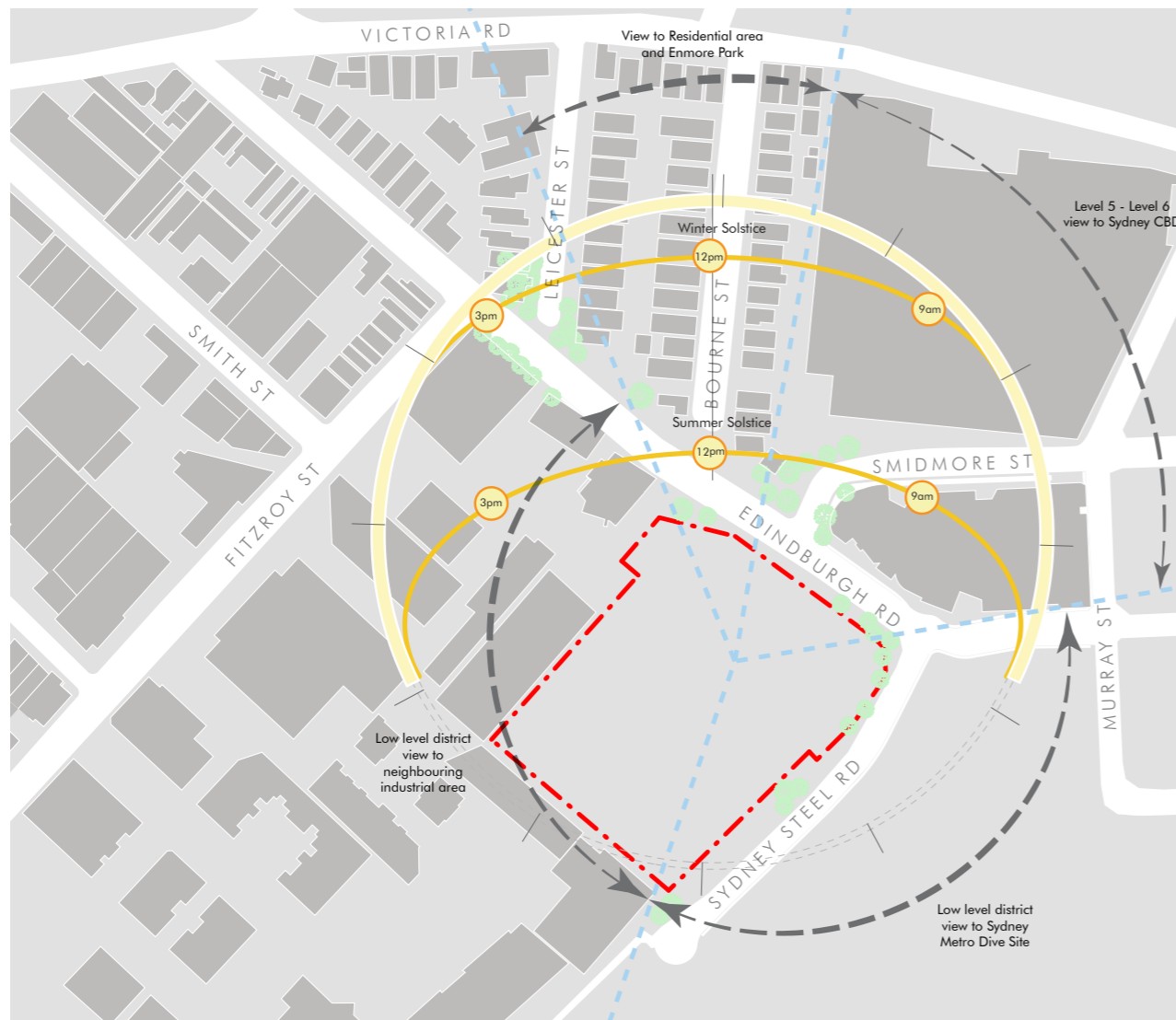
Pedestrian & Transport Network

The site is conveniently serviced by a few bus stops on Edinburgh Road and Smidmore Street.

The site is also well-served by established pedestrian footpaths and bicycle paths. Street crossings are supported by signalised intersection - Edibnrgh Road + Smidmore Street.

Sydenham Station Precinct plan is anticipating future pedestrian connection from Sydenham Station through Shirlow Street to Sydney Steel Road.





Views & Solar Access

Views from the site are primarily toward the Sydney CBD view on the north east.

The site also enjoys good solar access on the north and suffers minimal overshadowing within the site.



Key Views of Site

Corner of Edinburgh Road and Sydney Steel Road is the main view to present the development.

05

DEVELOPMENT STRATEGIES

Option 1

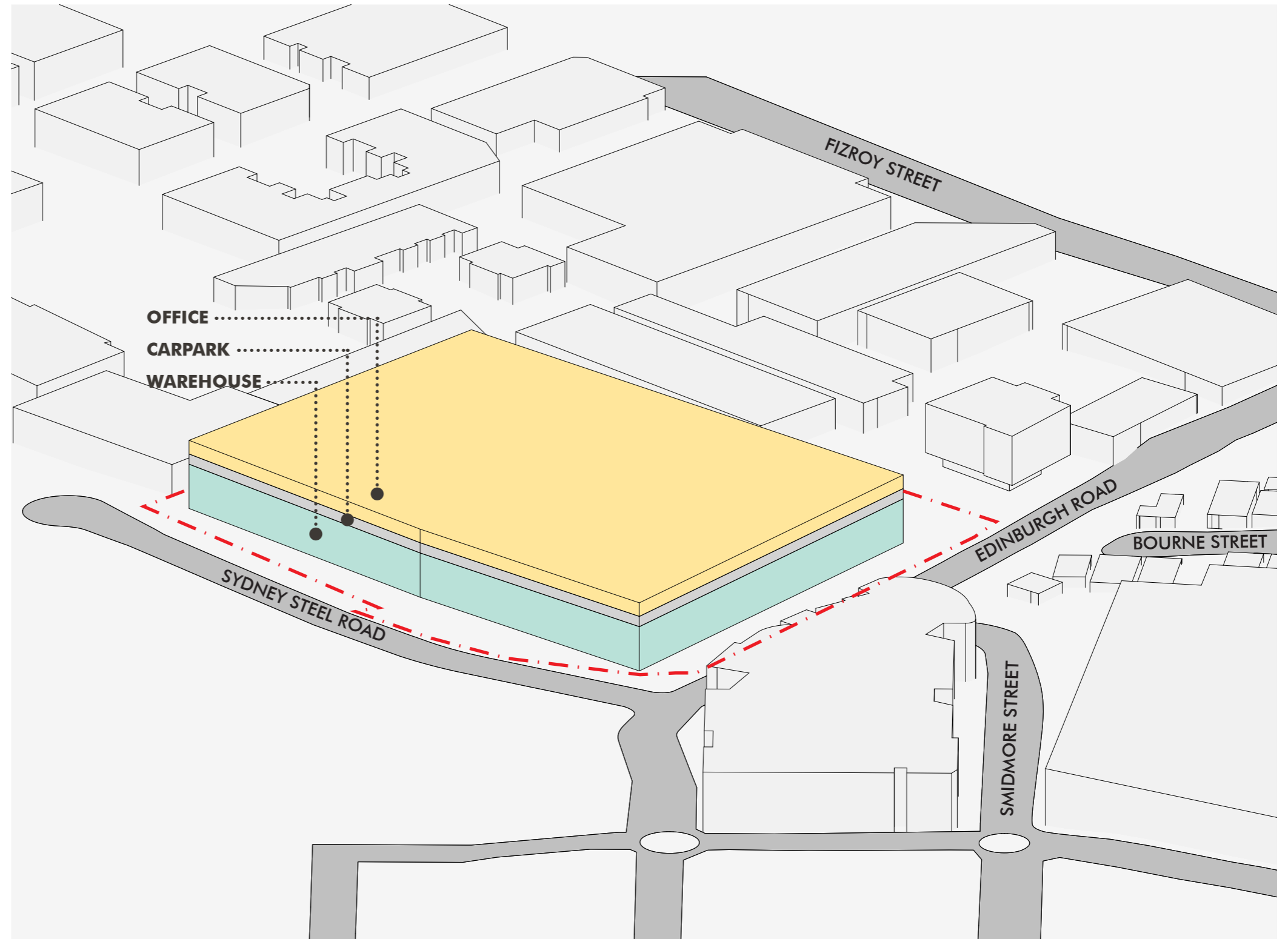
Warehouse on ground with employees parking and ancillary office over.

Pros:

- Complies with permissible usage under Marrickville LEP Zoning.
- Simple and economical construction.
- Satisfies Brief

Cons:

- Lacking public amenities;
- Ground interface with surrounding not well considered.
- Building presentation to Edinburgh Road not well presented.
- Building over stormwater easement.



