

Environmental Impact Statement

Mixed-use Residential Development

40 The Retreat, Bradfield

Submitted to the Department of Planning, Housing and
Infrastructure
on behalf of SCG Developments Pty Ltd

SSD-65729209



'Gura Bulga'

Liz Belanjee Cameron

'Gura Bulga' – translates to Warm Green Country. Representing New South Wales.



'Dagura Buumarri'

Liz Belanjee Cameron

'Dagura Buumarri' – translates to Cold Brown Country. Representing Victoria.



'Gadalung Djarri'

Liz Belanjee Cameron

'Gadalung Djarri' – translates to Hot Red Country. Representing Queensland.

Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We pay our respects to their Elders past, present and emerging.

In supporting the Uluru Statement from the Heart, we walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people for a better future.

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Date of issue

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1.0 (FINAL)

19/07/2024

SB

DH

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QQ. Consultation Outcomes Report	<i>Ethos Urban</i>
RR. Connecting with Country Report	<i>Hardy Hardy</i>
SS. Fire Engineering Strategy Report	<i>Jensen Hughes</i>
TT. BASIX Stamped Drawings	<i>Jensen Hughes</i>

Under separate cover

Landowners consent (including Title Search)

Estimated Development Cost (EDC) Report prepared by Newton Fisher

Signed Declaration

Project Details		
Project Name	40 The Retreat Bradfield	
Application Number	SSD-65729209	
Land to be Developed	40 The Retreat, Bradfield identified as Lot 272 in DP 803167	
Applicant Details		
Applicant Name	SCG Developments Pty Ltd	
Applicant Address	Level 13, 44 Market Street Sydney, NSW Australia, 2000	
Prepared by		
Name	Sabrina Bichara	Arcangelo Antoniazzi
Qualifications	Bachelor of City Planning (WSU)	BPlan(Dist), MUrbMgt&Plan
Address	Level 4, 180 George Street, Sydney NSW 2000	
Declaration		
Name	Daniel Howard	
Qualifications	Bachelor of Planning with Honours	
Registration Number	48497	
Organisation Registered With	Planning Institute Australia PIA	
The undersigned declares that this EIS: • has been prepared in accordance with the Environmental Planning and Assessment Regulation 2021; • contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the EIS relates; • does not contain information that is false or misleading; • addresses the Planning Secretary's environmental assessment requirements (SEARs) for the project; • identifies and addresses the relevant statutory requirements for the project, including any relevant matters for consideration in environmental planning instruments; • has been prepared having regard to the Department's State Significant Development Guidelines - Preparing an Environmental Impact Statement; • contains a simple and easy to understand summary of the project as a whole, having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development; • contains a consolidated description of the project in a single chapter of the EIS; • contains an accurate summary of the findings of any community engagement; and • contains an accurate summary of the detailed technical assessment of the impacts of the project as a whole.		
Signature		
Date	19 July 2024	

Executive Summary

Purpose of this report

This Environmental Impact Statement (**EIS**) has been prepared on behalf of SCG Developments Pty Ltd in support of a detailed State Significant Development Application (**SSDA**) made to the Department of Planning, Housing and Infrastructure for a mixed-use residential development (**proposal**) on land at 40 The Retreat, Bradfield (**site**).

The proposal is identified as a State Significant Development (**SSD**) site under Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021*. Development with an estimated development cost of more than \$30 million on land in the Western Sydney Aerotropolis is declared SSD.

A request for the issue of Industry Specific Secretary's Environmental Assessment Requirements (**SEARs**) for the proposal was sought on 12 December 2023. Accordingly, the SEARs were issued on 18 January 2024. This EIS addresses the matters identified in the SEARs and has been prepared in accordance with the Department's *State Significant Development Guidelines – Preparing an Environmental Impact Statement* and the requirements of the EP&A Regulation.

The site and context

The site has an area of approximately 20,912 sqm and currently contains an existing detached dwelling. The northern portion of the site contains ancillary out-buildings and former vehicle scraps and spare parts. The site contains a sporadic arrangement of existing trees and grass as the ground cover.

The site's immediate context is characterised as semi-rural with existing large lot residential development. Land to the immediate north is devoid of development and rural in nature whilst land to the immediate east (on land identified as 30 The Retreat Bradfield) contains the State heritage listed Kelvin Homestead. Land to the immediate south contains large lot detached dwellings.

Land to the immediate west forms part of the Bradfield City Centre, being planned and developed by the Western Parkland City Authority (**WPCA**). This large landholding currently contains the Aerotropolis Metro Station which is (at the time of writing) under construction and will support the Sydney Metro – Western Sydney Airport. This land holding also contains the (currently under construction) 'Bradfield First Building' which will be a new advanced manufacturing and research facility. The Bradfield City Centre more broadly is being planned (through the draft Bradfield City Centre Master Plan) to be the centre of the Western Parkland City and will be supported by mixed-use and commercial development, civic and open spaces with supporting building heights up to 60m.

Because of what is envisioned under the draft Bradfield City Centre Master Plan and broader Aerotropolis planning framework, the site sits within a context that is transitioning from existing rural residential to highly urban with significant renewal expected in the long term, ultimately forming part of an entirely new city leveraging off the Western Sydney Nancy Bird Walton Airport and Sydney Metro – Western Sydney Airport.

Within this Aerotropolis planning framework, the site is located within the Aerotropolis Core precinct. This precinct is planned to be a dense urban precinct around the Bradfield Metro Station comprising a commercial precinct for jobs, advanced manufacturing, and high technology to support up to 50,000 to 60,000 jobs. The Aerotropolis Core will also contain a residential sub-precinct in walking distance to the Metro or other public transport, Wianamatta-South Creek, and Thompsons Creek, in identified areas not impacted by significant aircraft noise.

Proposal overview

This SSDA seeks consent for a new mixed-use residential development, comprising a mix of residential and retail land uses across six individual buildings, comprising a total of 533 residential units and a total Gross Floor Area (**GFA**) of 55,330 sqm.

The proposal will be delivered in two separate stages (as detailed below). The first stage will utilise existing access arrangements to the site from The Retreat to support the redevelopment of the northern portion of the site.

The redevelopment of the southern portion of the site will be developed further into the future following the delivery of the local road network planned along the site's western boundary in general accordance with the Aerotropolis planning framework and Draft Bradfield City Centre Masterplan. Further discussion on ultimate access is provided in **Section 1.4** of the EIS.

Stage 1

Stage 1 seeks consent for construction and operation of development primarily in the northern portion of the site, including:

- The construction and use of three mixed-use residential buildings identified as Buildings A, B and C, comprising;
 - Maximum building heights between 30.4m and 39.8m;
 - 254 residential units;
 - 25,744 sqm of residential GFA;
 - 248 sqm of non-residential GFA;
 - 212 sqm of retail GFA (located at the ground level of Building B).
- Excavation works for the construction of the northern basement carpark for a shared two (2) storey basement to a maximum depth of RL 60.60, with capacity for 311 vehicle car spaces;
- Temporary access to the northern basement will be via a ramp connected to the southern portion of the site via a temporary road running through the southern portion of the site connecting to The Retreat.
- Temporary connection of stormwater infrastructure tanks;
- Site clearing and preparation works, sewer and potable water works;
- Associated site landscaping, through site links, communal open space, mass planting and public domain works inclusive of natural water features; and
- Delivery of utility and services augmentation as required.

Stage 2

Stage 2 seeks consent for the construction and operation of development in the southern portion of the site, including:

- The construction and use of three mixed-use residential buildings identified as Buildings D, E and F, comprising:
 - Maximum building heights between 23.8m and 39.9m;
 - 279 residential units;
 - 28,540 sqm of residential GFA;
 - 374 sqm of non-residential GFA; and
 - 212 sqm of retail GFA (located at the ground level of Building E).
- Excavation works and construction of a shared three (3) storey basement to a depth of RL 56.35, with capacity for 336 vehicle car spaces;
- Connection and access of the Stage 1 basement to the western boundary;
- Stormwater infrastructure;
- Associated bulk earth works, sewer and potable water works;
- Associated site landscaping, through site links, communal open space, mass planting and public domain works inclusive of water natural water features; and
- Construction of driveways to connect to the site's western boundary; and
- Delivery of utility and services augmentation as required.

Figure 1 provides a summary of the abovementioned staging and **Figure 2** provides a montage of the overall proposal.

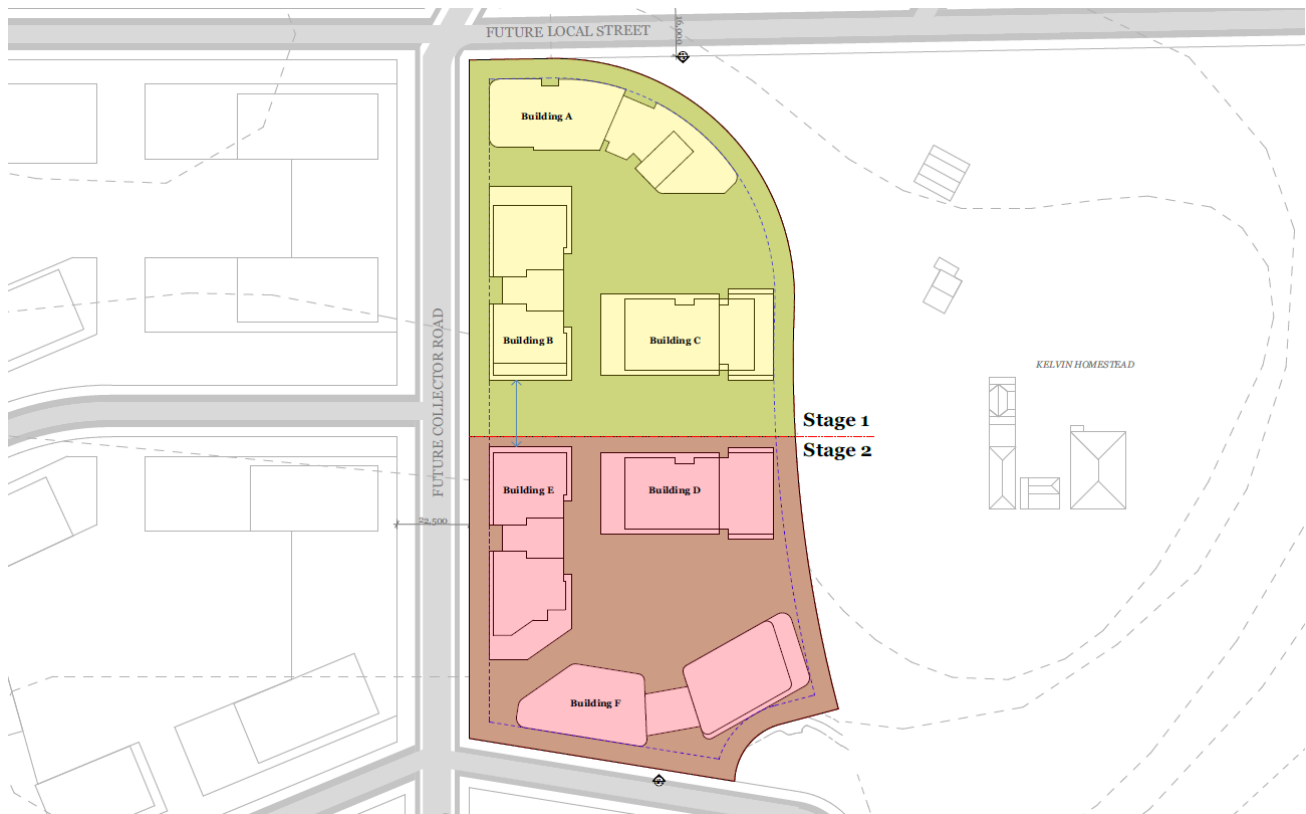


Figure 1 *Summary of proposal staging*

Source: DKO



Figure 2 *Visualisation of the proposal (as viewed from the east)*

Source: DKO

Strategic context

Section 2.0 of this EIS presents the proposal's strategic framework. The proposal aligns with this framework for the following key reasons.

- The proposal directly responds to the liveability principle of the Greater Sydney Region Plan by increasing housing supply in the Western Parkland City.
- The proposal will directly service the needs of the Western Sydney International (Nancy-Bird Walton) Airport and Western Sydney Aerotropolis by providing housing opportunities close to the significant quantum of jobs planned for the Aerotropolis.
- The proposal is entirely consistent with the planned future outcomes for the site and the Aerotropolis Core precinct, supporting a residential mixed use development on land planned to support mixed use residential development.
- In accordance with Housing 2041 (The NSW Housing Strategy), the proposal will provide residential housing which supports the provision of new housing stock in NSW, capable of supporting the diversity in the private housing and rental market.

Statutory context

Development approval is sought for the proposal under the State Significant Development provision of Part 4 of the EP&A Act. Approval is sought for the staged detailed design and construction of the proposal.

The proposal is consistent with the provisions of the relevant environmental planning instruments. The site is zoned Mixed Use under the State Environmental Planning Policy (Precincts—Western Parkland City) 2021. Development for the purposes of residential accommodation and retail premises are permissible in the Mixed Use zone with development consent.

Under the Aerotropolis Precinct Plan, the site is designated with a maximum FSR of 3.0:1 and a maximum building height of 56m. The proposal is consistent with these built form controls.

The proposal constitutes development on land within the Western Sydney Aerotropolis with an estimated development cost of more than \$30 million and does not include prohibited development or previously permitted development, as per Section 29 of the State Environmental Planning Policy (Planning Systems) 2021. Because of this, the proposal is declared to be State Significant.

The proposal is also commensurate with the broader statutory planning framework. This includes the objects of the EP&A Act, biodiversity considerations under the Biodiversity Conservation Act 2016 and Environment Protection and Biodiversity Conservation Act 1999, and other applicable State Environmental Planning Policies (SEPPs). Additionally, the proposal is consistent with the issued SEARs.

Section 4.0 of this EIS considers all applicable legislation in detail.

Community engagement and stakeholder consultation

The consultation program for this SSDA has included engagement with the local community, neighbours, key stakeholders, and government authorities to present an overview of the proposal and gather feedback during the preparation of the SSDA.

The Consultation Outcomes Report (provided at **Appendix QQ** of the EIS) addresses all consultation activities undertaken, the key issues discussed, the feedback received and whether there have been any associated amendments to the proposal.

Full consideration has been given to the SEARs during this development application process and to the SSD Consultation Guidelines.

Targeted consultation was undertaken in particular with the State Design Review Panel to obtain early and independent design advice on the proposal and the WPCA to support discussions in relation to future road design and mutually beneficial access arrangements along the site's western boundary.

Section 5.0 of the EIS demonstrates how the consultation and feedback received has informed key aspects of the proposal and its design. This EIS will be subject to formal public exhibition on the Major Projects NSW Website prior to determination.

Environment impact mitigation measures

This EIS provides an assessment of the proposal's environmental impacts in accordance with the SEARs, including an assessment of the below mentioned matters. The proposed measures to manage and minimise potential impacts arising from the development are also provided in this EIS.

- Design excellence
- Built form and urban design
- Visual impact
- Residential amenity
- Overshadowing
- Traffic, transport, and accessibility
- Noise and vibration
- Biodiversity
- Public domain and crime prevention through environmental design
- Ecologically sustainable development
- Flooding
- Contamination and remediation
- Waste management
- Aboriginal cultural heritage
- European heritage and archaeology
- Ground and water conditions
- Building Code of Australia and accessibility
- Utilities and services
- Social and economic impacts
- Site suitability
- Public interest

In doing so, the EIS confirms that the proposal will not give rise to unacceptable environmental impacts and is supportable from a planning perspective. A number of specialist consultant inputs appended to this EIS have informed this analysis (refer to table of contents). A detailed list of mitigation measures are provided at **Appendix D**.

Conclusion and justification

Having regard to biophysical, economic, and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified for the following reasons:

- The proposal represents the first significant residential development in the Aerotropolis which signals a commitment to progressing development in this new precinct. It strategically aligns housing with the significant employment opportunities envisioned for the Aerotropolis and the Western Sydney International Nancy- Bird Walton Airport.
- The proposal is consistent with the desired future character of the area, relevant strategic planning documentation and will strengthen the commitment to residential development in proximity to planned public infrastructure, employment and services within Bradfield.
- The finer-grain design approach, distribution and massing of form supports the site's transitional position in between the State heritage listed Kelvin Homestead to the east and future planned high density development to the west within the Bradfield City Centre.
- The proposal is permissible with consent and meets the relevant statutory requirements of the relevant environmental planning instruments.
- The proposal facilitates significant improvement of the public domain within the site allowing for improved through-site connections that lead to the future regional cycle path, Kelvin Park, and Thompson Creek beyond.
- The proposal will not result in adverse environmental impacts, through the implication of appropriate mitigation measures that will minimise any potential impact.
- Given the characteristics of the site, its strategic and accessible location, and the benefits of the proposal summarised above and detailed in the EIS, the proposal is considered to be suitable for the site and in the public interest.

1.0 Introduction

Ethos Urban has prepared this Environmental Impact Statement (**EIS**) on behalf of SCG Developments Pty Ltd (**applicant**) in support of a State Significant Development Application (**SSDA**) for a proposed mixed-use residential development comprising residential accommodation and retail premises (**proposal**) on land at 40 The Retreat, Bradfield (**site**).

The site is currently occupied and underutilised but is strategically positioned in the heart of the Western Sydney Aerotropolis, within the Aerotropolis Core precinct and is directly adjacent to the planned Bradfield City Centre and Sydney Metro – Western Sydney Airport. It is highly latent and presents an opportunity to provide development in accordance with the Aerotropolis planning framework and ultimately, deliver housing opportunities to cater to the significant jobs planned for Bradfield.

The proposal is identified as a State Significant Development (**SSD**) site under Schedule 1 of State Environmental Planning Policy (Planning Systems) 2021. Development with a capital investment value of more than \$30 million on land within the Aerotropolis is declared SSD for the purposes of the EP&A Act. As the proposal is identified as a mixed-use residential development and contains a capital investment value of over \$30 million (refer to the Estimated Cost of Development Report (Under a Separate Cover) it is declared SSD.

A request for the issue of Industry Specific Secretary’s Environmental Assessment Requirements (**SEARs**) was sought on 12 December 2023. Accordingly, the SEARs were issued on 18 January 2024. This EIS addresses the matters identified in the SEARs and has been prepared in accordance with the Part 4 of the EP&A Act, Department’s *State Significant Guidelines* (November 2021) and the *State Significant Development Guidelines – Preparing an Environmental Impact Statement* and the requirements of the EP&A Regulation.

A SEARs Compliance Table is provided at **Appendix A** which identifies where the SEARs have been addressed in this EIS. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report. The EIS intends to inform the community and stakeholders about the proposal, including its social, economic, and environmental impacts, mitigation measures and benefits, as well as providing an environmental assessment of the proposal.

1.1 The Applicant

The Applicant’s details are presented in **Table 1**.

Table 1 *Applicant Details*

Applicant:	SCG Developments Pty Ltd
Address:	Level 13, 44 Market Street Sydney, NSW Australia, 2000
ABN:	014 656 663 259

1.2 Overview of Proposal

This SSDA seeks consent for a new mixed-use residential development, comprising a mix of residential and retail land uses across six individual buildings, comprising a total of 533 residential units and a total Gross Floor Area (**GFA**) of 55,330 sqm.

The development will be delivered in two separate stages:

Stage 1

Stage 1 seeks consent for construction and operation of development primarily in the northern portion of the site, including:

- The construction and use of three mixed-use residential buildings identified as Buildings A, B and C, comprising;
 - Maximum building heights between 30.4m and 39.8m;
 - 254 residential units;
 - 25,744 sqm of residential GFA;
 - 248 sqm of non-residential GFA;

- 212 sqm of retail GFA (located at the ground level of Building B).
- Excavation works for the construction of the northern basement carpark for a shared two (2) storey basement to a maximum depth of RL 60.60, with capacity for 311 vehicle car spaces;
- Temporary access to the northern basement will be via a ramp connected to the southern portion of the site via a temporary road running through the southern portion of the site connecting to The Retreat.
- Temporary connection of stormwater infrastructure tanks;
- Site clearing and preparation works, sewer and potable water works;
- Associated site landscaping, through site links, communal open space, mass planting and public domain works inclusive of natural water features; and
- Delivery of utility and services augmentation as required.

