Statement of Environmental Effects

Alterations and additions to the existing garden centre

307 Lane Cove Road, Macquarie Park

Submitted to City of Ryde Council

On Behalf of Thunderbirds are Go Pty Ltd atf the Gardeners Trust

March 2021

REPORT REVISION HISTORY

Revision	Date Issued	Revision Description	
01	14/12/20	Draft to client	
		Prepared by	**Verified by**
		Olivia Page *Senior Project Planner*	 Stephen Kerr *Executive Director*
01	03/03/21	Final	
		Prepared by	**Verified by**
		Olivia Page *Senior Project Planner*	 Stephen Kerr *Executive Director*

Disclaimer
This report has been prepared by City Plan Strategy & Development P/L with input from a number of other expert consultants (if relevant). To the best of our knowledge, the information contained herein is neither false nor misleading and the contents are based on information and facts that were correct at the time of writing. City Plan Strategy & Development P/L accepts no responsibility or liability for any errors, omissions or resultant consequences including any loss or damage arising from reliance in information in this publication.

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

Appendix	Document	Prepared by
1	Architectural Plans	DKO Architecture
2	Urban Design Report	DKO Architecture and Realm Studios
3	Landscape Plans	Realm Studios
4	Survey Plan	Chadwick Cheng Consulting Surveyors
5	Geotechnical Report	Geotechnique Pty Ltd
6	Preliminary Site Investigation	Geotechnique Pty Ltd
7	Heritage Report	Heritage 21
8	Bushfire Report	Blackash Bushfire Consulting
9	Traffic and Parking Report	The Transport Planning Partnership
10	Arborist Report	Birds Tree Consultancy
11	BCA and Access Statement of Compliance	Blackett Maguire and Goldsmith
12	Stormwater Management Plan	BG&E
13	Acoustic Impact Assessment	ADP Consulting
14	Energy Efficiency Report	ADP Consulting
15	Reflectivity Report	ADP Consulting
16	Section J Report	ADP Consulting
17	Section J Compliance Verification Assessment	ADP Consulting
18	Site Waste Minimisation Plan	Pitt and Sherry
19	Structural Letter	BG&E
20	Crime Risk Assessment Report	City Plan
21	Pre-DA and UDRP Meeting Minutes	City of Ryde Council
22	Wind Report	Cermak Peterka Petersen Pty Ltd
23	Cost Report	Turner and Townsend
24	Plan of Management	Thunderbirds are Go Pty Ltd atf The Gardeners Trust
25	Planning Agreement Offer	Thunderbirds are Go Pty Ltd atf The Gardeners Trust
26	Demo Work Plan	Metropolitan Demolitions Group
27	Fire Safety Strategy Report	Stephen Grubits and Associates

1. EXECUTIVE SUMMARY

This Statement of Environmental Effects (SEE) has been prepared for Thunderbirds are Go Pty Ltd by City Plan Strategy and Development Pty Ltd (City Plan) to accompany a development application (DA) to City of Ryde Council (Council). The site is located at 307 Lane Cove Road, Macquarie Park and is otherwise known as Eden Gardens.

This SEE has been prepared pursuant to Section 4.12 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and Clause 50 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation). The purpose of this SEE is to:

- Describe the proposed development and its context
- Assess the proposal against the applicable planning controls and guidelines, and
- Assess the potential environmental impacts and mitigation measures.

This DA seek approval for alterations and additions to the existing garden centre and construction of an 18-storey office building at the site. The proposal will entail:

- Alterations and additions to the existing garden centre including:
  - Retention of the existing at grade parking spaces fronting Lane Cove Road and the underground parking spaces directly below
  - Excavation to provide additional underground spaces on the north-east of the site
  - Provision of end of trip facilities and service rooms in the basement level
  - Alterations and additions of the existing main garden centre building located on the west of the site including amendments to the garden centre store, café, amenities, food and beverage venue, neighbourhood shops and provision of a winter garden
  - Expansion of the existing function spaces in the south-west of the site
  - Provision of a new outdoor garden centre, including nursery, in the north-west of the site
  - A multi-level car park in the mid-north of the site with rooftop activity and wellness zone, and
  - Provision of a storage room, loading bay, waste room and rock climbing wall at the ground level of the proposed multi-storey car park.
- Construction of a new 18-storey commercial office building in the centre of the site.
- A new restaurant including outdoor and indoor dining spaces in the mid-east of the site. (Noting the fit-out of the restaurant does not form part of this DA and will be subject of separate approval).
- Landscape works in various places and retention of existing display gardens.

Pursuant to the Ryde Local Environmental Plan 2014 (RLEP), the site is zoned B7 Business Park. The proposed land uses include a garden centre, office premises, neighbourhood shops, restaurant and cafes, function centre and parking as permissible with development consent in the B7 zone. Residential land uses are strictly prohibited in the B7 zone pursuant to the RLEP. Individual neighbourhood shops are each less than 200m² as specified by clause 5.4 of the RLEP. The site is not subject to a maximum permissible building height. The height of the development varies across the site. At the north the aboveground carpark extends four storeys, the garden centre is generally a single storey, noting the end of trip facilities and a function room are located in the basement, the function building is two storeys, the restaurant is a single storey with a rooftop area above and the office building is 18-storeys. The proposed building achieves the objectives of clause 4.3 of the RLEP, notwithstanding the absence of a numerical control. The office building form enables the provision of employment floorspace within the walking catchment of the metro line, is of a scale that is consistent with the emerging character of the locality, will create an attractive visual marker at the northern entrance to the Macquarie Park Corridor, enables the 1:1 FSR to be achieved in a manner that appropriately responds to the bushfire constraints and delivers an environmentally sustainable

development. The site is subject of a maximum floor space ratio (FSR) of 1:1. The proposal is compliant at 1:1, providing 24,669m² of gross floor area compared to a site area of 24,680m².

The proposal is classified as integrated development pursuant clause 101 and 104 to State Environmental Planning Policy (Infrastructure) 2007 (ISEPP). The site adjoins Lane Cove Road on the west boundary, being a classified road and is defined as 'traffic generating development'. It is noted that the application will be referred to Transport for NSW (TfNSW). Furthermore, the proposal results in an extension to the right-hand lane providing access to the site from Lane Cove Road. This extension has been discussed with Council and will be subject of assessment by TfNSW as part of this application.

Given the location of the site in proximity to the Macquarie Park Metro Station, the development proposes 502 on-site parking spaces which is 17 spaces more than the Macquarie Park Corridor maximum rates and the 153 less than the Ryde Development Control Plan (RDCP) rate. The proposed parking provision is appropriate given:

- The site's location nearer to the Macquarie Park Station than numerous areas within the corridor and is also serviced by regular buses
- The RDCP rates precede the opening of the metro station which would have reduced the car mode share of the surrounding area significantly
- The proposal will attract visitors and workers who undertake multi-purpose trips
- The development involves the implementation of a Green Travel Plan (GTA), and
- The development achieves the objectives of the RDCP which aim to "minimise traffic congestion", "minimise car dependency" and "promote alternative means of transport - public transport, bicycle and walking".

The site adjoins Lane Cove National Park to the north and east. The national park is bushfire prone land and accordingly the location of proposed buildings has been largely determined by the Bushfire Attack Levels (BAL). The development duly considers the bushfire risk and seeks to mitigate impact to property and life.

Pre-DA and Urban Design Review Panel (UDRP) meetings were held with Council and the Ryde UDRP on Thursday 26 November. Section 3.15 of this SEE provides a detailed response to the matters raised in the meetings. Subject to addressing several items (which have been incorporated into the submitted DA), we understand that Council and the UDRP were generally supportive.

The DA is accompanied by a Planning Agreement Offer (the Offer) provided by the applicant and landowner. The Offer comprises a development contribution with the following components:

1. Upgrading of the pedestrian footpath on the western side of Lane Cove Road between Talavera Road and the site to the same standard as the existing pedestrian footpath on the western side of Lane Cove Road between Waterloo Road and Talavera Road.
2. Construction of a pedestrian safety fence on the footpath on the western side of the M2 overpass.
3. Extension of the turning bay providing access to the site for traffic travelling north bound on Lane Cove Road.

As detailed in Appendix 25, it is intended that the benefits under the offer are provided in lieu of developer contributions under section 7.11 of the EP&A Act.

It is intended that should development consent for the DA be granted, this offer will be confirmed in a formal planning agreement with City of Ryde Council. The agreement will comply with the requirements of the EP&A Act and the EP&A Regulation.

The proposal creates a unique multi-faceted destination that combines employment with garden centre, food and beverage and function centre in a peaceful landscaped setting adjacent to the National Park. The proposed office building reinforces the role that Eden Gardens currently fulfils as a visual marker of the northern entrance to Macquarie Park on Lane Cove Road and will create an important marker of the

intersection of Lane Cove Road and the M2. The design of the office building including the proposed balconies and wintergardens create an indoor-outdoor setting for workers to feel connected to nature with the backdrop of the national park setting and the beautiful 1.2 ha garden which occupies a significant part of the site.

The development is sited in a natural setting providing unique business, leisure, and entertainment opportunities at all times of the day and night. The design encourages engagement with the garden setting and elevates the proposal as a vibrant place to dine, socialise and work, enhancing the appeal of the locality.

Diversity of people, wellness and horticulture underpin the fine grain architectural and landscape design. The proposal seeks to improve the functionality of the development with additional on-site parking and improved pedestrian and vehicular access, which is dual purpose, acting as landscape area while not in use. Wellness and fitness are incorporated on the carpark rooftop and with the climbing wall.

The proposal delivers an ecologically sustainable development. Water management will remain exemplar on-site and solar arrays are proposed, which are not only an aesthetic feature of the carpark rooftop but ensure renewable energy and conservation is aligned with the aspirations of Council and the community sentiment at large.

In conclusion, the development is compatible with the emerging future character of the locality and has no adverse amenity impacts. The proposal demonstrates design excellence and will deliver an exceptional and unique work and recreation environment which complements its natural setting.

2. THE SITE

2.1. Site Details

The site is located at 307 Lane Cove Road, Macquarie Park and is otherwise known as Eden Gardens. The site is situated in the Ryde local government area and is 15km north-west of the Sydney central business district (CBD) (Figure 1).

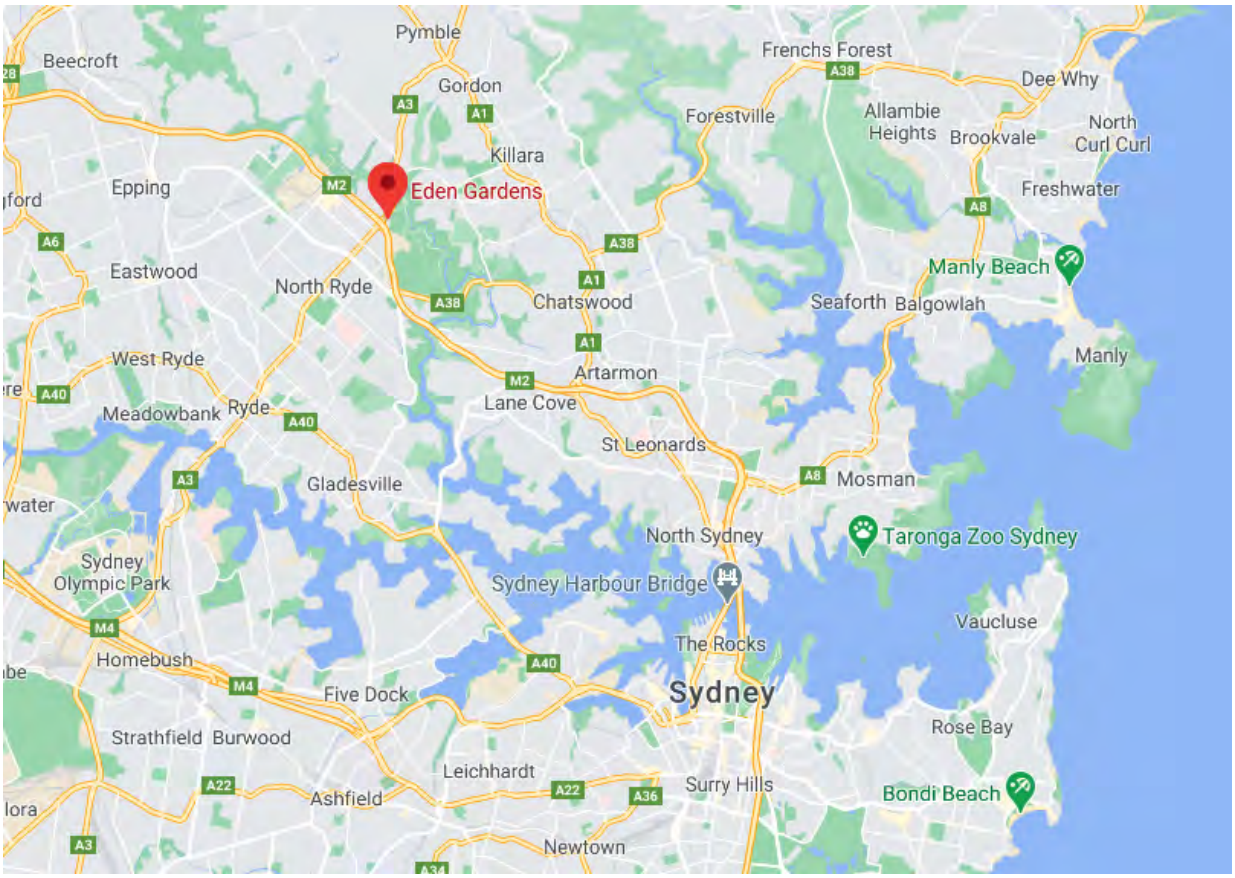


Figure 1: Locality map, site marked with a red marker (Source: Google Maps)

The site is located on a prominent position bounded by Lane Cove Road to the west, the M2 Motorway to the south and Lane Cove National Park to the north and east. The site is located just outside of the Macquarie Park Corridor, notwithstanding is approximately 840m walking distance (800 radial distance) from the Macquarie Park Metro Station.

Figure 2: Aerial photo of the locality, site outlined in red (Source: Near Maps)

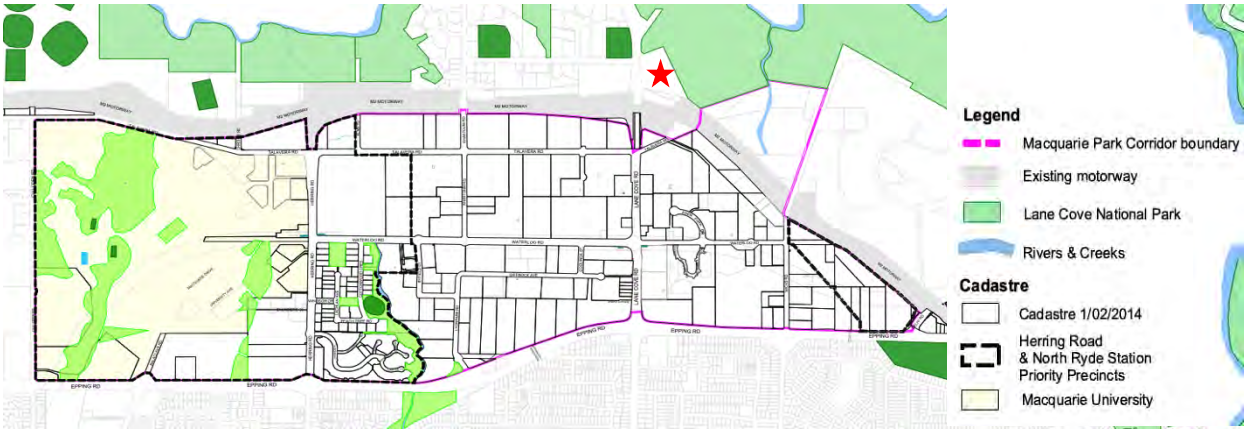


Figure 3: Extract of the Macquarie Park Corridor, site marked with a red star (Source: RDCP 2014)

Figure 4: Base map showing the site to the north of the Macquarie Park metro station (Source: Six Maps)

The site is legally described as Lot 10 in Deposited Plan 1071734 and has an area of 24,680m². The dimensions of the site are as follows.

Table 1: Site dimensions

Boundary		Dimension
North	Lane Cove National Park	100.935m
South	M2 Motorway	145.035m
East	Lane Cove National Park	176.49m
West	Lane Cove Road	124.325m

2.2. Site and Locality Context

The site is an 'island site', located at the north-eastern corner of the intersection of the M2 Motorway and Lane Cove Road. The site is situated on the periphery of the Macquarie Park Corridor and is a key visual marker when entering the locality from the north on Lane Cove Road and, west and east along the M2 Motorway. The corridor comprises a mix of technology focused commercial development and high density RFBs. Four high rise RFBs are located directly to the west of the site on the adjacent side of Lane Cove Road. The surrounding locality is serviced by a major retail centre, being Macquarie Shopping Centre. With regard to transport, the area is serviced by the Macquarie Park and Macquarie University Metro

Stations and several bus routes. These buses provide routes on various classified and arterial roads including:

- Lane Cove Road
- The M2 Motorway
- Epping Road
- Fontenoy Road
- Waterloo Road
- Lady Game Drive
- Herring Road
- Delhi Road

These roads connect Macquarie Park to West Pymble, Gordon, Lindfield, Chatswood, Marsfield, Epping, Ryde, North Ryde and the City.

The surrounding locality is illustrated in the below figure.

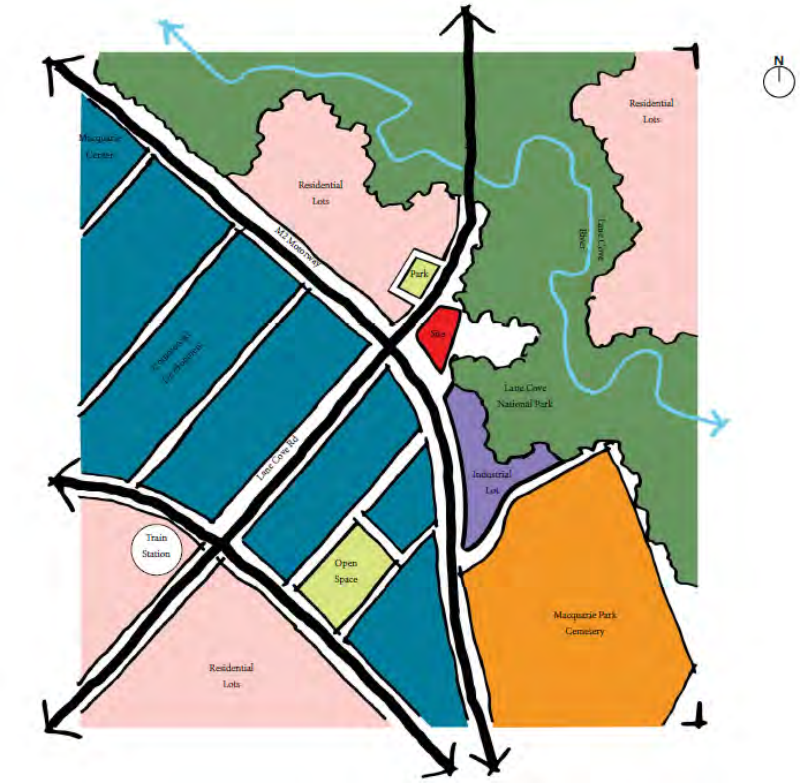


Figure 5: Surrounding context of the site, site shaded red (Source: DKO Architecture)

The Macquarie Park Corridor has experienced transformation over the last decade with substantial redevelopment and uplift in site controls. A small number of sites yet to be redeveloped, including the Frasers "Midtown Mac' site, which is in design development. It is evident densities have increased around metro stations, which were converted from heavy rail to metro as part of the North-West Rail Line.

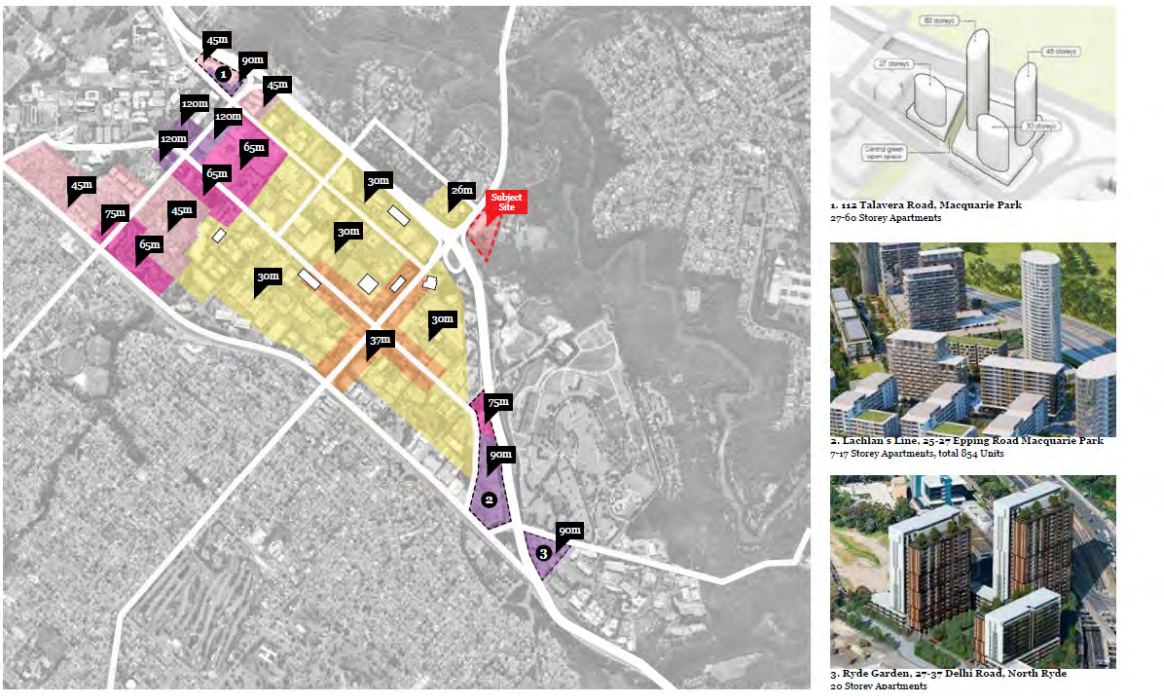


Figure 6: Significant developments in the vicinity of the site (Source: DKO Architecture)

The site and more generally the Macquarie Park Corridor is serviced by the North West Metro line running from Tallawong to Chatswood via Macquarie Park. Several buses service the Lane Cove Road, Fontenoy Road, Waterloo Road, Epping Road and M2 Motorway. The site benefits from being 840m walking distance from the Macquarie Park Station (Figure 8). To the west on Waterloo Road is Macquarie Park University Station and North Ryde Station to the east, see below figure.