Option 2

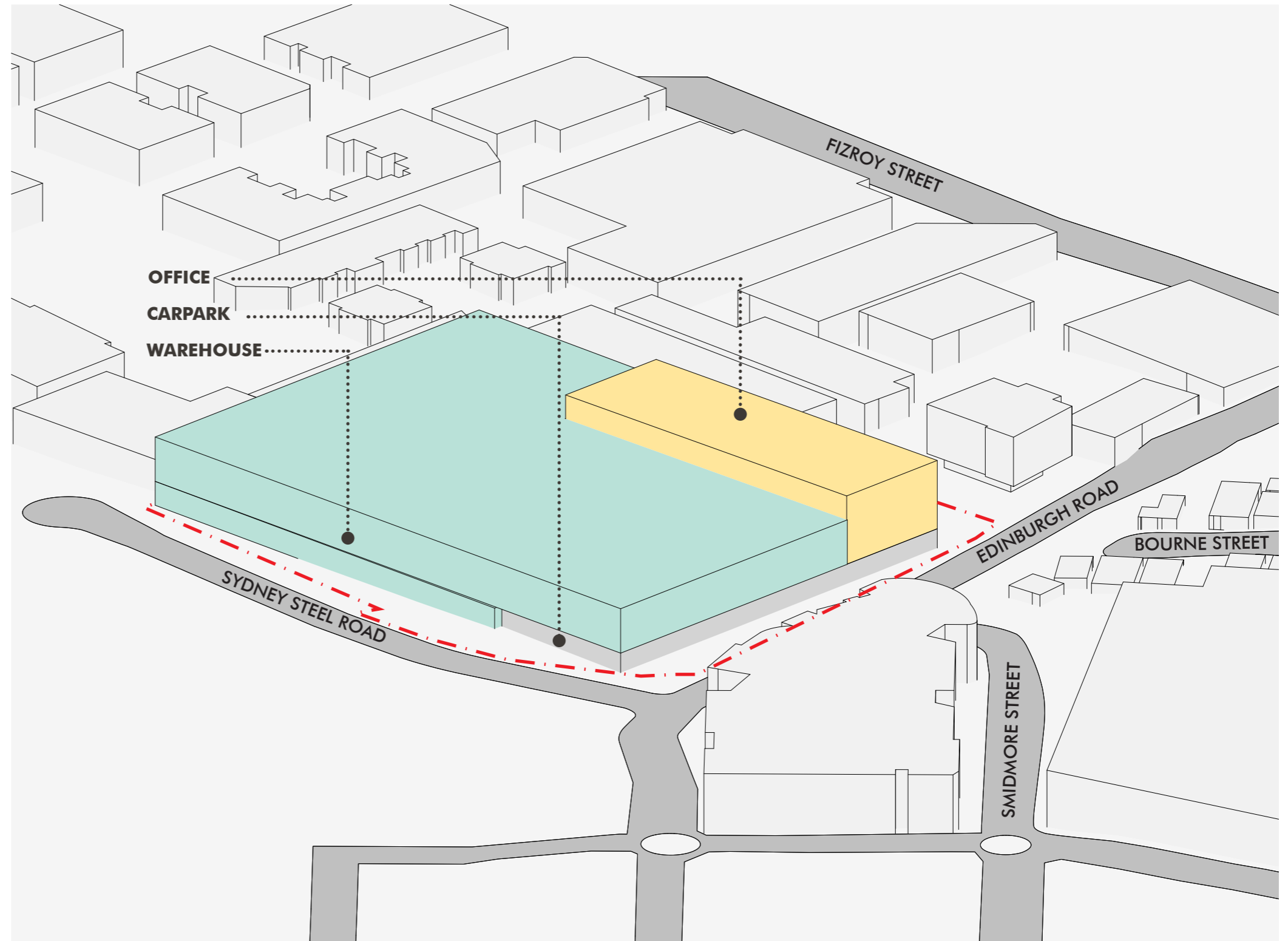
Office component adjacent to the neighbouring commercial building with on-grade parking for employees. Warehouse to occupy east of the site.

Pros:

- Allows opportunity to improve ground amenities.
- Easy access to carpark for employees.
- Satisfies project brief.

Cons:

- Not taking the advantage of the opportunity of views towards the CBD.
- Building edge to Edinburgh road not well presented.
- Exceed allowable FSR



Option 3

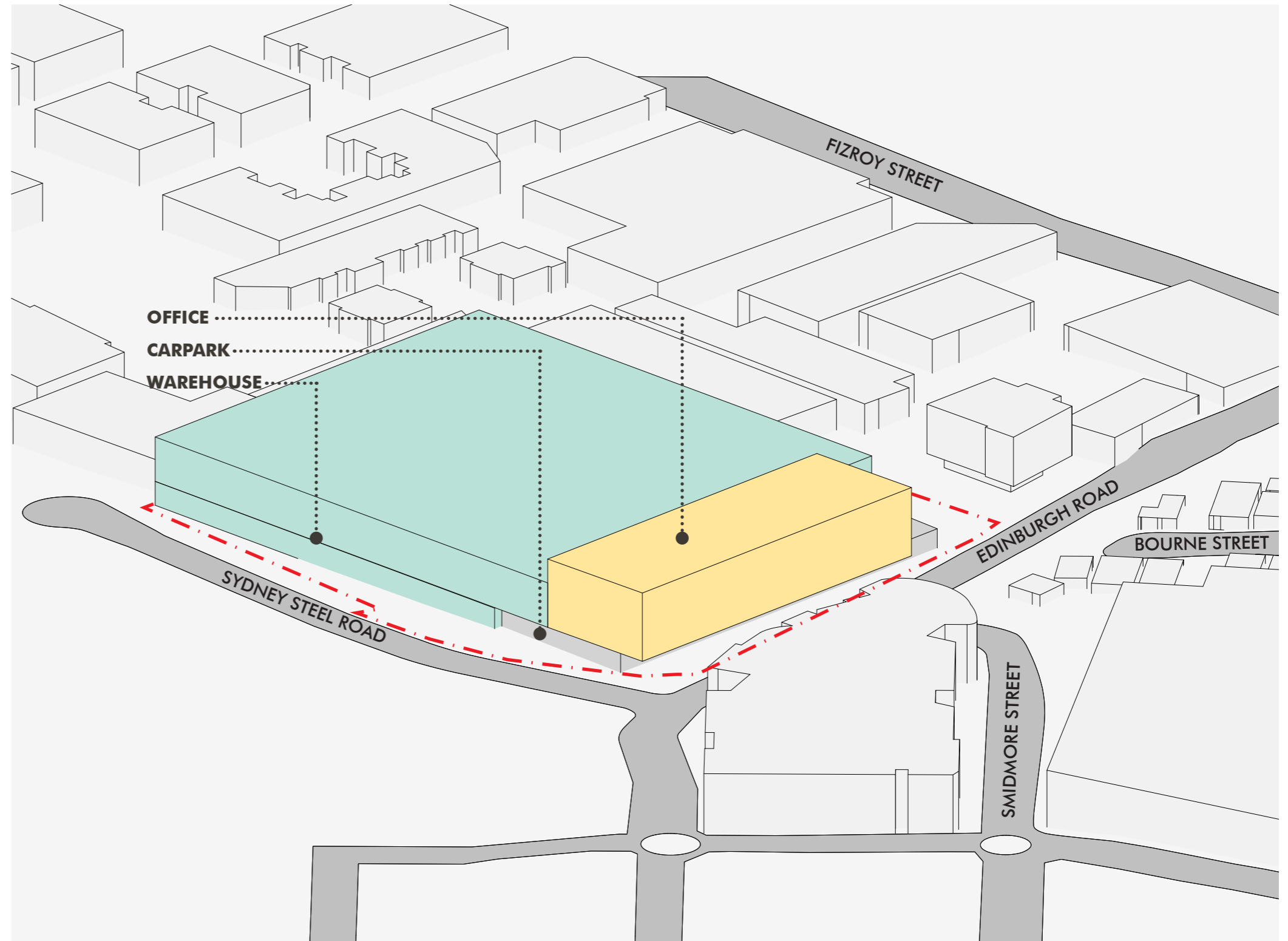
Warehouse component setback from Edinburgh Road, carpark and office component fronting the site.

Pros:

- Warehouse setback from Edinburgh Road away from residential area
- Allows opportunity to improve ground amenities and building presentation.
- Easy access to on-grade carpark for employees.
- Office component as screen to warehouse.
- Satisfies project brief.

Cons:

- Exceed allowable FSR

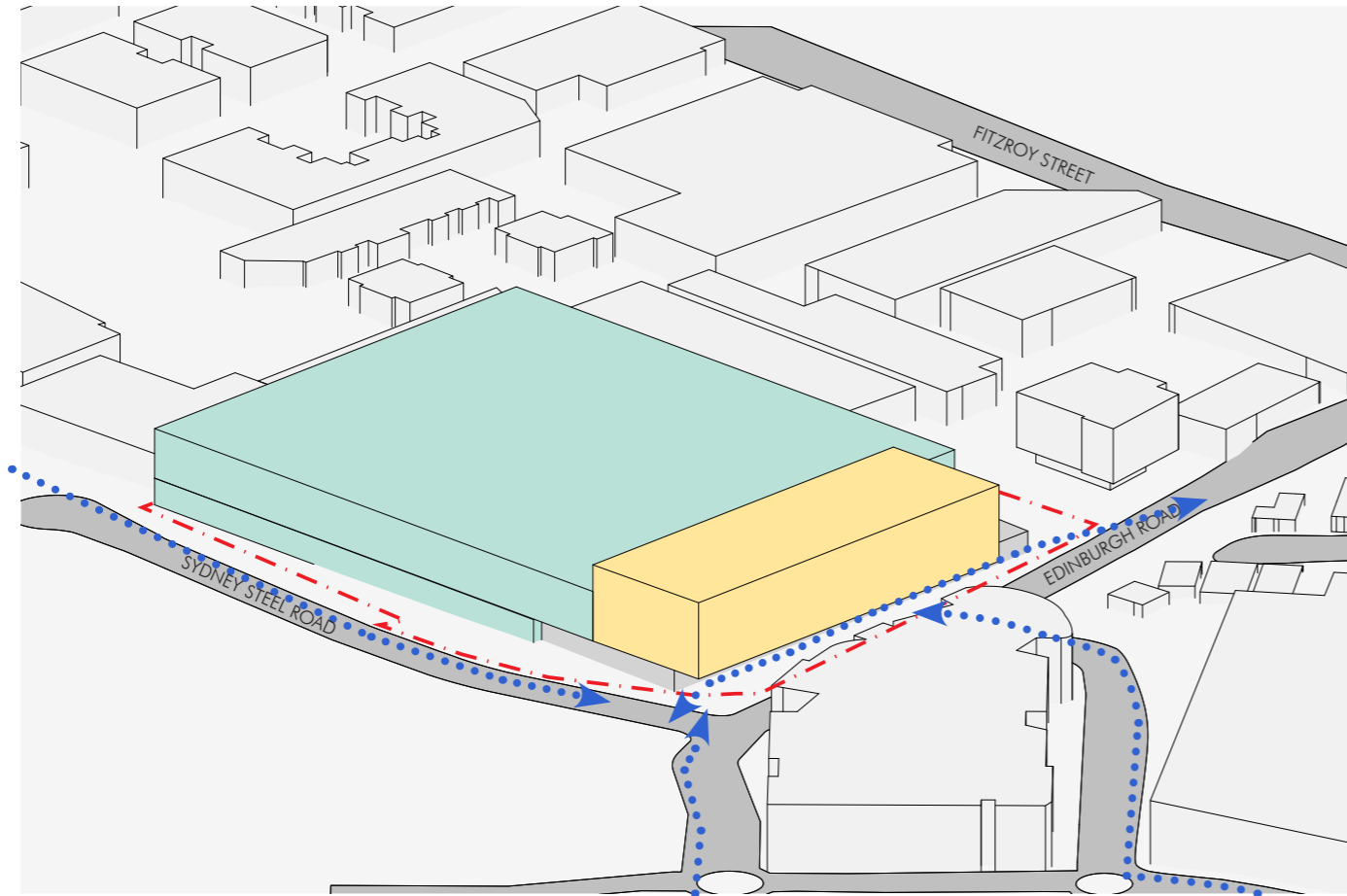




06

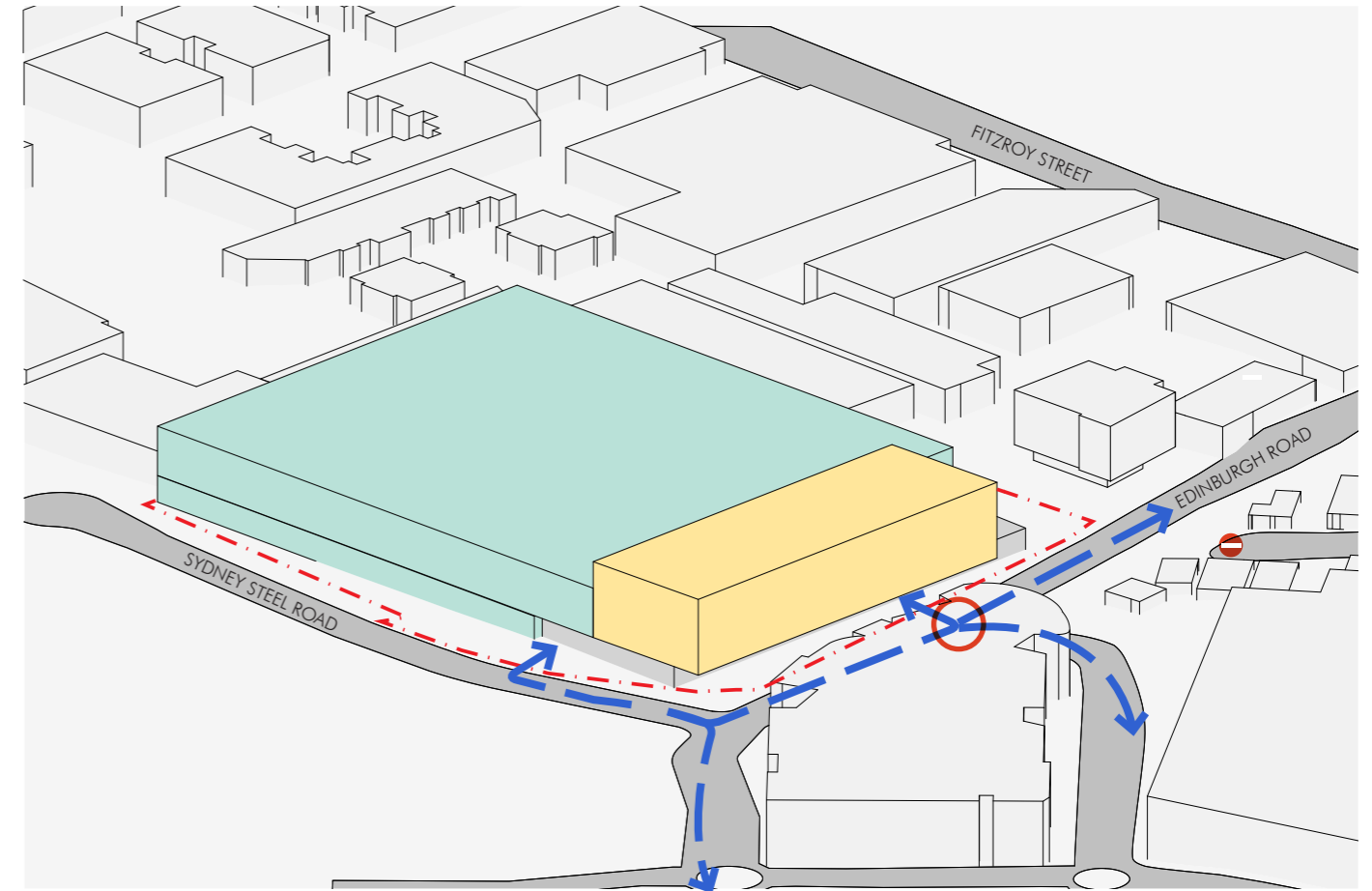
DESIGN PROPOSAL

Massing Strategy



Public access

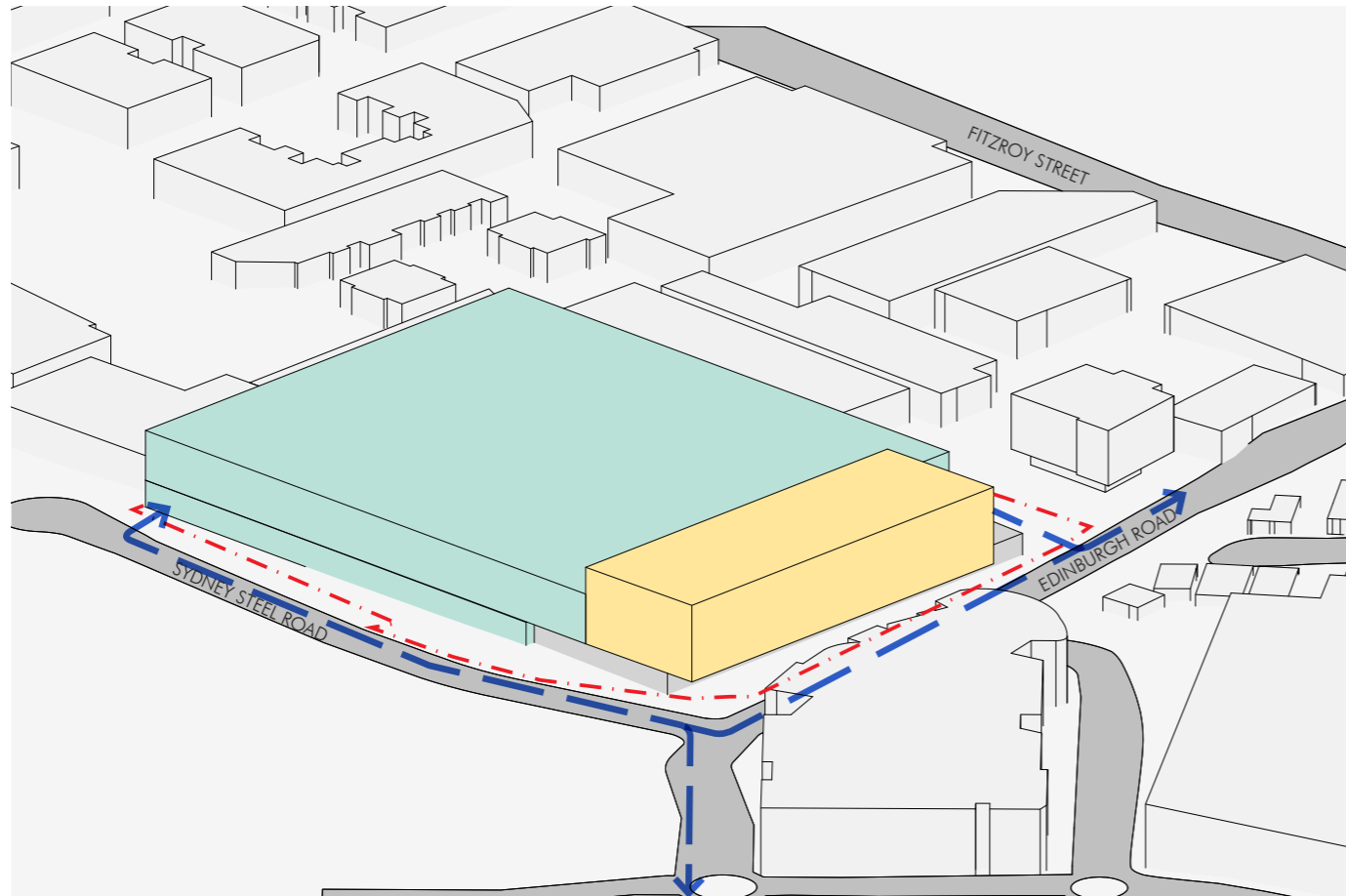
- Edinburgh Road is main pedestrian access connecting people from the dive site, Marrickville Metro and adjacent residential area.
- Future plan to activate pedestrian and bicycle link from Sydenham Station via Sydney Steel Road will generate foot traffic and activate Sydney Steel Road.
- Public access flows work in line with the desired future character in DCP for precinct 43.