Stage 2

Stage 2 seeks consent for the construction and operation of development in the southern portion of the site, including:

- The construction and use of three mixed-use residential buildings identified as Buildings D, E and F, comprising:
 - Maximum building heights between 23.8m and 39.9m;
 - 279 residential units;
 - 28,540 sqm of residential GFA;
 - 374 sqm of non-residential GFA; and
 - 212 sqm of retail GFA (located at the ground level of Building E).
- Excavation works and construction of a shared three (3) storey basement to a depth of RL 56.35, with capacity for 336 vehicle car spaces;
- Connection and access of the Stage 1 basement to the western boundary; and
- Stormwater infrastructure;
- Associated bulk earth works, sewer and potable water works;
- Associated site landscaping, through site links, communal open space, mass planting and public domain works inclusive of water natural water features; and
- Construction of driveways to connect to the site's western boundary;
- Delivery of utility and services augmentation as required.

This EIS provides further description of the proposal in **Section 3.0**. The proposal will be undertaken in accordance with the Architectural Drawings prepared by DKO (**Appendix B**).

1.3 Objectives of the Proposal

The proposal will deliver residential accommodation and ground floor retail that responds to the site's unique context, designed to support the anticipated growth and demand for housing arising from the broader growth of Bradfield and the Aerotropolis. The key objectives of the proposal are summarised below:

1.3.1 Strategic objectives

- Deliver diverse housing typologies that can directly respond to the planned future growth of Bradfield in alignment with the structure of the draft Bradfield Masterplan
- Align with the strategic framework by providing residential development within close proximity to the Western Sydney International (Nancy-Bird Walton) Airport and within the Western Sydney Aerotropolis Core.
- The mixed-use development seeks to be consistent with the broader strategic vision as detailed in the Greater Sydney Region Plan by responding to the liveability principle and increasing the housing supply in the Western Parkland City.
- Support a mutually beneficial long term access outcome for the site and adjoining landowners.
- Provide a design that reflects the site's natural siting in Dharug Country through its approach to built form and character.
- Provide a variety of unit typologies that support a broad diversity of individuals and family compositions.
- Remain sympathetic to the site's transitional position adjacent to State heritage listed Kelvin Park Homestead and the future Bradfield City Centre.

- Align the development staging to correspond to the delivery of infrastructure within the precinct.

1.3.2 Design objectives

Heritage Transition

A built form and landscape carefully transitions between the scale of Thompson Creek, State heritage listed Kelvin Park Homestead and the larger massing of Bradfield City Centre and the Aerotropolis Core Precinct.

Living Option

Deliver a diverse range of living options for a growing precinct and population.

Establishing Connections and Permeability

Maximise walkability within a permeable, connected precinct.

Solar amenity and ground plane

Ensure adequate solar amenities are achieved for future residents and surrounding development.

High Quality Amenity

Facilitate high quality and diverse amenity spaces throughout the proposal inclusive of green open spaces, spaces for diverse physical activity and social connection.

Activation

Support fine-grain activation at the ground plane to support street activation, the day-to-day needs of residents and encourage social interaction without the need to leave the precinct.

1.3.3 Restrictions or Covenants

The site does not contain any known restrictions or covenants.

2.0 Strategic Context

This section identifies key strategic matters relevant to the assessment of the proposal, including the site's features, context, strategic context and other developments in the surrounding area. This section also provides an analysis of feasible alternatives that were considered in light of the proposal's objectives.

2.1 Site Location and Context

The site is located within Dharug Land, in the Liverpool Local Government area. The site is located within the Aerotropolis precinct. The Aerotropolis represents a new priority growth precinct designed to leverage off the Western Sydney International (Nancy-Bird Walton) Airport and Aerotropolis Metro – Western Sydney Airport.

Within the Aerotropolis, the site is located within the Aerotropolis Core. This precinct is planned to be a dense urban precinct around the Aerotropolis Metro Station comprising a commercial precinct for jobs, advanced manufacturing, and high technology to support up to 50,000 to 60,000 jobs. The Aerotropolis Core will also contain a residential sub-precinct in walking distance to the Metro or other public transport, Wianamatta-South Creek, and Thompsons Creek, in identified areas not impacted by significant aircraft noise.

The site's western boundary adjoins the Bradfield City Centre, of which a draft Master Plan has been prepared by the Western Parkland Authority (**WPCA**). The draft Master Plan is (at the time of writing) currently under assessment with DPHIE. Bradfield City Centre will contain the Bradfield Metro Station (which has commenced construction) and two advanced Manufacturing Research Facility buildings (one of which is approved and one of which is currently in planning).

The Bradfield City Centre more broadly, is planned to be the centre of the Aerotropolis Core precinct.

Figure 3 illustrates the site's current surrounding context.

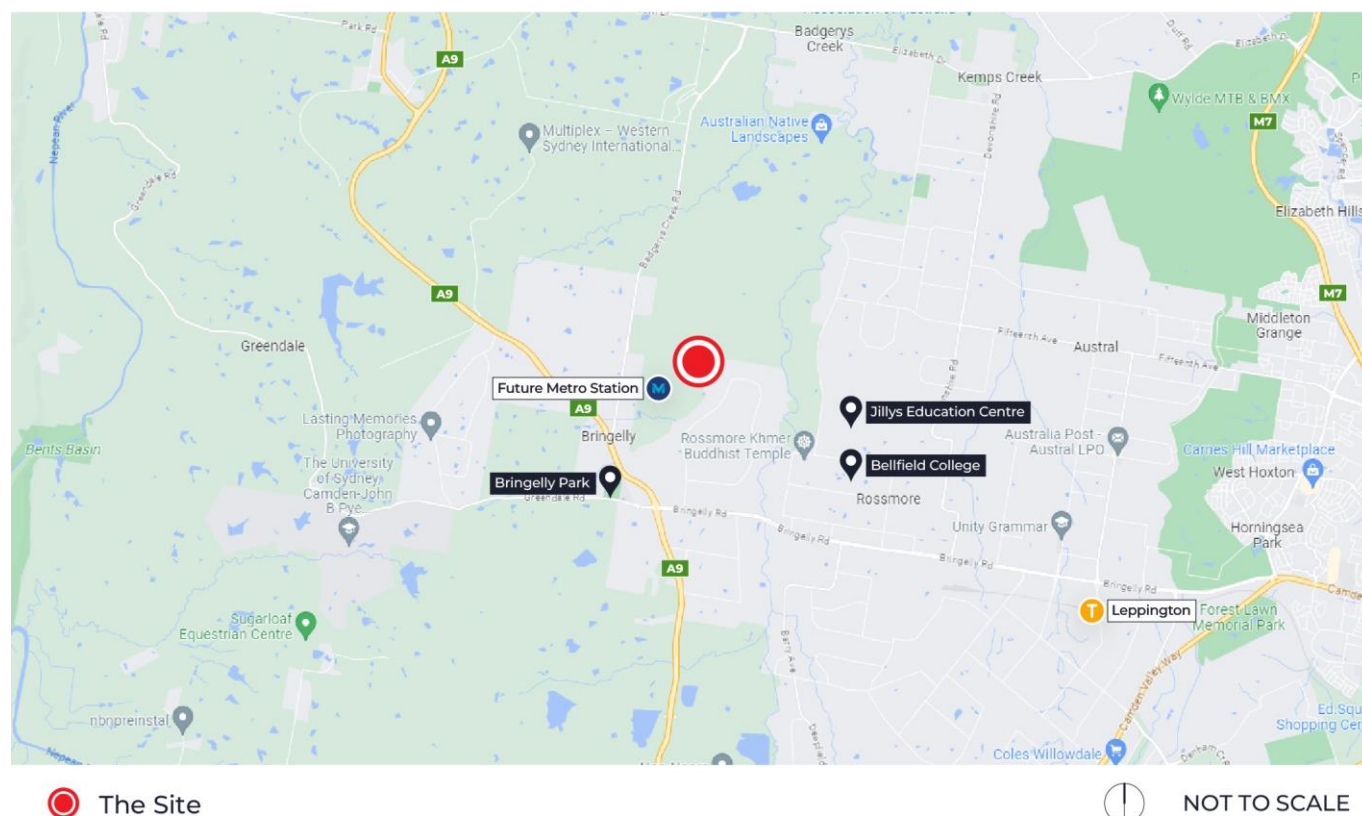


Figure 3 Site Context

Source: Ethos Urban

2.2 Site Description

The site comprises a single lot which is legally described as Lot 272 in DP 803167. A Survey Plan is provided in **Appendix K**. The site currently accommodates a large seven-bedroom detached dwelling with grass cover with sporadic trees and vegetation. The site contains sheds at the site's northern boundary. An aerial image of the site is provided in **Figure 4** and **Figure 5**.

A Preliminary Geotechnical Investigation by Intrax at **Appendix Q** was prepared for the proposal. The Preliminary Geotechnical Investigation found that the existing structures on site were built between 1994 and 2005. A review of historical imagery found that there were no signs of significant earthworks or construction other than the current development. The site area indicates that the surface geology is Triassic-aged Bringelly Shale. The Bringelly Shale is a member of the Wianamatta Group, typically comprising shale claystone, sandstone, laminate and less commonly coal.



Figure 4 Site aerial

Source: Nearmap, edits by Ethos Urban



Figure 5 Existing site conditions (viewed from south west corner looking north across the site)

Source: Nearmap, edits by Ethos Urban

2.2.1 Transport and Accessibility

The site currently facilitates pedestrian and vehicular access via The Retreat which is a cul-de-sac which connects to Kelvin Park Drive to the southeast. The Northern Road (A9) is located 1.7km southwest of the site. The M7 motorway is located 10km to the east of the site which links the M5 south-west with the M4 and the Hills M2.

2.2.2 Public Transport Access

The nearest train station is currently Leppington Station and is located 7km southeast of the site.

2.2.3 Stormwater and Flooding

The site is serviced by Sydney Water drainage infrastructure. The site is not located within a flood-prone area.

2.2.4 Utilities and services

AT&L has prepared a Civil and Utilities Infrastructure Report at **Appendix MM** and confirms the following services and utilities are located within the vicinity of the site.

- Potable water owned by Sydney Water;
- Electrical line owned by Endeavor Energy; and
- Telecommunications Telstra and NBN.

AT&L have confirmed that there is no sewerage or gas in the vicinity of the site.

2.3 Key features of site and surrounds

2.3.1 Existing surrounding development

Development to the west includes the Aerotropolis Metro Station (currently under construction) and the 'First Building', located in the Bradfield City Centre. Construction of the First Building is now underway.

Existing development to the north of the site comprises agricultural land largely devoid of development. 25 The Retreat to the southwest consists of a single residential property comprising a large home, shed, dam and maintained lawn. South of the site is The Retreat which provides access to the site's southern boundary (25 The Retreat). The property comprises a single residential property comprising a large home, shed, dam and sporadic trees and shrubbery. The property largely comprises a maintained lawn.

East of the site is the State Heritage listed 'Kelvin Park Homestead' which comprises multiple buildings of State heritage significance, maintained lawns and sporadic trees and shrubbery (refer to **Section 2.3.2**). Land further to the east beyond the homestead contains the Thompsons Creek Riparian Corridor. Development to the west (the Bradfield City Centre) includes the Bradfield Metro Station (currently under construction) and the Bradfield First Building which is also under construction.

2.3.2 Heritage

There are no known elements of Indigenous heritage on the site. Detailed testing and assessment has been undertaken as part of the EIS process.

The site is not identified as a heritage item under Schedule 2 (Environmental Heritage) of the Parkland City SEPP. The site is not located in a heritage conservation area.

As detailed above, the land to the immediate east of the site at 30 The Retreat, Bradfield (Lot 272 in DP 803167) contains a State heritage item (item no. I3) identified as the Kelvin Park Homestead, refer to **Figure 6** and **Figure 7**.



Figure 6 Aerial view of the site in relation to Kelvin Park Homestead as indicated in teal

Source: Urbis Heritage



Figure 7 *Kelvin Park Homestead main homestead structure*

Source: DKO

2.4 Bushfire

The site is located on the Liverpool Bushfire Prone Land map to contain (in part) Category 2 (buffer zone) Bushfire Prone Vegetation, see **Figure 8** below. Bushfire is assessed in greater detail in **Section 6.16**.

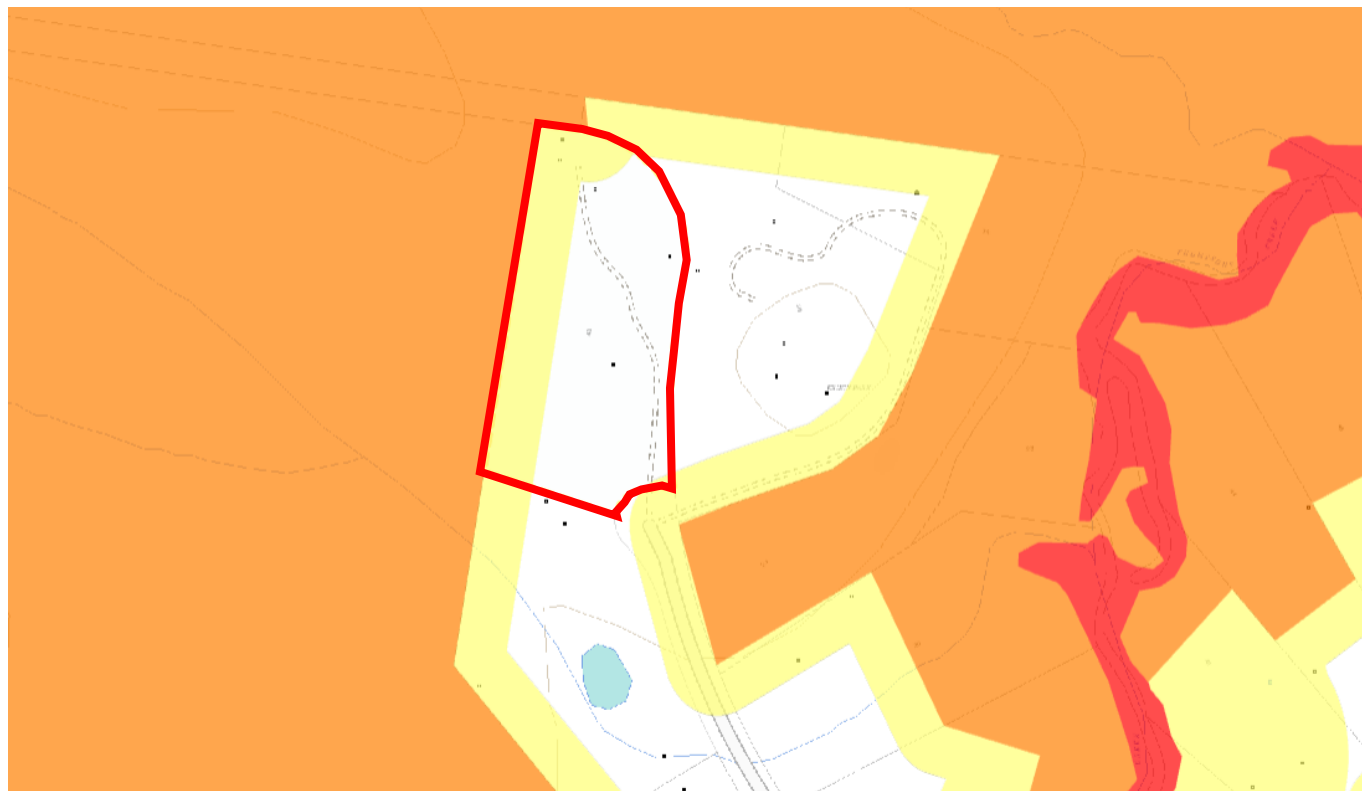


Figure 8 Bushfire mapping

Source: ePlanning Spatial Viewer

2.5 Future Surrounding Development

2.5.1 The Aerotropolis

The Aerotropolis (refer to **Figure 9** and **Figure 10**) is envisaged to become 'Australia's next global gateway', built around the world-class Western Sydney International (Nancy-Bird Walton) Airport. The Aerotropolis is expected to undergo transition and significant development to support the economic growth of the Parkland City over the next decade, using the new Western Sydney International Airport as a catalyst for growth.

The Greater Sydney Commission has established a clear, overarching vision for Sydney – A Metropolis of Three Cities. Historically, the emphasis on jobs, amenities, growth and infrastructure has been on two of the three – the Eastern Harbour City focused on the Sydney CBD and Central River City focused on Parramatta. The Western Sydney Airport is the catalyst for much of Western Sydney's future urbanisation.

As detailed previously, within the Aerotropolis, the site is located within the Aerotropolis Core precinct. This precinct is planned to be a dense urban precinct around the Aerotropolis Metro Station comprising a commercial precinct for jobs, advanced manufacturing, and high technology to support up to 50,000 to 60,000 jobs. The Aerotropolis Core will also contain a residential sub-precinct in walking distance to the Metro and other public transport, Wianamatta-South Creek, and Thompsons Creek, all identified areas not impacted by significant aircraft noise.

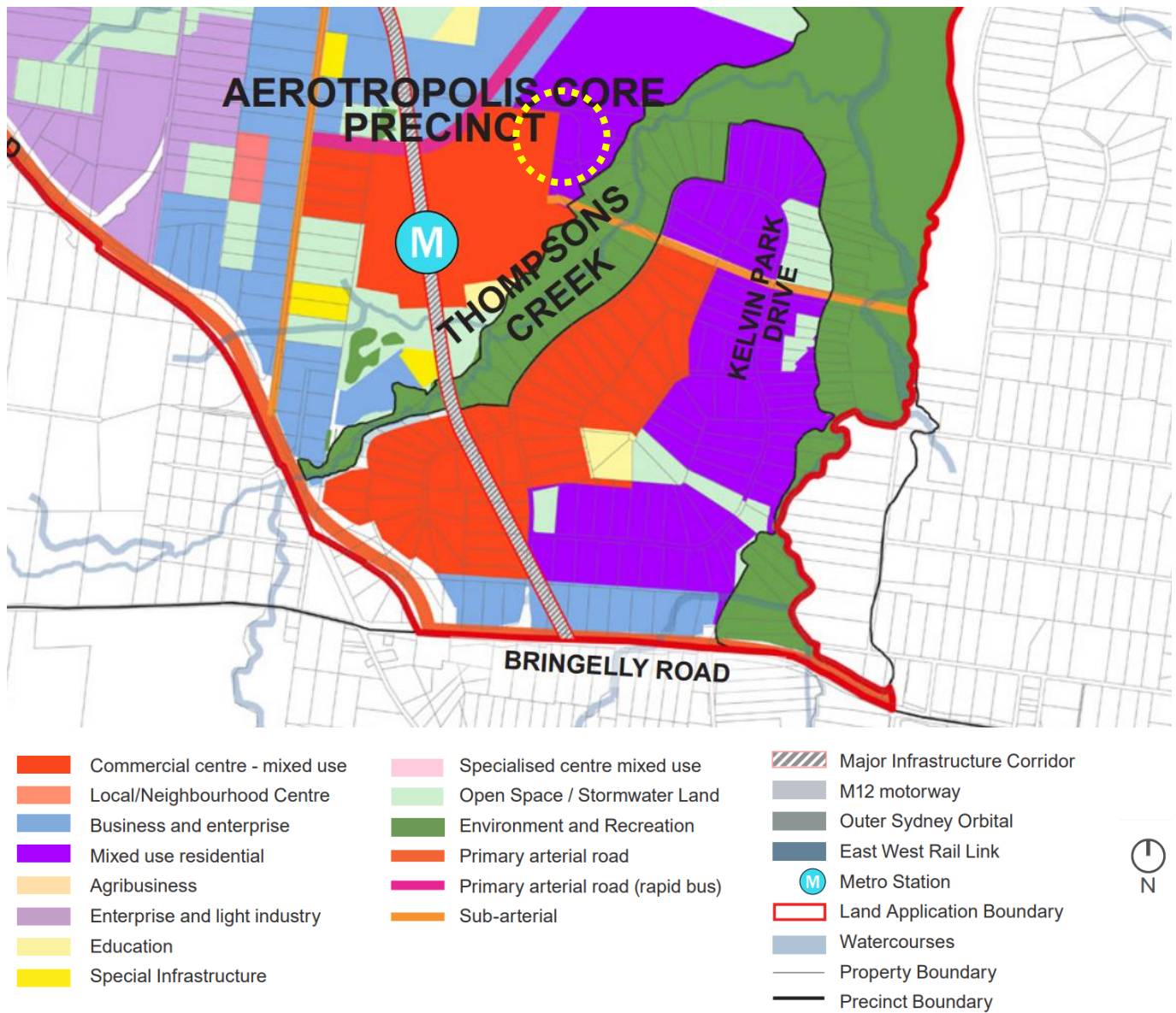


Figure 9 Aerotropolis land use and structure plan – Aerotropolis Core precinct with site shown in yellow circle