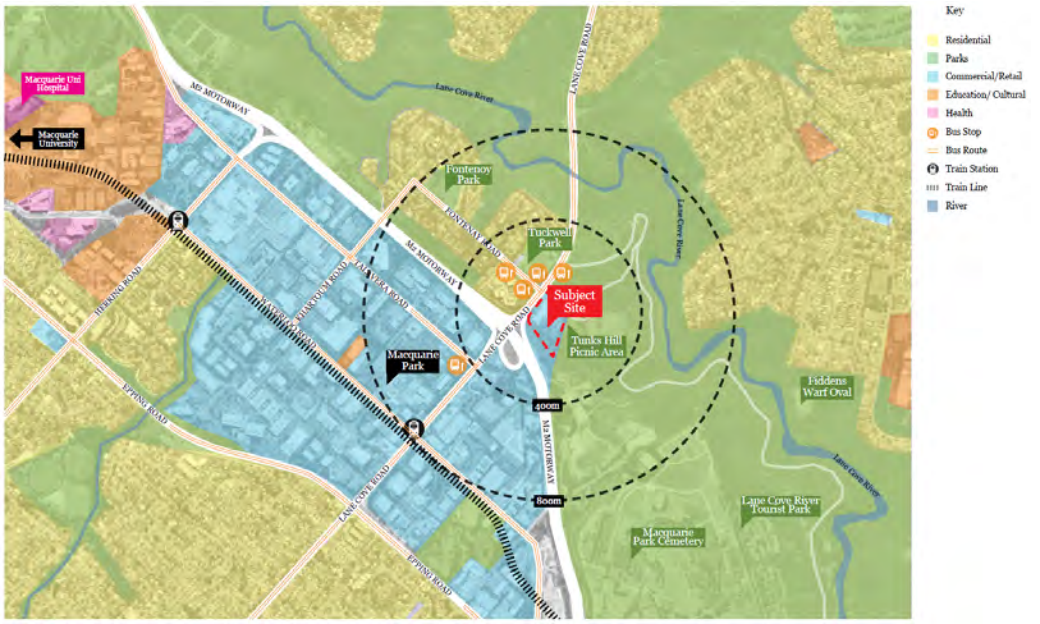


Figure 7: Overview of the transport linkages and surrounding land uses (Source: DKO Architecture)

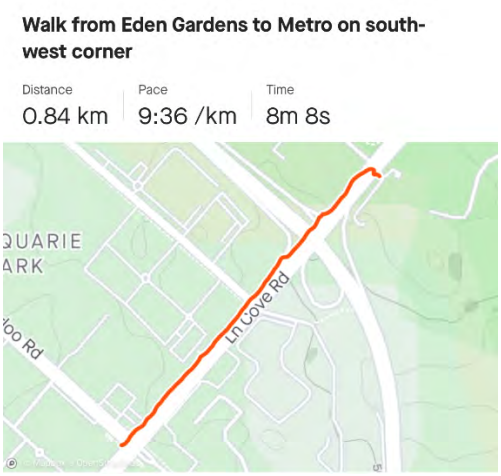


Figure 8: Extract of walk including distance from Eden Gardens to Macquarie Park Metro Station (Source: City Plan)

To the west of the site at the corner of Lane Cove Road and Fontenoy Road is a high-density residential development with four identical towers gathered around a central courtyard. Above level 5, the residential units in the south-east tower benefit from views of the Sydney CBD skyline.

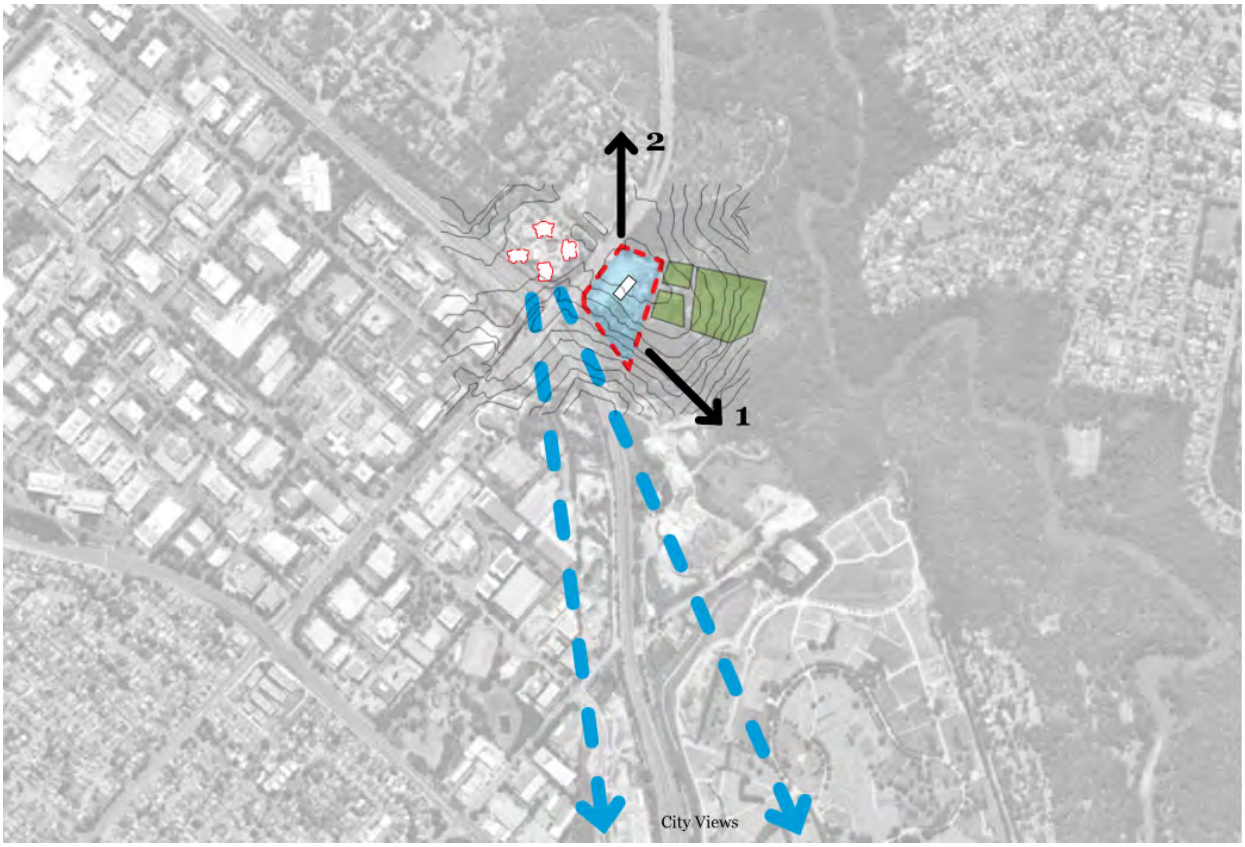


Figure 9: Extract of the city view corridor (Source: DKO Architecture)

Further to the significant developments in Figure 6, the following photos illustrate developments in the vicinity of the site.

Figure 10: Commercial development along the east side of Lane Cove Road, site marked with a yellow pin (Source: City Plan)

Figure 11: East entrance to Macquarie Park Metro Station

Figure 12: Residential flat buildings to the west of the site (Source: City Plan)

Figure 13: Recently completed residential flat building at 112 Talavera Road, Macquarie Park (Source: City Plan)

2.3. Site Characteristics

2.3.1. Existing Improvements

The site currently comprises an integrated horticultural development known as Eden Gardens. The centre includes:

- Garden centre and service areas
- Café comprising indoor and outdoor dining
- Function hire centre for wedding, business events, conferences, education and garden events
- Large international grade display gardens
- Eden Garden administrative office, and
- Underground and above ground car parking.

Photos of the existing development are illustrated below.

Figure 14: Existing walkway adjoining the cafe area (Source: City Plan)

Figure 15: Existing garden area at the south, looking south-east (Source: City Plan)

Figure 16: Existing garden centre and landscaping, looking north-west (Source: City Plan)

Figure 17: Existing garden to the south of the outdoor dining area (Source: City Plan)

Figure 18: Existing walkway in the garden and rear access road for emergency vehicles (Source: City Plan)

Figure 19: Existing walkway over the south garden (Source: City Plan)

Figure 20: Garden Centre looking west (Source: City Plan)

Figure 21: Service area on the north boundary (Source: City Plan)

Figure 22: Entry to site (Source: City Plan)

Figure 23: Existing outdoor area adjoining the office space at the south-west corner (Source: City Plan)

Figure 24: Entry to the site from Lane Cove Road and north-west corner of existing garden centre (Source: City Plan)

Figure 25: Western boundary of existing garden centre looking south (Source: City Plan)

Figure 26: Entrance to the site as viewed from the lights on the west side of Fontenoy Road (Source: City Plan)

Figure 27: Western boundary of the existing garden centre as viewed from the west side of Lane Cove Road (Source: City Plan)

2.3.2. Topography

Chadwick Cheng Consulting Surveyors have prepared a detailed site survey (Appendix 4). The survey illustrates the site generally falls from the north-west corner to the south-east corner.

- RL55.22m to RL47.71m from south-west to south-east (7.51m difference)
- RL59.63m to RL58.88 from north-west to north-east (0.75m difference)
- RL59.63m to RL55.22m from north-west to north-west (4.41m difference)
- RL58.88m to RL47.71m from north-east to south-east (11.17m)

2.3.3. Bushfire

The site is bushfire prone land. The bushfire prone land map (Figure 28) shows the site has bushfire prone Category 1 vegetation to the north and south-east (all off the site). The site is affected by the 100m Category 1 Buffer. Blackash Bushfire Consultants have confirmed the below figure is an accurate depiction of the land that could carry bushfire.

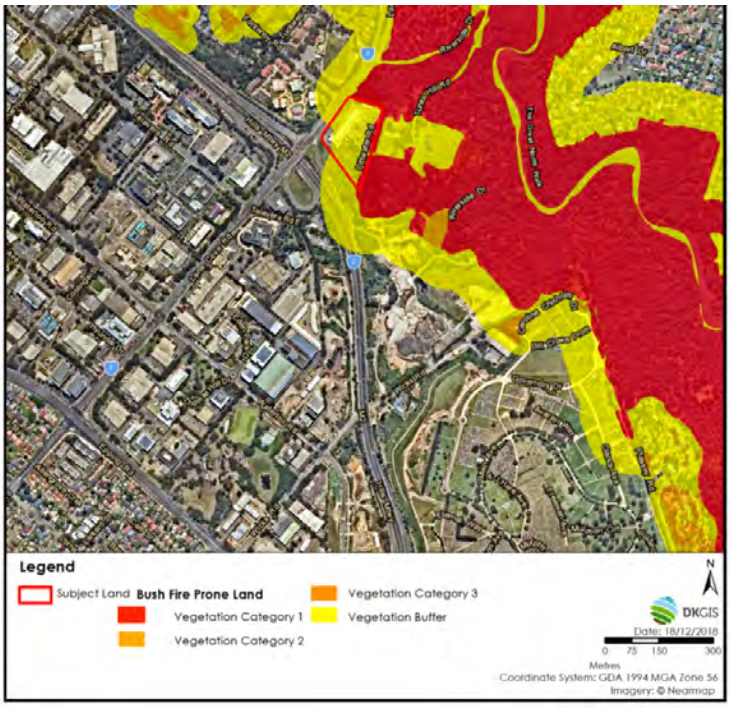


Figure 28: Extract of the bushfire prone land map (Source: Blackash Bushfire Consultants)

Blackash Bushfire Consultants notes:

> *The site sits on a gentle ridgeline with Lane Cove National Park to the north and east of the site. The vegetation is forest and the area has a history of bushfires running through the Lane Cove Valley. The fire path is contained between the existing development. However, the orientation of the Lane Cove National Park is north west that provides a direct fire path past the site…*
>
> *There is potential for the site to be impacted from two sides (north and east) with bushfire attack in the form of ember attack, smoke, radiant heat and direct flame contact. The bushfire attack from the east is significantly reduced by Tunks Hill Picnic area that runs nearly the entire length of the eastern side of the lot…Potential exists for a fire to be driven into the south east of the site from the east. However, easterly winds are cooler, with higher moisture content and higher humidity…*
>
> *Fires burning under a westerly or north-westerly influence push past the site and will not directly impact it. There is potential for fire to impact the north of the site. And, in consideration of this, the car park has been placed to the north of the site to provide a radiant heat shield to the remainder of the site.*

Further, the BAL for the site is illustrated in the below figure. As discussed later in this SEE, the location of buildings in the proposal has been driven by these BALs.

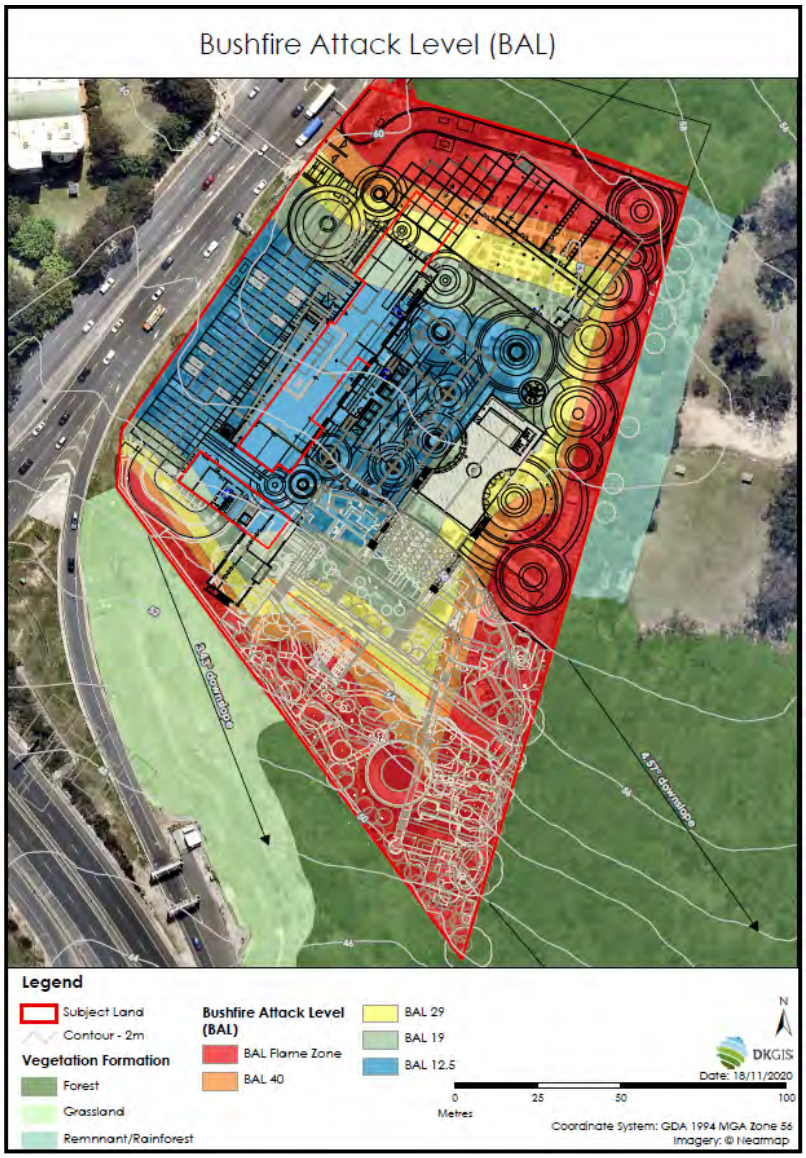


Figure 29: Extract of the BAL mapping (Source: Blackash Bushfire Consulting)

2.3.4. Geotechnical and Soils

Geotechnique Pty Ltd have prepared a geotechnical report (Appendix 5). The Geological map of Sydney indicates that the bedrock across most portions of the site comprises Ashfield Shale, belonging to the Wianamatta Group of rocks and compromising dark grey to black and laminate. Though Hawkesbury sandstone, comprising medium to coarse grained quartz sandstone, with very minor shale and laminate lenses, is likely to be encountered in the south-east corner of the site.

The Soil Landscape Map of Sydney indicates that the landscape across most portions of the site belong to the Lucas Height Group, which is characterised by gently undulating crests and ridges on plateau surfaces of Mittagong Formation (alternating bands of shale and fine-grained sandstone), with local relief to 30m and ground surface slopes of less than 10%. Rock outcrop is absent. The subsurface soil is likely to be moderately deep (0.5m to 1.5m) and stony.

The landscape in the south-east portion of the site belongs to the Gymea Group, which is characterised by undulating to rolling rises and low hills on Hawksbury sandstone, with local relief of 20m to 80m and ground slopes of less than 25%, broad convex crests, moderately inclined side slopes with wide benches and localised rock outcrops. The subsurface soil in this group is likely to be sandy, highly permeable and susceptible to erosion hazard.

Based on Geotechnique's assessment, the subsurface profile across the site is likely to comprise a sequence of topsoil/fill and residual soils underlain by shale/sandstone bedrock. The predominant bedrock is likely to be sandstone encountered at depths of 1.0m to 2.0m from the existing ground surface.

2.3.5. Contamination

Geotechnique Pty Ltd have prepared a preliminary site investigation report. Appendix 6 notes:

> *The site has been used for market garden and farming activities in the past, which indicate potential for applied agricultural chemicals and fertilisers. The use of agricultural chemical and fertilisers may result in metal and organochlorine pesticides (OCP) contamination on the site…*
>
> *The site contains imported fills material for levelling the ground and/or in the possible fill areas. Potential contaminants may include metals, total recoverable hydrocarbons, benzene, toluene, polycyclic aromatic hydrocarbons, OCP, polychlorinated biphenyls, phenols, cyanides and asbestos.*
>
> *Fill material and natural soils may potentially be contaminated.*

Refer to Section 6.4.2 of this SEE for discussion on the environmental impact.

2.3.6. Stormwater

BG&E have prepared a stormwater management report in Appendix 12. The report details the complex drainage patterns existing on the site.

> ***Nursery/Upper Courtyard***
>
> *This area comprises a series of constructed gully grassed pits branching into a centralised wetland channel running north-east down south-west. This wetland channels conveys collected stormwater to a rainwater storage tank (approximately 180m³ effective storage) located under the nursery, adjacent to the channel and retaining wall bounding the nursery to the south.*
>
> *The upper garden generally falls in a south-easterly direction with a myriad of terraced gardens, ponds and garden features. Formalised stormwater drainage and overland flows directs runoff in this area towards a reconstructed creek runs from the south-west part of the garden in an easterly direction before discharging to the main detention tank (approximately 750m³ effective storage) in the south-east portion of the site.*
>
> *Water is pumped back from the detention tank reservoir up to the rainwater/irrigation storage tank in the upper/courtyard/nursery.*
>
> ***South/East Corner***
>
> *This area comprises bush garden and is situated downstream of the main detention basin. Stormwater runoff in this area will flow directly off site via dispersion drain and flow towards the M2 stormwater pollution pond and greater ancillary drainage system.*
>
> ***North East Corner***

In this area the catchment is made up of mainly the service area and stormwater runoff is conveyed through kerb breakouts before being collected by a drainage swale and dispersed into Lane Cove National Park.

Western Boundary

A roadside garden at the top of embankment drains directly into Lane Cove Road to be captured by a series of kerb inlet pits to ultimately discharge towards the M2.

The main building catchments are reticulated to basement carpark levels by the hydraulic network before being captured and discharged to the reconstructed creek and ultimately the main detention tank.

Summary

The existing drainage configuration was developed to optimise capture and re-use of stormwater to meet on-site irrigation needs. Pollution control facilities within the site have also been installed to ensure that the stormwater quality is appropriate for re-use.

In excess of the stormwater capacity within the site, an existing treatment train ensures that all site stormwater discharged has been treated to minimise pollutants.

2.3.7. Heritage

The site is not an item of environmental heritage or within a heritage conservation area pursuant to the RLEP. The site is also not listed on the NSW State Heritage Register, the National Heritage List, the Commonwealth Heritage List, the National Trust Register (NSW) or the former Register of National Estate.

There are no active heritage listed items or heritage conservation areas situated in the vicinity of the site. The below figure shows item 60 (Lane Cove National Park) directly abutting the site to the north and east. Heritage 21 was advised by Council on 18 November 2020 that item 60 is no longer listed as a heritage item under Schedule 5 of the RLEP, despite being shown in the RLEP mapping. Refer to Appendix 7.