Employee access

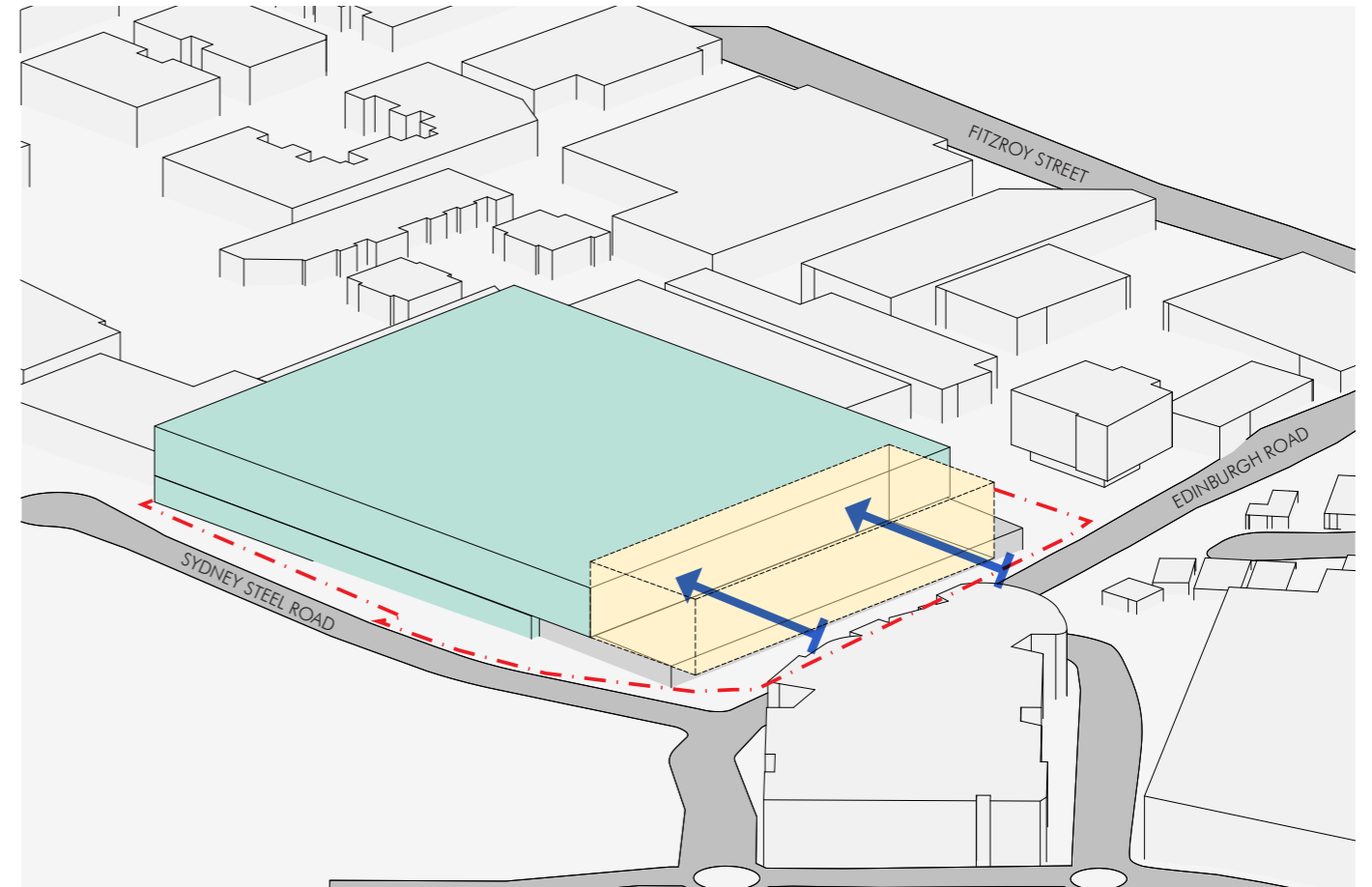
- Car parking for employees is therefore proposed to the North-East of the site.
- Vehicle access is proposed from Edinburgh Road + Smidmore Street intersection and from Sydney Steel Road.
- Employee car parking entries are separated away from heavy vehicles to minimise conflict between vehicle movement of different class.

Massing Strategy



Heavy Vehicle Access

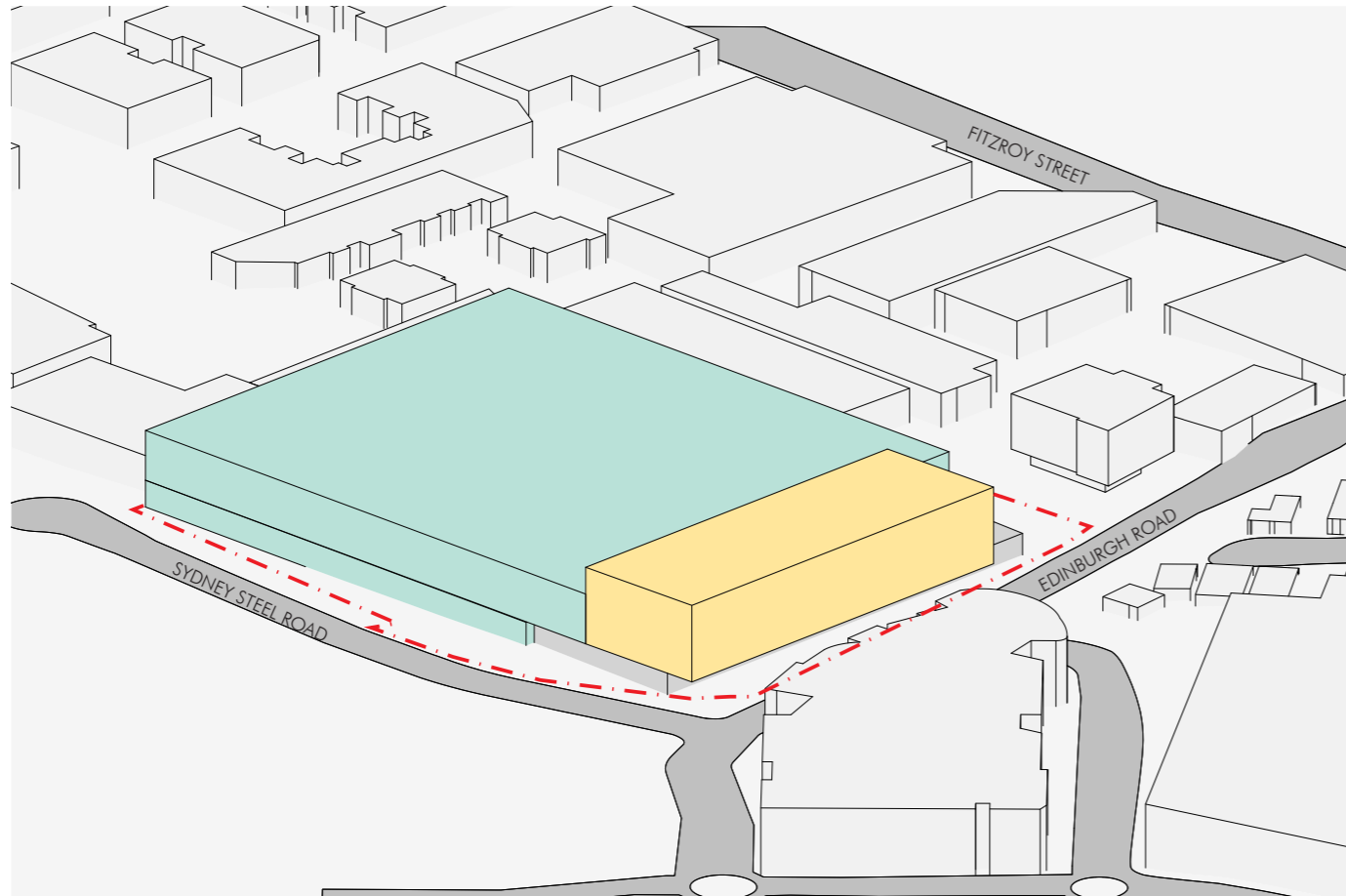
- Heavy vehicle use associated with the warehouses is proposed away from non-industrial interface to keep heavy vehicle movement away from pedestrian and car.
- Impact to streetscape appearance on Edinburgh Road is minimise as desired in the DCP.



Warehouse Massing

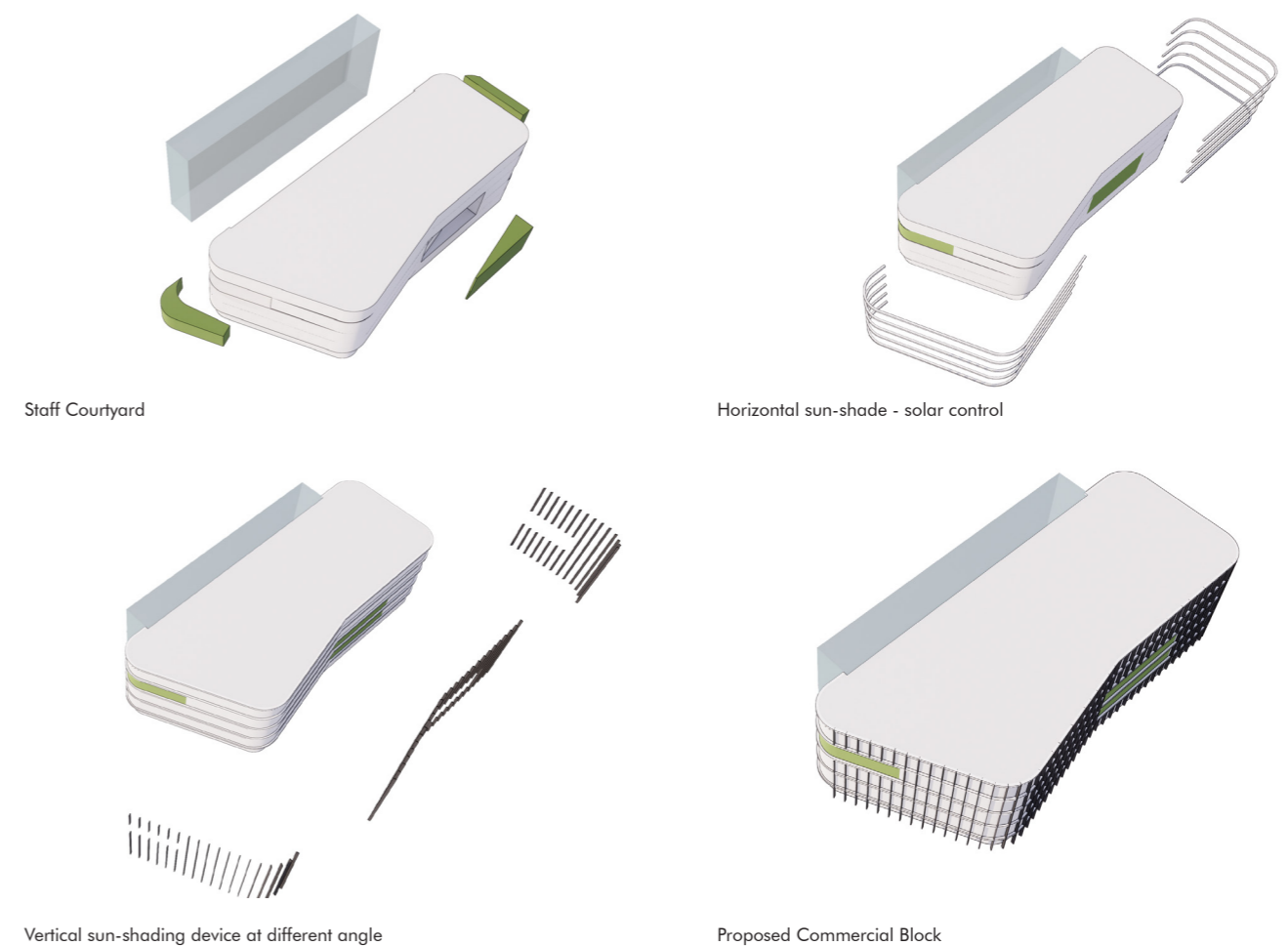
- Warehouse components of the programme are proposed to occupy to the South-West portion of the site.
- Being in an industrial zoned land, warehouse area is approximately 70% of the overall proposed area.
- The warehouse components are setback away from Edinburgh Road. This is in keeping with surrounding context and helps keep un-activated facades away from low density residential and retail uses.