Source: NSW DPHI Transport

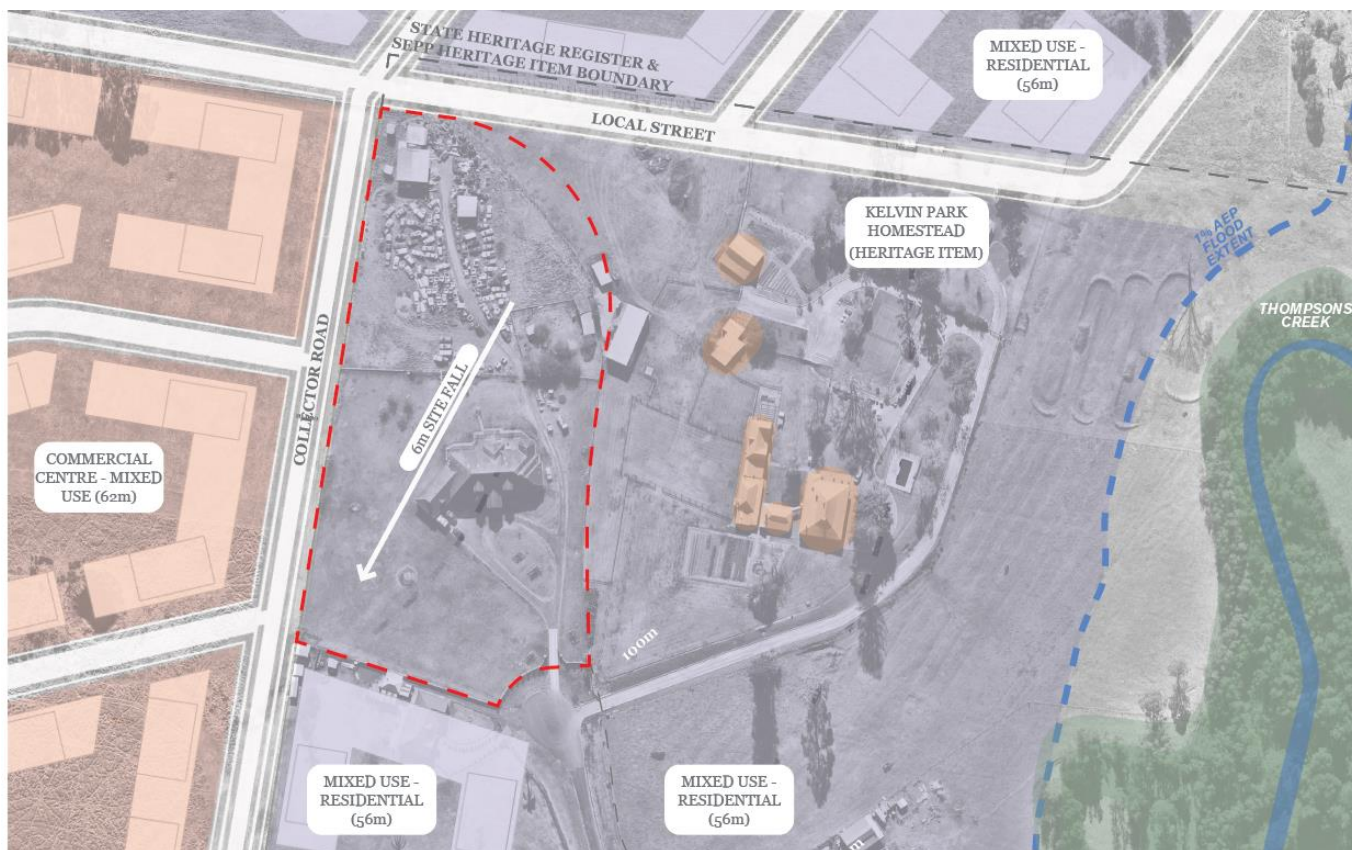


Figure 10 Surrounding land uses and building heights under the Aerotropolis Precinct Plan

Source: DKO

Aerotropolis Metro Station

The Aerotropolis Metro Station will be located east of Badgerys Creek Road within the Bradfield City Centre serving the heart of Western Sydney Aerotropolis. There will be two entrances, one on the eastern side and another on the western side of the station. The Aerotropolis Metro Station will become a major transport interchange providing essential connectivity to the future new central business district of the Western Sydney Parkland City.

The Fifteen Avenue Smart Transit (FAST) Corridor

The FAST Corridor is a key initiative of the Liverpool City Council to deliver a high-quality public transport link between the Liverpool Central Business District (CBD) and the Western Sydney International Airport. Once completed, the framework will provide rapid transport connection between the Western Sydney International Airport, the new Aerotropolis and Liverpool's CBD. FAST is located north of the site and will be a primary arterial bus corridor running east-west within the Bradfield City Centre.

The 19km corridor could accommodate fast and efficient transport services such as zero emissions rapid buses, trackless trams, light rail, and alternative modes of transport such as car sharing. The highspeed transits will accommodate low-speed urban 'super stops' at centres, and prioritise walking, cycling and micro-mobility with segregated shared paths and local landscaping.

2.5.2 Bradfield City Centre

Land to the west of the site will comprise the Bradfield City Centre that has been subject to a master planning process by the WPCA. As detailed previously, the City Centre will also include the new Aerotropolis Core Metro Station which is currently under construction.

Construction of the Bradfield City Centre is underway. This includes work on the First Building, as well as first stage civil and enabling works on new roads and utility services. The First Building is due for completion in early 2024. In November 2021 an SSDA was submitted to the Department which will comprise advanced manufacturing research and development facility. Approval was granted in September 2022. This work will provide the foundation for the Bradfield City Centre which will continue to grow and evolve over the next 30 years.

The Second Building (located at 215 Badgerys Creek Road, Bradfield) will provide services, specialist equipment and workspaces for small to medium enterprises (SMES) and start-ups, large multinational companies, government, and research institutions to collaboratively develop and commercialise projects and products that can be supplied to key emerging sectors, such as defence, space and cleantech.

Key features of The Bradfield City Centre will include 36 hectares of public domain, 60 hectares of land prepared for development, a visitor centre and high-tech research facility, a digitally enabled city centre, commercial and community facilities, a plaza adjacent to the new metro station and dining, entertainment and leisure infrastructure.

Land to the further north of the site (approximately 1.8 kilometres) on land identified as 475 Badgerys Creek Road (also known as the Inghams Estate) is, similar to the Bradfield City Centre, currently undertaking a master planning process which will facilitate predominately enterprise and light industrial redevelopment of this land holding.

Bradfield City Centre Master Plan

As detailed above, land to the immediate west of the site forms part of the Bradfield City Centre. This landholding is currently the subject of a master planning process, prepared in accordance with Part 4.7 of State Environmental Planning Policy (Precincts—Western Parkland City) 2021. The master plan (known as the draft Bradfield City Centre Master Plan) was placed on public exhibition between Monday 5 February and Monday 4 March 2024 and is (at the time of writing) subject to assessment by the Department.

The Master Plan seeks to enhance and amend the Aerotropolis Precinct Plan as it applies to Bradfield City Centre and provide further, more refined objectives and controls for the City Centre's redevelopment.

The Applicant remains generally supportive of the overall principles and vision for the Bradfield City Centre as presented in the draft Bradfield City Council Masterplan – specifically the focus on providing for mixed-use development outcomes, increased opportunities for integration with public and active transport, as well as adopting a landscape-led approach that contributes to the establishment of a blue-green infrastructure framework for the wider Aerotropolis region.

Notwithstanding this, the draft Master Plan has put forward a revised local road network that alters the established local road network under the existing Aerotropolis Precinct Plan (refer to **Figure 11**). Importantly, this revised layout results in a diminished ability for the orderly development of the site (being 40 The Retreat, Bradfield) as it foresees the extension of three local roads running through the site. Ultimately, this results in a 43% reduction of developable area for the site. Importantly, the proposed layout would:

- Cut through three private landowners (including the site) to the east of the master plan area;
- Result in reduced developable areas for these landowners, forcing their redeveloping into taller, narrower forms which ultimately hinders the precincts ability to provide a height transition to the State heritage listed Kelvin homestead; and
- Reduce vehicular traffic flow.



Figure 11 Revised local layout proposed under the draft Bradfield Master Plan and implications for the site

Source: DKO

Following submission to the draft Master Plan by the applicant during its exhibition period and ongoing consultation with the WPCA, the applicant put forward to the WPCA and Department a revised local road network for the portion of the Master Plan that adjoins the site's western boundary (refer to **Figure 12**).

This suggested amendment to the local road network retains the urban intent of the draft Master Plan and retains all location of all collector roads. The suggested amendment supports a single local road adjacent to the site's western boundary to support vehicular access to the site. For the WPCA, this layout also consolidates two irregular lots, making them more suitable for redevelopment.

This revised layout has obtained in principle support from the WPCA with the applicant committed ongoing collaboration with the WPCA and the Department. Further assessment of this matter is provided in **Section 6.0** of the EIS.



Figure 12 Alternative local layout proposed by the applicant of 40 The Retreat Bradfield

Source: DKO

2.6 Strategic Planning Context

The relevant strategies, environmental planning instruments, policies and guidelines are discussed in **Table 2**.

Table 2 Summary of Strategic Context

Strategic Plan	Strategic Context
Greater Sydney Region Plan – A Metropolis of Three Cities	The Greater Sydney Region Plan – A Metropolis of Three Cities (Region Plan) prepared by the then Greater Sydney Commission (GSC) is the overarching strategic plan to manage change and growth in the Greater Sydney Region. It sets a 40-year vision where most residents live within 30 minutes of their jobs, education and health facilities, services and great places. The proposal's primary function is to provide residential development. The residential development will service the needs of the Western Sydney International (Nancy-Bird Walton) Airport and Western Sydney Aerotropolis (WSA) workforce. The proposal is consistent with the broader strategic vision as detailed in the Greater Sydney Region Plan, namely by responding to the liveability principle and increasing the housing supply in the Western Parkland City. The proposal will deliver residential development that connects to its surrounding heritage and natural environmental landscape. The proposal is consistent with the relevant objectives of the region plan: • Objective 7: Communities are healthy, resilient, and socially connected – The proposal promotes physical and mental health through its landscape led approach, highly vegetated ground level and green spaces in the upper levels. Further the proposal fosters social interaction through the incorporation of amenity areas throughout the development as well as the retail component of the development. • Objective 10: Greater housing supply – The proposal will deliver a range of homes for a variety of family sizes. • Objective 30: Urban tree canopy is increased – The proposed will significantly increase the canopy coverage of the site. 38% canopy coverage will be achieved.
Western City District Plan	The Western City District Plan (District Plan) builds upon the Regional Plan's vision, objectives, and strategies to provide a 20-year plan to manage growth in the Western Sydney District. The District Plan places significant emphasis on the (Western Sydney Aerotropolis) WSA as a driver for growth within the region. In particular, the proposal will support high-quality residential development and communal open space within the WSA and will provide economic flow-on benefits to surrounding future employment development. The proposal is consistent with the relevant objectives of the District Plan: • Planning Priority W4 - Fostering healthy, creative, culturally rich and socially connected communities - The proposed mixed- residential development will foster a healthy community through its landscape led approach. The highly vegetated site will encourage immersion into the natural landscape and encourage social interaction. Amenities for residents include a gym, pool and wellness centre which encourage physical and mental health. The communal open space in the upper levels further encourages immersion into green spaces that are easily accessible to residents living in the upper levels of the development. • Planning Priority W5 - Providing housing supply, choice and affordability, with access to jobs, services and public transport - The proposed mixed- use residential development provides diverse housing sizes to accommodate a range of family types in close proximity to the Aerotropolis Metro Station (currently under construction). • Planning Priority W12 - Protecting and improving the health and enjoyment of the district's waterways - The proposed siting of the building has been positioned to allow the natural flow of water through the site. The Water and Stormwater Management Plan (Appendix X) adequately details the management of water to accommodate the proposed mixed-use residential development. • Planning Priority W15 - Increasing urban tree canopy cover and delivering Green Grid connections - The proposal will significantly increase the canopy coverage of the site. The landscape led approach will result in a highly vegetated site that is 100% made of up native flora species. The green open spaces are scattered throughout the development, particularly at the ground level and also throughout the upper levels through the incorporation of podium gardens. • Planning Priority W16 - Protecting and enhancing scenic and cultural landscapes - The proposed mixed-use residential development maintains views to Kelvin Park Homestead and Thompsons Creek through the careful positioning and orientation of buildings. • Planning Priority W18 - Delivering high quality open space - The proposed mixed-use residential development will provide extensive public spaces that are welcoming, green and can facilitate a range of physical activities.

Strategic Plan	Strategic Context
Western Sydney Aerotropolis Plan 2020	The site is located within the Aerotropolis Core Precinct. The proposal is consistent with the key considerations within the Plan, including; • Supporting the investment of the new Aerotropolis Metro Station through facilitating residential development and public spaces and bringing homes closer to transport and employment areas. • Providing medium-density housing in walking distance to public transport with appropriate amenities to support the centre and integration of commercial and employment communities. The proposed mixed-use residential development has been designed in accordance with the following objectives: 2.1.1 Starting with Country Objective 2.1.1 aims to integrate Country into the Aerotropolis and influence planning, urban design, and landscape management. The project team has engaged Hardy Hardy to ensure that Country is embedded into the proposed mixed-use residential development. The mixed-used residential development has been designed through a landscape led approach as advised by the Dharug custodians. The building facades, materials and flora elements have been chosen to represent elements of Country. Section 3.3 and the Connecting with Country Report at Appendix RR further detail the Country led approach. 2.3 Designing a cool, green new city with great places Objective 2.3 aims for the Aerotropolis to be a vibrant urban centre with great connection and a mix of uses in appropriate locations. The proposed mixed-use development will be highly vegetated at the ground level, it will facilitate 38% canopy coverage and 33% deep soil. The total landscaped area of the development will be 10,345 sqm. Throughout the upper levels of the development, podium levels will facilitate green communal open spaces to ensure greenery is scattered throughout the upper levels of the mixed-use residential development. All landscaped areas will deliver high-quality open space. The ground level landscaped areas will deliver through site connections to the existing and future surrounding development. 2.5 Retaining a green, biodiverse landscape Objective 2.5 aims to incorporate native plants and animals into the Aerotropolis landscape. The Connecting with Country approach to the proposed mixed-use residential development has facilitated a biodiverse landscape. The proposed vegetation comprises 100% native vegetation with the intention of reintroducing native plants to the site. The siting of buildings has been strategically positioned to allow the natural flow of water through to the site.
Western Sydney Aerotropolis Precinct Plan	The Aerotropolis Precinct Plan (Precinct Plan) provides place-based objectives and requirements to guide development in the Aerotropolis in a consistent and sustainable manner over time. The proposed mixed-use residential development is consistent with the following objectives in the Precinct Plan: 2.1 Precinct Plan Objectives • ‘Start with Country’ by promoting access to Country and designing the Aerotropolis through a process that includes Aboriginal people. The proposed mixed-use residential development has been designed through a Country led approach. Hardy Hardy was engaged by the developer to engage Traditional Custodians local knowledge holders. The Connecting with Country approach informed the landscape led approach and the overall design of the proposed mixed-use residential development. This has resulted in a design that celebrates Country and is sensitive to the Dharug land of which the site located. Section 3.3 and the Connecting with Country Report at Appendix RR further detail the Connecting with Country approach to the development. • Celebrate culture by reflecting the cultural landscape and continuous connection of Aboriginal people and Country through: a. the design of the public domain; b. preservation and rehabilitation of the natural environment and systems; c. the alignment of movement networks with culturally significant spaces; d. the design of buildings; The proposed mixed-use residential development will reintroduce native species to the site through the use of native flora species, this seeks to reintroduce native animals to the site. The Connecting with Country approach (detailed further in Section 3.3 and the Connecting with Country Report at Appendix RR) has influenced the entire development and reflect elements of Country in all aspects including the building facades and materials, the positioning of buildings around the natural flows of water, the landscape orientated design and choice of exclusively native vegetation. • Facilitate quality and innovative development to provide for a variety of employment uses that grow and diversify the economy of the Western Sydney Parkland

Strategic Plan	Strategic Context
	The proposal is predominantly residential. However, the ground level incorporates two retail tenancies to support the economy of the broader Western Sydney Parkland. The residential development within the Aerotropolis Core is essential to supporting the future intended uses of the Aerotropolis Core which is likely to contain a mix of uses. The proposed mixed-use residential development will facilitate homes near employment uses that will be highly accessible via active transport modes and the Aerotropolis Metro Station (currently under construction). • Implement a landscape-led approach to designing the Aerotropolis, utilising the blue-green grid and natural topography of the Aerotropolis as the defining elements The proposed mixed-used residential development has adopted a landscape led approach informed by the Connecting with Country approach. The proposal has incorporated the natural flow of water through the site through the strategic positioning of buildings. The vegetated areas of the site comprise 100% native species as detailed in the Landscape Plan at Appendix J. 2.2 Aerotropolis Core • Enable residential development as part of a diverse mixed use sub-precinct in areas that are not impacted by airport noise and that benefit from proximity to Wianamatta-South Creek and Thompsons Creek The proposed mixed-use residential development focuses providing residential development in the Aerotropolis Core. The site benefits from a location that is close to Thompsons Creek and will not be impacted by aircraft noise.
Future Transport 2056	Future Transport 2056 emphasises the key role transport has in supporting new economic and social opportunities, particularly supporting the development of the Western Parkland City, the Aerotropolis and surrounding lands, including the location of the site. The strategy reaffirms the proposal's vision to be highly connected to the Airport, WSA and the wider Western Sydney Region. The proposed mixed-use residential development will be in close proximity to the Aerotropolis Metro Station (currently under construction). The future residents will be encouraged to utilise the public transport connections and green modes of transport. The site facilities connections to the future regional cycle way located to the southeast of the site through the proposed through site links.
Liverpool Local Strategic Planning Statement (LSPS) 2020	The LSPS 2020 identifies the Western Sydney International (Nancy-Bird Walton) Airport and WSA as major drivers of employment and economic growth within Liverpool. The LSPS also highlights the importance of high-quality accessible living spaces that are supported by communal open space and infrastructure-aligned growth.

2.7 Proposal Justification

The proposal is consistent with the overarching objectives of the relevant strategic plans, policies and guidelines, see **Section 2.6** above. It will facilitate a mixed-use development inclusive of retail and residential development and provide residential development in the Aerotropolis Core. Any potential impacts of the proposal are acceptable and can be managed through the proposed mitigation measures or conditions of consent.

Overall, the proposal can be justified for the following reasons:

- The proposal has been prepared in alignment with the overall vision for the Aerotropolis articulated in the *Western Sydney Aerotropolis Plan 2020*.
- The proposal meets the general objectives of the Aerotropolis Core precinct under the Western Sydney Aerotropolis Plan (May 2023).
- The proposal meets the aims of Clause 4.1 and land use objectives under Chapter 4 of *State Environmental Planning Policy (Precincts—Western Parkland City) 2021*.
- The proposal meets the land use objectives of the Mixed Use Zone of which the site is located.
- The proposed massing has been shaped to respect and maintain the natural ground plane for local ecosystems and ensure the natural flow of water corridors across the site can continue.
- The proposed buildings have been strategically stepped in height as a response to the site's context, scale, and solar access to amenities.
- The proposal will deliver diverse typologies that respond to the sites context and foster small communities within the site that encourage social interaction through the provision of shared spaces and amenities.

- The tiering of massing enables visual connection to the greater context of Thompsons Creek, Kelvin Park Homestead, and the Cumberland Plains Woodlands.
- Deep soil and landscaping have been maximised at the site's eastern boundary to ensure the Kelvin Park edge is blended with the site's future urban context.
- Public permeability has been maximised through the various site links.

Consistent with the vision for the site, the proposal will make an economic contribution to the WSA by providing high-quality housing with ancillary open space and retail to maximise ground floor activation. This accords with the site's designation (under the Aerotropolis Precinct Plan Land Use Plan) for development that is predominately residential in nature and can support residential neighbourhoods in highly accessible locations that can support the housing needs of the Aerotropolis future workforce.