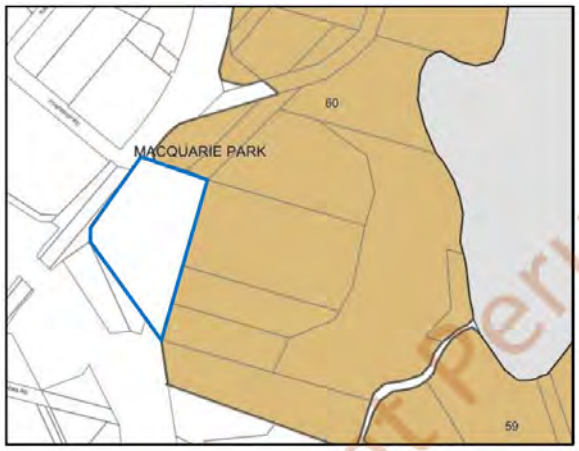


Figure 30: Extract of the superseded heritage map, noting item 60 is no longer a heritage item as confirmed by Council (Source: NSW Legislation)

Refer to Appendix 7 for a detailed description of the historical context of the site.

2.3.8. Site Access, Parking and Transport

Access

The site consists of a single vehicular and pedestrian access point from Lane Cove Road at the north-west corner. The site benefits from a signalised intersection providing direct vehicular and pedestrian access to the site. When heading north on Lane Cove Road, the site may be accessed from the signalised right hand turn lane. When heading south, a 35m slip lane provides signalised left hand turn access into the site. Further, the site may be directly accessed straight from Fontenoy Road.

Parking

The existing development comprises at grade parking in the front west setback for 20 cars and 173 underground car parking spaces. Vehicles access the existing parking by turning right when entering the site and following the two-way road and ramp past the at-grade spaces and to the underground spaces.

Transport

The site is situated 840m walking distance from Macquarie Park Station, noting 800m radial distance (Figure 8). Due to the location of the M2 on ramp, pedestrians walk along the western side of Lane Cove Road and enter the site at the Fontenoy Road lights. The north-west rail line provides turn-up-and-go train services from Chatswood to Tallawong via Macquarie Park. Macquarie University is the station to the west of Macquarie Park and North Ryde is east of Macquarie Park. At Chatswood commuters may connect to heavy rail providing services to the Sydney CBD. The site is also serviced by various buses, refer to the below figure for the location of bus stops and metro stations.

Figure 31: Extract of the public transport map (Source: TTPP)

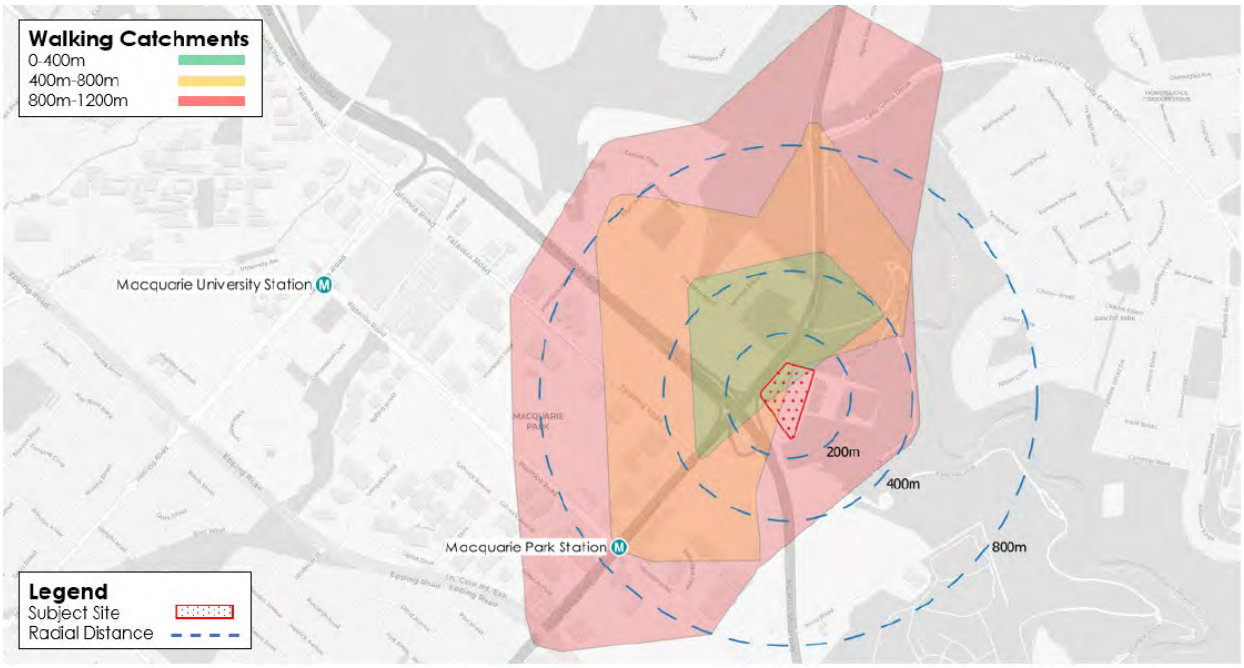


Figure 32: Extract of walking catchments map, site outlined in red (Source: TTPP/Open Route Service)

The bus routes servicing the site are as follows.

Service	Route	Route Description	Location	Frequency (peak / off peak)
Bus	197	Mona Vale to Macquarie University via Gordon	Lane Cove Road Opposite Eden Gardens Stop Nos. 2113312 2113188	15 mins / 30 mins
	562	Gordon to Macquarie University		3 weekday services only, runs between 10:30am – 1:00pm
	565	Chatswood to Macquarie University		20 mins / 60 mins
	572	Turramurra to Macquarie University via South Turramurra & West Pymble		15 mins / 30 mins
	575	Hornsby to Macquarie University		20 mins / 30 mins
	292	Marsfield to City Erskine St via Macquarie Park		30 mins

Figure 33: Public bus services (Source: TTPP)

Notably, bus route 197 runs between the site and Macquarie Park Station via a 5-minute trip and provides services every 15 minutes during peak periods.

The following images illustrate the walking route from Macquarie Park Station to the site.

Figure 34: East station entrance (Source: City Plan)

Figure 35: Lights across Waterloo Road at the east (Source: City Plan)

Figure 36: West station entrance (Source: City Plan)

Figure 37: Lights from east of Waterloo Road across Lane Cove Road (Source: City Plan)

Figure 38: Wide western footpath adjacent to Lane Cove Road (Source: City Plan)

Figure 39: Wide western footpath adjacent to Lane Cove Road before Talavera Road (Source: City Plan)

Figure 40: Narrower footpath before M2 overpass (Source: City Plan)

Figure 41: Pedestrian crossing connecting footpath to M2 overpass (Source: City Plan)

Figure 42: Narrow footpath at south of M2 overpass (Source: City Plan)

Figure 43: Footpath on M2 overpass (Source: City Plan)

Figure 44: Footpath between M2 exit and Fontenoy Road (Source: City Plan)

Figure 45: Footpath on western side of Lane Cove Road before Fontenoy Road lights (Source: City Plan)

Figure 46: Pedestrian crossing to site at Fontenoy Road and Lane Cove Road intersection (Source: City Plan)

As shown in the above figures, the characteristics of the walk from the Macquarie Park Metro Station to the site is as follows:

- The walk takes less than 10 minutes (approximately 8 minutes 8 seconds, refer to Figure 8)
- The walk includes crossing four sets of traffic lights at Waterloo Road, Talavera Road, M2 western off-ramp and Fontenoy Road to the site
- The walk includes crossing one pedestrian zebra crossing at the M2 western on-ramp
- The footpath between Waterloo and Talavera Road is wide and easily walked.
- The footpath narrows after Talavera Road to the site and while still walkable, could be upgraded.

In this regard the site is within a walkable distance of the Metro Station. Indeed, it is closer to a metro station than numerous other sites with the Macquarie Park corridor. Furthermore, as noted above there are opportunities to improve the pedestrian experience by erecting a pedestrian fence on the M2 overpass and upgrading the footpath from Talavera Road to the same standard as between Waterloo Road and

Talavera Road. In this regard a planning agreement offer has been made by the applicant to undertake this work in lieu of equivalent developer contributions under section 7.11 of the EP&A Act.

2.4. Planning History of the Site

In 2004, a DA was approved by Council for the demolition of existing structures and construction of the integrated horticultural development being the (now) existing garden centre, underground parking, landscaping, and site works. The application is not available on Council's DA tracker.

On 10 August 2017, DA 2016/0186 was approved by Council. The application related to a new digital business identification sign at the site.

A pre-DA and UDRP meeting were held with Council on 12 April 2018.

2.5. Planning Proposal Affecting the Site

Council resolved at the 22 September 2020 Council meeting to forward a planning proposal (PP) which is an administrative update of the RLEP. The purpose of PP, dated August 2020, is to update and address a range of miscellaneous and administrative issues identified in the operation of the plan and introduce a number of provisions.

In relation to the site specifically, the PP proposes the increase the permissible uses in the B7 Business Park zone. The following uses are proposed to be permissible with development consent in the B7 zone:

- Amusement centres
- Eco-tourist facilities
- Entertainment facilities
- Freight transport facilities
- Retail premises
- Recreation facilities (indoor)
- Recreation facilities (outdoor)
- Service station, and
- Water recycling facilities

Gateway Determination has not been received by the Department of Planning, Industry and Environment (DPIE).

3. DESCRIPTION OF DEVELOPMENT

3.1. Proposed Development

The DA seeks approval for alterations and additions to the existing garden centre and construction of an 18-storey office building at the site. The proposal will entail:

- Alterations and additions to the existing garden centre including:
  - Retention of the existing at grade parking spaces fronting Lane Cove Road and the underground parking spaces directly below
  - Excavation to provide additional underground spaces on the north-east of the site
  - Provision of end of trip facilities and service rooms in the basement level
  - Alterations and additions of the existing main garden centre building located on the west of the site including amendments to the garden centre store, café, amenities, food and beverage venue, neighbourhood shops and provision of a winter garden
  - Expansion of the existing function spaces in the south-west of the site
  - Provision of a new outdoor garden centre, including nursery, in the north-west of the site
  - A multi-level car park in the mid-north of the site with rooftop activity and wellness zone, and
  - Provision of a storage room, loading bay, waste room and rock climbing wall at the ground level of the proposed multi-storey car park.
- Construction of a new 18-storey commercial office building in the centre of the site.
- A new restaurant including outdoor and indoor dining spaces in the mid-east of the site. (Noting the fit-out of the restaurant does not form part of this DA and will be subject of separate approval).
- Landscape works in various places and retention of existing display gardens.

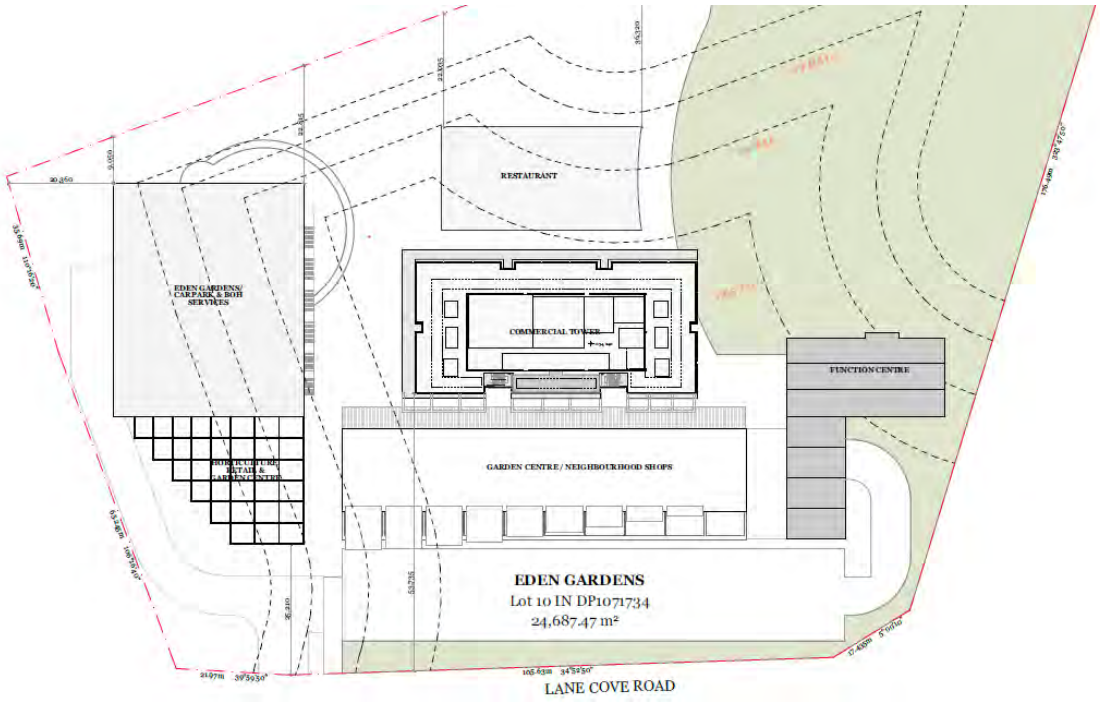


Figure 47: Extract of the site plan (Source: DKO)

3.2. Development Statistics

The development statistics are as follows.

Table 2: Development statistics

	Control	Proposed
Site area	-	24,680m²
Height of building	None-applicable	Office building: maximum height: RL141.14 (18 storeys) at the top of the lift overrun. Multi storey building (garden centre, carpark and wellness rooftop): maximum height RL80.44 at the top of the fair stair enclosure and RL82.10 at the solar panels Garden and function centre: RL67.13 (one to two storeys in height).
FSR	1.0:1	1:1
Gross floor area	24,680m²	24,669m²
Office car parking	RDCP - 511 spaces Macquarie Park Corridor - 341 spaces	358 spaces
Retail and garden centre car parking	RDCP - 87 spaces Macquarie Park Corridor - 87 spaces	87 spaces
Function centre car parking	RDCP - 57 spaces Macquarie Park Corridor - 57 spaces	57 spaces
Total car parking	RDCP - 655 spaces Macquarie Park Corridor - 485 spaces	502 spaces, including 7 accessible spaces
Car share spaces	None-applicable.	4 spaces
Bicycle spaces	50 spaces	138 spaces
Motorcycle spaces	None-applicable.	10 spaces

3.3. Demolition

The proposal involves alterations and additions to the existing garden centre building, and hence demolition is proposed. The architectural plans in Appendix 1 clearly depict the elements of the existing development that are to be maintained and those being demolished, refer to the following table and images.

Table 3: Demolition, alteration and additions

Existing areas to be maintained/altered	Existing areas to be demolished
Basement ▪ Existing 173 car spaces ▪ Service room ▪ Outdoor function space ▪ Landscape and gardens	Basement ▪ Eden Gardens office
Ground floor ▪ Part of the function centre ▪ The neighbourhood shops	Ground floor ▪ Existing awning and louvred roof ▪ Kitchen and bar

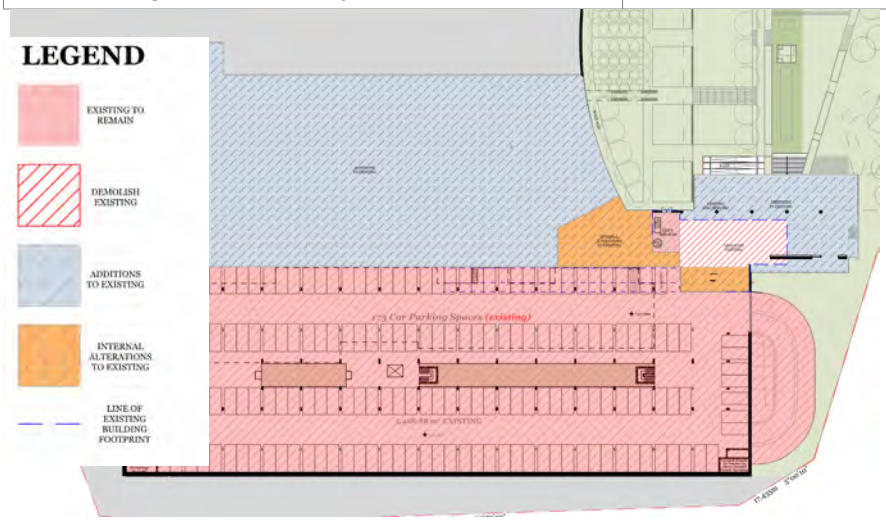


Figure 48: Extract of the basement demolition plan (Source DKO)

Figure 49: Extract of the ground floor demolition plan (Source: DKO)

Metropolitan Demolitions Group (Appendix 26) have prepared a Demolition Work Plan which sets out the method of demolition to be adopted during the contractual works.

3.4. Tree Removal

The proposed development requires the removal of several trees on-site as detailed in the below table.

Table 4: Tree removal

Tree no	Species	Retention Value	Landscape Significance	Comment
1	Ulmus parvifolia	High	Medium	Not viable to be retained due to encroachment of the proposed development.
2	Ulmus parvifolia	High	Medium	
3	Ulmus parvifolia	High	Medium	
4	Ulmus parvifolia	High	Medium	
5	Ulmus parvifolia	High	Medium	
6	Ulmus parvifolia	High	Medium	
7	Ulmus parvifolia	High	Medium	
8	Ulmus parvifolia	High	Medium	
9	Ulmus parvifolia	High	Medium	
10	Corymbia gummifera	High	Medium	
11	Corymbia gummifera	High	Medium	
12	Eucalyptus haemastoma	High	High	
22	Ailanthus altissima	Low	Low	Not viable to be retained due to encroachment of the proposed development. Exempt from RDCP.
23	Corymbia ficifolia	High	Medium	Not viable to be retained due to encroachment of the proposed development.
24	Corymbia ficifolia	High	Medium	
25	Corymbia ficifolia	High	Medium	
26	Waterhousia floribunda	High	Medium	
27	Zelkova serrata	High	Medium	
28	Lagerstroemia indica	High	Medium	

Tree no	Species	Retention Value	Landscape Significance	Comment
29	Melia azedarach	High	Medium	
30	Citharexylum spinosum	High	Medium	
31	Brachychiton acerifolia	High	Medium	
32	Jacaranda mimosifolia	High	Medium	
180	Afrocarpus falcatus	High	Medium	
181	Afrocarpus falcatus	High	Medium	
182	Afrocarpus falcatus	High	Medium	
183	Angophora costata	High	High	
184	Angophora costata	High	High	
185	Afrocarpus falcatus	High	Medium	
186	Afrocarpus falcatus	High	Medium	
187	Afrocarpus falcatus	High	Medium	
188	Eucalyptus scoparia	Medium	Medium	
189	Corymbia ficifolia	High	Medium	
190	Yucca elephantipes	Medium	Medium	
191	Magnolia grandiflora	High	Medium	
192	Angophora costata	High	High	
193	Angophora costata	High	High	

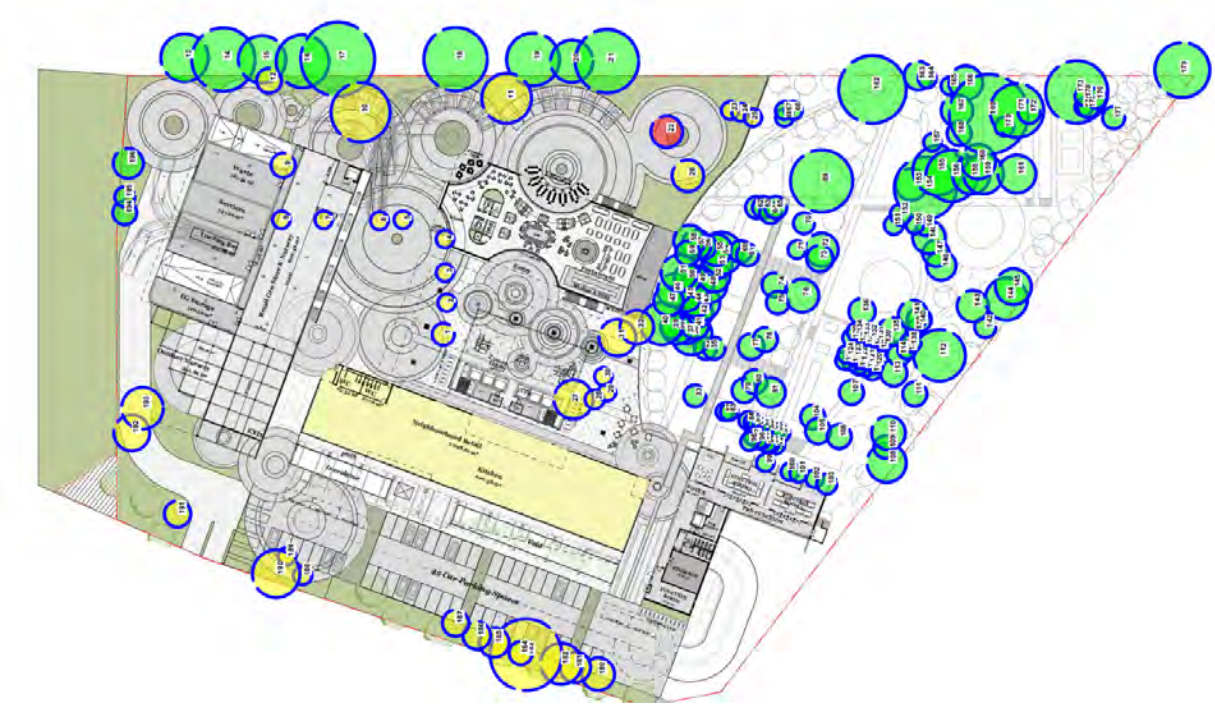


Figure 50: Extract of the tree location plan (Source: Birds Tree Consultancy)

Note, tree 155 (Eucalyptus racemosa) is recommend for resistograph testing and risk assessment.