Massing Strategy



Office Component

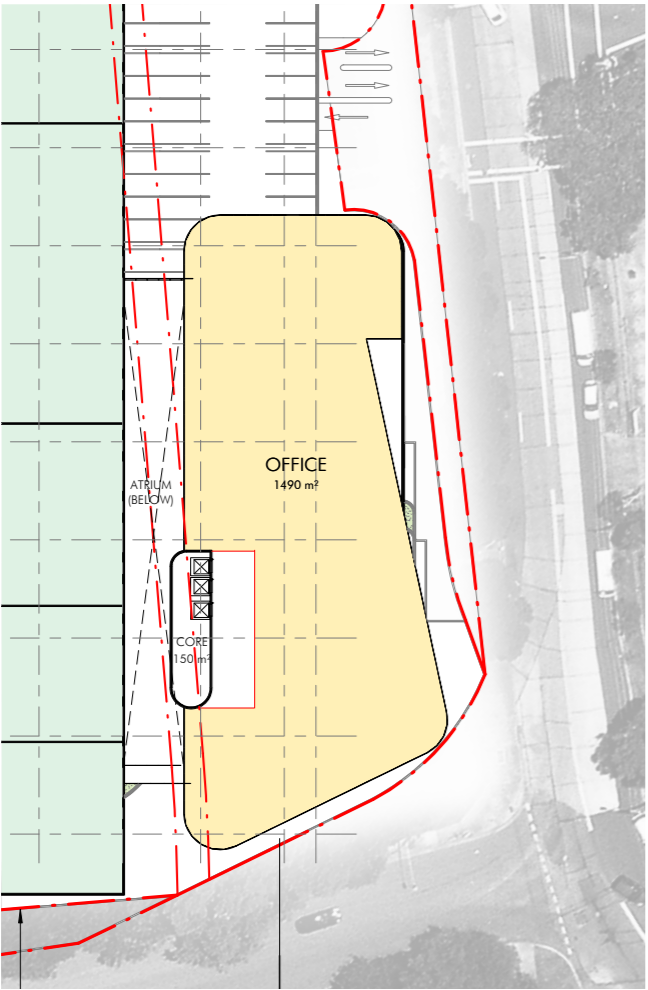
- Office component proposed above car park levels.
- Good opportunities for approach views from Edinburgh Road travelling both ways and from Smidmore Street.
- Good street presence and opportunities to contribute passive surveillance.
- The office component is proposed to house support team to the online shopping fulfillment centre and satisfied the desired future character in Precinct 43 generating approximately 600 jobs..



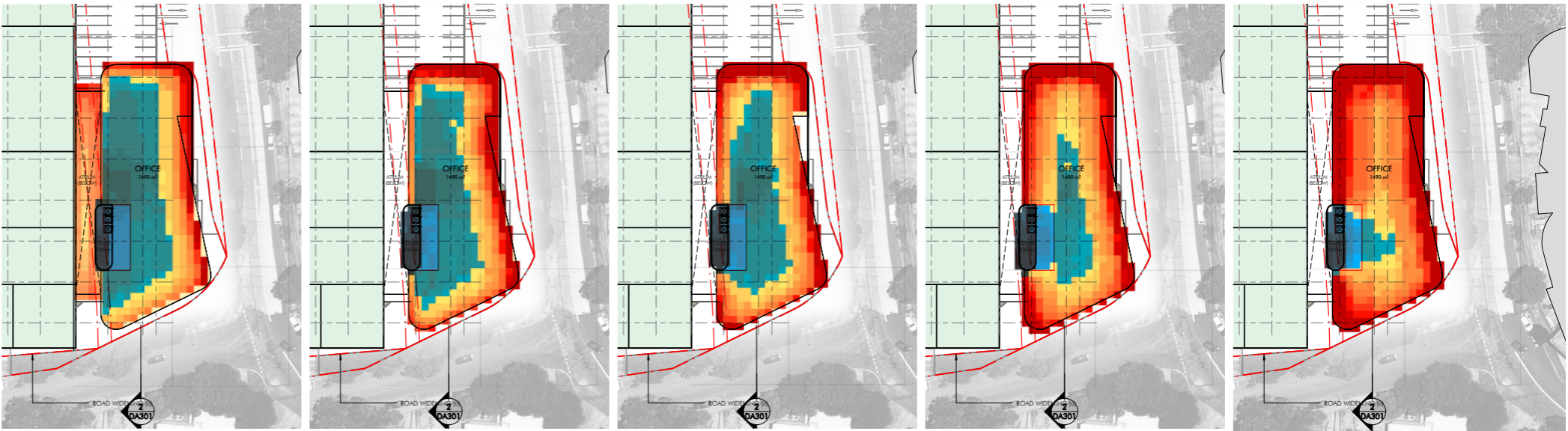
Commercial Block Massing

- Voids carved out at different levels to create outdoor recreation area for staff.
- Atrium separating office and warehouse components to allow more natural sunlight penetrating into office space.
- Horizontal sun-shading to control heat gain.
- Vertical sun-shading at an angle on Western facade to control winter sun.