2.8 Cumulative Impacts

The proposal will deliver significant benefits the Western Sydney Aerotropolis and is not expected to give rise to any unacceptable or cumulative environmental impacts that cannot be appropriately managed. The proposal will be delivered in accordance with the planning sequencing for the Aerotropolis, which has been designed by key government stakeholders in line with the infrastructure priorities of the Aerotropolis.

The nearby relevant proposals that have the potential to result in cumulative impacts are identified in **Table 3** below.

Table 3 *Surrounding Future Development Summary*

Development	Description	Location	Status
Western Sydney Airport	Western Sydney International will be a world-class smart airport, built to service 10 million passengers.	Badgerys Creek, approximately 6.5km northwest of the site.	Under Construction. Anticipated to open in 2026.
Aerotropolis Metro Station	Aerotropolis Station will become a major transport interchange, providing important connectivity to the future new central business district of the Western Parkland City.	East of Badgerys Creek Road.	Under Construction. Anticipated to open in 2026.
Bradfield City Centre	The Bradfield City Centre will be a cyber-secure, advanced, green and connected hub for advanced industries.	Within the Western Sydney Aerotropolis, at the sites western boundary.	Master plan under assessment.
First Building Bradfield City Centre	The First Building will be an advanced manufacturing research and development facility.	215 Badgerys Creek Road, Bradfield. Within the Bradfield City Centre.	Under construction.
Second Building Bradfield City Centre	Second Building will be an advanced manufacturing research facility.	215 Badgerys Creek Road, Bradfield. Within the Bradfield City Centre.	Preparing EIS.
Central Park, Bradfield City Centre	Central Park will be the main civic gathering space and welcoming point for visitors in the Bradfield City Centre.	Lot 3101, DP 1282964. Within the Bradfield City Centre.	Preparing EIS.

An assessment of the cumulative impacts associated with these proposals are considered under the relevant issue in **Section 6.0**.

2.9 Analysis of Alternatives

As part of the early investigations for redevelopment, options were considered in arriving at the current project. These included:

2.9.1 Do Nothing

Leaving the site unchanged would result in a missed opportunity to realise the vision of the site as a high-quality residential development that would support the developing Aerotropolis Core Precinct. The development supports the operation and employment outcomes of the WSA by providing homes close to future jobs. 'Doing

nothing' would be inconsistent with the envisaged outcomes for the Site in accordance with the new strategic planning framework for the Aerotropolis.

2.9.2 Use of the Site for an Alternative Purpose

There are no realistic alternative uses for the site that are consistent with the vision outlined in the Western Sydney Aerotropolis Precinct Plan other than mixed-use residential. The Aerotropolis Precinct Plan makes clear the desired use of the Site is for residential mixed-use that focuses on establishing predominantly residential neighbourhoods in proximity to metro/mass transit nodes and accessible areas.

3.0 Project Description

3.1 Project Overview

This chapter of the report provides a detailed description of the proposal. This SSDA seeks consent for the design, construction, and use of the proposal. The development will be delivered in two separate stages (as shown in **Figure 13**). In its ultimate form, the proposal will provide:

- A total of 533 residential units across six individual buildings;
- 647 car parking spaces across two separate individual basements, including 61 accessible spaces;
- A total GFA of 55,330 sqm; and
- Two points of vehicular access, and a point of pedestrian drop off at the site's western boundary.

Stage 1

Stage 1 seeks consent for construction and operation of development primarily in the northern portion of the site, including:

- The construction and use of three mixed-use residential buildings identified as Buildings A, B and C, comprising;
 - Maximum building heights between 30.4m and 39.8m;
 - 254 residential units;
 - 25,744 sqm of residential GFA;
 - 248 sqm of non-residential GFA;
 - 212 sqm of retail GFA (located at the ground level of Building B).
- Excavation works for the construction of the northern basement carpark for a shared two (2) storey basement to a maximum depth of RL 60.60, with capacity for 311 vehicle car spaces;
- Temporary access to the northern basement will be via a ramp connected to the southeastern corner of the site via a temporary road running through the southern portion of the site connecting to The Retreat.
- Temporary connection of stormwater infrastructure tanks;
- Site clearing and preparation works, sewer and potable water works;
- Associated site landscaping, through site links, communal open space, mass planting and public domain works inclusive of natural water features; and
- Delivery of utility and services augmentation as required.

Stage 2

Stage 2 seeks consent for the construction and operation of development in the southern portion of the site, including:

- The construction and use of three mixed-use residential buildings identified as Buildings D, E and F, comprising;
 - Maximum building heights between 23.8m and 39.9m;
 - 279 residential units;
 - 28,540 sqm of residential GFA;
 - 374 sqm of non-residential GFA; and
 - 212 sqm of retail GFA (located at the ground level of Building E).
- Excavation works and construction of a shared three (3) storey basement to a depth of RL 56.35, with capacity for 336 vehicle car spaces;
- Connection and access of the Stage 1 basement to the western boundary; and
- Stormwater infrastructure;
- Associated bulk earth works, sewer and potable water works;
- Associated site landscaping, through site links, communal open space, mass planting and public domain works inclusive of water natural water features; and
- Construction of driveways to connect to the site's western boundary;

- Delivery of utility and services augmentation as required.



Figure 13 Project staging plan

Source: DKO

The proposal is discussed further in the following subsections and detailed within the Architectural Drawings prepared by DKO at **Appendix B** as well as the Landscape Plans prepared by Arcadia at **Appendix J**. Photomontages of the proposal are provided in **Figure 14** to **Figure 16** below.



Figure 14 View of the proposal from Kelvin Park Homestead, looking west

Source: DKO



Figure 15 *South western corner perspective of the proposal*

Source: DKO



Figure 16 *Through site link perspective of the proposal*

Source: DKO

3.2 Key Project Information

3.2.1 Project Area

The project area is inclusive of the entirety of 40 The Retreat Bradfield (Lot 272 in DP803167). The proposal will be located wholly within the site boundary. The technical and environmental assessments undertaken to support the development assess all the land located within the site boundary.

3.2.2 Project Details

The key details of the proposal are outlined in **Table 4**.

Table 4 *Key Project Details*

Component	Description	
Proposed Land Use	Residential accommodation and retail premises	
Legal Description	Lot 272 in DP803167	
Site Area	20,907 sqm	
GFA per Stage	Stage 1	Stage 2
	Residential: 25, 744 sqm	Residential: 28,540 sqm
	Non- residential: 248 sqm	Non-residential: 374 sqm
	Retail: 212 sqm	Retail: 212 sqm
Total GFA	55,330 sqm	
FSR	2.65:1	
No. Residential Units	533, including 54 adaptable units	
Maximum Height(s)	Building A: RL 109.30 (eleven storeys) Building B: RL 107.57 (eleven storeys) Building C: RL 111.50 (eight storeys) Building D: RL 92.55 (six storeys) Building E: RL 105.51 (eleven storeys) Building F: RL 103.95 (ten storeys)	
Basement Car spaces	Stage 1	Stage 2
	311	336
	Total: 647	
Motorcycle Spaces	Stage 1	Stage 2
	30	32
	Total: 62	
Bicycle Spaces	Stage 1	Stage 2
	Residential: 254	Residential: 280
	Visitor: 25	Visitor: 28
Total Communal Open Space	10,282 sqm (49%)	
Total Deep Soil	6,807 sqm (33%)	
Total Landscaped Area	10,345sqm (50%)	

Component	Description
Total Site Canopy Coverage	7,923 sqm (38%)
Capital Investment Value	\$206,692,916 million (excluding GST). Refer to the Capital Investment Value Letter prepared by Newton Fisher (Appendix QQ).

3.3 Connecting with Country

Development in the Aerotropolis must consider the *Recognise Country: Draft Guidelines for development in the Aerotropolis*, published in October 2021. The project team has engaged Hardy Hardy to ensure these guidelines are considered and to ensure Connecting with Country is embedded in the development early as possible as part of the design process.

A summary of the Connecting with Country process to date is summarised by the Designing with Country Report prepared by Hardy Hardy (refer to **Appendix RR**).

As recognised by the SDRP, the SSDA has taken a landscape-led approach informed by the design principle 'Start with Country'; which has informed the proposal's built form and character. The proposal will further consider propagating seeds from the Grandmother Tree prior to the construction stage of the project. This was advised by the Dharug custodians for use in the landscape design. The SSDA process has continuously referred to the Draft Connecting with Country framework on the Government Architect New South Wales (GANSW) website to guide the development and will continue to do so after following the submission of the application.

3.3.1 Walking in Country

Walking in Country occurred on 26 October 2023 and facilitated the design team to acquire Indigenous knowledge to then inform the proposed design. Walking on Country provided a crucial opportunity to learn and respect the deep connection and concern Dharug people have for their Country. This invaluable knowledge is essential for creating designs that are culturally sensitive, connected, and sustainable.

Walking Country is a crucial step in connecting and designing with Country because it involves physically immersing all senses in all elements of Country. Engaging with geology and meeting the water that is informing the design principles is essential in building a relationship to care, design, nurture, and belong, with and to Country. From a Dharug perspective, this is best practice and an essential step that cannot be missed.

Walking as a team, the applicant, members of the SDRP and design team were led by the Dharug Traditional owners through Country. This provided an opportunity to ensure active listening and immersion into the oldest continuous living culture on Earth. This process facilitated stronger relationships and cross-pollination, bringing together collective wisdom for the greater good of humans, non-humans, and more-than-humans, ensuring inclusivity for a more holistic architectural response that brings an active voice to all manifestations of Country, not a passive backdrop.

The Connecting with Country framework and Walking in Country process informed the design principles that has been adopted to ensure the objectives for the proposal are achieved (refer to **Section 3.4** below).

3.4 Design Principles

The following design principles and urban approaches have been adopted to ensure the overall vision and objectives for the site and project are achieved. The design approach to the proposal is grounded by four overarching design principles. These principles were deeply developed based on the Connecting with Country framework and process undertaken:

- **Regeneration: remembering Place Dharug Nguraa**
 - Restoring the presence of indigenous species to their rightful place.
 - Revitalise natural habitats by restoring water access.
 - Reuse materials taken from the land.
 - Reconnect with the land to nurture fertility and endemic food sources.
 - Reconnect and regenerate endangered species through landscaping.
 - This will encourage sounds of belonging to remain.

- **Ridges and Valleys: rejuvenation of bioregional Cumberland Plain**
 - Understanding the geology and history of the land.
 - Respecting natural levels.
 - Place for respite, shelter and hiding.
 - Meandering connections for navigating Country and Place.
 - Protect and maintain important sightlines.
- **Interconnected relationality: Ground Plane Suitable for Bioregional Area**
 - Elder Tree connected to living systems.
 - Everything is interconnected.
 - Nothing in the natural world is separate, therefore buildings should not cause separateness.
 - The connection of humans and non-humans is essential for belonging.
 - Yarning to build relationships, between humans, non-humans and more than humans.
 - Make residents feel part of the local community.
 - Sounds of belonging are connected to wellbeing.
- **Memory of Place: Shared communities of Humans and non-humans**
 - Sense of belonging.
 - Feeling of safety.
 - Memory comes through materiality and form.
 - Material palette will speak to Country and Place.
 - Sharing of stories to listen to the land.
 - Letting Country guide the feeling and memories.
 - Reflecting on intertwined Aboriginal and colonial history for healing.

3.5 Site Preparation Works

Site preparation works are proposed to facilitate the proposal. This includes demolition of all existing building structures on site and tree removal. These works will occur across the entirety of the site during Stage 1 to support the construction of the Stage 1 basement and vehicular access from The Retreat.

3.5.1 Tree Removal

The exiting vegetation on the site includes lawn, shrubs, and small trees. Like detailed above, all existing vegetation on the site will be removed in Stage 1 in accordance with the Arboricultural Impact Assessment (**AIA**) by Creative Planning Solutions (CPS) at **Appendix W**. Overall, a total of 15 trees are proposed to be removed and one to be retained (refer to **Figure 17**). Of the 15 trees proposed to be removed, each have been assessed as having low retention value.

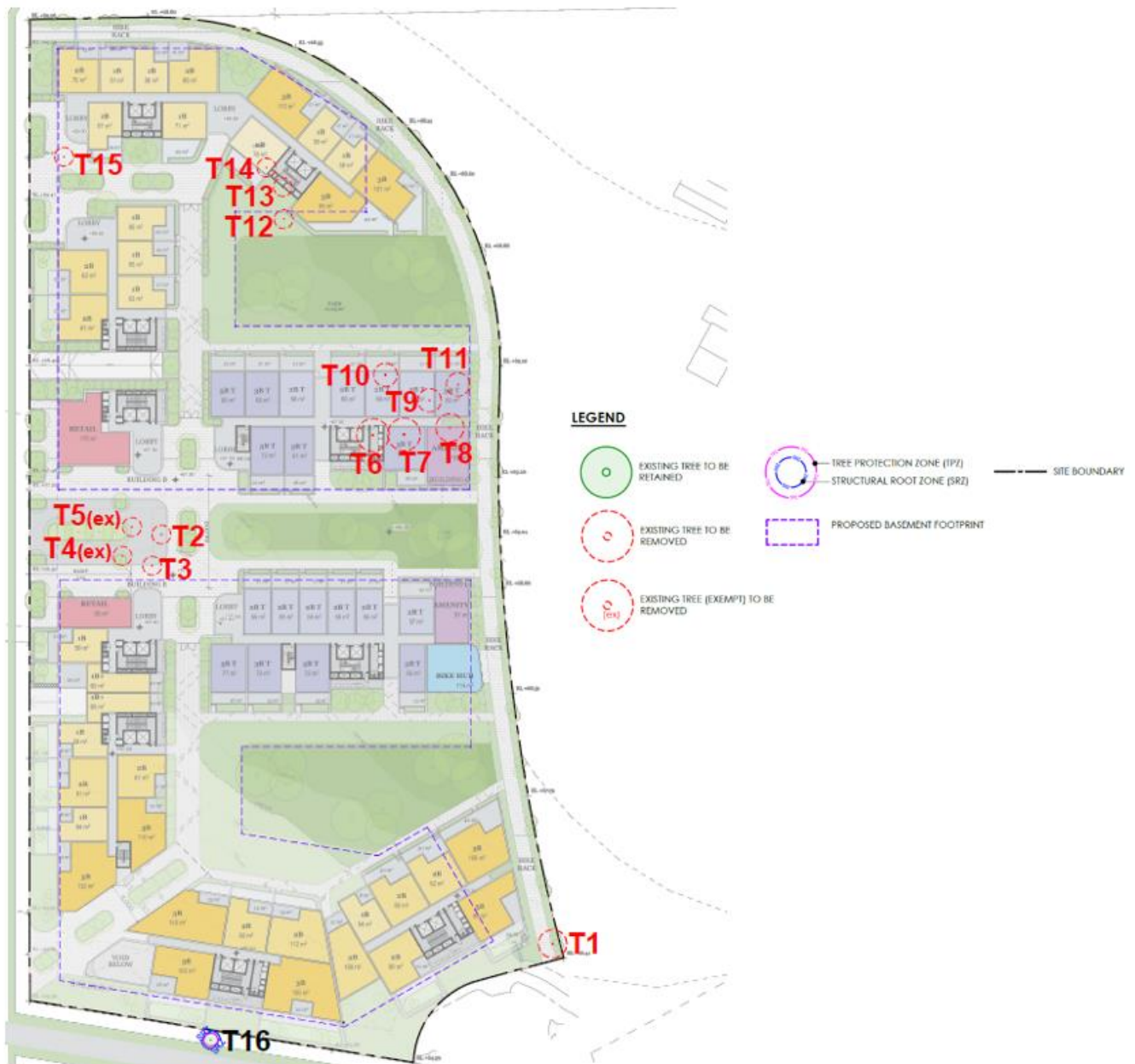


Figure 17 Tree retention and removal plan

Source: CPS

3.5.2 Earthworks

Excavation and bulk earthworks will be required to accommodate the three basement levels. The majority of the site will be excavated up to 8.5 metres. The proposed earthworks volumes are summarised in **Table 5**.

Table 5 Proposed Earthworks

Item	Volume
Net Cut (including top soil stripping)	- 118, 938
Net Fill	+ 1008
Balance	- 117,930 (export required)

3.6 Layout and Built Form

The general arrangement of form across the site is shown in **Figure 18**. The built form reflects the surrounding context and the desired future character of the site. The built form is primarily concentrated at the site's western boundary creating a substantial street presence and an activated street frontage. The tallest components of the site will reach a maximum of 11 storeys at the western boundary. The tallest buildings will be Buildings B and E which form the gateway entrance into the site, having a maximum height of 39.80 metres and 38.22 metres respectively.

The built form considers permeability and daylight which results in an optimised form to generate a respectful interface to Kelvin Park Homestead. The form of the buildings have also been designed to allow sky views from the ground plane.

The massing gradually tapers down to the site's eastern boundary, which is adjacent to State heritage listed Kelvin Park Homestead, and beyond, Thompsons Creek. The built form accommodates a variety of massing, setbacks, and orientation to maximise amenity levels for future occupants.

Building A and Building F have been modulated to follow the curved northern and southern boundaries of the site. The buildings will comprise podiums at levels 4 and 5 to follow the natural topography of the land, sloping downwards towards Kelvin Park Homestead.

Building C and Building D include podiums at levels 2 and 8 which are designed to contribute to a reduction of bulk and scale. The buildings will each comprise nine storeys with communal open space at roof level.

The buildings will be significantly setback from each other to allow for extensive open space and landscaped areas at ground level. A Landscape Plan has been prepared by Arcadia and is provided in **Appendix J**. The proposed landscaping for the development is described in **Section 3.10**.

Further details regarding the built form, including the associated massing and design, are detailed within the accompanying Architectural Drawings (**Appendix B**) and Design Excellence Report (**Appendix E**) prepared by DKO.



Figure 18 Proposed massing

Source: DKO

3.7 Vehicular access, pedestrian access and movement

3.7.1 Pedestrian access

Stage 1

Pedestrian access to the site will be provided via The Retreat at the site's southwestern corner. A temporary 1.5metre wide footpath will be provided along the temporary two-way driveway that will run through the southern portion of the site to the northern portion of the site to access Stage 1 of the proposal, see **Figure 19**.

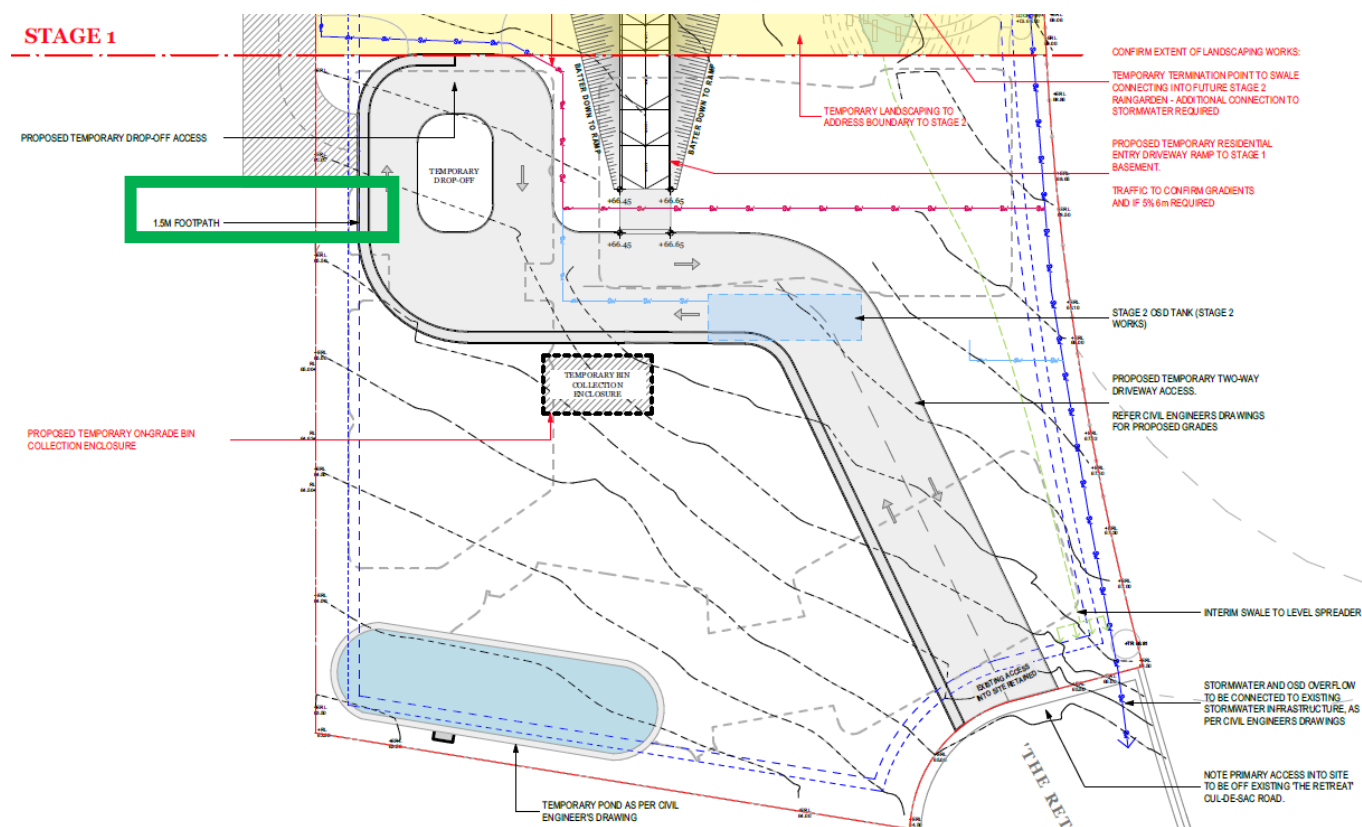


Figure 19 Stage 1 pedestrian access

Source: DKO

Stage 2

Pedestrian access will be provided from the site's western boundary. Three pedestrian access points will be provided along the site's western boundary, at the most northern point of the site, at the most southern point of the site and the approximate middle of the western boundary.