Figure 51: Evidence of decay in tree 155 (Source: Bird Tree Consultancy)

Refer to the arborist report (Appendix 10) detail.

3.5. Landscaping

The landscape plan (Appendix 3) recognises the iconic existing landscape elements including the subterranean bamboo forest at the entry to the neighbourhood retail area, the 'Eden Tree' sculpture, the

aerial canopy walk through in the lower garden, the lower garden and surrounding scribbly gum forest, the spiral recycle water collection basin and the ceremonial lawn with the office building folly at its eastern axis. These elements are maintained, enhanced and celebrated within the broader context of the redeveloped exterior design.

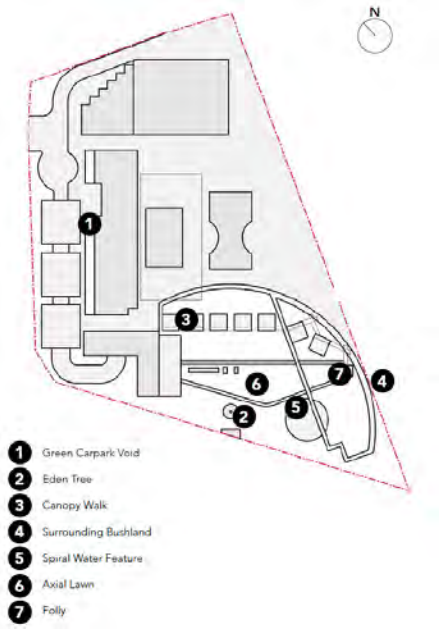


Figure 52: Locality plan of the existing landscape features (Source: Realm Studios)

The landscape scheme has been driven by the following site analysis:

- Accessibility and circulation, notably the site's location to major roads and delivery of clear way-finding around the site
- Visible points, views and sight lines, including views of Lane Cove National Park and the CBD in the distance
- Noise amelioration and provision of a buffer from the M2 vehicular noise
- Creation of four main axial alignments, with the main east/west axial through the ceremonial lawn from the function centre and the north/south axial through the restaurant down to the southern pavilion
- Retention of existing significant trees and utilising these trees to shape the arrangement of built form and landscaping on the site, and
- Consideration of various platforms and height differentials and providing landscaping which compliments these settings including the lower garden, Eden Square, restaurant rooftop and active and wellness rooftop.

The landscape spaces have been divided into six zones. The three central zones from north to south reflect the active wellness rooftop, the central and upper terraces as active social programmable spaces and the lower existing garden as the passive and quieter activation space. Each of the three zones can be broken down into series of smaller activation zones or gardens.

Connected to the three central zones are the entry, arrival landscape, flexible use car park and the eastern upper terrace gardens adjacent to the Lane Cove National Park. All six zones are inexplicably intertwined.

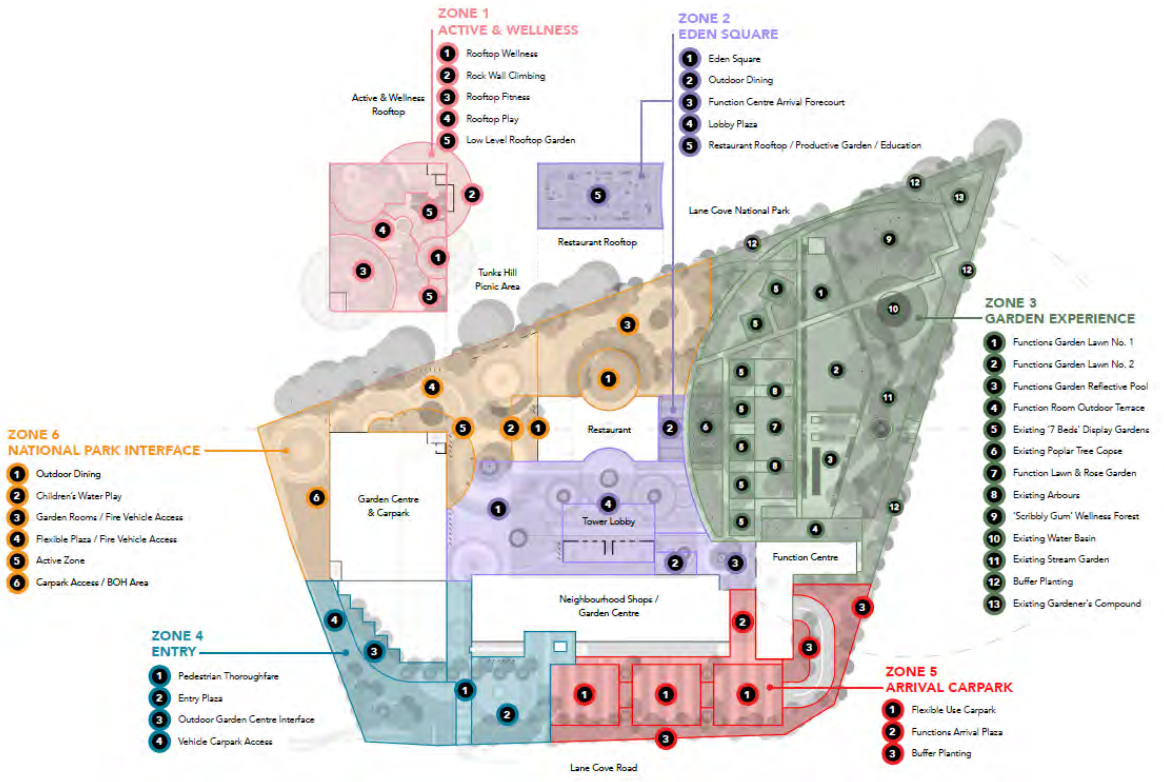


Figure 53: Extract of the landscape zones (Source: Realm Studios)

Table 5: Summary of landscape zones

Zone	Detail
1. Active and wellness	▪ Combination of the elevated car park, eastern façade of the climbing wall and car park rooftop activation in the form of a wellness area.
2. Eden square	▪ Consists of smaller breakout spaces relating to outdoor dining, function centre forecourt, kiosks informal eatery, children's water play and flexible lobby environment. ▪ The circular paving geometry allows for articulation of gathering spaces, furniture location and is situated at the core of the site.
3. Garden experience	▪ Comprises four cascading terraces moving down the natural slopes of the lower garden from the northern curved wall and poplar grove toward the south stream garden and scribbly gum wellness forest. ▪ The lower garden has been refined to allow for greater ceremonial activation and maximisation of program diversity.
4. Entry	▪ The arrival experience allows for clear articulation between pedestrian and vehicle movement. ▪ The entry plaza forecourt is located separate to the dedicated carpark in the front of the garden centre and neighbourhood shops. ▪ The circular geometry at the entry plaza is the start of a decorative paving motif that works its way through the public thoroughfare, between the

Zone	Detail
	garden centre and neighbourhood shops, opening up to the wider expanse of the centrally located Eden Square.
5. Arrival Carpark	▪ The arrival carpark is a secure access zone. It provides access to the western interface and the upper terrace zones. ▪ The carpark allows for a flexible use of space and clear wayfinding. This area is surrounded by raised feature tree planters in the front of the neighbourhood shops and, trees and understorey buffer planting along the Lane Cove Road boundary. ▪ The lower bamboo forest has been retained and an additional stairwell has been added to allow greater access into the neighbourhood shops from the basement.
6. National Park interface	▪ The national park interface allows for a myriad of uses. ▪ Along its length is an articulated 7.2m wide emergency vehicle access zone, turning circle and space for VIP parking as required. ▪ Canopy coverage along the national park boundary is mainly understorey planting and specimen trees.

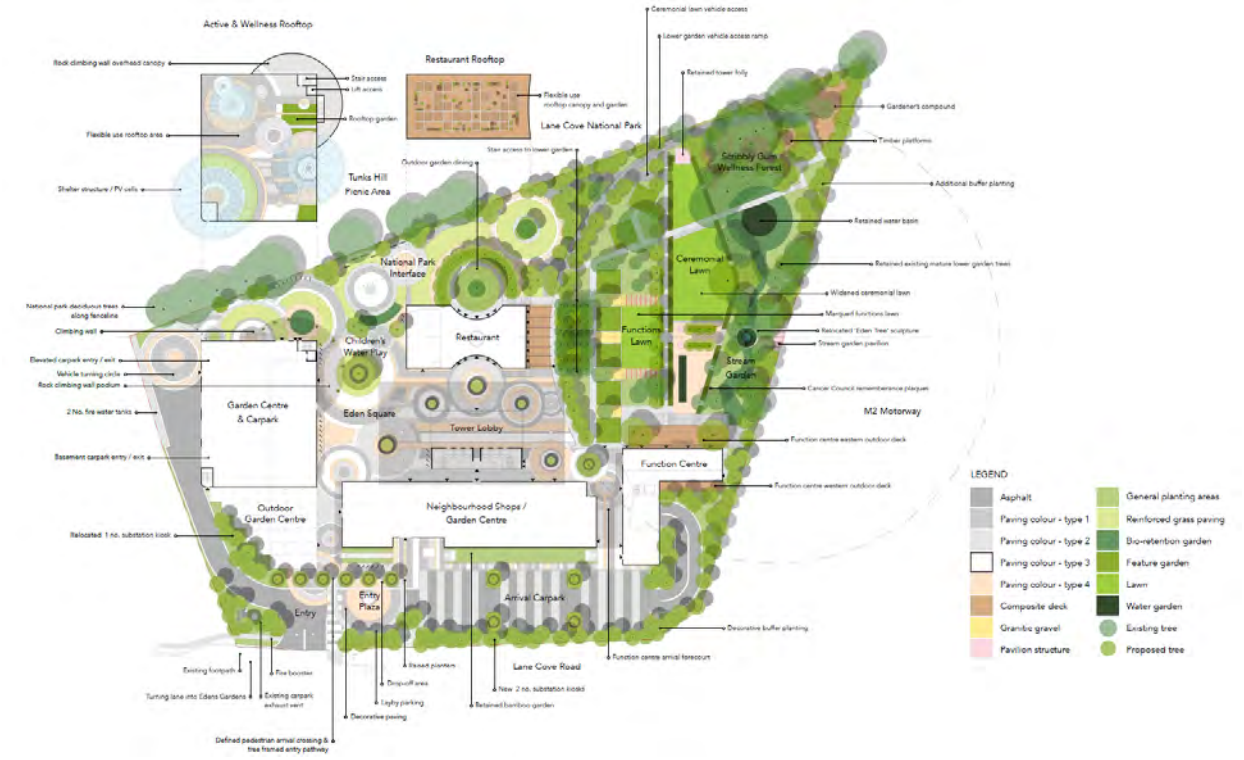


Figure 54: Extract of the general landscape arrangement (Source: Realm Studios)

Refer to Appendix 3 for further detail on landscaping.

3.6. Excavation

The proposed development will involve 3.0m of excavation to accommodate the basement car park. Geotechnique noted in Appendix 5 the materials to be excavated are anticipated to include soils (including topsoil/fill and residual soils) as well as bedrock sandstone/shale. The sandstone/shale up to a depth of 3.0m will vary from low strength to high strength.

3.7. Stormwater

The proposed stormwater strategy has been prepared in accordance with Section 8.2 of the RDCP and the technical manual. BG&E outline that the strategy appreciates the vision of the landscape design which seeks to maximise rainwater harvest, capture and re-use within the upper courtyard hardstone areas.

BG&E describe the proposed stormwater management process as follows:

> *The general approach is for the hardstand areas of the upper courtyard and commercial areas to fall to a series of recessed wicking planters for tree growth optimization with stormwater to be collected in the retained irrigation storage tanks. Runoff from the proposed landscape portion of the upper courtyard will be filtered through a series of bio-hardens for water quality. In excess of the underground system capacity; a passive irrigation swale to the east of the hardstand area is proposed to replicate the displaced planted wetland channel and collect runoff. An upgraded drainage network will then formally convey this runoff through the display garden before discharging to the main detention basin.*
>
> *The southern garden areas, internal road access and building roof catchment will generally emulate the current drainage pattern with runoff conveyed to the reconstructed creek downstream of the lawn and garden display areas. The reconstructed creek also discharges to the main detention basin. Downstream the basin is the lower bush garden. In the case of emergency overflow; the outflows will runoff through this garden into a dispersion channel to spread the flow over approximately 35m before draining to the M2 pollution control pond and receiving network.*
>
> *Drainage and roof areas and hardstand areas over areas of the proposed basement construction shall be designed and coordinated by the hydraulic consultants.*
>
> *The treatment strategy incorporates drainage bio-gardens, continued use of the existing Humeceptor, water re-use from collected rainwater in detention areas and aeration in the reconstructed creek. Water capture in the main reservoir will be pump back and recirculated to the courtyard for usage. Flows have been determined by use of the ILSAX modelling method.*

Refer to Appendix 12 for further detail and the plans.

3.8. Access

The arrival experience clearly delineates between pedestrian and vehicle movement. Pedestrian entry from Lane Cove Road is maintained in its current location, with a protective barrier separating the footpath from the vehicular driveway. The development improves the pedestrian entry with a 4.5m opening which connects to the single pedestrian entry point which is 7.5m and distinguishable due to the clear break in the building.

Vehicles will be directed to the north for all public parking and service areas, while private vehicles need to access a secure boom gate to turn south across the pedestrian crossing to the at-grade parking and the basement beyond.

From the basement, the garden centre may be accessed from the existing lift, stairs and escalator as well as the proposed new stairs. While the office building and end of trip facilities will utilise the new lobby and lift core providing direct access to the office building.

From the new multi storey carpark, the site can be accessed using a proposed lift, internal staircase or external active staircase.

3.9. Parking

The development provides a total of 502 on-site car parking spaces. These spaces are mostly located within the basement and above ground, with a small number at-grade adjacent to the west site boundary and VIP parking abutting the eastern site boundary. In summary:

- 173 existing car parking spaces in the basement
- 53 new car parking spaces in the basement
- 48 car parking spaces at grade adjacent to the western boundary
- 6 car parking spaces at grade adjacent to the eastern boundary
- 222 car parking spaces within the above ground car park at the northern portion of the site

11 motorcycle spaces are proposed at the ground floor to the west of the existing escalator.

138 bicycle spaces are proposed within the end of trip facilities in the basement.

3.10. Energy

The design incorporates three solar panel arrays on the rooftop of the multi-storey building adjacent to the north boundary of the site. Ecological sustainable development initiatives are a core component of the development. The project's energy efficiency initiatives include:

- High performing double-glazed windows with thermally broken frames to assist in reducing heat loss in winter and heat gain summer
- External shading devices to reduce solar heat gains experienced during the day
- Provision of high levels of insulation to the external walls, roof and exposed floorings
- Innovative heating and cooling systems to provide thermal comfort and minimise energy consumption
- The use of cross flow ventilation through winter gardens where feasible to reduce energy required for cooling, maintain a low energy expenditure and provide opportunities to naturally cross ventilate in the garden centre
- Provide high efficiency LED lights, explore opportunities for electric lighting and use of sensors including motion and photelectric sensors to ensure back of house spaces and outdoor lighting is automatically switched off when not required.
- Targeting A-Grade, 5.5 star NABERS, 5 star green star and will be designed to a WELL Core rating, noting the proposal does not intend to certify to WELL.

Refer to the energy efficiency report in Appendix 14 for further detail.

3.11. Estimated Cost of Works

The proposed works have an estimated cost of works of $132,184,812.65 excluding GST. Refer to the attached cost report prepared by Turner and Townsend.

3.12. Development Plans and Supporting Documentation

This SEE is to be read in conjunction with the following supporting documentation.

Table 6: Supporting documentation

Document	Prepared by
Architectural Plans	DKO Architecture
Urban Design Report	DKO Architecture and Realm Studios
Landscape Plans	Realm Studios
Survey Plan	Chadwick Cheng Consulting Surveyors
Geotechnical Report	Geotechnique Pty Ltd
Preliminary Site Investigation	Geotechnique Pty Ltd
Heritage Report	Heritage 21
Bushfire Report	Blackash Bushfire Consulting
Traffic and Parking Report	The Transport Planning Partnership
Arborist Report	Birds Tree Consultancy
BCA and Access Statement of Compliance	Blackett Maguire and Goldsmith
Stormwater Management Plan	BG&E
Acoustic Impact Assessment	ADP Consulting
Energy Efficiency Report	ADP Consulting
Reflectivity Report	ADP Consulting
Section J Report	ADP Consulting
Section J Compliance Verification Assessment	ADP Consulting
Site Waste Minimisation Plan	Pitt and Sherry
Structural Letter	BG&E
Wind Report	CPP Wind
Cost Report	Turner and Townsend
Plan of Management	Thunderbirds are Go Pty Ltd atf The Gardeners Trust
Planning Agreement Offer	Thunderbirds are Go Pty Ltd atf The Gardeners Trust
Demo Work Plan	Metropolitan Demolitions Group
Fire Safety Strategy Report	Stephen Grubits and Associates

3.13. Hours of Operation

As detailed in the Plan of Management (POM) prepared by Thunderbirds are Go Pty Ltd atf The Gardenders Trust, the proposed land uses will operate for the following hours:

Use	Monday – Friday	Saturday	Sunday	Public Holiday*
Centre Open Hours	6am -12 Midnight	6am -12 Midnight	6am -12 Midnight	6am -12 Midnight
Commercial Office	7am – 7pm Security access available after hours	Security access available after hours	Security access available after hours	Security access available after hours
Eden Gardens & Garden Centre	7.30am – 7pm Thursday until 9pm	7.30am – 7pm	7.30am – 6pm	7.30am – 6pm
Neighbourhood shops	7.30am – 7pm Thursday until 9pm	7.30am – 7pm	7.30am – 6pm	7.30am – 6pm
Café	7am – 6pm Thursday until 9pm	7am – 7pm	7am – 6pm	7am – 6pm
Restaurant	7am – 11pm	7am – 11pm	7am – 11pm	7am – 11pm
Function Centre	6.30am- 11pm	6.30am- 11pm	6.30am- 11pm	6.30am- 11pm
Display gardens	Open hours	Open hours	Open hours	Open hours

Figure 55: Proposed hours of operation (Source: POM)

3.14. Job Generation

During operation, the office building is expected to accommodate 1,750 workers, with an additional 100 workers overseeing the function centre, hospitality, garden centre and neighbourhood retail.

3.15. Pre-Lodgement Consultation

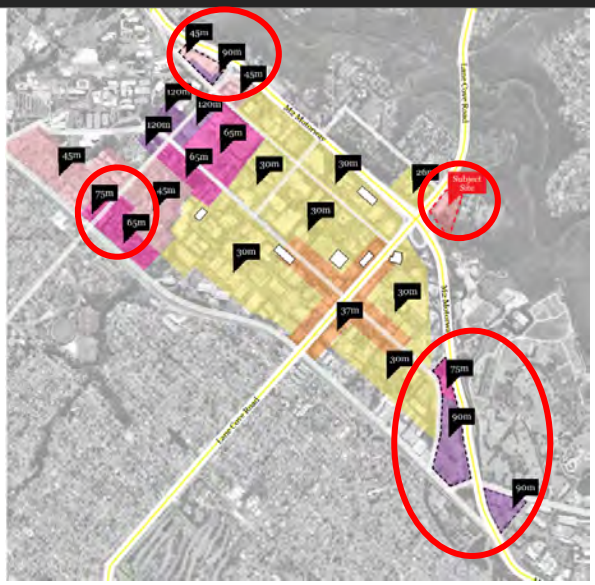
3.15.1. Pre-DA and UDRP Meetings

A pre-DA and UDRP meeting were held with Council in April 2018. This package responds to feedback previously provided as well as feedback received in the recent pre-DA and UDRP meetings held on Thursday 26 November 2020.

The feedback received in the 2020 UDRP meeting is summarised in the below with corresponding responses.

Table 7: Response to UDRP feedback

UDRP Feedback	Response
Although not a residential apartment building, the Panel's comments were structured against the design principles of SEPP65.	
Context and Neighbourhood Character The Panel appreciates that the existing garden centre use is becoming less viable and on this basis the applicant seeks to investigate other uses. However, the Panel restates its concerns for the underpinning strategic logic of development intensification on this site. The site is generally not contiguous with the Macquarie Park corridor and is instead situated at its periphery. A significant commercial development brings with it a series of access challenges.	DKO Architecture and Realm Studios have prepared a comprehensive urban design report in Appendix 2. This document addresses the matters raised by the UDRP, specifically the strategic justification for the proposal in this location. The site is a key visual marker at the northern entry to the Macquarie Park Corridor. The site is the missing piece in a quadrant of markers in the locality. These prominent markers are situated on the periphery, outside of the corridor, as shown below.

UDRP Feedback	Response
The Panel is concerned for relatively low pedestrian accessibility and amenity available to people arriving at the site by Metro. Visual and physical barriers between the site and the core area are likely to act as a disincentive to pedestrian access. Consequently, the site's location may encourage higher rates of private vehicle usage. In its current form the bushland corridor creates the 'gateway' to Macquarie Park. The Panel is concerned that a commercial building form may sit as an incongruous element distinct and separated from the built form elsewhere in the Macquarie Park development corridor. The Panel notes that the existing office building form development on the opposite side of Lane Cove Road is residential and is therefore not an entirely relevant precedent when considering potential commercial uses.	 *Figure 56: Extract of locality height analysis (Source: DKO Architecture)* Detailed site analysis underpins the strategic justification for the intensification of the site. Specifically: ▪ The key strategic planning documents highlight Macquarie Park as the northern anchor of Sydney's Eastern Economic Corridor and is the largest non-CBD office market in Australia. The proposal delivers a unique workplace environment which is destinational and multifaceted due to its landscaping setting, public space offering and focus on wellbeing. ▪ The development is the missing visual marker in the quadrant of buildings on the periphery of the corridor. ▪ The proposal is a strong response to the landscape character of the site. This is integrated through the retention of the south gardens, landscaping focus of the ground plane and internally within the office building. ▪ The location of buildings has been driven by the BALs and opportunity to retain city views from the residential development at the corner of Fontenoy Road and Lane Cove Road. ▪ The site is a walkable 840m from Macquarie Park Metro Station. The DA also integrates a public offering to enhance the experience of this walk.