Office Daylight Analysis



Office Footprint



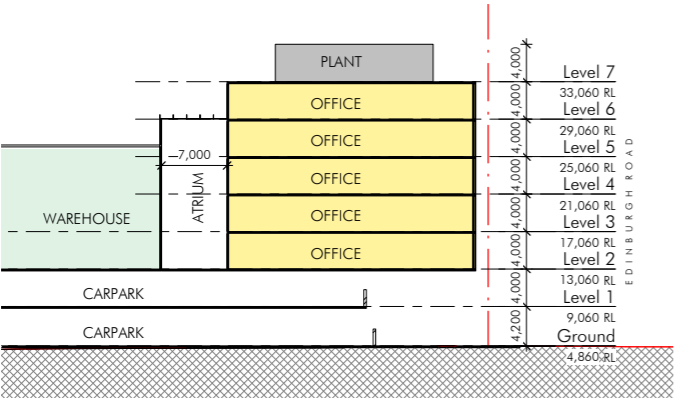
Level 2

Level 3

Level 4

Level 5

Level 6

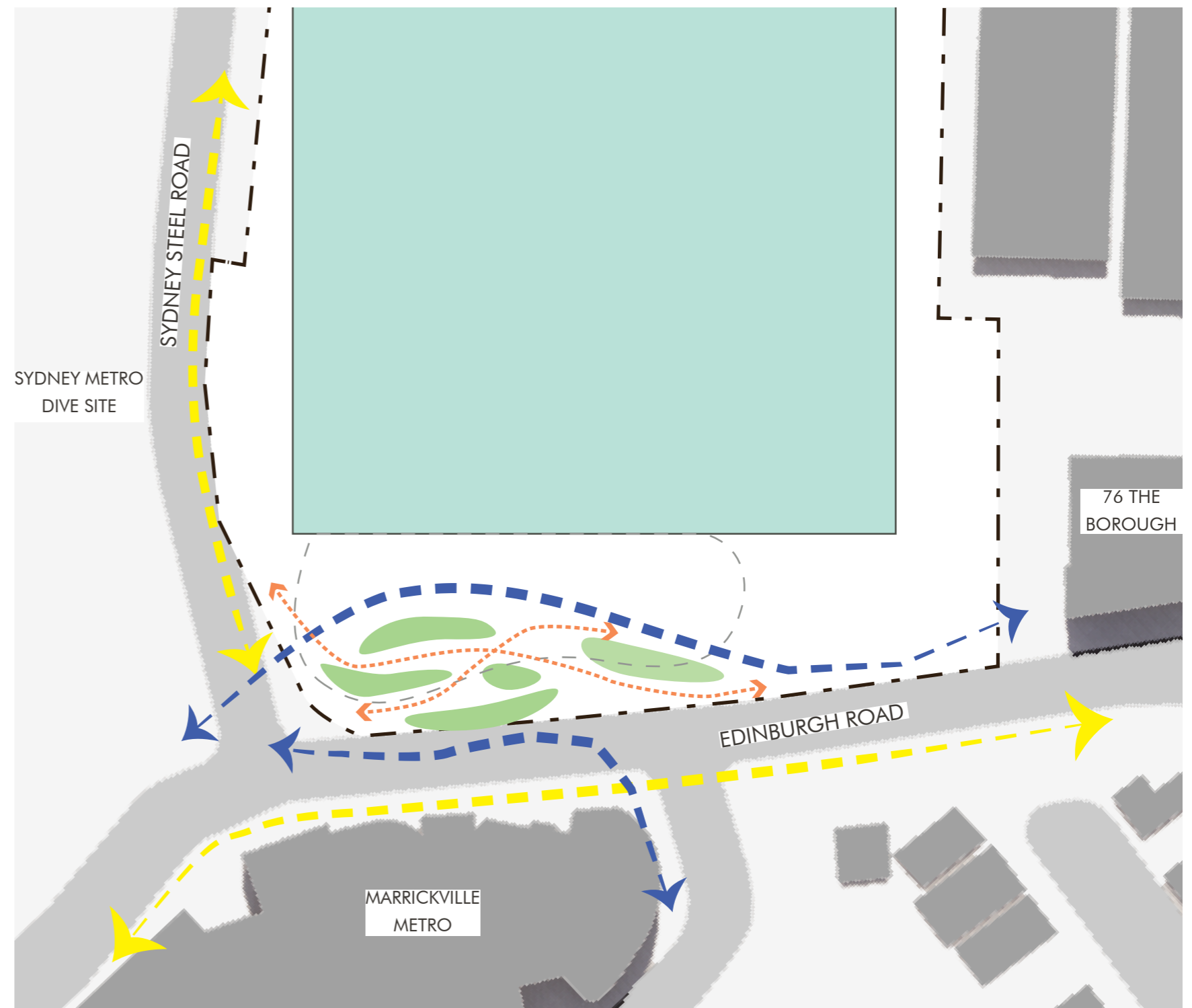


Section

Key Moves

GROUND MOVEMENT

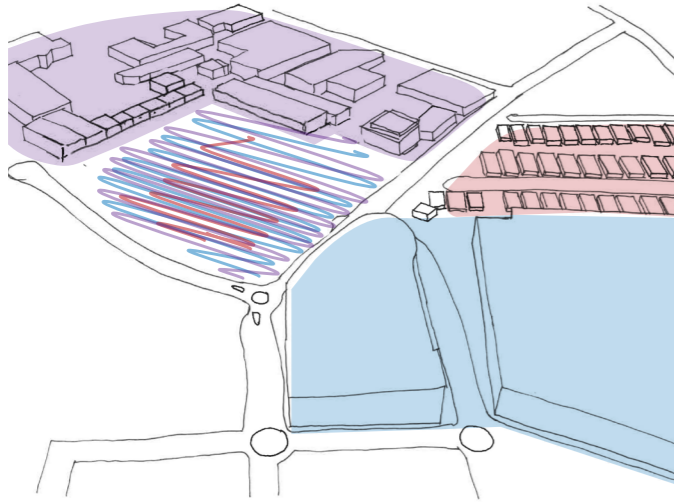
- Existing cycle path along Edinburgh Road
- Future cycle path along Sydney Steel Road
- Pedestrian movement along Edinburgh Road and connection from Marrickville Metro shopping centre
- Permeable paths at the intersection of different activities creating a public domain for local community.



Design Principles

- Context & Location
- Built form & Scale
- Functionality & Quality
- Legibility
- Community
- Amenity
- Landscape
- Sustainability
- Safety
- Aesthetics

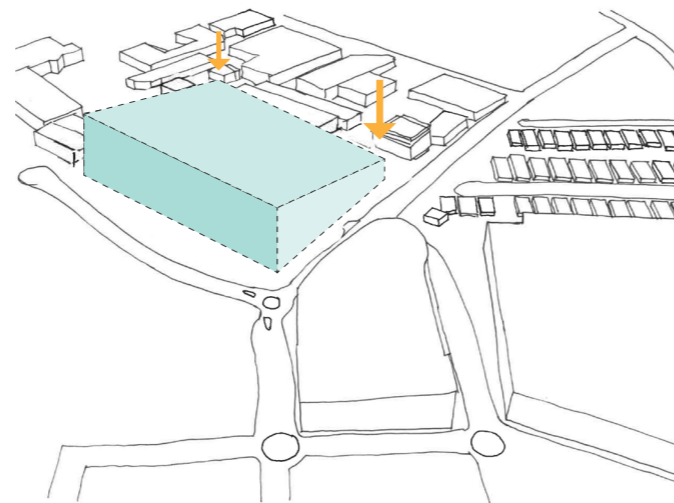
Resolution of Design Principles



Context & Location

An investigation into the distinctive character of the local area, including prominent natural & built features, social, economic, and environmental conditions, the overall built environment.

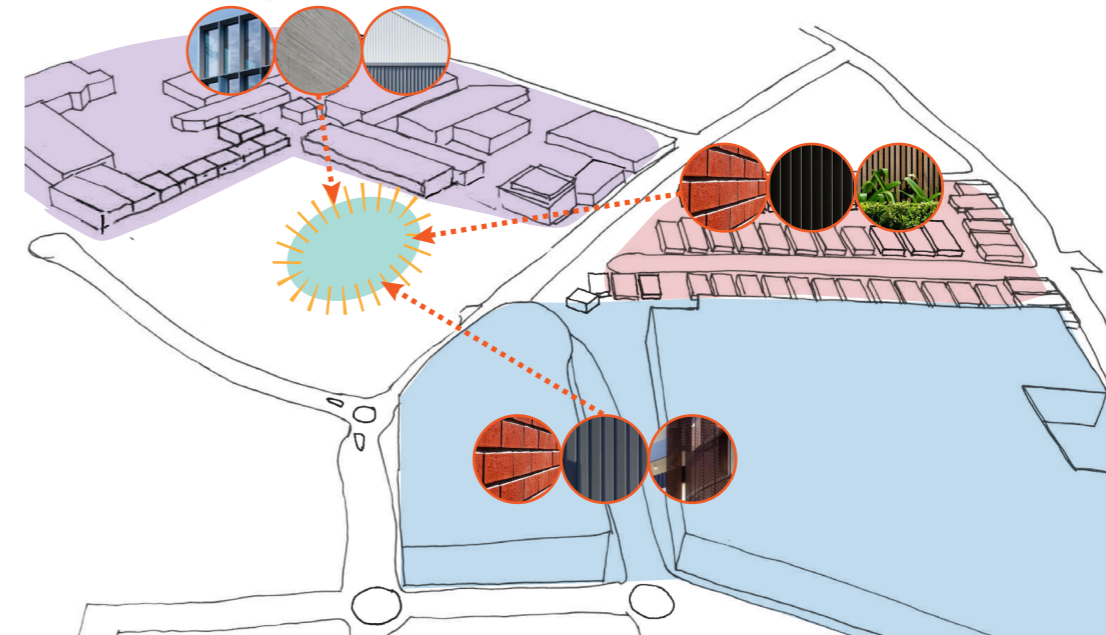
The design responds intelligently and sensitively to these factors and makes a positive contribution to the streetscape, neighbourhood and neighbouring sites. The design has also considered the future desired character of the area and its interfaces.



Built Form and Scale

The built form successfully responds to its setting and the future character and setting of the location.

Its prominent location on the road intersection and road exposure has been recognised, in addition the form and scale of the built form also responds to the functionality of the space, operation and integration with the surrounding use context so as to present a modern considered approach to the continuation of employment in the neighbourhood.



Functionality & Quality

The design seeks to balance the needs of the user efficiently and effectively. Space and purpose have been designed to respond to well thought through relationships and ease of use. Space have been made as flexible and as adaptive as possible to minimise possible future modifications.

Material selections, durability and their relationships have been considered as has the detailing and weather implications to ensure the quality of the finished form and its life cycle into the future.

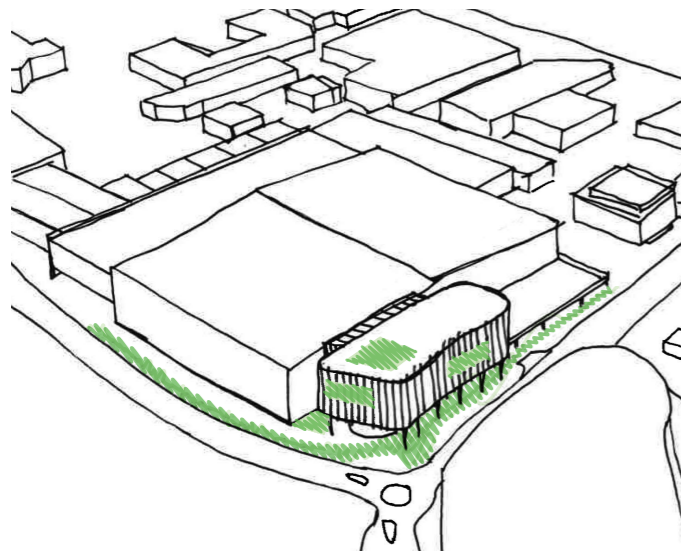
Legibility

The built form has a clear identity and its uses and components have been clearly defined for ease of operations and use. The overall design has enabled this legibility to compliment the design outcome.

Community

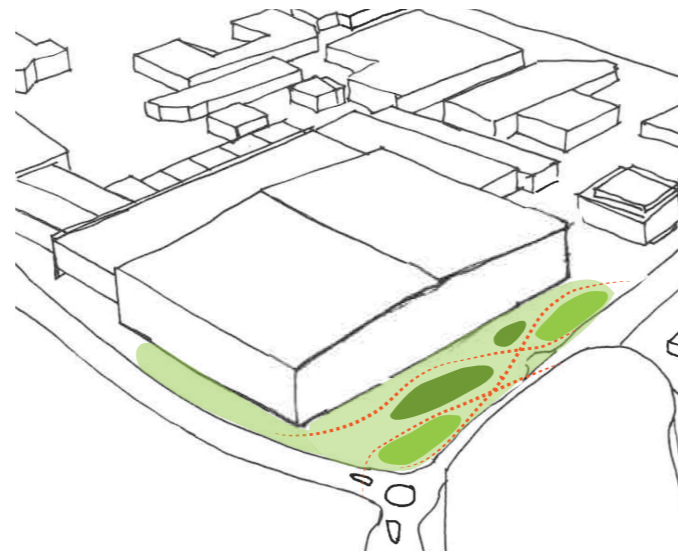
The design responds to the local community context, the wider social context. The function itself will create employment opportunity for the diverse local community and encourage diverse social interaction.