The main pedestrian access point to the site will be facilitated via a welcoming public domain area in between Building B and Building E, located at the approximate middle of the site's western boundary.

3.7.2 Vehicular access

Stage 1

Vehicular access to the northern basement during Stage 1 will occur via a temporary access point located in the centre of the site (refer to **Appendix E** and **Appendix G**). The temporary access point to the northern basement will be connected via an at-grade service road to The Retreat as illustrated in **Figure 20**.

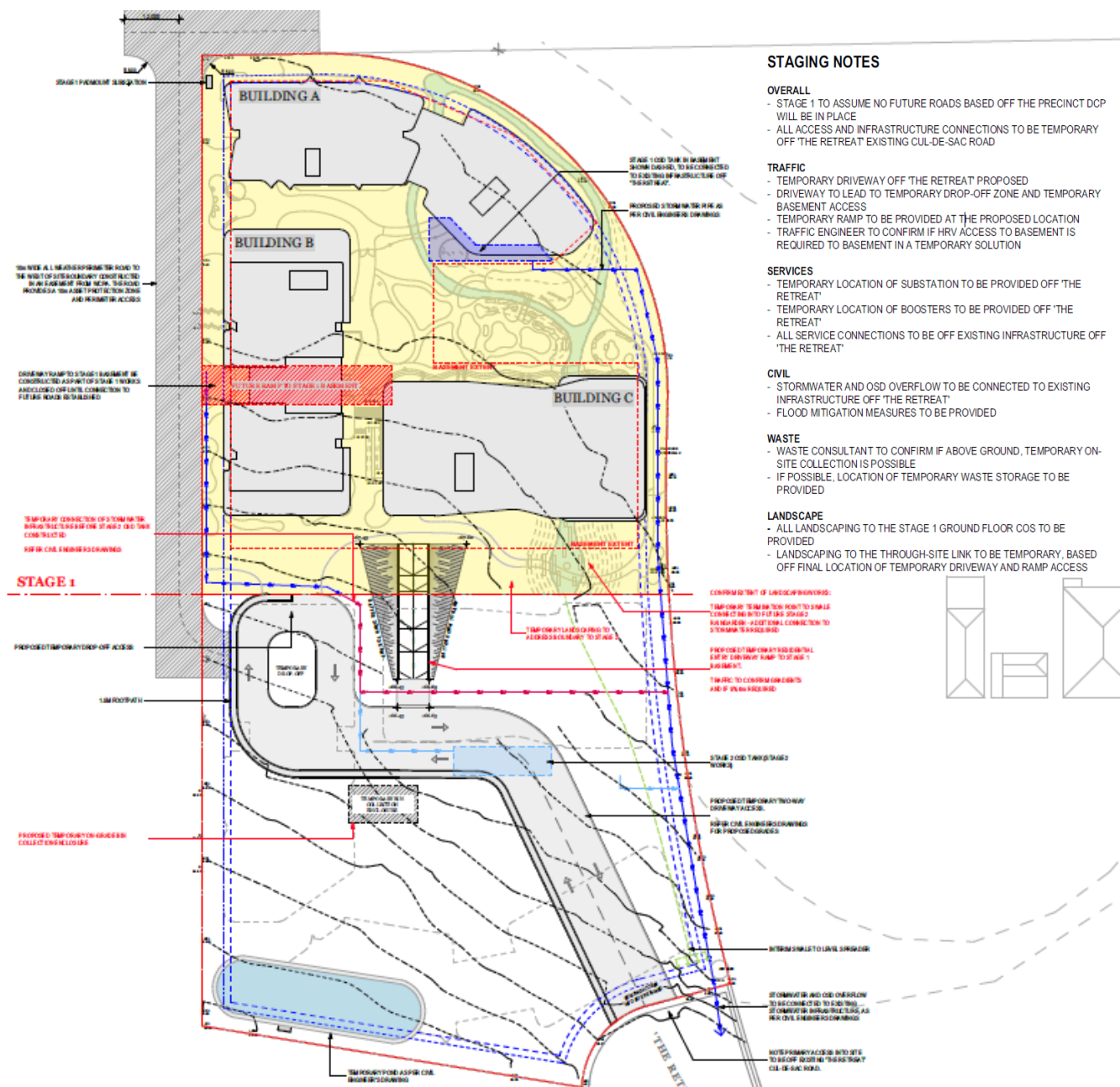


Figure 20 Stage 1 access

Source: AT&L

Stage 2

Stage 2 will include two vehicular access points at the site from the western boundary. The northern and southern basements will be accessible via local roads connecting to the two access points at the site's western boundary which provides access to the two separate basements. **Figure 21** illustrates the proposed vehicle access points in red below. It is important to note that Stage 2 will be dependent on the construction of road infrastructure at the site's western boundary.

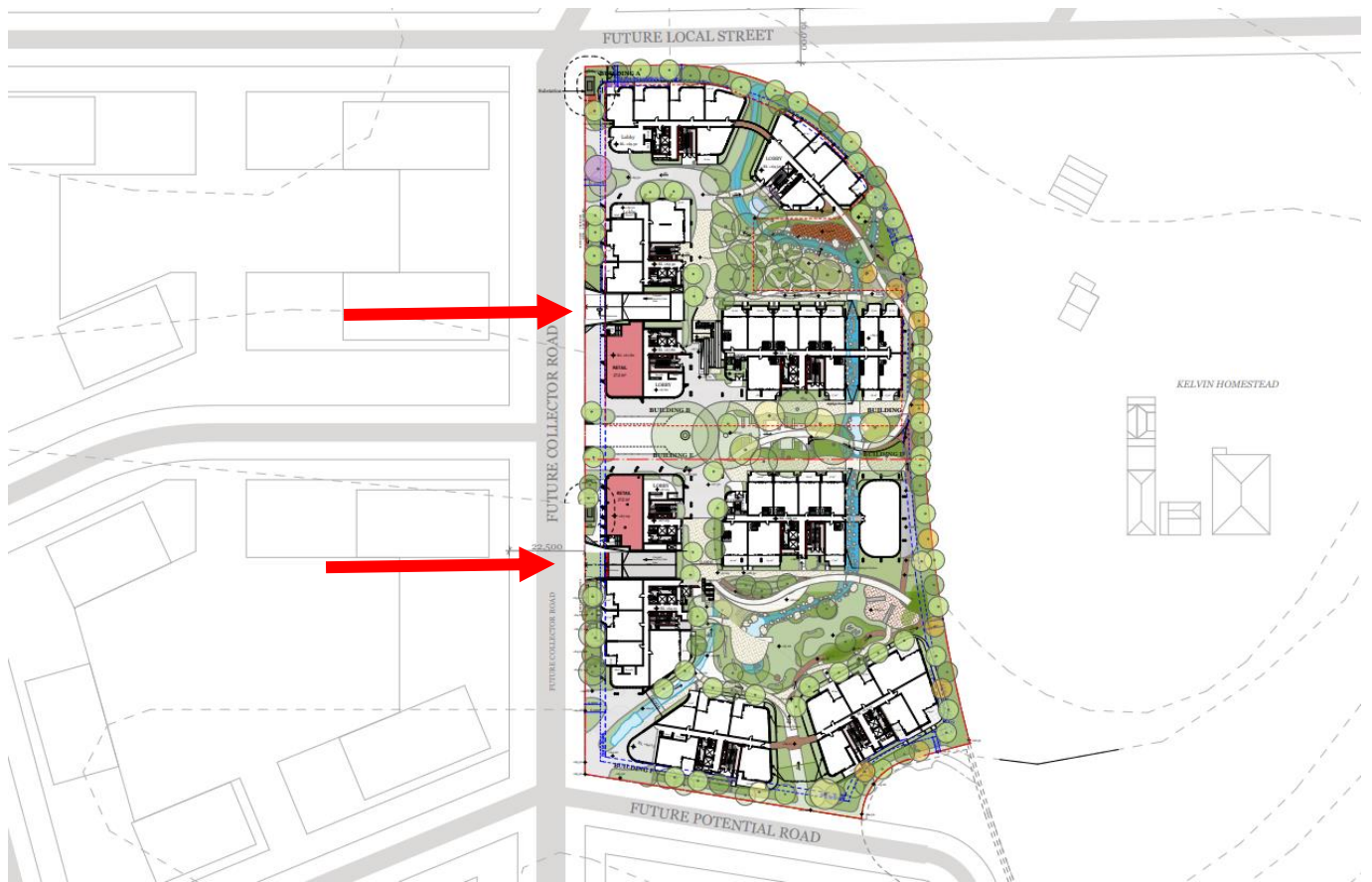


Figure 21 Stage 2 Access (ultimate redevelopment scenario)

Source: DKO

3.7.3 Shared basement levels

Each stage of the proposal will have its own, separate basement. The first three buildings (to be delivered in Stage 1), Buildings A, B and C, will be supported by the northern basement. The remaining three buildings (to be delivered in Stage 2) Buildings D, E and F, will be supported by the southern basement.

Northern basement (Stage 1)

The northern Stage 1 basement will comprise:

- 311 car parking spaces;
- 30 motorcycle parking spaces;
- 291 bicycle spaces;
- 5 lift cores and fire stairs with accessible car parking located closest to the lift cores; and
- Bulky waste room, waste holding rooms, service rooms and a turning bay.

Southern basement (Stage 2)

The southern basement will comprise:

- 336 car parking spaces;
- 32 motorcycle spaces;
- 321 bicycle spaces;
- 5 lift cores and fire stairs with accessible car parking located closest to the lift cores; and
- Waste room, services room and waste holding room.

3.8 Land Uses

The proposal will primarily comprise residential land uses with supporting retail ground floor uses, multiple communal open space areas, landscaped gardens, and a range of ancillary amenities for use by the residents.

3.8.1 Retail premises

Building B and Building E will comprise the two mixed-use residential buildings which form the gateway into the main pedestrian and vehicular access to the site. Building B and Building E are the only buildings within the development that contain retail tenancies at ground level.

On the western side of the buildings, ground-floor retail uses will activate the site's western boundary. The total GFA for retail uses accumulates to 424 sqm.

3.8.2 Residential accommodation

The proposal will provide a total of 533 residential units across the six mixed-use residential buildings. Buildings A, C, D, and F are residential flat buildings and will include lobbies, open-space terraces and lounge spaces at ground level. Levels one to 11 will comprise residential units.

As detailed above, Buildings B and E will be mixed-use in nature, supporting stand-alone retail tenancies at ground level.

Overall, the proposal will provide a total of:

- 104 x 1-bedroom residential units;
- 346 x 2-bedroom residential units;
- 81 x 3-bedroom residential units; and
- 2 x 4-bedroom residential units.

A breakdown of the residential unit typologies is provided in **Table 6**.

Table 6 Apartment typology breakdown

	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	Subtotal	Residential GFA (m²)
Lower ground	2	7	1	0	10	1316
Ground	4	29	15	0	48	5727
Level 1	10	33	6	0	49	6221
Level 2	13	47	8	0	68	6679
Level 3	14	42	8	0	64	6262
Level 4	10	32	5	0	47	4645
Level 5	11	31	6	10	48	4564
Level 6	11	31	6	0	48	4564
Level 7	9	27	4	0	40	3863
Level 8	10	27	4	0	41	3860
Level 9	9	23	4	0	36	3378
Level 10	1	13	12	2	28	2876
Level 11	0	4	2	0	6	1375
Subtotal	104	346	81	2	533	55330

	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	Subtotal	Residential GFA (m ²)
Proposed Mix	20%	65%	15%	0%	100%	

3.8.3 Residential Amenities

Wellness Centre, Gym and Pool Facilities

Various amenities are directly accessible from the ground plane which will ensure convenient and equitable access for residents. The Wellness Centre situated at both The Ridgeline (a public through-site link) and the Woodlands (a sprawling landscaped communal space to the south) offers residents convenient access to essential facilities. The site's green space also contributes to the Wellness Centre shape, refer to **Figure 22**.

Residential amenity is also scattered throughout the upper levels of the development including the building's rooftops. Gathering spaces, the swimming pool, reflection spaces and outdoor green spaces will be scattered throughout the upper levels of the buildings, refer to **Figure 23**.

Building D will accommodate the gym and Wellness Centre at the ground level closest to the site's eastern boundary. The gym and wellness space will comprise 247 sqm of floor space. Building D will accommodate a pool at level 4 closest to the site's eastern boundary and comprise 363 sqm of floor space. All residents will have access to the gym, Wellness Centre and pool.

Specifically, amenity spaces are provided throughout the six proposed buildings as below.

- Ground level of Building A: 53 sqm of amenity space.
- Ground level of Building D: 247 sqm comprising the gym/wellness space.
- Level 4 of Building A: 77 sqm of amenity space
- Level 4 of Building D: 68 sqm of amenity space.
- Level 7 of Building C: 68 sqm of amenity space.
- Level 10 of Building B: 51 sqm of amenity space.
- Level 10 of Building E: 60 sqm of amenity space.

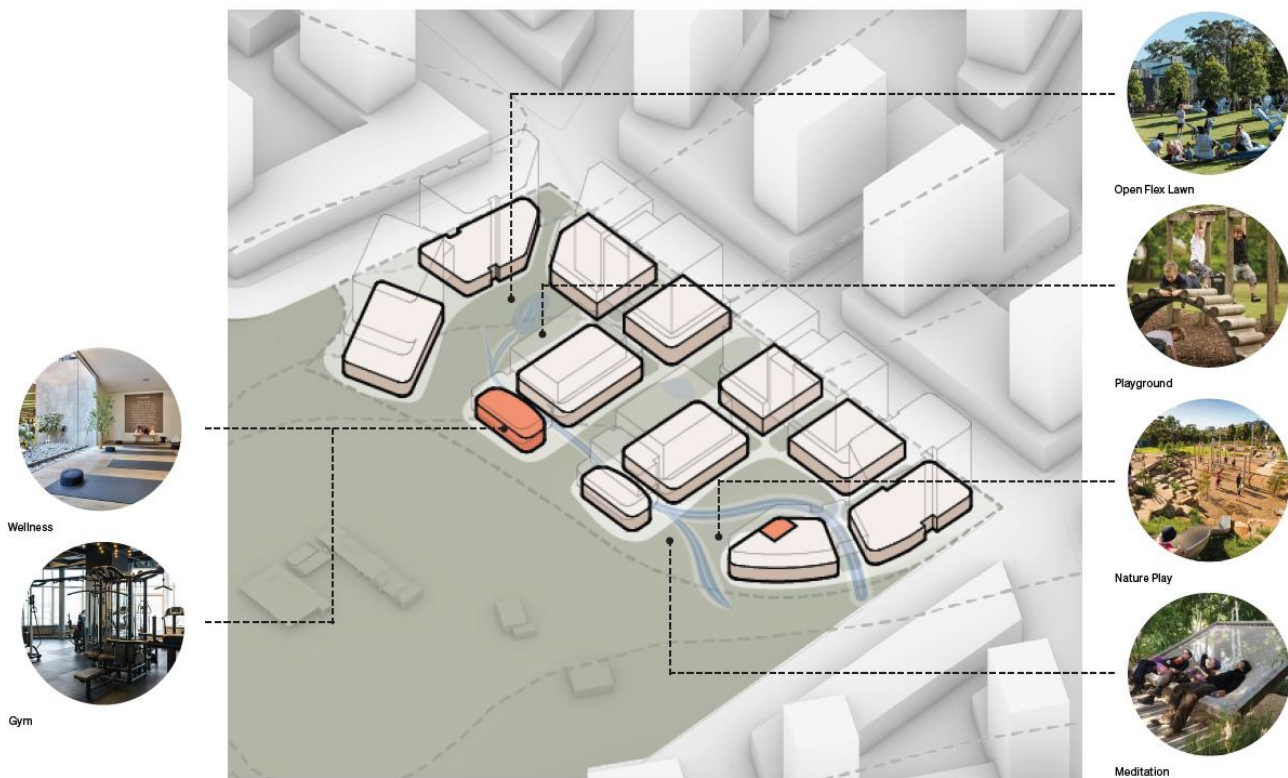


Figure 22 Residential amenity at ground level

Source: DKO

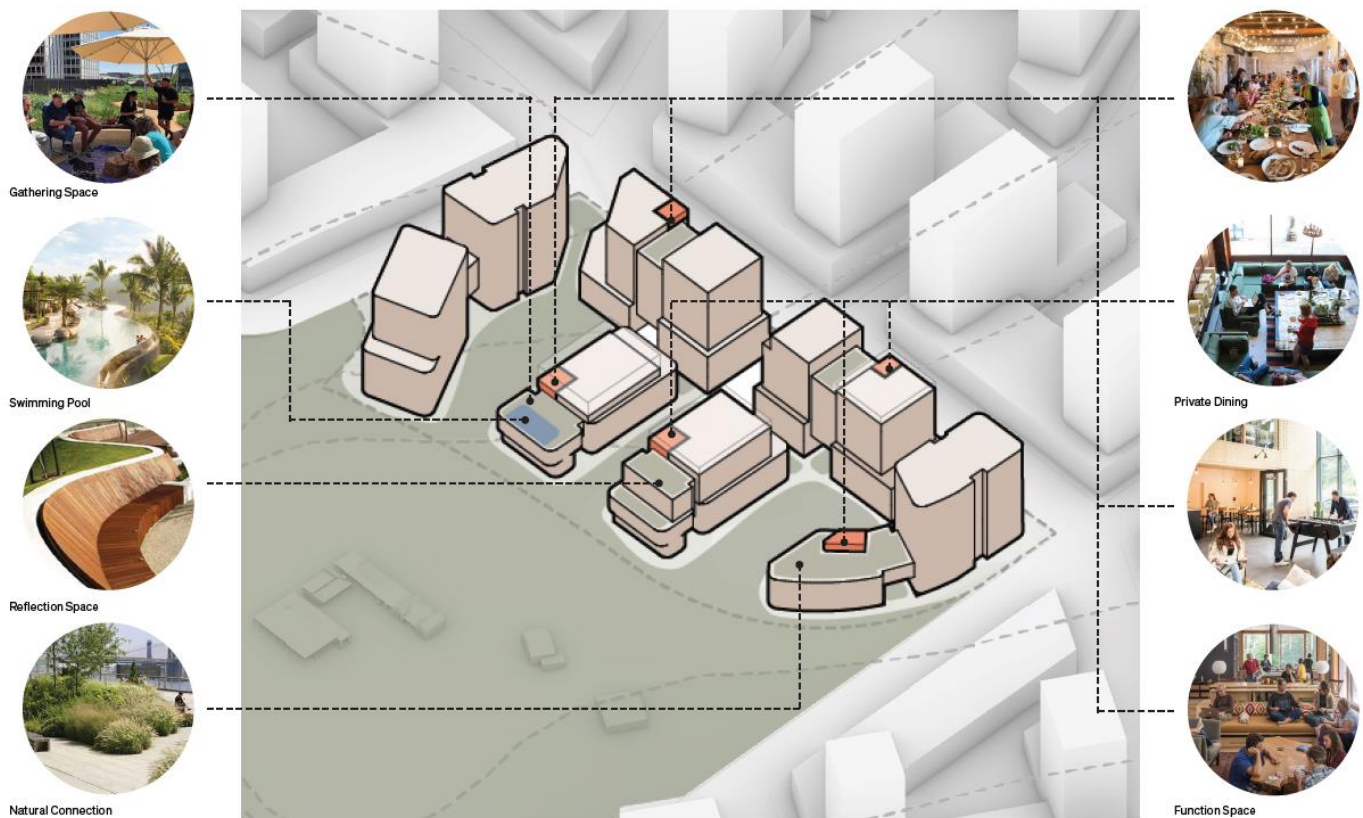


Figure 23 Residential amenity at the upper levels

Source: DKO

3.8.4 Communal Open Space

A diverse range of amenities catering to the public and future residents are strategically placed throughout the development, leveraging opportunities across various locations. At the ground level, retail units activate the site's gateway at the western boundary. Interwoven throughout the ground level are various outdoor amenity spaces including children's playgrounds, tranquil nooks and grassy knolls scattered across the ground plane. The landscape design further boosts a variety of features including water elements to ridgeline walks which connect the various amenity spaces.