UDRP Feedback	Response
	▪ The proposal improves the pedestrian access to the site and its legibility from Lane Cove Road and Fontenoy Road. The proposal provides a 4.5m wide pedestrian entry, parallel to the vehicular entry. The pedestrian link connects with the new 7.5m wide break in the existing garden centre/neighbourhood retail building, creating a major thoroughfare into the heart of the activity. It is signified by two large trees on either side of the entry. Being the only break in the built form, it is an engaging arrival experience.
Built Form and Scale The applicant is encouraged to provide an urban design justification to support a 18 storey, approximately 53 x 25m, 1,000sqm floor plate office building on the site given its strong landscape setting. Little design material describing the office building expression and character was presented. The Panel is concerned that should a office building be located in a relatively prominent and isolated location that it needs a strong architectural identity, with depth and substance introduced into the facade elements. As presented, the proposal appeared simplistic and as yet unresolved in comparison to other elements of the proposal. No urban design information has been provided as part of the submission to demonstrate how the proposed building height responds to the desired future character for the corridor, or how it would integrate into the overall Macquarie Park corridor height strategy. Any architectural solution for the site should recognise the site is visible across the broader locality and experienced 'in the round' from many vantage points. The Panel encourages the applicant to prepare a more detailed assessment of visual impacts associated with the office building, from a range of vantage points across the local area. The Panel supports retention of elements of the garden centre and function centre and their integration into the anticipated 'sense of place' for any proposed new use. The office building is located behind the retained garden centre with a constrained site address and 'front door'. Visitors are required negotiate the relatively narrow throat presenting to Lane Cove	Refer to the urban design report (Appendix 2) which provides urban design justification for the proposal. The office building has been further developed since the UDRP meeting. Notable changes include: ▪ Recessing of level 5 and 12 to provide greater articulation of the office building and break up the built form mass. ▪ Provision of wintergardens in the tower portion of the office building at levels 8, 9, 15 and 16. These contribute to building articulation and compliment the recessed levels aforementioned. ▪ Refinement of materials for various buildings across the site. ▪ Introduction of a sawtooth roof and clerestory windows for the function centre. This ties in with the existing retail roof known locally as the 'North Shore Opera House'. ▪ Detailed analysis has been undertaken from various vantage points in the locality. This has informed design development and is illustrated on pages 42- 45 of the urban design report (Appendix 2). ▪ The office building is distributed vertically rather than the mass split across the site. This is primarily the result of designing to the BALs and the desire to deliver a high-quality, active and destinational ground floor plane. This plane has been carefully designed to consider how people will socialise and move freely through the site. ▪ The office building floorplates are flexible and easily adaptable for future tenants. Notwithstanding, the office building benefits from a variation of terraces and wintergardens connecting the outdoors with the indoors and maximising natural light.

UDRP Feedback	Response
Road, and pass beyond the existing built form to a commercial lobby undercroft beyond. The Panel supports the general arrangement of complementary uses proposed at the lower levels of the podium form, and the general approach to architectural expression evident in the renders shared during the presentation. The Panel understand that car parking is necessary, but concerned that concessions available to reduce parking rates are being sought. The available parking concessions are predicated on better-located sites close to public transport within the Macquarie Park core.	▪ The proposal responds to the desired future character of the locality by drawing on elements such as the delivery of the missing visual marker at the northern entry point of the corridor, which the single point of connection to the north-shore. However, the proposal goes beyond this by delivering its unique vision of a destinational place that integrates and balances workplace, hospitality, public recreation, community interaction and wellbeing. The delivery of these offerings has been considered at a human scale and reflected in the final design outcome. In summary, the development provides a built form which is congruent to the locality and well-justified from a strategic urban design and planning perspective. The proposal is a superior workplace and recreational development in a landscape setting.  *Figure 57: Extract of the design response, comparing the proposal (left) and generic tower development in the corridor (Source: DKO Architecture)*
Density The Panel notes the proposal appears to conform with the FSR control applicable to the site. The Panel restates it reservations about the proposed single point office building form and encourages the applicant to prepare a detailed urban design justification and associated assessment of the proposal's visual impacts, along with detailed architectural studies of form and detail to mitigate against visual impacts.	The proposal is compliant with the maximum permissible FSR of 1:1. DKO Architecture and Realm Studios have prepared an urban design report in Appendix 2. This includes detailed urban design justification for the proposal and visual impact analysis.
Sustainability Specific sustainability measures where not discussed. The Panel notes that a proposal of this scale should seek to be exemplary in sustainable	The proposal will implement a number of energy efficiency initiatives. Refer to section 6.4.11, appendix 14, 16 and 17 for further detail.

UDRP Feedback	Response
practices and should set and meet appropriate targets and ratings.	
Landscape The proposal retains elements of the existing garden centre and associated landscape. The Panel appreciates the aspiration to create a strong landscape-led sense of place for visitors and workers alike. The Panel is broadly supportive of the proposed site planning, and the configuration of the key publicly accessible spaces, subject to comments made elsewhere in this report.	The proposal maintains the strong landscape-led design. This is illustrated in the landscape plan prepared by Realm Studios in Appendix 3.
Amenity The Panel remains concerned the proposed entry arrangement for the office building is indirect and does not present directly to the site entry. The resulting amenity within the core of the site appears to be capable of achieving a high quality. The Panel is concerned for the constrained access for visitors and workers in accessing it. The Panel supports the general approach to landscape design noting it may need some adaptation to address site planning and access issues raised in this report.	As discussed earlier in this table, the proposal improves the pedestrian access from Lane Cove Road through the provision of a 4.5m pedestrian entry connecting to the proposed 7.5m break in the existing garden centre/neighbourhood shop building. This creates a major thoroughfare leading to the heart of the activity including the commercial tower lobby. The break in the building is marked with two significant trees. The treatment of the break in the built form creates an engaging, legible and enticing arrival experience. The building locations, landscaping and future way-finding signage together will direct pedestrians to various parts of the site. Refer to Appendix 2 and 3 for further detail.
Safety The concerns raised by the Panel earlier in this report, regarding the constrained address and access for the office building, create a corresponding issue for safety and security. It is not yet clear to the Panel if the site is secured out of operating hours, nor how the site is configured for public, visitor or tenant access.	The orientation of buildings, treatment of facades, landscape design and use of spaces in the evening have been informed by safety measures. Individual buildings will be securely locked or have swipe card access. Refer to the CPTED Report (Appendix 20) and POM (Appendix 24) for further detail. The ground floor masterplan identifies gate locations, where provided.
Housing Diversity and Social Interaction Not applicable.	Not applicable.
Aesthetics As noted earlier in this report, the Panel is not yet convinced of the point form office building proposal. The applicant is encouraged to develop a strong urban design justification and detailed visual impact assessment. The indicative montages provided during the presentation offered greater resolution of expression and character in the key public spaces	Appendix 2 provides an in-depth design response to the matters raised by the UDRP. The architectural plans (Appendix 1) incorporate design changes, specifically to the office building façade. The proposal provides a strong architectural identity as the key visual markers at the northern gateway and delivers substance in the façade treatment, as shown in the below image.

UDRP Feedback	Response
and at the lower levels of the podium than in the office building. Consequently, the office building form appeared under-developed and weaker in its architectural character and expression. If the office building form is to be retained and incorporated within the proposal, then the Panel's view is it needs a strong architectural identity, with depth and substance introduced into the facade elements. This is important to separate the proposal from the typical 'business park' architecture characteristic of Macquarie Park, and important given the particular prominence and isolation of this office building form.	 *Figure 58: Extract of development photomontage looking north-west (Source: DKO Architecture)*  *Figure 59: Extract of render of the ground floor plane looking south at the restaurant (Source: DKO Architecture)*

The feedback received in the 2020 pre-DA meeting is summarised in the below with corresponding responses.

Table 8: Response to pre-DA feedback

Council Feedback	Response
Planning	
RLEP *Zoning/Permissibility* Clause 5.4 of the RLEP2014 restricts the maximum area of Neighbourhood Shop on the site to a maximum of 200m² GFA. The relevant clause states that if development for the purposes of a neighbourhood shop is permitted under this Plan, the retail floor area must not exceed 200 square metres. On this basis the multiple tenancies as shown must not exceed 200m² GFA.	Neighbourhood shops (plural) is permissible with consent. Notwithstanding, clause 5.4 contains controls relating to miscellaneous permissible uses. Clause 5.4(7) restricts a neighbourhood shop (singular) to a maximum area of 200m². The proposed development complies with this standard.

Council Feedback	Response
Building Height Building height details must be clearly demonstrated on the architectural plans.	Refer to appendix 1.
FSR Floor plans showing areas included in the calculation must be submitted.	Refer to appendix 1.
Heritage A heritage impact statement is to be submitted and demonstrate that the proposal has no impact on the heritage significance of the National Park.	Refer to appendix 7.
SEPP55 A preliminary site contamination report in accordance with SEPP55 must accompany any DA to Council. The report must demonstrate that the site will be suitable for the proposed uses.	The site is suitable for the proposed use. Refer section 4.4.1 of this SEE and appendix 6.
RDCP	
Building setbacks The proposed design shows the building (restaurant) located very close to the eastern side boundary (close to the bushland). A greater setback is encouraged to comply with the Planning for Bushfire Protection. Additional setbacks may be required for tree protection once tree root zones are mapped Please revise the plans to ensure no encroachments into the required setback area.	As discussed in this SEE, the location of buildings on the site has been governed by the BALs. The proposal has been designed in accordance with the PBP 2019 and verified by Blackash Bushfire Consulting. The setback of the restaurant will not cause adverse bushfire risk to the proposal. Refer to appendix 8.
Accessibility An access report demonstrating compliance with the accessibility requirement for the proposed class or classes of building must be submitted with the any future DA.	Refer to appendix 11.
Impact on trees and root zone mapping A detailed Arborists Report must be submitted. Trees are to be protected and retained.	Refer to appendix 10.
Other assessment matters	
Overshadowing impact and shadow diagrams Please provide sufficient details to demonstrate overshadowing impact on the existing adjoining buildings and adjoining lands. The impact must not be unreasonable. The shadow diagrams require sufficient clarity and must be drawn to a reasonable scale (same as the architectural plans) to be legible and enable proper assessment. Adjoining buildings and boundaries	Refer to the shadow diagrams prepared by DKO Architecture in appendix 1. Refer to section 6.3.3. of this SEE for discussion on overshadowing. In summary, no adverse overshadowing impacts fall onto neighbouring properties.

Council Feedback	Response
of the affected adjoining properties must also be shown on all shadow diagrams.	
CPTED A CPTED assessment of the proposal must be carried out and safety and surveillance provisions must be indicated in the DA proposal.	Refer to appendix 20.
Depth of building Inadequate details were provided to review the building depth and amenity implications (plans were without any dimensions). Some dimensions were shown in the presentation at the meeting – however, any future DA must incorporate adequate dimensions on plan and elevations to demonstrate the building setbacks, separation and general dimensions.	Refer to appendix 1.
Details of various uses and GFA of each use The details of the various proposed land uses on the site must be provided with matters relating to permissibility adequately dealt with in a planning report. Provide details of the GFA of the proposed uses.	Refer to the development data table in appendix 1 and section 3.2 of this SEE.
Food premises standards Any new kitchens, café, restaurants or the likes must comply with Food Safety Standard 3.2.3 and AS4674-2004 Design, construction and fit-out of food premises.	The fit-out of the restaurant and cafe tenancies will be subject of separate approval.
Depth of excavation Details of basement excavation must be provided. In the circumstances if the basement excavation penetrates the ground water, this would be deemed an integrated development with the Department of Industries - Water and accordingly additional details and integrated development fees may be required.	As outlined in section 3.6 of this SEE, the proposed development will involve 3.0m of excavation to accommodate the basement car park. The proposed excavation to accommodate one level of basement does not reach the water table, hence the application is not integrated development pursuant to the *Water Management Act* 2000.
Geotechnical report and groundwater impact assessment Information required for such application should include a thorough hydrogeological assessment of the predicted impacts of the proposed development and calculation of volumes likely to be extracted through the process of excavation/ dewatering. This requirement applies to activities interfering with aquifers, including low yielding and saline groundwater systems.	Refer to the geotechnical report in appendix 5. A groundwater impact assessment is not required as the water table is not penetrated.
Bushfire assessment report	Refer to appendix 8.

Council Feedback	Response
An application must be accompanied by a bushfire assessment report.	
Plan of management A plan of management must be submitted for the operation of the function centre.	Refer to appendix 24.
Demolition works Details of trees, demolition deposit at the time of DA lodgement, waste management plan addressing demolition, demolition work method plan, photographs and demolition traffic management plan is required.	Refer to appendix 26.
Environmental health	
Noise impact assessment Noise impact assessment is required for the proposal.	Refer to appendix 13.
Waste and storage Waste and storage must comply with Part 7.2 of the RDCP.	Appendix 18 confirms that compliance is achieved with part 7.2 of the RDCP.
Harvest and reuse stormwater Any proposal to harvest of reuse stormwater must comply with the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2) – Stormwater Harvesting and Reuse	BG&E confirm in Appendix 12 harvest of reuse stormwater complies with the relevant guidelines.
Car Parking Refer to the detailed comments in appendix 21.	TTPP have provided a detailed response to these items in Appendix 9.
Traffic Refer to the detailed comments in appendix 21.	TTPP have provided a detailed response to these items in Appendix 9.
Stormwater Management It is foreseeable that the development will discharge to the existing draining system which is anticipated to discharge through RMS land and thereon to the adjoining Lane Cove National Park (Porters Creek) to Lane Cove River. In accordance with National Park guidelines stormwater runoff to natural waterways will need to attenuate to ensure there is no adverse impacts to the downstream waterways. There is also some flood affectation in this area however the land is utilised. The configuration will require onsite detention to be implemented. In the event that the applicant wishes to seek exemption from this requirement then it will be warranted that their stormwater engineering consultant investigate the receiving system and demonstrate that it is capable of	Refer to Appendix 12.

Council Feedback	Response
accommodating the additional runoff arising from the 100yr ARI event without detriment to the downstream environment. Such a report should be accompanied by site investigation photos and additional analysis demonstrating the level of discharge does not detrimentally affect the downstream area. These should be implemented into the landscaping component of the development to avoid the reliance upon a proprietary device.	
Public Domain Improvement A public domain improvement plan must accompany any DA lodged.	The DA is accompanied by a planning agreement offer to undertake public domain improvements that will improve pedestrian access to the site (Appendix 25).

3.15.2. Consultation with Rural Fire Service

As detailed in the bushfire report in Appendix 8, Blackash Bushfire Consulting and the project team attended a pre-lodgement meeting with the Rural Fire Service (RFS) on 7 March 2019. In summary, the meeting minutes note.

Table 9: Consultation with RFS

RFS Feedback	Response
No objection is raised in principle to the locations for the office building, though multi storey building need to address the additional consideration set out in section 8.2.2 of the PBP 2018.	Noted, though the bushfire report in Appendix 8 provides an assessment against the PBP 2019.
Location of the proposed function centre needs careful re-consideration to demonstrate compliance with PBP as the requirement change significantly between the current and future versions.	This advice was provided in relation to superseded plans. Refer to the updated design in Appendix 8.
Access provisions need to demonstrate compliance with the acceptable solutions or performance criteria of the PBP to ensure safety of fire fighters and evacuating occupants during a bushfire energy.	Refer to the bushfire report in Appendix 8.
An emergency management and evacuation plan needs to be prepared for the proposed facility consistent with Development Planning - A Guide to Developing Bush Fire Emergency Management and Evacuation Plan December 2014.	An emergency management and excavation plan will be prepared for the site in accordance with the Development Planning - A Guide to Developing Bush Fire Emergency Management and Evacuation Plan December 2014.

The bushfire report submitted with this application addresses each of these items raised in the meeting minutes with RFS. It is noted the application will be referred to RFS during the assessment period.

3.15.3. Consultation with TfNSW

A meeting was held with Roads and Maritime (now known as TfNSW) on 20 May 2019. The meeting was attended by the former traffic consultant for the project, the architect, DKO Architecture, and the applicant. While formal meeting minutes were not produced the feedback was as follows.

Table 10: Response to TfNSW feedback

TfNSW Feedback	Response
TfNSW noted parking provision is a matter for Council, though reduced rates would be in line with TfNSW goals for the locality.	Refer to section 6.3.7 and Appendix 9 for detailed discussion of the proposed parking.
TfNSW requested a review be undertaken of the appropriateness of the existing turn bays on the intersection, including the right turn bay into site from the south and the left turn bay into the site from the north.	Refer to the traffic and parking report prepared by TTPP in Appendix 9.
TfNSW suggested a review of the event space design be undertaken.	This advice was provided in relation to superseded plans. Refer to the updated design in Appendix 9.
TfNSW requested we include a review of the loading / servicing arrangements, including a swept path assessment for the largest design vehicle at the intersection and on the site.	This advice was provided in relation to superseded plans. Refer to the updated design in Appendix 9.

4. STATUTORY PLANNING CONSIDERATIONS

4.1. Overview

The relevant statutory framework considered in the preparation of this report comprises:

- EP&A Act
- EP&A Regulation
- State Environmental Planning Policy No. 55 (Remediation of Land)
- ISEPP
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017
- State Environmental Planning Policy No.19 (Bushland in Urban Areas)
- Sydney Regional Environmental Planning Policy (Sydney Harbour Catchment) 2005, and
- RLEP 2014.

Where relevant, these controls are addressed below.

4.2. Environmental Planning and Assessment Act 1979

4.2.1. Section 1.3 – Objects

The EP&A Act is the principle planning and development legislation in New South Wales. In accordance with Section 1.3, the objectives of the EP&A Act are:

1.3 Objects of Act

The objects of this Act are as follows:

(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,

(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,

(c) to promote the orderly and economic use and development of land,

(d) to promote the delivery and maintenance of affordable housing,

(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,

(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),

(g) to promote good design and amenity of the built environment,

(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,

(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,

(j) to provide increased opportunity for community participation in environmental planning and assessment.

For the reasons set out below, it is considered that the proposed development satisfies the above stated objects of the EP&A Act:

- The social and economic welfare of the community is promoted through the ongoing provision of a publicly accessible garden centre, display gardens and landscape area, a new restaurant and café and neighbourhood shops servicing the commercial community as well as the nearby residential area within the Macquarie Park Corridor and is peripheries.
- ESD is an integral component of the development as discussed in detail in section 3.10 and 6.4.11 of this SEE. The proposal seeks to minimise energy consumption for the life of the project.
- The proposal will result in the orderly and economic use and development of land as the site is of an appropriate size, location and land use zoning to enable the proposal.
- Residential uses are prohibited at the site, hence affordable housing is not provided.
- The site is located within an established locality. The State's natural resources will not be adversely affected by the proposal.
- The proposed development has been assessed as having an acceptable environmental, economic and social impact as detailed in section 6 of this SEE and the accompanying consultant reports and plans. Subsequently, the proposal will not impact on the enjoyment of future generation.
- The proposal will not impact built or cultural heritage, noting Lane Cove National Park is no longer a heritage item.
- The site does not pose any risk to human health, or none that cannot be remediated.
- The community will be provided with an opportunity to comment on the DA during the assessment process and facilitated by Council through notification. In addition, Thunderbirds are Go Pty Ltd atf The Gardeners Trust will undertake community consultation, ensuring the community and other stakeholders are heard, understood and their issues considered in the design.

4.2.2. Section 4.15 of EP&A Act 1979

Section 4.15(1) of the EP&A Act as amended specifies the matters which a consent authority must consider when determining a development application. The relevant matters for consideration under Section 4.15 of the EP&A Act are addressed in the Table below.

Table 11: Section 4.15 of EP&A Act 1979.

Section	Comment
Section 4.15(1)(a)(i) Any environmental planning instrument	Consideration of relevant instruments is discussed in Section 4.6.
Section 4.15(1)(a)(ii) Any draft environmental planning instrument	Not relevant to this application.
Section 4.15(1)(a)(iii) Any development control plan	Consideration of relevant the development control plan is discussed in Section 5.3.
Section 4.15(1)(a)(iiia) Any planning agreement	Not applicable.
Section 4.15(1)(a)(iv) Matters prescribed by the regulations	Refer to Section 4.3.
Section 4.15(1)(b) - (e)	Refer to Section 6 of this SEE for consideration of (b), (c) and (e). Matter (d) relates to submissions and is a matter for the consent authority.

4.2.3. Section 4.46 – Integrated Development

This section of the EP&A Act defines integrated development as matters which require consent from Council and one or more approvals under related legislation. In these circumstances, prior to granting consent Council must obtain from each relevant approval body their General Terms of Approval in relation to the development.