Resolution of Design Principles



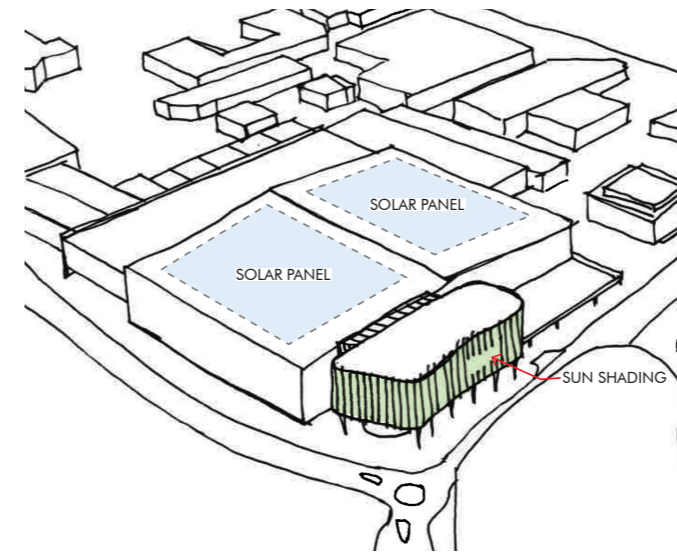
Amenity

The design has successfully responded with the provision of a variety of uses, proximity to supporting amenity as well as optimising internal and external amenity for the users.



Landscape

The design recognises that landscape and building operate together and as an integrated and sustainable system.



Sustainability

The design has considered a sustainable landscape in an urban setting and sought to improve and organise the existing urban realm and streetscape, responding to the desired future character.

The built form and function has considered practical and effective sustainable measures, relating to shading, ventilation, power generation and water.



Safety

Safety has been considered and evaluated in the design process to ensure risk and harm are minimised and safe behaviour and use are supported.

Aesthetics

The design has taken on board the design principles identified and produced a building that has resolved the challenges and embraced the opportunities to achieve an elegant coherent outcome.

The arrangement of built form and space has been considered in its context. The design has addressed the varying scales and form of the building in the selection and association of materials and colour. This has enabled a skilled integrated and considered design response.

Development Summary

27,576m²

Developable Site Area

1,450m²

Public Interface

1,445m²

Total Landscape Area

995m²

Tree Canopy Cover

21,000m²

CFC Warehouse

8,570m²

Spec. Warehouses

8,970m²

Ancillary Office

371

Staff & Visitor
Car Parking

140

Delivery Van Parking

Context: Marrickville Metro Redevelopment



Context: 76 The Borough



Warehouse Component

Architectural Precedents

Metal wall sheeting with solid base



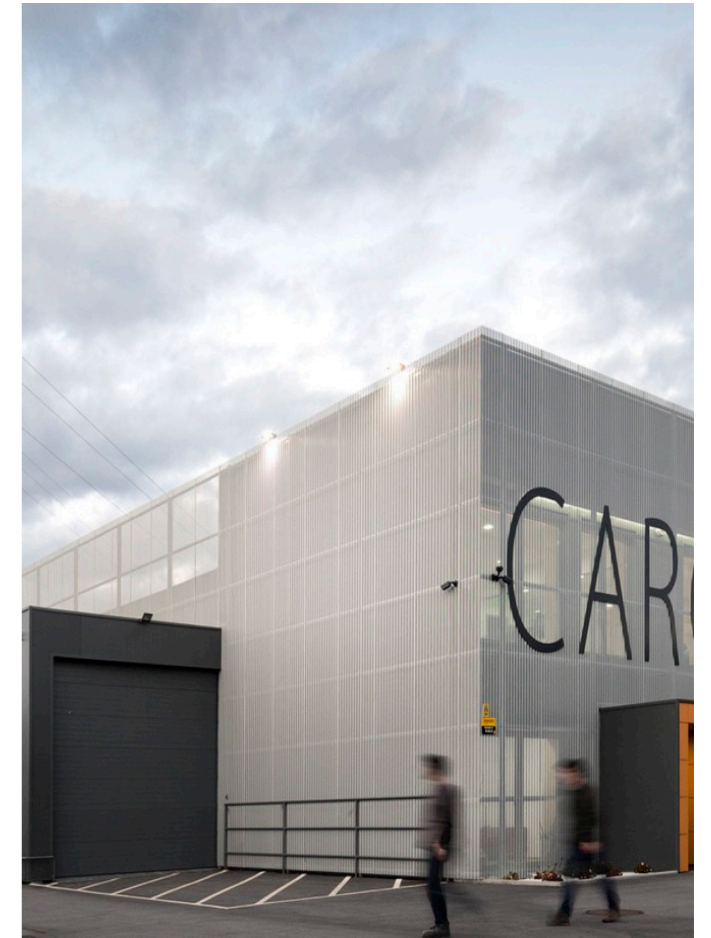
Marrickville Metro expansion, Marrickville

Graphic wall in building



Fitzroy, Melbourne

Perforated textile-like screen to soften the corner



Carcema Headquarters, Barcelos Portugal

Warehouse Component

Materiality



metal wall sheeting



metal wall sheeting



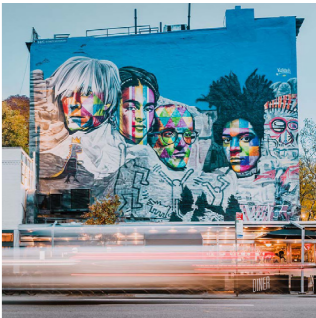
concrete - natural



perforated screen



landscape



street art

Conceptual Drivers - Office

movement | distribution | automation | technology

to celebrate and embrace the internal activities, movement of internal automation is a strong concept in developing the aesthetic of the office component.



- perforated metal screen
- steel framing
- conveyor belt rounded corner



- repetitive texture
- steel framing
- solid + void



- conveyor belt transition
- bolt connections
- guard rail



- textured conveyor belt
- steel guard
- rubber screen

Office Component

Architectural precedents below have demonstrated desired characters derived from the concept and they have been adopted in the proposed design.

shifting floor profiles

- conveyor belt transition
- conveyor belt rounded corner
- repetitive texture - vertical mullion



UTS Central, Sydney

dynamic form

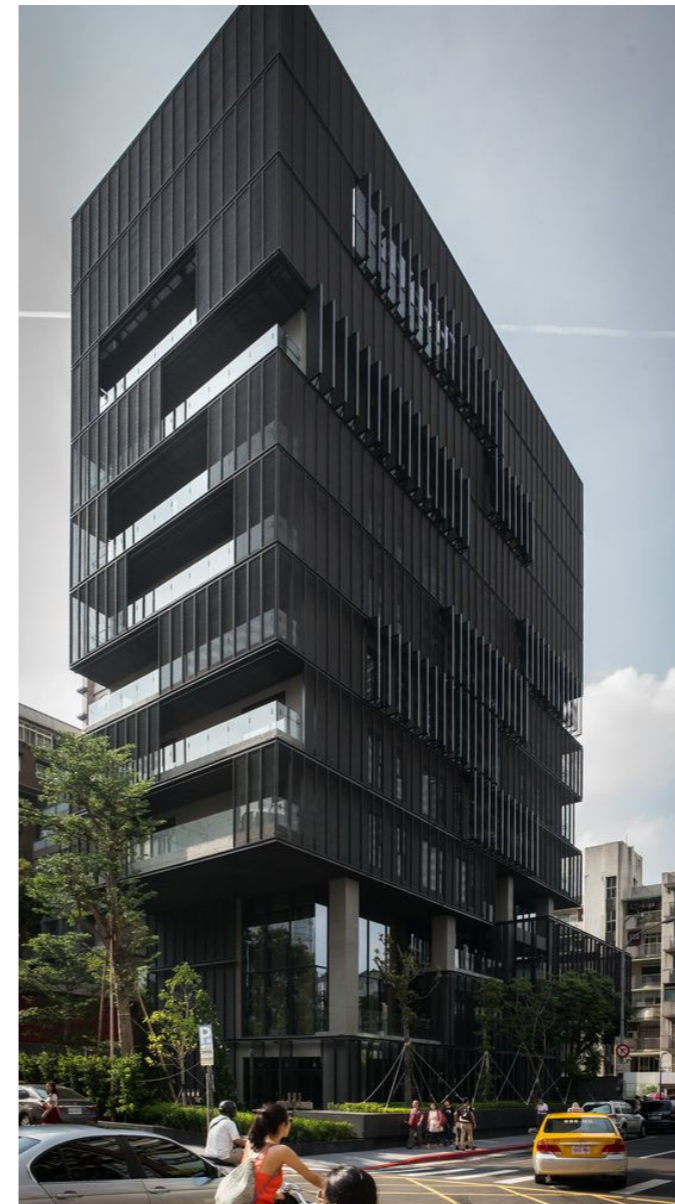
- repetitive texture - vertical sunshade
- voids - recesses in facade
- guard rail - horizontal sunshade



145 NVT Office Building, Vietnam

peeling facade

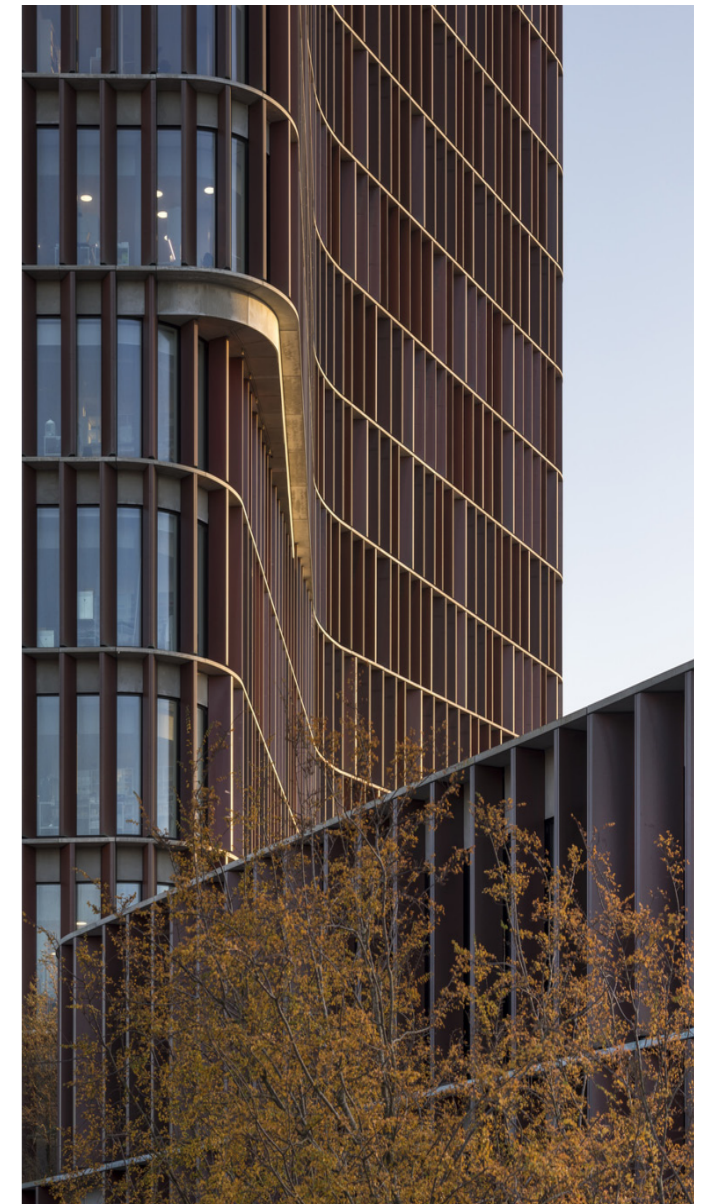
- perforated metal screen
- bolt & nut fixing
- voids - recesses in facade



Hotel Proverbs, Taipei

offset sun shades

- voids - vertical blades
- steel guard - expressed transom
- conveyor belt rounded corner



The Maersk Tower, Denmark

Office Component

Materiality



aluminium sunshades



timber soffit



concrete - natural



precast concrete - charcoal



planters



clear vision glazing

Conceptual Drivers - Public Domain

context | culture | adaptation | growth

respecting the local architectural character and culture, creating an opportunity to encourage diverse social interaction is the main focus in designing the public domain.