Dedicated areas of communal open space are proposed throughout the development, in total, 10,282 sqm of communal open space will be provided for residents. Communal open spaces are located throughout the ground level as well and in the upper levels of the proposed buildings. Their specific locations are provided within the Architectural Drawings at **Appendix B**. In the upper levels of the proposed buildings communal open space is located as below:

- Level 3 of Building E: 242 sqm of communal open space.
- Level 4 of Building A, D and F: 617 sqm, 363 sqm and 155 sqm.
- Level 7 of Building C: 54m² of communal open space.
- Level 10 of Building B and E: 51 sqm and 60 sqm.

Landscaping for the spaces will be undertaken in accordance with the Landscape Plans prepared by Arcadia at **Appendix J**, incorporating a diverse vegetative palette that maximises usage of native vegetation, as further discussed in **Section 3.10**.

3.9 Façade and Materiality

The form of the proposed buildings celebrates the site's surrounding heritage and Connecting with Country design principles by choosing brown bricks and textured cladding. The building facades are robust yet reflective of the natural elements of the Dharug Nation upon which Bradfield now resides. The proposed buildings maintain a bold, modern design to captivate the attention of future residents and visitors. The façade and materiality are assessed in further detail in **Appendix E**, an excerpt from the textures and palette report is provided in **Figure 24** below.

The building facades will further recess on every floor. The plane over the external communal areas will shift outward for solar shading and slowly terrace down towards the Kelvin Park Homestead. The most prominent buildings, facing the western boundary, will create a bold yet welcoming entry into the site through the careful choice of bronze detailing and precast concrete pictured in **Figure 25** below.

The proposed materials and finishes aim to form buildings that embrace the site's position on Dharug land and surrounding heritage fabric that will be enhanced by the development of the site. The proposal seeks to incorporate the natural elements of the site's surroundings. The selected materials and textures have been drawn from sky, tree, and earth textures, see **Figure 26**. The buildings will reflect the site's rich history and natural elements through the choice of neutral colours and rounded building edges, yet a modern style façade.



Figure 24 Textures and palette

Source: DKO



Figure 25 Proposed building façade viewed from the future collector Road, facing north east

Source: DKO

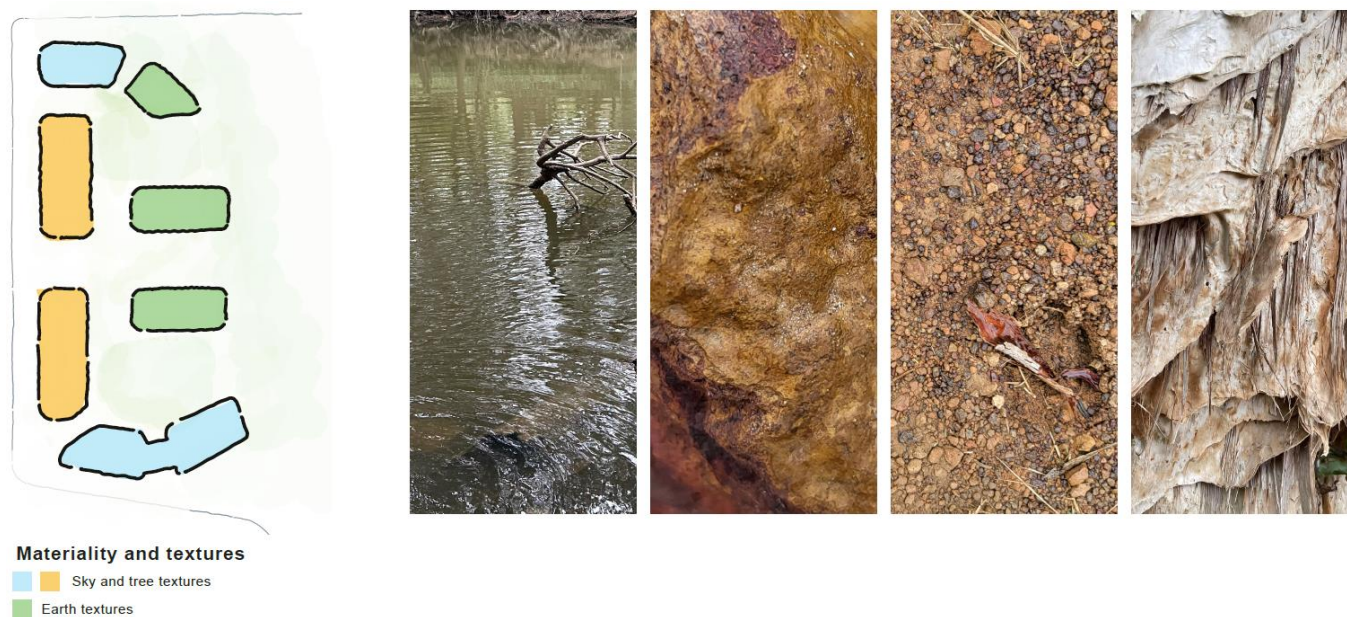


Figure 26 *Materiality and textures*

Source: DKO

3.10 Landscaping

Significant landscape works are proposed throughout the site and will embellish the public domain between the proposed buildings. The landscaping works will facilitate pedestrian and public domain infrastructure features that will be characterised by multiple wayfinding pathways, seated areas, water features, perimeter planting, communal open spaces, and passive recreational play spaces.

Landscaping for the site will be dispersed throughout the site's ground level between each of the proposed buildings. Gardens are proposed at Levels 3, 4 7 and 10. A Detailed Landscape Plan has been prepared by Arcadia and is provided at **Appendix J**. Landscaping will be delivered in accordance with the Staging Plan as demonstrated in **Figure 27**.



Figure 27 Landscaping staging plan

Source: Arcadia

3.10.1 Ground level landscaping

The below key elements will comprise the ground level landscaped areas within the site:

- **Primary Entry Points:** The primary entry points are welcoming landscaped pedestrian points to the site with seating elements and feature trees.
- **The Northern Woodlands:** The northern woodlands comprise a highly vegetated area with scattered seating, a mediation garden, swale feature, bridges, a timber climbing structure and planter boxes.
- **The Central Ridgeline:** The central ridgeline includes a round-a-bout pick up drop off zone, open lawn area feature tress, a viewing deck and planter boxes .
- **The Grasslands:** The grasslands include a softball play areas, fitness stations, seating nooks , a swale feature and entry feature settings.

Figure 28 provides an illustration of the proposed Landscaping Masterplan of the sites ground level.



Figure 28 *Proposed landscaping masterplan*

Source: Arcadia

3.10.2 Upper levels landscaping

The proposal seeks to provide landscaping in throughout the building's upper levels. The sections below detail the landscaped areas at various levels.

Level 3 and 4

Level 3 will comprise a garden in the southern portion of Building E. Level 4 of Building F, at the building's centre will also comprise a garden. The gardens will include the following elements as illustrated in **Figure 29**.

- Integrated seating and feature shade structures.
- Corten steel garden beds, feature paving elements, canopy trees, raised feature planters and a BBQ.



Figure 29 Level 3 and 4 proposed gardens

Source: Arcadia

Level 4 will comprise a Gathering Deck in Building A and will include the following elements as illustrated **Figure 30** below.

- A vegetable garden and barbeque facilities.
- Open lawn area, canopy trees and Corten steel garden beds.
- Feature shade structures, bar-style seating, integrated seating elements and feature paving elements.

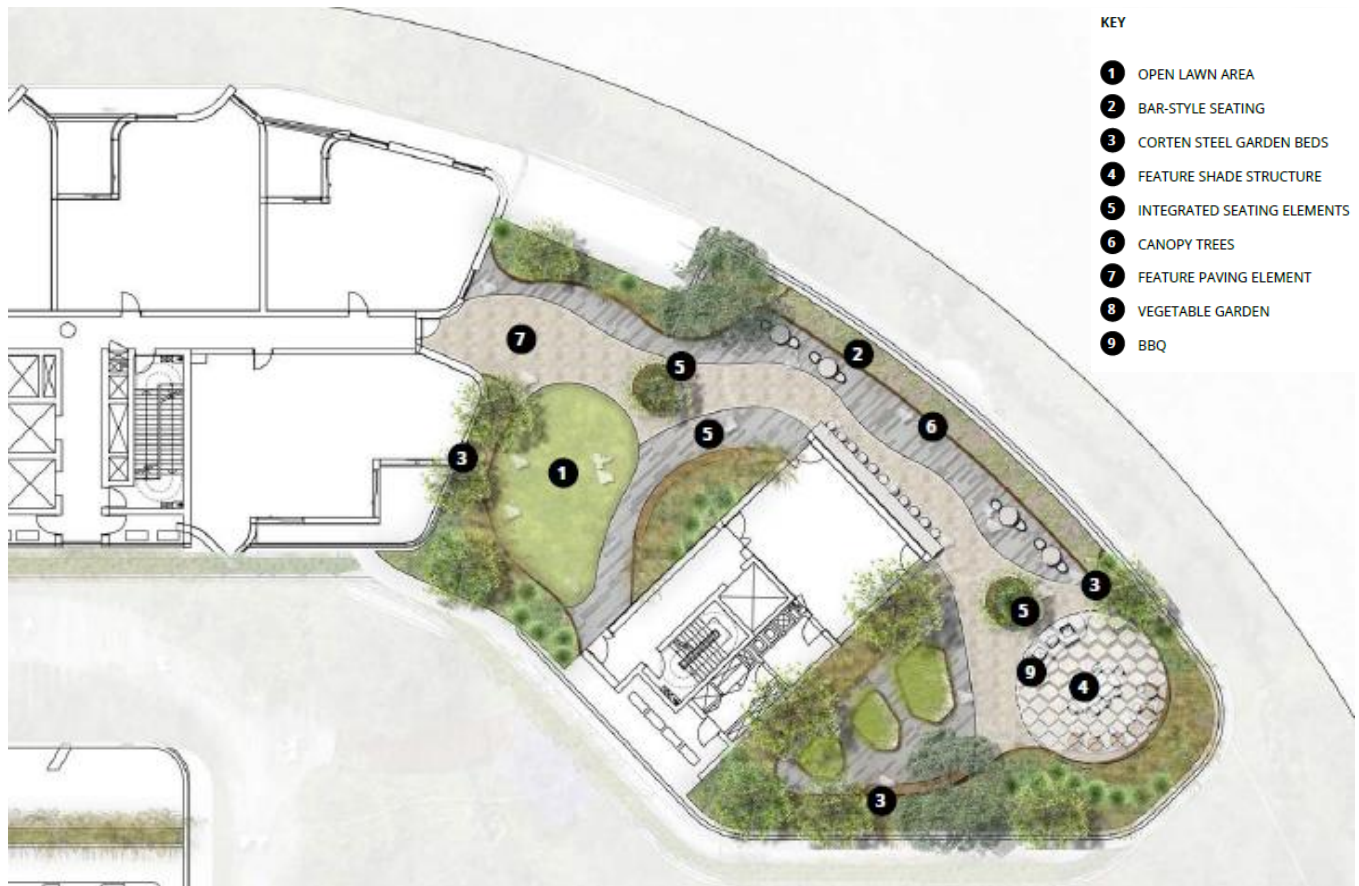


Figure 30 Level 4 Gathering Deck

Source: Arcadia

Level 4 will comprise a pool and deck at the far eastern side of Building D. The landscaped area will include the following elements, as illustrated in **Figure 31**.

- The pool and deck.
- Integrated seating and feature shade elements.
- Canopy trees, planter pots, and Corten steel garden beds and;
- A sunken lounge.

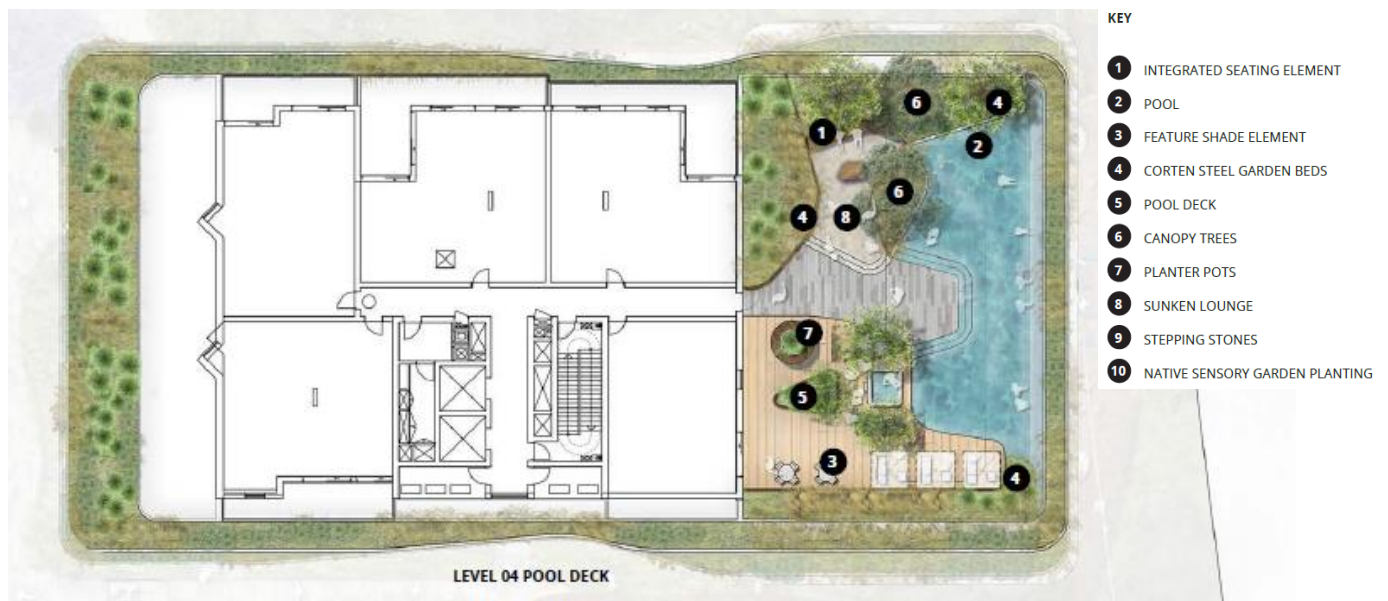


Figure 31 Level 4 Pool

Source: DKO

Level 7

Level 7 of Building C will comprise a gathering deck at the buildings far eastern end. The landscaped area will include the following elements, as illustrated in **Figure 32**.

- Integrated seating and feature shade elements.
- Corten steel garden beds, canopy trees, planter pots and stepping stones.
- A native sensory garden planting.

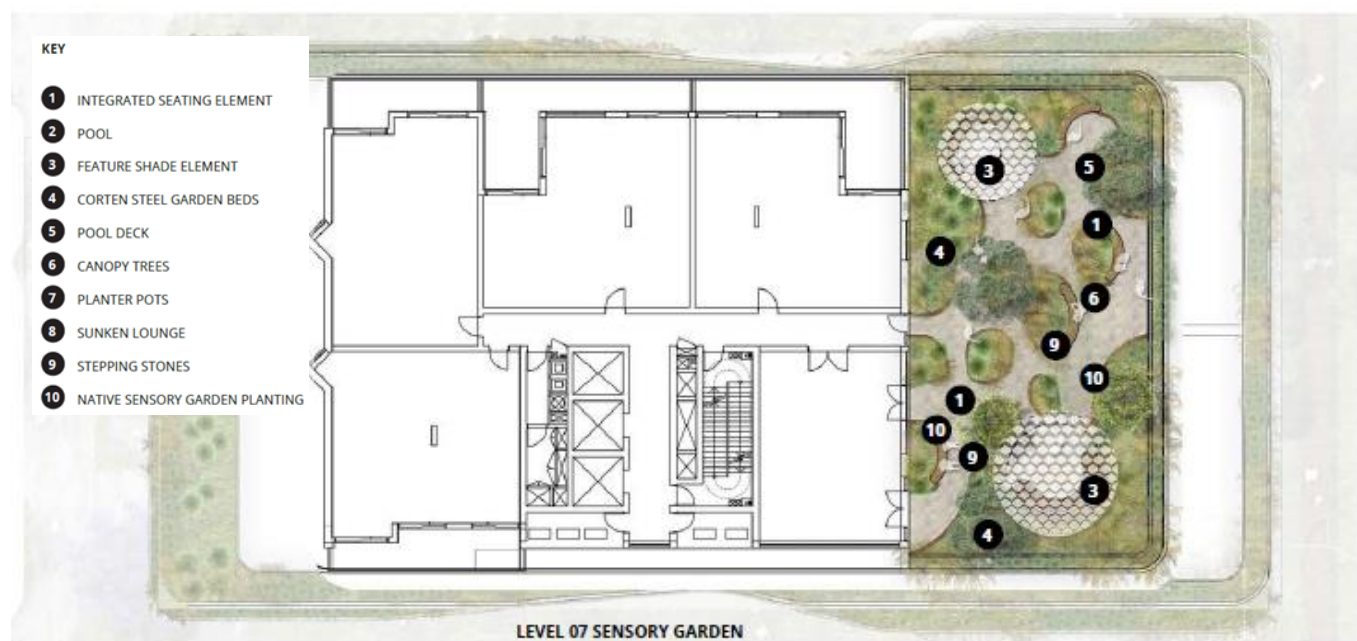


Figure 32 Level 7, Sensory Garden

Source: Arcadia

Level 10

Level 10 will comprise Viewing Decks located through the centre of Building B and Building E. The viewing decks allow views from both the western and eastern sides of the Viewing Decks. The Viewing Decks include the following elements which are illustrated in **Figure 33**.



Figure 33 Level 10, Viewing Decks

Source: Arcadia

3.11 Contributions

Local contributions will be proposed via a Voluntary Planning Agreement with Liverpool City Council through a monetary contribution of 4.5% of the development cost, equivalent to the rate within the draft Aerotropolis Contribution Plan. A Letter of Offer has at the time of writing been submitted to Council for their consideration and is provided under separate cover.

A contribution to the State Special Infrastructure Contribution will seek Voluntary Planning Agreement with the State to make a cash contribution to a specific piece of infrastructure in lieu of a cash contribution. A Letter of Offer has at the time of writing been submitted to the Department for their consideration.

4.0 Statutory Context

4.1 Relevant legislation

Development approval is sought for the project under the SSD provision of Part 4 of the EP&A Act. **Table 7** outlines an assessment against the proposal’s key statutory requirements and is further expanded upon at **Appendix C**, which identifies all statutory requirements and where those requirements have been addressed in the EIS.

4.1.1 Development in the Aerotropolis

Development in the Aerotropolis is guided by the following statutory plans and policies:

- Division 1 of Part 3 of Environmental Planning and Assessment Regulation 2021 (**The Regulations**);
- Chapter 4 of State Environmental Planning Policy (Precincts—Western Parkland City) 2021 (**Parkland City SEPP**); and
- The Aerotropolis Precinct Plan (May 2023) (**Precinct Plan**).

The permissibility of the proposal is outlined in **Table 7** below.