The DA is integrated development pursuant to clause 101 and 104 of the ISEPP. This is due to the development's frontage to a classified road and the proposal is defined as traffic generating development. With regard to clause 101 of the ISEPP, the following is noted:

- The existing development comprises vehicular access directly from Lane Cove Road as discussed in Section 2.3.8 above.
- The safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of the existing vehicular access to the site, emission of smoke or dust or the nature, volume or frequency of vehicles using the classified road to gain access to the land.

Refer to the Traffic and Parking Report (Appendix 9) for further detail.

With this said, the application will be referred to TfNSW.

While the site is bushfire prone land, the development does not involve subdivision for a residential or rural residential purpose or comprise a special fire protection pursuant to Section 100B of the Rural Fire Act 1997. Notwithstanding, the application will be referred to RFS for comment.

The proposed excavation to accommodate one level of basement does not reach the water table, hence the application is not integrated development pursuant to the *Water Management Act* 2000.

4.3. Environmental Planning and Assessment Regulation 2000

4.3.1. Clause 92 – Demolition

All demolition work will be undertaken in accordance with Clause 92 of the Regulation requiring the consent authority to consider AS 2601 - 1991: The Demolition of Structures.

4.3.2. Clause 98 – Compliance with the BCA

Pursuant to the prescribed conditions under Clause 98 of the Regulation, any building *work "must be carried out in accordance with the requirements of the Building Code of Australia"*. Refer to the Building Code of Australia Report (BCA) prepared by Blackett Maguire and Goldsmith (Appendix 11).

4.4. State Environmental Planning Policies

4.4.1. State Environmental Planning Policy No 55 – Remediation of Land

SEPP 55 states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standard, ensures land is investigated if contamination is suspected, and requires Councils to be notified of all remediation proposals. The Managing Land Contamination: Planning Guidelines were prepared to assist Councils and developers to determine when land has been at risk.

Clause 7 of the SEPP 55 requires that a consent authority must not grant consent to a development unless it has considered whether a site is contaminated, and it is satisfied that the land is suitable (or will be after undergoing remediation) for the proposed use.

Geotechnique Pty Ltd have prepared a Preliminary (Stage 1) Site Investigation (Appendix 6). The site has been used for market garden and farming activities in the past, which indicate potential for applied agricultural chemicals and fertilisers. The use of agricultural chemical and fertilisers may result in metal and organochlorine pesticides (OCP) contamination on the site. The site contains imported fills material for levelling the ground and/or in the possible fill areas. Potential contaminants may include metals, total recoverable hydrocarbons, benzene, toluene, polycyclic aromatic hydrocarbons, OCP, polychlorinated biphenyls, phenols, cyanides and asbestos. Thus, fill material and natural soils may potentially be contaminated.

Geotechnique Pty Ltd concluded the site can be made suitable for the proposed use provided it is remediated and validated and the recommendations in Appendix 6 adhered to. This includes sampling and testing to address the potential contaminants. Therefore, the requirements of SEPP55 have been satisfied for the purpose of this application.

4.4.2. State Environmental Planning Policy (Infrastructure) 2007

The application is integrated development pursuant to clause 101 and 104 of the ISEPP. Refer to section 4.2.3 of this SEE for further detail.

4.4.3. State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

This application seeks approval of Council to remove 37 trees in accordance with the requirements of clause 7(1) of the SEPP (Vegetation in Non-Rural Areas) and chapter 9.5 of the RDCP.

4.4.4. State Environmental Planning Policy No.19 (Bushland in Urban Areas)

The site adjoins Lane Cove National Park to the north and east. Clause 3 of SEPP19 notes that the policy does not apply to land reserved as a national park in the National Park and Wildlife Act 1974. Hence SEPP19 does not apply.

4.5. State Regional Environmental Plan (Sydney Harbour Catchment) 2005

The Sydney Regional Environmental Planning Policy (Sydney Harbour Catchment) (SHCREP) aims to improve the health of the harbour, its foreshore, and its tributaries. Further, it seeks to maximise accessibility to the harbour and its foreshore for the general public. For the purposes of the SHCREP, access is generally considered in terms of physical as well as visual access.

The site is located in the Sydney Harbour Catchment and accordingly the SHCREP applies to the development proposal. In summary, the site is not located within:

- Critical habitat area
- Foreshore and waterways area
- Heritage area
- A strategic foreshore site
- Wetlands protection area, and
- Catchment zoning area.

Given the site is not within any such areas, the extent of controls in the SHCREP of relevance to this application is limited.

Clause 20 to 27 of the SHCREP prescribe several matters which must be considered by a consent authority prior to determining a DA. The matters generally relate to preserving and improving the health of and access to the catchment's natural environmental features.

The proposal has been designed in accordance with site-specific stormwater capture, filtration, and release measures to ensure its discharge does not unreasonably affect the health of the harbour or its foreshores. The proposal does not adversely impact the use of the harbour or foreshore land as it does not have a direct frontage to it. The scale, form and design of the building ensures the proposal is not intrusive as viewed from Lane Cove River and is compatible with the existing and desired future character of Macquarie Park. The development maintains, protects, and enhances the unique visual qualities of the national park and complements the nearby river. A visual connection between this greenery is evident in the proposal's landscape and horticultural focus. The proposal is in keeping with adjoining development in the locality and maintains CBD views from the RFB to the west.

In summary, the proposal is consistent with the SHCREP's environmental matters, as prescribed by clause 20 to 27, and is consistent with the intent of the policy.

4.6. Ryde Local Environmental Plan 2014

4.6.1. Zoning and Permissibility

The RLEP is the primary environmental planning instrument applying to the site. Pursuant to the RLEP the site is zoned B7 Business Park as illustrated in Figure 60 below.

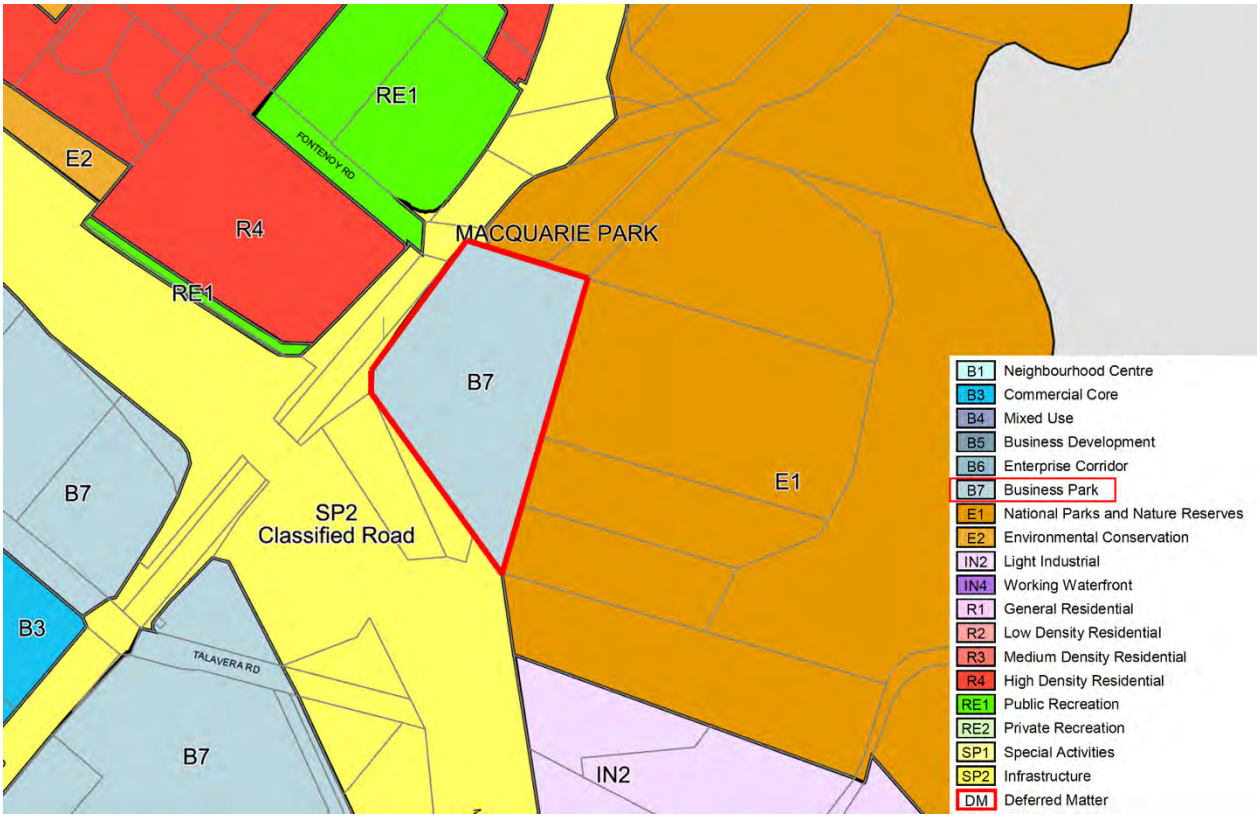


Figure 60: Extract of the land use zoning map, site outlined in red (Source: NSW Legislation)

The proposed garden centre, office premises neighbourhood shops, restaurant and cafe are permissible with development consent in the B7 zone. Function centres are not specified in item 2 or 4, hence as permissible with consent by virtue of not strictly being prohibited in the zone. The proposed wellness and active rooftop and rock climbing wall are ancillary to the office building.

2 Permitted without consent

Home occupations

3 Permitted with consent

Building identification signs; Business identification signs; Centre-based child care facilities; ***Garden centres****; Hardware and building supplies; Light industries;* ***Neighbourhood shops****;* ***Office premises****; Oyster aquaculture; Passenger transport facilities; Respite day care centres;* ***Restaurants or cafes****; Roads; Tank-based aquaculture; Warehouse or distribution centres;* ***Any other development not specified in item 2 or 4***

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home-based child care; Home businesses; Home occupations (sex services); Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Pond-based aquaculture; Port facilities; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Resource recovery facilities; Restricted premises; Retail premises; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Waste disposal facilities; Water recreation structures; Water recycling facilities; Water supply systems; Wholesale supplies

Neighbourhood shops (plural) is permissible with consent. Notwithstanding, clause 5.4 contains controls relating to miscellaneous permissible uses. Clause 5.4(7) restricts a neighbourhood shop (singular) to a maximum area of 200m². The proposed development complies with this standard.

4.6.2. Objectives

Clause 2.3(2) of the RLEP provides that Council must have regard to the zone objectives when determining an application. The objectives of the B7 Business Park zone are as follows:

1 Objectives of zone

- *To provide a range of office and light industrial uses.*
- *To encourage employment opportunities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.*
- *To encourage industries involved in research and development.*

The proposal is consistent with the zone objectives as it involves the construction of a new 18-storey office building which consequently facilitates employment opportunities in the locality. The design delivers a unique office experience given the adjoining national park, the display gardens and landscape setting and complimentary uses including a garden centre, restaurant and cafes, neighbourhood shops. These uses support the day-to-day needs of workers on the site.

4.6.3. Other RLEP 2014 Provisions

Consideration of the remaining provisions of the RLEP that are relevant to the proposal are addressed in Table 12 below.

Table 12: RLEP Compliance Table

Relevant Clause	Comment	Complies
Clause 4.3 Height of Buildings	The site is not subject of a maximum building height. The proposal nonetheless achieves the relevant objectives of this clause. *(a) to ensure that street frontages of development are in proportion with and in keeping with the character of nearby development,* The street frontage of the proposal is compatible and in proportion with the existing and desired future character of the locality, including development fronting Lane Cove Road, the M2 Motorway and the Macquarie Park Corridor more widely. *(b) to minimise overshadowing and to ensure that development is generally compatible with or improves the appearance of the area,* The design of the development, particularly the location of the tower portion of the office building has considered overshadowing impacts. The impacts are compatible with development of the locality. The proposed overshadowing does not result in adverse impact to the picnic areas to the east of the site or the on-site landscape setting and is considered acceptable. Refer to section 6.3.3 of this SEE for detailed discussion. *(c) to encourage a consolidation pattern and sustainable integrated land use and transport development around key public transport infrastructure* The site is located within proximity of the Macquarie Park Metro Station and various regularly serviced bus stops. The development contributes to the consolidation of integrated land uses supported by key public transport infrastructure. The development and its location to such services encourages the use of sustainable transport including public transport, walking and cycling. *(d) to minimise the impact of development on the amenity of surrounding properties,* The proposal minimises amenity impacts onto surrounding properties. The surrounding properties of the site include Lane Cove National Park and the RFB opposite the site on the west of Lane Cove Road. As assessed in section 6.3.4 of the proposal does not result in any view loss for the RFB. The amenity of Lane Cove National Park to the north and east is preserved. From a bushfire perspective the location of building's has been driven by the BALs. The landscape setting of the development is compatible with the national park setting. The recreational spaces in the park including Tunks Picnic Area will be not be adversely impacted by overshadowing. Section 6 of this SEE confirms the proposal has acceptable	NA Yes

Relevant Clause	Comment	Complies
	environmental impacts and where minor impacts occur these have been mitigated through design and operational measures. *(e) to emphasise road frontages along road corridors.* The development adjoins a single road corridor being Lane Cove Road to the west. The road frontage (west elevation) of the proposal has been designed to positively emphasis the road corridor. The proposal maintains its identifiable presentation to the street frontage which comprises a single vehicular access point and vegetated buffer zone between the street at-grade parking. Further the ground floor structures are setback between 21.6m to 26.3m and the tower portion of between 48.7m to 50.4m.	
Clause 4.4 Floor Space Ratio	The site is subject to a maximum permissible floor space ratio (FSR) of 1.0:1. The proposed development is compliant with the development standard with an FSR of 1:1, providing 24,669m² of gross floor area compared to a site area of 24,680m².	Yes
Clause 5.10 Heritage Conservation	The RLEP mapping shows the site adjacent to heritage item no.60 Lane Cove National Park. However, on 18 November 2020 Council advised that item 60 is no longer listed as a heritage item under Schedule 5 of the RLEP.	N/A
Clause 6.2 Earthworks	As discussed in Section 3 of this SEE, the provision of on-site basement parking necessitates excavation requiring development consent. The proposed excavation satisfies the matters in clause 6.2(3) as follows: ▪ B&E have prepared a comprehensive stormwater management plan which ensures no adverse runoff impacts result from the proposal. ▪ The site is zoned B7 Business Park thus excavation is required to facilitate the future use. ▪ The fill and soil are suitable for excavation. ▪ A Site Minimisation and Waste Management Plan (Appendix 18) accompanies this application and identifies the management process for the excavated material. Any contaminated materials will be disposed of appropriately. ▪ It is very unlikely relics will be encountered on the site given its history. ▪ The development will not impact any waterway and is not in proximity of a drinking water catchment and environmentally sensitive area. ▪ The Geotechnical Report (Appendix 5) proposes a number of measures and recommendations to minimise impacts during excavation. The Geotechnical Report assessed the stability of the site for the proposed excavation and confirms it is acceptable and will not result in adverse impact to environmental processes. Clause 6.2 is therefore satisfied.	Yes

Relevant Clause	Comment	Complies
Clause 6.4 Stormwater Management	The objective of clause 6.4 is to minimise the impacts of urban stormwater on land and adjoining properties, native bushland and receiving waters. This application is accompanied by a stormwater plan in Appendix 12. This confirm that development will utilise the site's existing detention system at the south-east and central area of the site. The site contains two large detention tank which collect rainwater and reuse for gardening activities.	Yes

5. OTHER PLANNING CONSIDERATIONS

The relevant planning framework considered in the preparation of this report comprises:

- A Metropolis of Three Cities - the Greater Sydney Region Plan
- North District Plan, and
- Ryde Development Control Plan 2014 (RDCP).

5.1. Greater Sydney Region Plan

A Metropolis of Three Cities - the Greater Sydney Region Plan (Plan) was released in March 2018 and is the first Region Plan by the Greater Sydney Commission. The Plan encompasses a global metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City. It is envisioned that people of Greater Sydney will live within 30 minutes of their jobs, education and health facilities, services and great places.

The site is located in the Eastern Harbour City and Macquarie Park is identified as a metropolitan cluster within the economic corridor stretching from Macquarie Park sweeping east to Chatswood and North Sydney and, south to the CBD, Alexandria and Sydney Airport. The proposal provides a unique business and lifestyle offering to Macquarie Park as the largest non-CBD office market in Australia. The redevelopment of the site is consistent with the strategic direction provided therein.

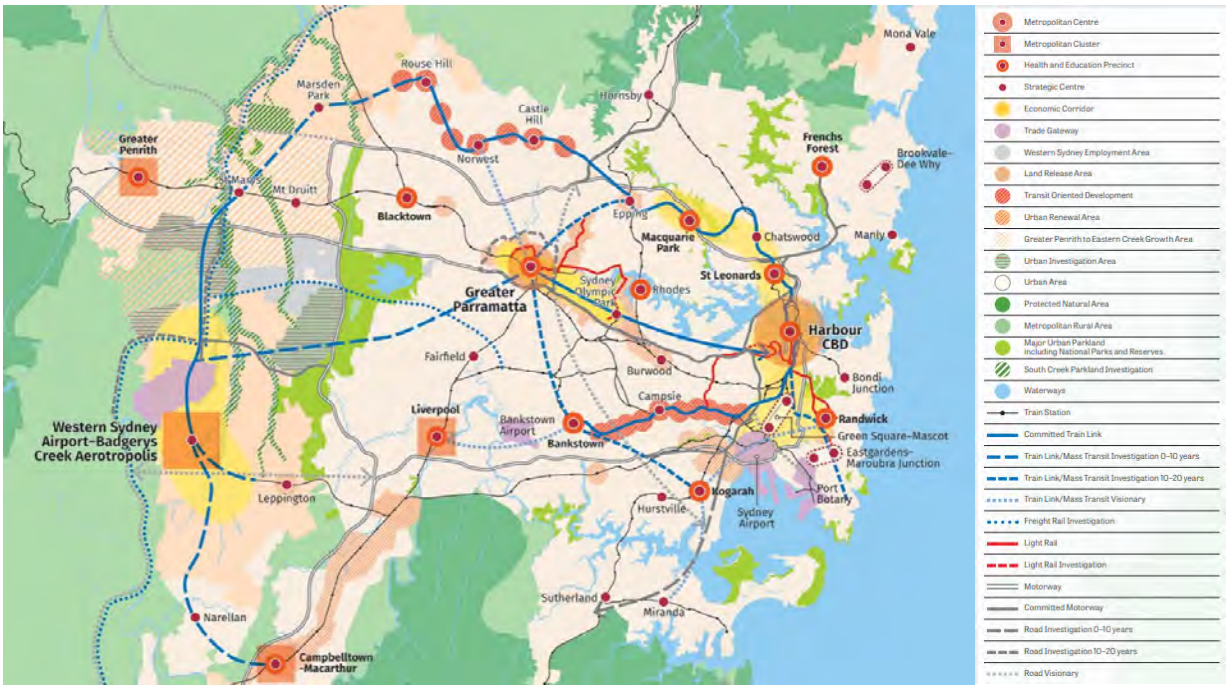


Figure 61: Extract of Three Cities Vision map (Source: GSC)

5.2. North District Plan

The North District Plan provides a series of priorities and actions to guide development and accommodate the expected growth across the district. The District Plans have been prepared to give effect to the Greater Sydney Region Plan. The North District Plan is in the north-west part of the Eastern Harbour City, being well-serviced, highly accessible and well-established. The Ryde LGA is described as a centre which

provides great places that meet the needs of a culturally rich and diverse resident and worker population. The LGA is expected to experience the greatest increase in population with an additional 51,700 people by 2036. This population will be supported alongside the ongoing urban renewal, particularly of the Macquarie Park centre, and the proposal is a contributor to this renewal and will support workers, as well as residents.

Macquarie Park is one of the top ten office precincts in Greater Sydney and the North District Plan notes that growing the economic activity of these major assets is a key priority. Second to the Sydney CBD, Macquarie Park contains 878,640m² of commercial floorspace. The proposal fosters the role of Macquarie Park as a business precinct and will contribute to meeting the baseline target of 79,000 jobs in 2036 increasing from 58,500 in 2016. The North District Plan highlights the importance of fostering the green grid provided by Lane Cove National Park. The development respects the adjoining national park, and its strong landscape focus maintain this undeniable connection.

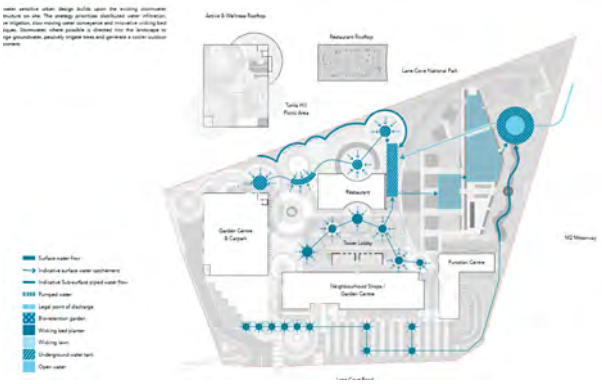
5.3. Ryde Development Control Plan 2014

Consideration of the applicable RDCP 2014 provisions that are relevant to the proposal are considered in Table 13 below. In summary, the proposal is generally compliant with the applicable provisions.