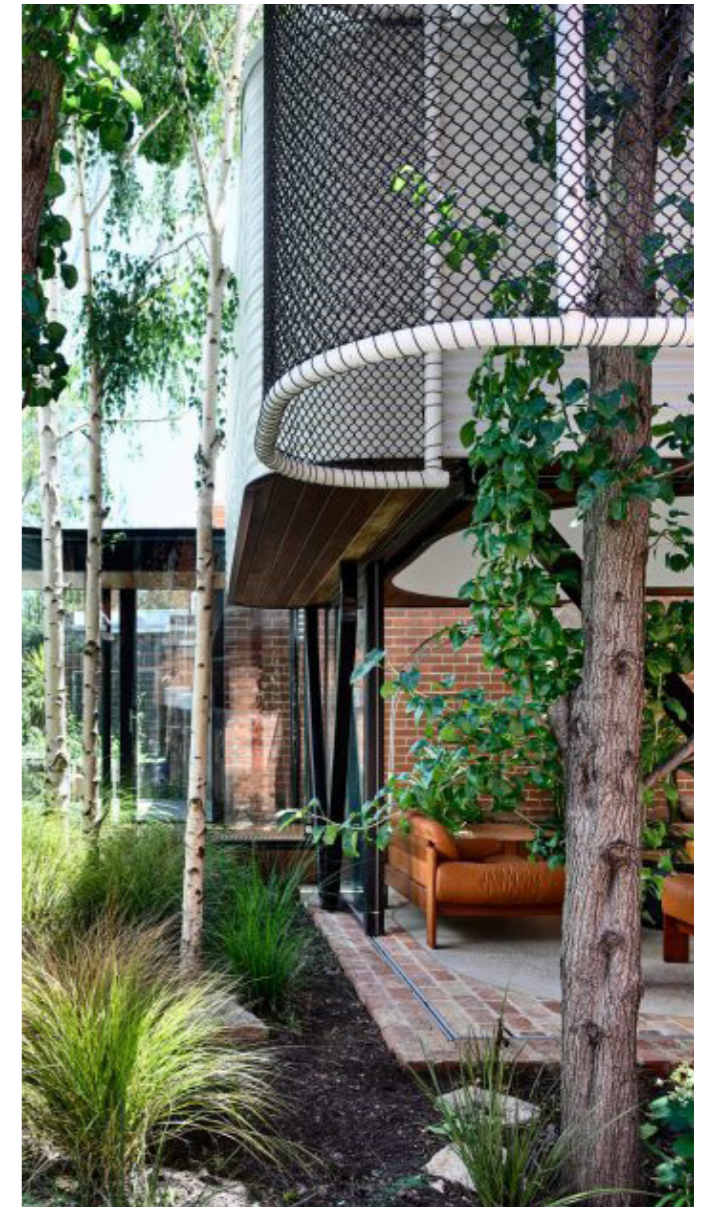
- red brick
- bright graffiti on wall
- signage



- red brick
- contemporary internal fitout in existing brick building
- outdoor hang out area



- double volume public space
- 'light' facade over



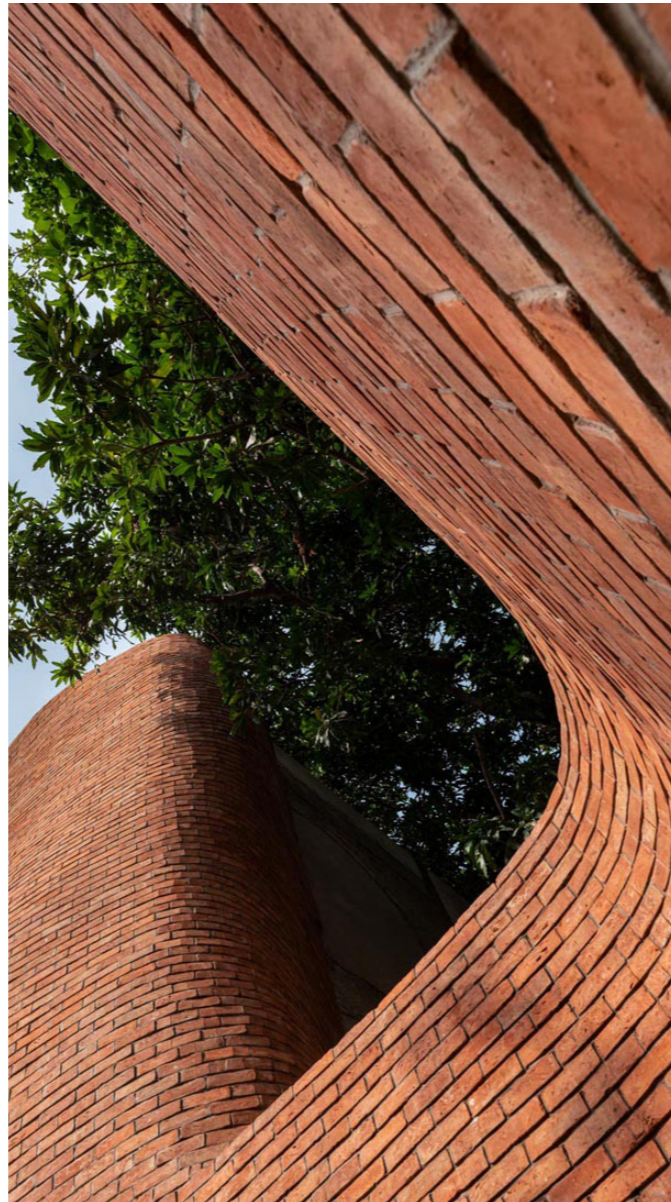
- landscape + seating area
- red brick
- steel structure

recycled brick facade



Marrickville Metro expansion, Marrickville

curvaceous brick facade



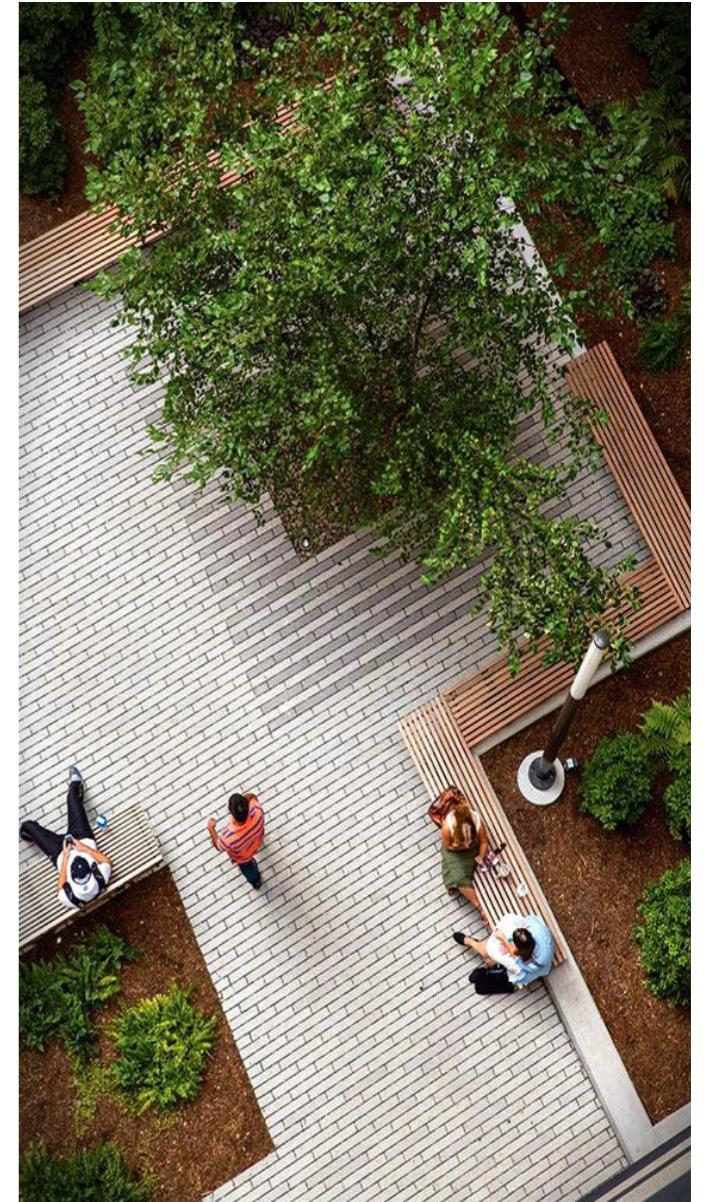
KBM Sweet Shop, India

green undercroft forecourt



80 Ann Street, Brisbane

pedestrian circulation | landscaping



Zen Garden Design: Shunmyo Masuno

Public Domain

Materiality



aluminium batten screen



recycled brick



concrete - natural



white brick paver



planters