Table 7 Key Statutory Requirements

Statutory Plan	Consideration												
Environmental Planning and Assessment Regulation 2021	Division 1 of Part 3 of the Regulation requires that an assessment of consistency against the Western Sydney Aerotropolis Plan and Precinct Plan is required to accompany a Development Application for land within the Aerotropolis. This assessment is provided in Section 2.6 . An assessment of the Precinct Plan is also provided at Appendix DD .												
Chapter 4 of State Environmental Planning Policy (Precincts—Western Parkland City) 2021	Table 10 provides a detailed assessment of the Parkland City SEPP, and below provides a summary.												
	<table><tr><td>Zoning</td><td>The site is zoned Mixed Use. This is a broad zone that permits an array of commercial, retail, high-density residential, entertainment and tourist land uses. The proposal is consistent with the land uses permissible within the mixed-use zone.</td></tr><tr><td>Obstacle surface limitation</td><td>Building heights across the Aerotropolis are guided by the Obstacle Limitation Heights. The site sits within the inner horizontal surface (RL 125.5m AHD) and has been designed to be within this height limitation (with the RLs of the proposed buildings ranging between circa RL 91 and RL 111..</td></tr><tr><td>Heritage Conservation</td><td>The site is not identified as a heritage item under Schedule 2 (Environmental Heritage) of the Parkland City SEPP. The site is not located in a heritage conservation area. The land to the immediate east of the site at 30 The Retreat, Bradfield (Lots 2711–2714 in DP 1128906) contains a State heritage item (item no. 13) identified as the Kelvin Park Homestead. Urbis Heritage has undertaken a detailed Heritage Impact Statement at Appendix O.</td></tr><tr><td>Design Review Panel</td><td>State Significant Development within the Aerotropolis must be subject to a Design Review Panel. The proposal has been presented to the SDRP on two occasions prior to lodgement - 10 August 2023 and 15 November 2023. Section 6.0 and Appendix E of the EIS demonstrates how the commentary received from the SDRP has informed the design and been addressed.</td></tr><tr><td>Aboriginal cultural guidelines</td><td>Development in the Aerotropolis must consider the <i>Recognise Country: Draft Guidelines for development in the Aerotropolis</i>, published in October 2021. The project team has engaged Hardy Hardy to ensure these guidelines are considered and to ensure Connecting with Country is embedded in the development early as part of the design process. The Connecting with Country Report is provided at Appendix RR.</td></tr><tr><td>Infrastructure servicing and concurrence</td><td>Division 4 (Infrastructure) of the Parkland City SEPP relates to development for residential purposes that increases the number of dwellings on the land. Development consent cannot be granted unless the consent authority is satisfied that public utility infrastructure that is essential for the development is available or</td></tr></table>	Zoning	The site is zoned Mixed Use. This is a broad zone that permits an array of commercial, retail, high-density residential, entertainment and tourist land uses. The proposal is consistent with the land uses permissible within the mixed-use zone.	Obstacle surface limitation	Building heights across the Aerotropolis are guided by the Obstacle Limitation Heights. The site sits within the inner horizontal surface (RL 125.5m AHD) and has been designed to be within this height limitation (with the RLs of the proposed buildings ranging between circa RL 91 and RL 111..	Heritage Conservation	The site is not identified as a heritage item under Schedule 2 (Environmental Heritage) of the Parkland City SEPP. The site is not located in a heritage conservation area. The land to the immediate east of the site at 30 The Retreat, Bradfield (Lots 2711–2714 in DP 1128906) contains a State heritage item (item no. 13) identified as the Kelvin Park Homestead. Urbis Heritage has undertaken a detailed Heritage Impact Statement at Appendix O .	Design Review Panel	State Significant Development within the Aerotropolis must be subject to a Design Review Panel. The proposal has been presented to the SDRP on two occasions prior to lodgement - 10 August 2023 and 15 November 2023. Section 6.0 and Appendix E of the EIS demonstrates how the commentary received from the SDRP has informed the design and been addressed.	Aboriginal cultural guidelines	Development in the Aerotropolis must consider the <i>Recognise Country: Draft Guidelines for development in the Aerotropolis</i> , published in October 2021. The project team has engaged Hardy Hardy to ensure these guidelines are considered and to ensure Connecting with Country is embedded in the development early as part of the design process. The Connecting with Country Report is provided at Appendix RR .	Infrastructure servicing and concurrence	Division 4 (Infrastructure) of the Parkland City SEPP relates to development for residential purposes that increases the number of dwellings on the land. Development consent cannot be granted unless the consent authority is satisfied that public utility infrastructure that is essential for the development is available or
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Statutory Plan	Consideration
	can be made available when required as detailed in the Civil and Utilities Infrastructure Report at Appendix MM . To support the operation of the development proposal, it is proposed to relocate, alter or augment infrastructure for the site including stormwater, sewer, water, and communications. This will be undertaken in accordance with the Civil and Utilities Infrastructure Report at Appendix MM . The concurrence of the Planning Secretary will be required to be obtained for consent to be granted, considering the impacts of the proposal on existing State designated infrastructure and the need for additional State designated infrastructure, arising from the proposal individually and cumulatively.

4.2 Power to Grant Approval

The legislative pathway under which the consent is sought, why the pathway applies, and the relevant consent authority is outlined in **Table 8** below.

Table 8 Power to Grant Consent

Matter	Consideration
Declaration of State Significant Development	Development in the Aerotropolis within Estimated Development Cost of more than \$30 Million is declared to be SSD. Division 4.7 of the EP&A Act establishes a specific system to consider projects classed as SSD. SSD is development deemed to be of State significance and includes certain classes of development above a certain value or location, that is regarded as important to the State. Section 29 of Schedule 1 'State significant development- general', within the State Environmental Planning Policy (<i>Planning Systems</i>) 2021 states: 29 Development in the Western Sydney Aerotropolis <i>Development on land shown on the Land Application Map under State Environmental Planning Policy (Precincts—Western Parkland City) 2021, Chapter 4 if the proposed development—</i> <i>(a) has an estimated development cost of more than \$30 million, and</i> <i>(b) does not involve development—</i> <i>(i) prohibited under the Chapter, or</i> <i>(ii) to which that Policy, section 4.13A applies.</i> The proposal contains an estimated development cost of over \$30 million (see the Estimated Development Cost Report under). Therefore, it is declared SSD. The proposal is for mixed-use residential development which is a land use permitted with consent and the proposal does not include prohibited development. 4.13A Previously permitted development is applicable to the proposal. The proposal was not previously permitted under Clause 4.13A.
Consent Authority	Section 4.5 of the EP&A Act and Section 2.7 of <i>State Environmental Planning Policy (Planning Systems) 2021</i> stipulate that an application made by a private company the consent authority is the Minister for Planning and Public Spaces (or the Department of Planning and Environment as their delegate). However, as per Section 2.7 of <i>State Environmental Planning Policy (Planning Systems) 2021</i>, if the proposal receives over 50 submissions or a submission is made by Council, the Independent Planning Commission would be made the consent authority.
Additional Requirements for development in certain areas of Sydney	Section 35 of the Regulations requires that a person not apply to a consent authority to development consent to carry out development on land within the Aerotropolis unless it is accompanied by an Assessment against the Aerotropolis Plan 2020 and the Precinct Plan. This assessment is provided at Appendix C and Section 2.6.
Contributions for certain areas of Sydney	Section 66 of the Regulations requires that a development application for development on land within the Aerotropolis must not be determined by the consent authority unless a contributions plan has been approved for the land to which the application relates unless: - the consent authority considers the development application is of a minor nature, or - the developer has entered into a planning agreement for the matters that may be the subject of a contributions plan. Contributions are proposed through a VPA process with both Liverpool Council and the State, with the intent to execute these agreements prior to determination (refer back to Section 3.11).

4.3 Pre-Conditions to Exercising Power to Grant Approval

The pre-conditions to be fulfilled by the consent authority before exercising their power to grant development consent are identified and considered in **Table 9**.

Table 9 Pre- Conditions

Matter	Consideration
Biodiversity Conservation Act 2016	In accordance with this Act, an assessment of any State Significant proposal's biodiversity impacts must be undertaken as part of the provision of any SSDA, including the provision of a Biodiversity Development Assessment Report (BDAR) in instances where it is required. Section 7.14 requires the consent authority to take into consideration the likely impact of the proposal on biodiversity values as assessed in the BDAR. Section 7.9 of the Act requires an SSD be accompanied by a Biodiversity Development Assessment Report unless it is determined that the proposal is not likely to have any significant impact on biodiversity values or if the Site has already part of biodiversity certification. The proposal is subject to a waiver from the requirement to prepare a BDAR in compliance with this pre-condition. A Bio-certification Letter Report is provided at Appendix BB.
State Environmental Planning Policy (Transport and Infrastructure) 2021	The <i>State Environmental Planning Policy (Transport and Infrastructure 2021 (T&I SEPP)</i> aims to facilitate the effective delivery of infrastructure across the State. Section 2.48 – Determination of development applications – other development Section 2.48 requires the consent authority to give written notice to the electricity authority supply of the area and take into consideration any response to that notice before granting consent to a development likely to affect an electricity transmission or distribution network. This SSDA will be referred to the relevant utility providers during the assessment as described in Section 6.7. Section 2.120 – Impact of road noise or vibration on non-road development Section 2.120 requires a consent authority to consider the impacts of road noise and vibration on residential development. This section especially requires: (3) <i>If the development is for the purposes of residential accommodation, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded—</i> (a) <i>in any bedroom in the residential accommodation—35 dB(A) at any time between 10 pm and 7 am,</i> (b) <i>anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.</i> Section 7.1.4 of the Noise and Vibration Impact Assessment provided by Acoustic Logic at Appendix P confirms that compliance with the above-mentioned noise levels can be achieved for each of the dwellings subject to the implementation of detailed design measures. Refer to Section 6.14 for a summary of the assessment made by Acoustic Logic. Schedule 3 Traffic generating development to be referred to TfNSW – Chapter 2 The proposal is identified as traffic-generating development under Schedule 3 because it is classified as residential accommodation as it will result in over 300 dwellings that have access to a road. Section 2.22 requires the consent authority to provide Transport for NSW (TfNSW) with written notice of the development application for traffic generating development. This application will be referred to TfNSW.
State environmental Planning Policy (Resilience and Hazards) 2021	The <i>State Environmental Planning Policy Resilience and Hazards 2021 (R&H SEPP)</i> aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. Section 4.6 stipulates that a consent authority must not consent to the carrying out of development unless: • It has considered whether the land is contaminated, and • If the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and • If the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose. The EIS is accompanied by a Preliminary Geotechnical Investigation (PGI) at Appendix Q prepared by Intrax. The PGI confirms that the ground conditions are suitable for the development proposal. The ground profile investigated is confirmed to permit typical construction practices for foundations and

Matter	Consideration
	basement constructions. Intrax recommends the following additional geotechnical investigations are conducted that obtain the following: • Ground data to a depth of at least 5 metres below pile toe depth. • Laboratory test data to support assignment of soil parameters. • Excavatability assessment. • Rock mass structure and defect orientation. These works will be undertaken at a later stage and will form part of the mitigation measures at Appendix D.
State Environmental Planning Policy (Housing) 2021	State Environmental Planning Policy (Housing) 2021 (Housing SEPP) applies to the proposal's residential component. The Housing SEPP applies to development for the purpose of mixed-use residential buildings and mixed-use developed with a residential accommodation component of which this SSDA proposes. Chapter 4 of the Housing SEPP, requires the consent authority to refer the development application to the relevant design review panel for advice concerning the design quality of the development and consider: • The design review panel's advice. • The design quality of the development. • The Apartment Design Guide (ADG). The proposal has been reviewed by the SDRP. The proposal is consistent with the Housing SEPP and is generally compliant with the design principles and criteria of the ADG. Detailed assessment of the proposal against the ADG is provided in Appendix E. Departures with the ADG are expanded upon in Section 6.0 of this EIS. The Design Excellence Report at Appendix E demonstrates how the proposal exhibits design excellence and supports a high-quality residential amenity outcome.
State Environmental Planning Policy (Sustainable Buildings) 2022	As detailed in the Sustainability and Resilience Report and the BASIX Assessment Report at Appendix Y and Appendix JJ, the proposal will meet the relevant BASIX requirements. An NCC 22 Section J Report is provided at Appendix GG.

Table 10 Pre-Conditions – Parkland City SEPP

Matter	Consideration	Compliance
State Environmental Planning Policy (Precincts—Western Parkland City) 2021		
The site is located in the Aerotropolis. Specifically, the site is located in the Aerotropolis Core Precinct.		
Chapter 4 Western Sydney Aerotropolis		
The aims of this Chapter are as follows— (a) to facilitate development in the Western Sydney Aerotropolis in accordance with the objectives and principles of the Western Sydney Aerotropolis Plan,		The proposal has been prepared in accordance with the objectives and principles of the Western Sydney Aerotropolis Plan 2020, refer to Section 2.6 Table 2 of this EIS.
(b) to promote sustainable, orderly and transformational development in the Western Sydney Aerotropolis,		The BASIX Assessment Report at Appendix JJ demonstrates that the proposal meets the highest possible ratings for the Water Score targets. The Western Sydney Aerotropolis Precinct Plan aims for a water score of 60% reduction in water usage. The proposal utilises all water feasible water saving options and achieves a water 56% reduction making it a substantial improvement over the legislated requirement of the mandatory 40% in the EP&A 2021 and the Sustainable Buildings SEPP 2022. This falls short of the 60% target in the Western Sydney Aerotropolis Precinct Plan. However, significant potential exists to reach the 60% target by connecting to the planned Local Advanced Water Recycling Centre (AWRC) once it becomes operational in 2026. Currently,

Matter	Consideration	Compliance
		BASIX does not recognise the AWRC, but when this option becomes available, the proposal is expected to meet the WSAP goal within the BASIX framework as detailed in The Water Score Memo prepared by Jensen Hughes at Appendix OO .
	(c) to ensure development is compatible with the long-term growth and development of the Western Sydney Airport (including in relation to the operation of the Airport 24 hours a day) and other critical transport infrastructure,	The proposal is compatible with the long-term growth of the Western Sydney Airport by providing a long-term housing option for its employees as it will not adversely impact the airport operations.
	(d) to promote employment and world-class innovation and provide for residential development in suitable locations,	The proposal is located in the mixed-use residential zone and will provide residential development in a suitable area within the Aerotropolis Core that is less impacted by aircraft noise, and well connected to transport, services and future planned open space. The ground floor retail tenancies will promote employment opportunities within the site.
	(e) to recognise the physical and cultural connection of the local Aboriginal community to the land and to incorporate local Aboriginal knowledge, culture and tradition into development,	The proposal has been designed with a Connecting to Country lens which led to the establishment of a landscape-led approach. The delivery of the proposal will result in a reintroduction of species endemic to the Cumberland Plain Woodlands and a building design that is reflective of the natural environment.
	(f) to preserve land for future infrastructure development,	Not applicable.
	(g) to protect, maintain and enhance, and to minimise the impact of development on, trees and vegetation, soil quality and the health of waterways and to contribute to the conservation of biodiversity,	The proposal will result in the reintroduction of endemic species which are reflective of the natural Cumberland Plain Woodlands. This has been implemented to reintroduce the natural flora landscape and to attract endemic fauna back to the area.
Land Use Table		
Mixed use zone 1 Objectives of the zone - To integrate a mixture of compatible land uses in accessible locations. - To promote business, office, retail, entertainment and tourist uses. - To promote a high standard of public amenity and convenient urban living. - To provide for residential and other accommodation that includes active non-residential uses at street level. - To ensure an appropriate transition from non-urban land uses and environmental conservation areas in surrounding areas to urban land uses in the zone. 2 Permitted without consent Home-based child care; Home businesses; Home occupations. 3 Permitted with consent Any development not specified in item 2 or 4 4 Prohibited Air transport facilities; Airstrips; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Charter and tourism boating facilities; Correctional centres;		The proposal is consistent with the objectives of the Mixed Use zone because: - It integrates compatible land uses through the incorporation of residential and retail tenancies which work together to support activation and bring closer together, day to day needs of residents. - The proposal sets a strong precedent of quality public amenities through the highly vegetated and accessible ground plane. The ground plane is interconnected with through site links and internal pathways, focused on landscaping and the movement of water. - The proposed gym and the wellness centre is one example of the high amenity, convenient offering for residents. - The proposal has been carefully designed to transition from non-urban land uses through its stepped built form and choices of natural colours and building facades. Development for the purposes of residential accommodation and retail premises are permissible in the Mixed Use zone with development consent as they are not prohibited.

Matter	Consideration	Compliance
	<i>Crematoria; Depots; Dual occupancies; Dwelling houses; Exhibition homes; Exhibition villages; Extractive industries; Forestry; General industries; Heavy industrial storage establishments; Heavy industries; Helipads; Highway service centres; Intensive livestock agriculture; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Rural industries; Rural supplies; Rural workers' dwellings; Secondary dwellings; Semi-detached dwellings; Sewage treatment plants; Timber yards; Transport depots; Truck depots; Turf farming; Warehouse or distribution centres; Waste or resource management facilities; Water treatment facilities; Wharf or boating facilities.</i>	
Part 4.3 Development Controls – Airport safeguards		
4.19 Wild life hazards		
<i>(1) The objective of this section is to regulate development on land surrounding the Airport where wildlife may present a risk to the operation of the Airport.</i>	<i>(2) Development consent must not be granted to relevant development on land in the 13 km wildlife buffer zone unless the consent authority—</i> <i>(a) has consulted the relevant Commonwealth body, and</i> <i>(b) has considered a written assessment of the wildlife that is likely to be present on the land and the risk of the wildlife to the operation of the Airport provided by the applicant, which includes—</i> <i>(i) species, size, quantity, flock behaviour and the particular times of day or year when the wildlife is likely to be present, and</i> <i>(ii) whether any of the wildlife is a threatened species, and</i> <i>(iii) a description of how the assessment was carried out, and</i> <i>(c) is satisfied that the development will mitigate the risk of wildlife to the operation of the Airport, including, for example, measures relating to—</i> <i>(i) waste management, landscaping, grass, fencing, stormwater or water areas, or</i> <i>(ii) the dispersal of wildlife from the land by the removal of food or the use of spikes, wire or nets.</i>	The site is located within the 13km Wildlife buffer zone. The species list, landscaping and approach to waste management has been designed to mitigate the risk wildlife attraction.
4.21 Lighting		
<i>(1) The objective of this section is to safeguard Airport operations from the risk of lighting and reflectivity distractions for pilots.</i>	<i>(2) Development consent must not be granted to development for the following purposes on land shown as the “6km Lighting Intensity Radius”, a “Light Control Zone” or a “Runway Boundary” on the Lighting Intensity and Wind Shear Map unless the consent authority has consulted the relevant Commonwealth body—</i> <i>(a) installation and operation of external lighting (whether coloured or white lighting) in connection with development for the following purposes—</i> <i>(i) classified roads,</i> <i>(ii) freight transport facilities,</i> <i>(iii) heavy industrial storage establishments,</i>	The site is located within the 6km Lighting Intensity Radius. The proposal does not however include any of the listed purposes and therefore is complaint with Clause 2 of Section 4.21.

Matter	Consideration	Compliance
	(iv) recreation facilities (major), (v) recreation facilities (outdoor), (b) installation and operation of external lighting in connection with construction works that is likely to be obtrusive or create light spill outside the land on which the construction works are carried out.	
4.22 Airspace operations		
	(1) The objectives of this section are— (a) to provide for the effective and ongoing operation of the Airport by ensuring that its operation is not compromised by development that penetrates the prescribed airspace for the Airport, and (b) the relevant Commonwealth body does not object to the development.	This clause refers to development located within the Obstacle Limitation Service Map. The development site is located between 120 RL-130 RL on the Obstacle Limitation Service Map. The proposals highest point is 107.57 (39.90m) and is below 120 RL. This SSDA will be referred to the Commonwealth Government for assessment.
	(2) This section applies to development on land shown on the Obstacle Limitation Surface Map that is a controlled activity within the meaning of Part 12, Division 4 of the Airports Act 1996 of the Commonwealth.	
	(3) Development consent must not be granted to development to which this section applies unless— (a) the consent authority has consulted the relevant Commonwealth body, and (b) the relevant Commonwealth body advises the consent authority that— (i) the development will penetrate the prescribed airspace but it does not object to the development, or (ii) the development will not penetrate the prescribed airspace.	
Part 4.4 Development controls – general		
4.24 Flood planning		
	(1) The objectives of this section are— (a) to minimise the flood risk to life and property associated with the use of land, and (b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change, and (c) to avoid significant adverse impacts on flood behaviour and the environment.	A Flood Impact and Risk Assessment has been provided at Appendix CC and is discussed in Section 6.15.
	(2) This section applies to— (a) land shown as the “flood planning area” on the Flood Planning Map, and (b) other land that is at or below the flood planning level.	The site is not located on the Flood Planning map and is not shown as flood planning area. Therefore, this section is not applicable to the SSDA. A Flood Impact and Risk Assessment has however been provided at Appendix CC and is discussed in Section 6.15.
4.25 Preservation of trees and vegetation in Environmental and Recreation Zone and Cumberland Plain		
	(1) The objectives of this section are— (a) to preserve the amenity of the Western Sydney Aerotropolis through the preservation of trees and vegetation, and (b) to promote the conservation of, and minimise the impact of development on, native vegetation.	Not applicable. The site is not located in the Environment Recreation Zone and is not shown as “existing native vegetation” on the High Biodiversity Value Areas Map.