Table 13: RDCP Compliance Table

Provision	Proposal
Part 7.1 Energy Smart, Water Wise	
3.2 Required Information	
An Energy Efficient Performance Report is to be prepared by an accredited consultant to demonstrate how the intent of the RDCP has been met.	ADP have prepared an Energy Efficiency Report in Appendix 14 this demonstrates how the intent of the RDCP will be achieved with the proposal.
7.2 Waste Minimisation and Management	
2.3 All Development	
f. All applications for development, including demolition, construction and the ongoing use of a site/premises, must be accompanied by: i. a Site Waste Minimisation and Management Plan (SWMMP); ii. location and design details of waste storage facilities on the site.	A Site Waste Minimisation Plan (SWMMP) has been prepared by Pitt and Sherry (Appendix 18). The plan details the waste management process during demolition, construction and ongoing use. The plans illustrate the proposed waste storage area.
2.4 Demolition and Construction	
b. Demolition is to be carried out using the process of deconstruction where materials are carefully dismantled and sorted. A Demolition Work Plan is required to be submitted.	Metropolitan Demolitions Group have prepared a Demo Work Plan (Appendix 26). It sets out the method of demolition to be adopted during the course of contractual works, achieving client, contractual, legal and other requirements.
2.8 Commercial and Retail	
a. all commercial premises must have a dedicated waste and recycling storage room	The architectural plans illustrate a satisfactory allowance for waste storage and disposal including: ▪ Within the underground car park

Provision	Proposal
or area, which has adequate storage space to meet the needs of the land use activity.	▪ For the garden centre Adequate waste storage areas will be provided for the following uses, subject to future fit-out: ▪ Within the restaurant and cafes ▪ In the office building
b. All waste and recycling storage rooms and areas must be designed and constructed in accordance with the requirements of Schedule 4 (refer S4.2 Waste and Recycling Storage Rooms and S4.5. External Waste and Recycling Storage Areas).	Pitt and Sherry confirm in section 1.4 of the Site Waste Minimisation Plan that the proposal is compliant with provision 2.8(b) - (k).
c. The waste and recycling storage room or area must provide separate containers for the separation of recyclable materials from general waste. Standard and consistent signage on how to use the waste management facilities should be clearly displayed.	As illustrated on the architectural plans, the basement waste room comprises 18 x 240L general waste bins and 18 x 240L commingled recycling bins. The ground floor waste room comprises 12 x 240L general waste bins, 13 x 240L commingled recycling bins and 6 x 240L garden organic recycling bins. The waste room also comprises a bin-lift providing basement access and a compactor zone. A sign will be displayed within the waste room to ensure a consistent waste management process is implemented on-site.
d. Space must be provided in each occupancy for the temporary storage of garbage and recyclables generated in that area	All tenancies will include temporary storage spaces for garbage and recycling. Provision of these temporary spaces will be subject of the tenancy fit-out.
f. In multi storey developments, consideration must be given to the convenient transportation of waste and recycling from the various floors to the central storage area. Such transportation system may include a passenger or goods lifts, or a garbage chute system.	Waste will be transported using the office building lifts. Typically, collection will occur after work hours.
k. Sufficient space in the development must be allocated to store bulky items such as used pallets and crates to prevent illegal dumping in the public domain.	The ground floor service area provides space to enable bulky items to be stored and disposed of, as required.
8.2 Stormwater and Floodplain Management	
2.3 Stormwater Drainage from Property	
a. Stormwater runoff from property must be directed to either public drainage infrastructure, a natural watercourse or public reserve under gravity feed wherever possible, with the point of connection designed in	This application is accompanied by a stormwater management plan prepared by BG&E in Appendix 12.

Provision	Proposal
accordance with Section 1.4.1 of the Stormwater Technical Manual. b. Stormwater discharge from multi-residential dwellings, commercial, retail and industrial development on sites greater than 1000m 2 and within 30 metres of inground public drainage infrastructure, must extend this drainage infrastructure to the site, so as to enable a direct connection be made to this infrastructure.	
3.0 Water Sensitive Urban Design	
a. All development applicable under this section must prepare a Water Sensitive Urban Design Strategy Plan (WSUD Strategy Plan) which is to contain, but is not limited to, the following items plus be in accordance with Council's document, "Water Sensitive Urban Design Guidelines".	The proposal incorporates WSUD as illustrated in the Realm Landscape Plan (Appendix 3). This includes passive irrigation swale, water basin reservoir and bio-filtration planting. The development will incorporate green star WSUD and, green star adaptation and resilience.  *Figure 62: Proposed WSUD strategy (Source: Realm)*
8.3 Driveways	
4.0 Designing Internal Access Roads and Parking Spaces	
a. Parking spaces and driveway widths for all vehicles shall comply with A.S.2890 except where modified by the City of Ryde Car Parking and Driveways Technical Material (refer Schedule attached to this Part).	TTPP confirm in Appendix 9 that the carpark and access arrangements have been reviewed for compliance with AS2890.1. The office parking spaces are designed as a class 1 parking facility which require a minimum 2.4m by 5.4m long car space with a 5.8m aisle width. The existing retail carpark containing 173 spaces is to be retained and provides 2.4m wide spaces with 6.0m- 6.6m aisles. TTPP note that car park is currently operating well. The new neighbourhood retail spaces in the above ground floor are to be designed as a Class 3A facility, which require a minimum 2.6m wide by 5.4m along, with 6.6m aisle.

Provision	Proposal
b. Provision must be available within the property to enable vehicles (85th percentile vehicle) to enter and leave the designated parking space in a single 3 point turn manoeuvre. A 99th percentile vehicle shall be used for disabled vehicles.	The proposal complies with this provision and confirmed in Appendix 9.
c. All vehicles must be able to enter and leave in a forward direction.	All vehicles are able to enter and exit the site in the forward direction.
9.2 Access for People with Disabilities	
3.0 Legislation	An access letter accompanies this application in Appendix 11 and demonstrates the proposal is capable of achieving compliance with all relevant Australian Standards and the Building Code of Australia.
9.3 Parking Controls	
2.3 Non-residential land uses	
Subsection 2.3 of section 9.3 of the RDCP stipulates the applicable parking controls.	The proposed car parking provision (502 spaces) has regard to the parking standard for Ryde generally, and the reduced parking requirements for the Macquarie Park Corridor to ensure that adequate, but not excessive, on-site parking is provided. Refer to section 6.3.7 and Appendix 9 for further discussion.

6. ENVIRONMENTAL IMPACT ASSESSMENT

6.1. Overview

This section identifies and assesses the impacts of the development with specific reference to the heads of consideration under Section 4.15 of the EP&A Act.

6.2. Context and Setting

The context and setting of the development site is described in Section 2 of this SEE.

Further consideration of the compatibility of the proposal and its surroundings can be undertaken with regard to the Land Environment Court Planning Principle on “compatibility with context” in *Project Venture Developments v Pittwater Council* [2005] NSWLEC 191. In order to test whether a proposal is compatible with its context, the following two questions can be asked:

- **Are the proposal’s physical impacts on surrounding development acceptable? The physical impacts include constraints on the development potential of surrounding sites.**

  The proposal's physical impacts on surrounding development are acceptable and cause no constraints on the development potential of surrounding sites. The environmental impacts are assessed in detail throughout Section 6 of this SEE, noting those on surrounding development primarily relate to bushfire, traffic and access, contamination, built form, views and reflectivity.
- **Is the proposal’s appearance in harmony with the buildings around it and the character of the street?**

  The site is the northern visual marker at the entry point to the Macquarie Park Corridor. The development is sufficiently setback from Lane Cove National Park and the location of buildings on the site has been governed by the bushfire BALs. The proposed built form is an appropriate response to the development in the locality, notably the buildings which form part of the 'quadrant' specifically Lachlan's Line, 112 Talavera Road and development at the south-west corner of the corridor. The proposal has been informed by detailed view analysis as to maintain the existing view corridors to the CBD from the existing residential development to the west of the site. The proposal achieves design excellence and is informed by detailed contextual analysis and delivers a superior design response. The proposal maintains the landscape setting of the site and a well-articulated built form compared to incongruent developments in Macquarie Park as shown below.

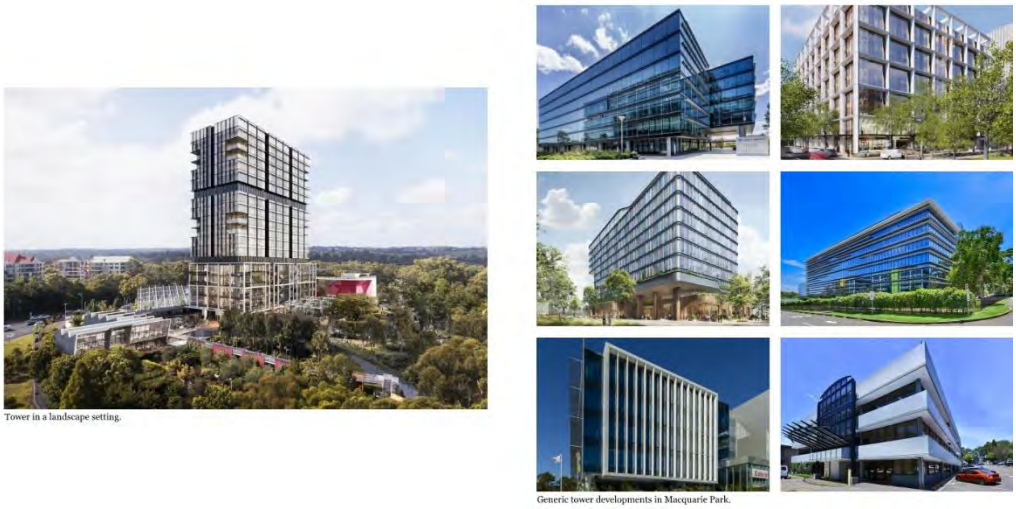


Figure 63: Visual presentation of the proposal being harmonious compared to other development in the locality (Source: DKO Architecture)

6.3. Built Environment

6.3.1. Built Form and Design

The proposal makes a positive contribution to the locality for a built form perspective. As discussed in this SEE, the site is strategically positioned as the fourth visual marker of a development quadrant of several prominent sites situated on the periphery of the Macquarie Park Corridor. The proposed built form is justified in this location given the site's key role as the single entry point to the corridor from the north along Lane Cove Road.

The office building has been skilfully designed to create a well-articulated form which is responds to the natural landscaping and garden setting as well as BALs. The design utilises a series of approaches to achieve this:

- Recessing of level 5 in the office building podium and level 12 in the tower.
- A mix of horizontal and vertical panelling on the tower to clearly delineate the podium and tower and break up the mass of the office building.
- Sawtooth roof in conjunction with clerestory windows for the function centre to maximise light and complement the existing garden centre/neighbourhood retail architectural roof feature.
- A well-considered ground plane which focuses on the human experience and utilises the strong landscape design to deliver a high-quality outcome.
- Integration of terraces and wintergardens in the podium and tower levels which visually and physically connect future workers to the bushland and extensive gardens below.
- Combination of sympathetic materials on the ground plane such as concrete in the office building and brick in the restaurant, both together with glass ensures pedestrians can distinguish between the uses though acknowledge the uses are connected and to be enjoyed by all.
- The design seeks to maximise the provision of natural light to the function centre, office tower and rooftop spaces.
- Internally the development incorporates high-quality materials and addresses the various.

The vision for the built form is intrinsically informed by the landscape setting, provision of high-quality public spaces and focus on wellbeing.

The setback of buildings has been solely driven by the BALs, as shown below.

Figure 64: Extract of BAL map (Source: DKO Architecture)

The built form outcome fine grain response to site analysis, design development, feedback from the UDRP panel and is informed by strong strategic justification. The development congruent with the desired future character of the locality from a built form perspective.

Figure 65: Extract of the photomontage of the development looking north-west (Source: DKO Architecture)

Figure 66: View looking north-east at Metro Station entrance (Source: DKO Architecture)

Figure 67: View looking north-east at the intersection of Talavera Road and Lane Cove Road (Source: DKO Architecture)

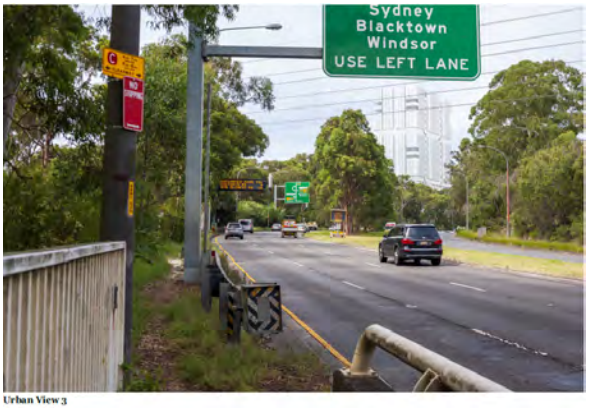


Figure 68: View from Lane Cove Road looking southbound (Source: DKO Architecture)

Figure 69: Extract of view from Tunks Picnic Area (Source: DKO Architecture)

6.3.2. Materiality

The proposed materials are compatible with the landscape setting of the site and have been specifically chosen due to their fire resilient qualities. The proposal comprises a mix of concrete natural finish light, medium and black, bricks, steel white finish frames, black steel, steel balustrades, metal mesh screen with 2mm circular perforations, clear glass, tinted glass and black glass. The composition of materials assists in articulating the office building mass for example darker tones at level 5 and 12. The variation in horizontal and vertical panelling not only visually breaks up the glass but creates a clear podium and tower element due to varying widths of the panelling. The natural materials at the ground plane contribute to the human scale centric design and are sympathetic of the garden and bushland setting.

Figure 70: Extract of a development photomontage showing parts of the ground plane and office building podium (Source: DKO Architecture)

Figure 71: Extract of photomontage of the north elevation of the restaurant (Source: DKO Architecture)

6.3.3. Overshadowing

DKO Architecture have assessed the overshadowing impacts of the proposal. While the site is an island site in relation to development, Tunks Hill Picnic Area and the Old Barn are situated within the Lane Cove National Park to the east of the site. Between 9am and 1pm these areas are not overshadowed by the proposal. Minor overshadowing occurs onto the south-west corner of Tunks Hill Picnic Area between 2pm-3pm at mid-winter. The shadow cast by the office building falls mostly within the site between 9am- 12pm and from 1pm- 3pm extends over the south-east of Lane Cove National Park on heavily vegetated bushland. The south display garden of the site experiences overshadowing to 50% of its area between 11am and 1pm. The proposed overshadowing does not result in adverse impact to the picnics area or the on-site landscape setting and is therefore considered acceptable.

Figure 72: Extract of shadow diagrams (Source: DKO Architecture)

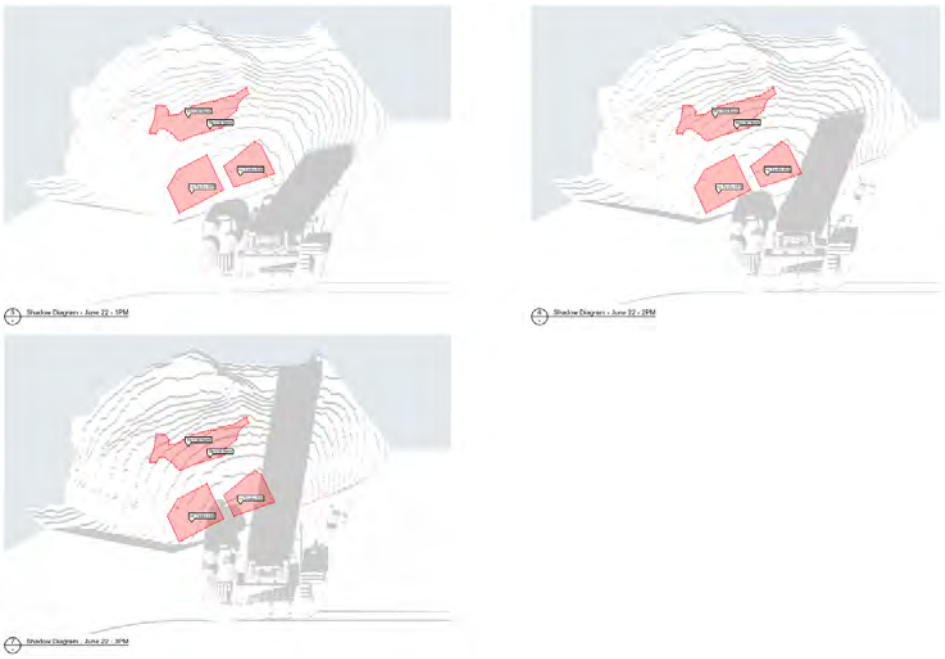


Figure 73: Extract of shadow diagrams (Source: DKO Architecture)

6.3.4. Views

The proposal maintains distant CBD and bushland views obtained from the neighbouring RFB to the west. The existing RFB comprises four separate buildings with the south-east building benefiting from CBD skyline views and the north-west and north-east Lane Cove National Park views. Though these views are only obtainable from level five and above, due to existing vegetation at the lower levels.

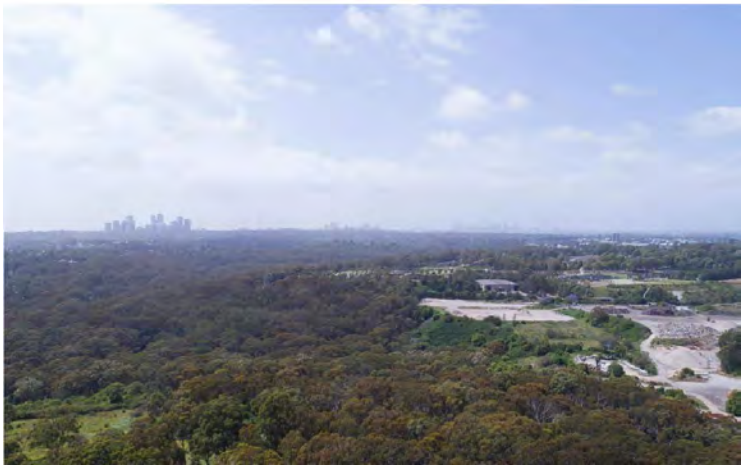


Figure 74: Extract of the CBD skyline as viewed from the nearby RFB development, looking south-east (Source: DKO Architecture)

Figure 75: Bushland views from the nearby RFB, looking north (Source: DKO Architecture)

The proposal does not result in any view loss from nearby development, notably to the various RFBs on the west of Lane Cove Road.

6.3.5. Internal Amenity

The development responds to the garden setting of the site and the locality's landscape focus, as such the design seeks to bring this amenity internally. Horticulture is embedded internally within the various buildings, including basement uses, the ground floor plane and the office building. The proposal provides a high level of internal amenity as follows:

- Due to the orientation of the site the office building will benefit from substantial solar access and ventilation
- Several levels of the office building are been designed with multiple balconies and wintergardens which connect the internal areas with the external National Park and garden setting, and
- The design of neighbourhood shops and the restaurant have been designed to be flexible in nature as to allow fit-out by a future tenant (subject of a separate application) and provide the necessary service areas to facilitate the use.

6.3.6. Heritage

Heritage 21 have considered the impact of the proposal with regard to the NSW Office of Environment and Heritage's guidelines. The proposal respects the heritage significance of the site, noting:

- The proposal will facilitate the continued use of the site as a garden centre and new use as office premises
- The proposal does not entail demolition of a heritage item or a contributory item
- The proposal would not result in the loss of any fabric deemed to be heritage significance
- The proposal would not adversely impact any significant view lines as there are no heritage item in the vicinity of the site. As confirmed in section 2.3.7 above, Lane Cove National Park is no longer a heritage item pursuant to the RLEP
- Significant trees within the site will largely be retained and only removed where deemed necessary to accommodate the new development, and
- The landscape scheme ensures the continued garden setting of the site.

Heritage 21 confirm there are no aspects of the proposal which could be detrimental to the heritage significance of the site and the development has a neutral heritage impact.

6.3.7. Parking

The RDCP sets different car parking rates for the Macquarie Park Corridor and the wider Ryde LGA. The Macquarie Park Corridor is identified in a map within the RDCP and according to that map, the site lies just outside the Corridor. Car parking has therefore been assessed against the rates prescribed for the wider Ryde LGA.

According to the RDCP, 655 on-site car parking spaces are required to serve the development. By way of comparison, if the car parking demand was assessed as though the site was within the Macquarie Park Corridor, 485 car parking spaces would be required.

The proposal includes 502 car parking spaces. Whilst this is less than amount of car parking required by the RDCP, it is considered appropriate for the following reasons:

The RDCP rate is considered to be excessive for the following reasons:

- The Macquarie Park Metro Station is located 840m walking from the site (800m radial distance), which is 50m beyond what is considered an accessible area catchment of a railway station
- The site is situated on the northern periphery (just outside) of the Macquarie Park Corridor as established earlier in this SEE
- The rates do not consider multi-purpose trips
- The garden centre has peak customer demand during the weekend and is not expected to generate significant customers during a typical weekday
- The function centre peak customer demand will be during weekend evenings and weekends, therefore is able to share parking supply with the office parking, if required

- The parking rates for office tenants is not supportive of encouraging sustainable transport, noting the rate by RMS/TfNSW survey is dated 1979. It is expected the site could achieve a lower parking generation and higher public transport mode share, with the metro station being located a 5-minute bus trip or an approximate 8 minute walk
- There are several bus stops within 200m of the site, with the nearest immediately fronting the site and providing services every 15 minutes (Route 197) to the metro station
- The RDCP rates precede the opening of the metro station which would have reduced the car mode share of the surrounding area significantly
- A GTP is to be implemented to reduce car travel and would include:
  - On-site parking facility for event buses/coaches as part of the travel demand management of functions
  - Car share vehicles are proposed on-site to reduce the need for staff and tenants to bring their own car. This would be particularly beneficial for office staff that attend off-site meetings throughout the day

The reduced parking provision would align with the objectives of the RDCP which aim to "minimise traffic congestion", "minimise car dependency" and "promote alternative means of transport - public transport, bicycle and walking".The RDCP does not stipulate parking provisions for a garden centre, hence the rate for a 'nursery' has been obtained from the Roads and Maritime Guide to Traffic Generating Developments 2002. The RDCP stipulates 655 on-site parking spaces are required for the development. As detailed in this SEE, the site is located on the north-west periphery of the Macquarie Park Corridor. The RDCP stipulates reduced rates for new commercial (and industrial) developments in the corridor. The site is situated 200m from the corridor and 840m walking distance from Macquarie Park Metro Station and is closer to the metro than other sites in the corridor, refer to the figure below.

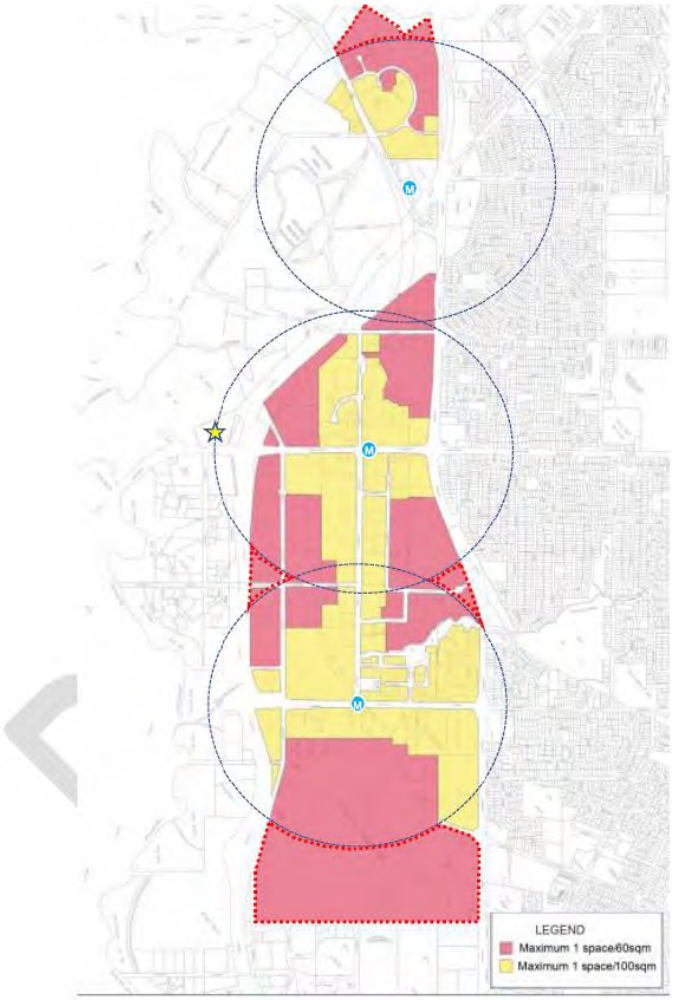


Figure 76: Extract of radial distance from the metro stations, sites greater than 800m outlined red though located within the corridor (Source: TTPP)

Therefore, TTPP have considered a provision 502 spaces suitable for the proposed development and will not result in adverse parking impacts.

6.3.8. Traffic

TTPP have prepared a traffic impact assessment in Appendix 9. The proposal is expected to generate a number of multi-purpose trips. Therefore a 20% multi-purpose reduction factor has been applied to the retail (neighbourhood shop) traffic generation estimated. The proposal will generate an additional 314 and 262 vehicle trips per hour in the morning and evening peak, respectively. TTPP have assessed the traffic generation to the road network, namely the signalised intersection of Lane Cove Road, Fontenoy Road and the site access using SIDRA Intersection. The following scenarios have been modelled:

- Existing conditions
- Post development (existing plus development traffic)
- 10 year future base (10-year horizon with development traffic), and

- 10-year post development (10-year horizon plus development traffic).

Traffic Distribution

10% of traffic is expected to travel west (or straight ahead to Fontenoy Road) in both peak periods. In the AM peak period, there is expected to be a 60% southbound and 30% northbound split along Lane Cove Road and vice versa in the PM peak period.

Intersection Modelling Results

Table 5.3 in Appendix 9 indicates the traffic movements entering and exiting the site are operating at a LoS D to F during both peaks, however, the through movement along Lane Cove Road is operating well a LoS A to C, notwithstanding there are some long queues at through movements. LoS A indicates the intersection is operating with spare capacity and LoS F is operating over capacity. The proposed operation is typical of intersections along major arterial roads where signal timing is prioritised to the arterial road and consequently traffic on the minor roads experience longer delays.

TTPP note the primary impact will be the right turn vehicle queue from Lane Cove Road into the site which is indicated to be:

- 109m in the AM peak in the post development scenario
- 96m in the AM peak in the 10 year post development scenario

The right turn bay into the site is some 35m long and thus cannot accommodate the above queues, which would overflow into the adjoining traffic lane. However, the impact of the vehicle queues into the site is proposed to be minimised by extending the right hand turn bay as captured in the planning agreement (Appendix 25) Based on the existing conditions, the right turn bay could be increased by 61m (to 96m) by reducing the width of the central median along Lane Cove Road, see below.

Figure 77: Extract of the right hand turn lane extension (Source: TTPP/Near Maps)

Vehicles turning right immediately upon entry can currently be delayed while giving way to pedestrians at the proposed pedestrian crossing. This would result in queues backing into Lane Cove Road. On this basis,

during the road network peak periods (which would also be the peak office arrival/departure periods), this right turn movement would be restricted with a boom gate control system, to direct traffic to turn left where new ramps into the basement and upper ground carpark are proposed.

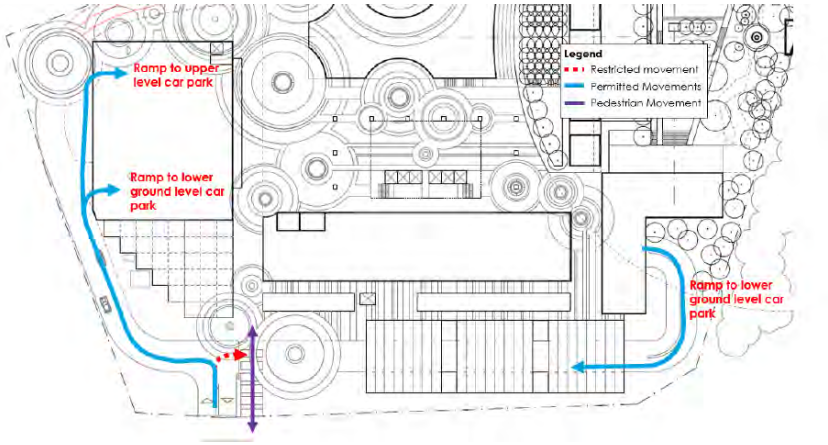


Figure 78: Extract of proposed peak traffic circulation (Source: TTPP)

The development will implement a Green Travel Plan and will be tailored to ensure appropriate measures are in place for the different land uses to promote a modal shift away from car usage. Appendix 9 details measures that may be implemented to promote sustainable modes of travel, pertinently public transport, car-share, walking and cycling.

6.3.9. Waste

Waste impacts of the proposal may include noise, odour and visual impact from the streetscape. To mitigate these impacts, Pitt and Sherry propose the following management methods:

- Noise
  - Bin collection will take place during the day
- Odour
  - General waste collection will occur three times a week. As putrescible waste is stored on-site for a very short time period and that high-risk items such as seafood will be appropriately bagged and sealed by the neighbourhood retail operators before disposal, it is not expected there will be odour or vermin issues.
  - Hot water taps for bin washing will be installed and the walls will be constructed of an impervious material for easy cleaning reducing the risk of odour
  - Adequate ventilation will be provided to reduce odours
  - Waste rooms will be designed to prevent the entry of vermin
- Visual impact
  - The proposed waste room at the ground level and in the basement are enclosed and not public from Lane Cove Road

These management methods will form part of the ongoing waste management process.

6.3.10. Noise and Vibration

ADP Consulting have prepared an Acoustic Impact Assessment. Appendix 13 notes the main source of external noise that will affect the façade of the proposed site in Lane Cove Road. Section 5 of the report

details a series of recommendations for the proposal. ADP Consulting confirm subject to addressing these recommendations, where possible, there are no site conditions, statutory or other requirements which would preclude the development from complying the relevant noise and vibration criteria.

6.3.11. Building and Construction

Compliance with the BCA will be demonstrated with the Construction Certificate (CC) documentation. Blackett Maguire and Goldsmith confirm the proposal can readily achieve compliance with the BCA subject to resolution of matters, identified in Appendix 11, prior to CC stage.

A final Construction Management Plan will be prepared by the appointed contractor, once the terms of any approval granted by Council are known. Accordingly it is anticipated that Council will include appropriate conditions within any consent notice requiring the preparation and approval of a CMP prior to works commencing.

6.3.12. Access

Blackett, Maguire and Goldsmith have assessed the proposal against the Disability (Access to Premises - Buildings) Standards 2010 and Part 3D provision of the BCA 2019. Appendix 11 outlines a number of items need to be resolved by way of performance solutions or plan amendments at the CC stage. BMG consider the proposal can readily achieve compliance with the abovementioned standards subject to resolution of matters in the report following a DA.

6.4. Natural Environment

6.4.1. Tree Removal

Section 3.4 of this SEE details the trees which will require removal to accommodate the proposal. This has been verified by Birds Trees Consultancy. All trees are preserved under Part 9.5 of the RDCP, except tree 22 which is exempt under clause 2.0(a)(vii) of the RDCP.

The Arborist Report (Appendix 10) notes:

- Tree 117 is dead with no visible habitat and is recommended for removal
- Tree 155 has evidence of significant decay within the trunk which places this tree at increased risk of failure. Birds Tree Consultancy recommend further investigation be carried out on this tree by means of a Resistograph Test and a Risk Assessment undertaken to determine the risk posed by this tree and viability of retention
- Tree protection zones of trees 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192 and 193 are encroached by the proposed construction and required earthworks by a total or major encroachment as defined by AS4970-2009 Protection of Trees on Development Sites. These trees will not be viable to be retained and are recommended for removal.
- TPZ of trees 13, 14, 15, 17, 18, 194 and 196 are encroached by the proposed construction and required earthworks by less than the minor encroachment as defined by AS4970-2009 Protection of Trees on Development Sites. These trees will remain viable to be retained.
- All other trees are viable to be retained and protected as detailed in section 7.0 of this report.

Where possible, the design has sought to retain trees, as they are an integral component of the site. The proposed landscape scheme includes extensive new planting across the site ensuring the site maintains its landscape and horticultural focus.

6.4.2. Contamination

Geotechnique Pty Ltd have confirmed that sampling and testing can be carried out to address potential contaminants after conditional development consent has been granted. If contaminants are identified, the site can be made suitable for the proposed development following successful remediation and validation. Geotechnique Pty Ltd have confirmed that the site can be made suitable for the proposed use in accordance with clause 7 of SEPP55.

6.4.3. Landscape

A key objective of the project is maintaining the rich landscape and horticultural focus of the site, connection to Lane Cove National Park and the nearby river. The landscape design will positively contribute to the quality and amenity of the site, the streetscape, the national park interface, the various on-site zones and be an enjoyable place for people to work and visit. The integrated approach considers the existing on-site drainage process and maintains the iconic south display gardens. The various zones created by Realm Studios seamlessly correspond to the context and existing site conditions. The zones may be used independently but are intrinsically linked to one another. The landscape design results in positive environmental impacts.

6.4.4. Bushfire

Blackash Bushfire Consulting discuss in Appendix 8 that the proposal has been designed specifically to address and comply with the requirements of Planning for Bushfire Protection 2019 (PBP 2019). Notably:

- All APZs for the proposed uses on the site meet the PBP 2019
- The development will be located within 70m of hydrants and the fire hydrant system designed to ensure coverage in accordance with AS2419.1:2005 and NCC Clause E1.3, complying with PBP 2019
- Gas and electricity supply for the new development will comply with PBP 2019 and any gas services installed and maintained in accordance with AS1596, complying with PBP 2019, and
- Internal roads comply with PBP 2019 such that roads will provide safe operational access for emergency services personnel in supressing a bushfire, while occupants are accessing or egressing an areas (PBP 2019 p.57).

To ensure the requirements of PBP are delivered with the development, Blackash Bushfire Consulting recommend in section 14 of the report that a Bushire Safety Authority is requested from RFS for the DA that specifies:

> *1. The entire site is managed as an inner protection area as per RFS standards for APZs*
>
> *2. APZs are as indicated in figure 6 of the bushfire report*
>
> *3. The existing buildings will be upgraded to provide ember protection on openable windows*
>
> *4. The carpark will be built to BAL flame zone in accordance with AS3959*
>
> *5. The office building will be built to BAL29 in accordance with AS3959*
>
> *6. Roads will comply with PBP 2019 requirements*

In summary, bushfire will be appropriately managed on-site and the development duly considers the bushfire risk and seeks to mitigate impact to property and life. Refer to Appendix 8 for further detail.

6.4.5. Geotechnical

Geotechnique Ptd Ltd have assessed the proposed development with regard to the geotechnical conditions. The proposed development will involve up to 3.0m of excavation for the basement car park. The materials to be excavated are anticipated to include soils (including topsoil/fill and residual soils) as well as bedrock sandstone/shale. Geotechnique anticipate sandstone/shale up to depth of 3.0m will vary from low strength to high strength. The selection of rock cutting equipment will be based on the strength of the sandstone/shale, site access, desired smoothness of the excavated rock surface and acceptable ground vibration during rock excavation. A dilapidation survey will be carried out to ascertain possible impacts from ground vibration during rock excavations. Geotechnique noted in their assessment that a rock saw is preferrable for excavation into medium to high strength sandstone/shale to minimise ground vibration during rock excavation.

Geotechnique note the proposed excavation faces will have "low" risk of instability provided the excavation faces are battered and/or retained with retaining structures designed in accordance with recommendations provided in the Geotechnical Report (Appendix 5). Further, proposed excavations are unlikely to encounter groundwater level. Therefore, the development will not impact on groundwater and vice versa. The design of the proposal will ensure that the surface water flow within and across the site is not impacted.

In summary, Geotechnique have confirmed the site is suitable for the proposed development provided the assessment and recommendations provided in the report are verified by conducting detailed geotechnical investigation during construction stage.

6.4.6. Stormwater

BG&E have prepared a comprehensive stormwater plan in Appendix 12. The plan seeks to build on the existing stormwater system established at the site which focuses on maximising rainwater harvest, capture and re-use within the upper courtyard hardstone areas. BG&E have coordinated closely with Realm Studios. The proposed stormwater management plan does not cause adverse impact. BG&E confirm the plan:

- Demonstrates the available on-site detention facilities for the proposed development provide the level of attenuation required to limit the post-development peak discharges to less than the pre-development (greenfield scenario) for events between the 5 year and 100 year ARI.
- Demonstrates that as a result of the above, the downstream receiving drainage configuration, notably the M2 Motorway pollution control pond and drainage network will be able to cater for the resultant flow. Furthermore, the flows are lower but of similar magnitude providing the benefit of not requiring modification to the existing network.
- Demonstrates that water quantity and quality as a result of the development will not impact receiving waterways, in particular Porters Creek and Lane Cove River downstream of the M2 Motorway drainage network.
- Satisfies the requirements of the WSUD management plan and pollutant reduction targets in accordance with Council's WSUD and Stormwater Management Guidelines.

6.4.7. Structural

BG&E have undertaken a structural review of the development proposal. Provided the demolition of existing structures, excavation and construction of new structures is undertaken in accordance with structural provisions of the BCA, AS1170.1, AS1170.2, AS3600, AS3700 and AS4100, in conjunction with accepted engineering principles and practice, the proposal will be structurally sound. Refer to Appendix 19 for detail.

6.4.8. Soil Management

Refer to Section 4.4.1 for the SEPP 55 assessment with regard to potential soil contamination. In summary, the site can be made suitable for the redevelopment.

6.4.9. Air and Microclimate

Some dust is anticipated during the construction period, particularly given demolition and excavation is involved. This impact can be managed through measures such as wetting down work areas/stockpiles, stabilising exposed areas, preventing material tracking out onto public roadways, covering loads on all departing trucks and working to weather conditions. Metropolitan Demolitions Group have also prepared a Demo Work Plan to manage the demolition of existing structures. Provided the works are undertaken in accordance with the recommendations in Appendix 26, the proposal is otherwise not expected to give rise to any long term or adverse impacts on local or regional air quality.

6.4.10. Reflectivity

ADP Consulting have assessed the material reflectance value of the office building's external façade to avoid façade sunlight reflectivity issues with respect to drivers. To ensure the office building does not cause adverse glare to nearby drivers the maximum recommended specular reflectivity should not exceed the below values.

Table 14: Maximum specular reflectivity of office building facade

Façade orientation	Maximum visible light reflectivity
North elevation	15%
South elevation	15%
East elevation	8%
West elevation	15%

The maximum reflectance of the western façade at 8% is due to the risk of a disability veiling glare for drivers travelling east long Fontenoy Road. With the current façade glazing system proposed to be double glazed with vertical shade fines, a glazing reflectivity less than 15% may be used to mitigate the glare for drivers facing the office building's western façade.

These recommendations will be adhered to minimise impact to drivers.

6.4.11. Wind Analysis

Cermak Peterka Petersen Pty Ltd (CPP) have undertaken a qualitative assessment of the impact of the proposed development on the wind conditions of the surrounding area. In regard to the environment wind assessment CPP note:

> *Being slightly larger than most surrounding structures, the proposed development will have some effect on the local wind environment, though any changes are not expected to be significant from the perspective of pedestrian comfort or safety. Wind conditions around the development are expected to be classified as acceptable for pedestrian standing or walking from a Lawson comfort perspective and pass the distress/safety criterion. Local amelioration would likely be necessary for areas intended for long-term stationary or outdoor dining activities.*

To quantify the wind conditions around the site, CPP recommend a wind tunnel test be undertaken during the detailed design at CC.

Refer to Appendix 22 for further detail.

6.4.12. Energy

As detailed in the Energy Efficiency Report (Appendix 14), the proposal will implement a number of energy efficiency initiatives. The building will be designed in line with the NCC2019 Section J Energy Efficiency provisions and will optimise façade performance and efficient building services. These initiatives relate to:

- High performance building fabric
- Efficient heating, ventilation and air conditioning design
- Passive cooling and indoor air quality
- Energy efficient lighting
- Daylight and shading strategies for reduced energy consumption
- Solar energy generation and green power purchasing
- Green star and NABERs certification

Ecological sustainable development strategies are at the core of the proposal and will remain so as the proposal develops through the CC stage.

ADP Consulting have undertaken a Section J assessment (Appendix 16 and 17) of the proposed façade and confirm it meets the minimum provisions of Part J1 and J3 for all levels.

6.5. Social and Economic Effects

6.5.1. Crime and Safety

Crime Prevention through Environmental Design (CPTED) is a recognised model which provides that if development is appropriately designed it can reduce the likelihood of crimes being committed. By introducing CPTED measures within the design of the development, it is anticipated that this will assist in minimising the incidence of crime and contribute to perceptions of increased public safety. The proposal has been designed to take into consideration these principles as addressed in detail in the Crime Risk Assessment Report prepared by City Plan (Appendix 20). This CPTED Report demonstrates that the development will have a high level of amenity, casual surveillance and ultimately public safety within the development and surrounding area. Provided at Section 7 of Appendix 20 are a range of measures which will enable the design and ongoing use of the development to align with those CPTED principles to reduce opportunities for crime. The works/measures identified are generally minor in scope and can be achieved by means of conditions of consent, or otherwise detailed in the CC drawings. The recommendations provided in the report are for guidance in this respect and we are satisfied that they can be accommodated. The proposal is an appropriate response to the CPTED principles and is supportable.

6.5.2. Social, Economic and Employment

The proposal will result in positive social, economic and employment outcomes for the locality. As outlined in section 3.14, the proposal will facilitate 1,750 new office works on-site and approximately an additional 100 workers associated with the function centre, hospitality, garden centre and neighbourhood retail. This number of people will be management in accordance with the POM in Appendix 25.

6.5.3. Public interest

Pursuant to case law of *Ex Gratia P/L v Dungog Council* (NSWLEC 148), the question that needs to be answered is "Whether the public advantages of the proposed development outweigh the public disadvantages of the proposed development".

There are no unreasonable impacts that will result from the proposed development. Therefore the benefits of the proposal outweigh any disadvantage and as such the proposed development will have an overall public benefit.

7. CONCLUSION

This DA seeks approval for alterations and additions to the existing garden centre at 307 Lane Cove Road, Macquarie Park. The development proposal involves the renewal of the existing garden centre and function spaces, construction of an office building, provision of neighbourhood shops, café and restaurant, on-site parking, landscaping, and services.

This SEE has undertaken an environmental assessment of the proposal and has concluded that the proposal provides a built form and high-quality amenity for future workers and visitors which is consistent and compatible with the desired future character of the site and responds to the transforming nature of the surrounding locality.

Moreover, the proposal is:

- An appropriate response to the context, setting, planning instruments and development guidelines and other considerations outlined in Section 4.15(1) of the EP&A Act
- Permissible with development consent in the B7 Business Park zone, consistent with the zone objectives and appropriate within its context of the site and surrounding area
- Considered to enhance the site in providing a landscape and horticultural orientated development with a congruent built form with surrounding development and that envisaged by the planning controls, providing a high quality and amenity building and responding to the site constraints, particularly bushfire, and
- Considered to not result in adverse environmental impacts by way of bushfire, contamination, acoustic, geotechnical, reflectivity, crime and safety, tree removal, traffic and parking.

The benefits provided by the proposed development outweigh any potential impacts and it is therefore considered to be in the public interest. The proposal will deliver a suitable and appropriate development and is worthy of approval.