Matter	Consideration	Compliance
	(2) This section applies to land— (a) in the Environment and Recreation Zone, or (b) shown as “existing native vegetation” on the High Biodiversity Value Areas Map.	Not applicable. The site is not located in the Environment Recreation Zone and is not shown as “existing native vegetation” on the High Biodiversity Value Areas Map.
4.25A Clearing of native vegetation		
	(1) This section applies to land shown as “existing native vegetation” on the High Biodiversity Value Areas Map.	Not applicable. As above, the site is not located on the High Biodiversity Value Areas Map.
4.26 Heritage Conservation		
	(1) The objectives of this section are— (a) to conserve the environmental heritage of the land to which this Chapter applies, and (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views, and (c) to conserve archaeological sites, and (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.	The site is not identified as a heritage item under Schedule 2 (Environmental Heritage) of the Parkland City SEPP. The site is not located in a heritage conservation area. The land to the immediate east of the site at 30 The Retreat, Bradfield (Lots 2711–2714 in DP 1128906) contains a state heritage item (item no. 13) identified as the Kelvin Park Homestead. Heritage is discussed in further detail in Section 6.2 . A Heritage Impact Statement is provided at Appendix O .
4.27 Transport Corridors		
	(1) Development consent must not be granted to the following development unless the consent authority has obtained the concurrence of Transport for NSW— (a) development on transport corridor land with a capital investment value of more than \$200,000, (b) development that involves the penetration of ground to a depth of at least 2 metres below ground level (existing) on land within 25 metres (measured horizontally) of transport corridor land.	The proposal does involve the penetration of ground to a depth exceeding 2 metres below the existing ground level however the site is not located within 25m of transport corridor land.
	2) In deciding whether to grant concurrence, Transport for NSW must take into account the following— (a) the appropriateness of the development in relation to planned infrastructure on transport corridor land, including the service capability of planned infrastructure and the provision of sustainable transport options, (b) the timing of the carrying out of the proposed development and the timing for constructing infrastructure on transport corridor land, (c) the effect of the development on planned infrastructure, including the additional costs of constructing infrastructure on transport corridor land if the development is carried out.	The proposal will be referred to TfNSW.
	(3) Development consent must not be granted to development with a capital investment value of more than \$200,000 on land in the 400 metre zone unless the consent authority has consulted Sydney Metro about the following— (a) the appropriateness of the development in relation to planned train stations, including the service capability of planned train stations and the provision of sustainable transport options, (b) the timing of the carrying out of the proposed development and the timing for constructing train stations,	The site is located outside the 400m referral zone that surrounds the Aerotropolis Core Metro Station. The site is not located on transport corridor land.

Matter	Consideration	Compliance
(c) the effect of the development on planned train stations.		
4.28B Aboriginal cultural guidelines		
Development consent must not be granted to development on land to which this Policy applies unless the consent authority has considered Recognise Country: Draft Guidelines for development in the Aerotropolis published in October 2021 on the Department’s website.		The proposal has considered the Aboriginal cultural guidelines, refer to Section 3.3 and Appendix RR .
Part 4.5 Design excellence		
4.29 Objectives		
The objectives of this Part are— (a) to ensure development in the Western Sydney Aerotropolis is consistent with the policy entitled Better Placed, published by the Government Architect NSW in May 2017, and (b) to deliver the highest standard of architectural, urban and landscape design.		The proposal is consistent with the <i>Better Placed</i> policy, refer to the assessment provided in Appendix E . The proposal will deliver the highest standard of architectural, urban and landscape design. The proposal has been reviewed by the SDRP twice and exhibits design excellence, refer Design Report at Appendix E .
4.30 Application of this Part		
(1) This Part does not apply to complying development.		The proposal is State significant development. The proposal is not complying development.
(2) This Part does not apply to development on land to which a master plan applies if the consent authority is satisfied that the master plan adequately provides for assessment of the design quality of the development.		The proposal is not on land to which a master plan applies.
4.31 Design review panel		
(1) This section applies to the following development— (a) State significant development, (b) development with a capital investment value of more than \$30 million, (c) development with a site area of at least 10,000m2, (d) development in relation to a building that has, or will have, 3 or more storeys above ground level (existing).		The section applies and the proposal has been reviewed by the SDRP. Refer Design Report at Appendix E which demonstrates how the SDRP commentary has been addressed in the proposed design.
(2) Development consent must not be granted to the development unless— (a) a design review panel reviews the development, and (b) the consent authority takes into account the findings of the design review panel, and (c) the consent authority is of the opinion that the development exhibits design excellence.		
4.32 Architectural design competition		

Matter	Consideration	Compliance
	<i>(1) This section applies to development in relation to a building that has, or will have, a height above ground level (existing) greater than 40m or 12 storeys.</i>	The proposal does not exceed 40m or 12 storeys. Therefore, the proposal does not require an architectural design competition.
4.33 Consideration of design excellence		
	<i>(1) In considering whether development exhibits design excellence for the purposes of this Part, the consent authority must have regard to the following matters—</i> <i>(a) whether the development responds to the physical and cultural connection of the local Aboriginal community to the land,</i> <i>(b) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,</i> <i>(c) whether the form and external appearance of the development will improve the quality and amenity of the public domain,</i> <i>(d) whether the development detrimentally impacts on view corridors.</i>	A Design Excellence Report is provided at Appendix E and demonstrates how the development will deliver design excellence.
	<i>(2) The consent authority must also have regard to how the development addresses the following matters—</i> <i>(a) the suitability of the land for development,</i> <i>(b) the existing and proposed uses and use mix,</i> <i>(c) Aboriginal heritage,</i> <i>(d) the relationship of the development with other buildings (existing or proposed) on the same site or neighbouring sites in terms of separation, setbacks, amenity and urban form,</i> <i>(e) the bulk, massing and modulation of buildings,</i> <i>(f) street frontage heights,</i> <i>(g) environmental performance and amenity standards, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,</i> <i>(h) the achievement of the principles of ecologically sustainable development,</i> <i>(i) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of pedestrian networks,</i> <i>(j) the impact on, and proposed improvements to, the public domain,</i> <i>(k) the impact on special character areas,</i> <i>(l) achieving appropriate interfaces at ground level between the building and the public domain,</i> <i>(m) architectural diversity where the development is to consist of more than 2 buildings.</i>	
Part 4.7 Precinct plans and master plans		
4.39 Development must be consistent with precinct plan		
	<i>(1) Development consent must not be granted to development on land to which a precinct plan applies unless the consent authority is satisfied that the development is consistent with the precinct plan.</i>	The Precinct Plan applies to the site. The site is located within the Aerotropolis Core. The proposal is consistent with the key control of the Precinct Plan (refer to Table of Compliance at Appendix C). The Vision for the Aerotropolis Core is focused on employment and economic development. The vision recognised that the Aerotropolis Core will also include residential development of which these SSDA seeks to provide. This SSDA is aligned with the objectives of the Aerotropolis Core precinct objectives as the proposal will facilitate residential development in the

Matter	Consideration	Compliance
		Aerotropolis Core in an area that is not impacted by aircraft noise and benefits from its proximity to the future Aerotropolis Metro Station (currently under construction).
4.40 Development prior to precinct plan		
	(1) This section applies to development on land in the Western Sydney Aerotropolis if there is no precinct plan in force for the land.	This clause does not apply. The Precinct Plan applies to the site.
Division 2 Master plans and complying development		
4.42 Consent authority to consider master plan		
	Development consent must not be granted to development on the following land unless the consent authority has considered the master plan or draft master plan— (a) land to which a master plan applies or is proposed to apply, (b) land shown on the Land Application Map that is adjacent to land to which a master plan applies or is proposed to apply.	The site is not land in which a masterplan applies however adjoins land adjacent to land which a master plan is proposed to apply. As discussed in detail in Section 2.5.2 the applicant has considered the draft Master Plan and prepared a submission to the draft Bradfield Master Plan and proposes an alternative access arrangement in consultation with the WPCA.
Division 4 Infrastructure		
4.47 Development to which Division applies		
	This Division applies to the following development on land in the Western Sydney Aerotropolis— (a) development to which section 4.40 applies, (b) development for commercial or industrial purposes, (c) development for residential purposes that results in an increase in the number of dwellings on the land.	The proposal is for residential purposes and results in an increase in the number of dwellings on the land. Therefore, <i>Division 4 Infrastructure</i> applies to the proposal.
4.49 Public utility infrastructure		
	(1) Development consent must not be granted to development to which this Division applies unless the consent authority is satisfied that— (a) public utility infrastructure that is essential for the development is available, or (b) the public utility infrastructure will be available when required.	The proposal will provide all essential public utility infrastructure as required. See Section 6.7.2 . Stage 1 will involve augmentation of the existing site services within the site and from the Retreat and Stage 2 will involve connection to the services and utilities as provided by Bradfield City Centre.

4.4 Mandatory Matters for Consideration

The matters that the consent authority is required to consider in deciding whether to grant consent to any development application are identified and considered in **Table 11** below.

Table 11 Mandatory Matter for Consideration

Legislation	Matters for Consideration
Environmental Planning & Assessment Act 1979	The proposal is consistent with the objects of the EP&A Act for the following reasons: The proposal promotes orderly and economic use of development as the proposal is located in the First Priority area as identified in the Precinct Plan. This ensures transport, such as the Aerotropolis Metro Station and utilities infrastructure delivery will align with the proposal.

Legislation	Matters for Consideration
	- The proposal has committed to a BASIX energy score of 61%, a BASIX water score of 56% and have committed to a thermal comfort level average with a 7 star NatHERS rating to support ecologically sustainable development. - The proposal protects the environment through reintroducing endemic species to the site, the proposal's landscape design will be made up of 100% endemic species. - The proposal promotes sustainable management of built and cultural heritage through its stepped design to sympathetically integrate with the State heritage item located adjacent to the site (Kelvin Park Homestead). Further, the proposal has undertaken a Connecting with Country process that led to a landscape led design. The proposal is consistent with Division 4.7 of the EP&A Act, particularly for the following reasons: - The development has been declared to have state significance. - The development is not prohibited by an environmental planning instrument. - The development has been evaluated and assessed against the relevant heads of consideration under section 4.15(1), as outlined in this table.
State Environmental Planning Policy (Resilience and Hazards) 2021	The <i>State Environmental Planning Policy Resilience and Hazards 2021</i> (R&H SEPP) aims to promote the remediation of contaminated land to reduce the risk of harm to human health or any other aspect of the environment. Section 4.6 stipulates that a consent authority must not consent to the carrying out of development unless: - It has considered whether the land is contaminated, and - If the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and - If the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose. The EIS is accompanied by a Preliminary Geotechnical Investigation (PGI) at Appendix Q prepared by Intrax. The PGI confirms that the ground conditions are suitable for the proposal. The ground profile investigated is confirmed to permit typical construction practices for foundations and basement constructions. Intrax recommends the following additional geotechnical investigations are conducted that obtain the following: - Ground data to a depth of at least 5 metres below pile toe depth. - Laboratory test data to support assignment of soil parameters. - Excavatability assessment. - Rock mass structure and defect orientation. These works will be undertaken at a later stage and will form part of the mitigation measures at Appendix D.
State Environmental Planning Policy (Housing) 2021	State Environmental Planning Policy (Housing) 2021 (Housing SEPP) applies to the proposal's residential component. The Housing SEPP applies to development for the purpose of and mixed-use residential buildings developed with a residential accommodation component of which this SSDA proposes. Chapter 4 of the Housing SEPP, requires the consent authority to refer the development application to the relevant design review panel for advice concerning the design quality of the development and consider: - The design review panel's advice. - The design quality of the development. - The Apartment Design Guide (ADG). The proposal is generally consistent with the Housing SEPP and the ADG. Any variations from the Housing SEPP or ADG have been detailed in the ADG assessment within Appendix E and Section 6 of this EIS. Table 10 presents how the proposal exhibits design excellence. The proposal is generally consistent with the Housing SEPP and the ADG. The proposal minorly departs from the building separation requirement (3F Visual Privacy) within the

Legislation	Matters for Consideration
	ADG and is justified in Section 6.1.4 . The proposal is consistent with the key ADG requirements including solar access and cross ventilation. Appendix E and Section 6.4.1 of this EIS provide a detailed assessment.
State Environmental Planning Policy (Sustainable Buildings) 2022	The NSW Government is committed to developing sustainable homes and buildings, as such the Sustainable Buildings SEPP came into effect on 1 October 2023. The Sustainable Buildings SEPP encourages the design and delivery of more sustainable buildings across NSW. It sets sustainability standards for residential and non-residential development and starts the process of measuring and reporting on the embodied emissions of construction materials. The relevant standards of BASIX buildings relate to energy and water use and thermal performance. A Sustainability and Resilience Report is provided at Appendix Y and provides a detailed assessment of the relevant standards. A BASIX Assessment Report is provided at Appendix JJ as well as an NCC Section J Report at Appendix GG.
Western Sydney Aerotropolis Development Control Plan 2022 - Phase 2	As per the Western Sydney Aerotropolis Development Control Plan 2022 under Section 2.10 of SEPP Planning Systems, development control plans do not apply to State significant development. Nevertheless, the proposal has been designed with consideration to the Western Sydney Aerotropolis Development Control Plan 2022, as presented in Appendix F .

4.4.1 State Environmental Planning Policy (Housing) 2021

Chapter 4 Design of residential apartment development of the Housing SEPP contains the relevant standards for the proposed mixed-use residential development. The applicable provisions of the Housing SEPP have been considered in the preparation of this SSDA are addressed in Table 12 below.

Table 12 Relevant provisions of the Housing SEPP under Chapter 4

Section	Controls	Comment
Section 142 – Aims of chapter	<i>(1) The aim of this chapter is to improve the design of residential apartment development in New South Wales for the following purposes—</i> <i>(a) to ensure residential apartment development contributes to the sustainable development of New South Wales by—</i> <i>(i) providing socially and environmentally sustainable housing, and</i> <i>(ii) being a long-term asset to the neighbourhood, and</i> <i>(iii) achieving the urban planning policies for local and regional areas,</i>	The BASIX Assessment Report at Appendix JJ demonstrates that the proposal meets the highest possible ratings for the Water Score targets. The Western Sydney Aerotropolis Precinct Plan aims for a water score of 60% reduction in water usage. The proposal utilises all feasible water saving options and achieves a water 56% reduction making it a substantial improvement over the legislated requirement of the mandatory 40% in the EP&A 2021 and the Sustainable Buildings SEPP 2022. This falls short of the 60% target in the Western Sydney Aerotropolis Precinct Plan. However, significant potential exists to reach the 60% target by connecting to the planned Local Advanced Water Recycling Centre (AWRC) once it becomes operational in 2026. Currently, BASIX does not recognise the AWRC, but when this option becomes available, the proposal is expected to meet the WSAP goal within the BASIX framework as detailed in The Water Score Memo prepared by Jensen Hughes at Appendix OO.

Section	Controls	Comment
	<i>(b) to achieve better built form and aesthetics of buildings, streetscapes and public spaces,</i>	The proposal sets a strong precedent for the Aerotropolis through its delivery of a high quality built form and landscape design. The building facades have been designed to incorporate materials reflective of the natural landscape and the public spaces have been designed to be inviting, diverse, accessible, and highly vegetated with species only endemic to the area as detailed in the Design Excellence Report at Appendix E .
	<i>(c) to maximise the amenity, safety and security of the residents of residential apartment development and the community,</i>	The proposal has been designed against the principles of Crime prevention Through Environmental Design (CPTED) and will deliver a safe and secure development with clear site lines, well sit public areas and CCTV where needed as detailed in the CPTED Report provided at Appendix V .
	<i>(d) to better satisfy the increasing demand for residential apartment development, considering— (i) the changing social and demographic profile of the community, and (ii) the needs of a wide range of people, including persons with disability, children and seniors,</i>	The proposal has been designed to be accessible to people, including people with disability. 54 adaptable apartments have been included to support persons with a mobility impairment, seniors and children as detailed in the Accessibility Review Report at Appendix N
	<i>(e) to contribute to the provision of a variety of dwelling types to meet population growth,</i>	The proposal facilitates a range of 1, 2, 3 and 4 bedroom apartments to meet a variety of dwelling types to accommodate the population as detailed in Section 3.2.2 of this EIS and in the Architectural Drawings at Appendix B .
	<i>(f) to support housing affordability,</i>	The proposal does not specifically deliver affordable housing however seeks will deliver housing diversity through a range of one, two, three and four-bedroom units to support housing diversity and greater affordable through greater supply as detailed in Section 3.2.2 of this EIS and in the Architectural Drawings at Appendix B .
	<i>(g) to minimise the consumption of energy from non-renewable resources, to conserve the environment and to reduce greenhouse gas emissions,</i>	The proposal will maximise renewable energy sources through solar PV to significantly reduce greenhouse gas emissions while minimising reliance on non-renewable resources by only using electricity on the site as detailed in the Sustainability and Resilience Report at Appendix Y .
	<i>(h) to facilitate the timely and efficient assessment of development applications to which this chapter applies.</i>	Not applicable.
	<i>(2) This chapter recognises that the design of residential apartment development is significant because of the</i>	Satisfied. The proposal recognises the importance of design quality. The

Section	Controls	Comment
	<i>economic, environmental, cultural and social benefits of high quality design</i>	Design Excellence Report at Appendix E demonstrates the incorporation of economic, environmental, cultural, and social elements of design. Further the development demonstrates compliance with the ADG Appendix E .
143 – Land to which this chapter applies	<i>This chapter applies to the whole of the State, other than land to which State Environmental Planning Policy (Precincts—Regional) 2021, Chapter 4 applies.</i>	Satisfied. Chapter 4 is applicable to the site.
144 – Application of chapter	<i>(1) In this policy, development to which this chapter applies is referred to as residential apartment development.</i>	Satisfied. The proposal is considered a residential apartment development.
	<i>(2) This chapter applies to the following— (a) development for the purposes of residential flat buildings, (b) development for the purposes of shop top housing, (c) mixed use development with a residential accommodation component that does not include boarding houses or co-living housing, unless a local environmental plan provides that mixed use development including boarding houses or co-living housing is residential apartment development for this chapter.</i>	Satisfied. The proposal comprises a mixed-use residential flat buildings.
	<i>(3) This chapter applies to development only if— (a) the development consists of— (i) the erection of a new building, or (ii) the substantial redevelopment or substantial refurbishment of an existing building, or (iii) the conversion of an existing building, and (b) the building is at least 3 storeys, not including underground car parking storeys, and (c) the building contains at least 4 dwellings.</i>	Satisfied. The proposal consists of the erection of six new buildings and comprises varying storeys (between four and eleven storeys).
	<i>(4) If particular development comprises development for the purposes specified in subsection (2) and development for other purposes, this chapter applies only to the part of the development for the purposes specified in subsection (2).</i>	Satisfied. The proposal is primarily residential with Buildings B and E comprising retail development at ground level. It is noted that subsection 2 only applies to the residential components of the development.
	<i>5) This chapter does not apply to development that involves only a class 1a or 1b building within the meaning of the Building Code of Australia.</i>	Satisfied. The proposal does not involve any class 1a or class 1b buildings.
	<i>(6) To avoid doubt, development to which Chapter 2, Part 2, Division 1, 5 or 6 applies may also be residential apartment development under this chapter.</i>	Noted.
145 – Referral to design review panel for development applications	<i>(1) This section applies to a development application for residential apartment development, other than State significant development.</i>	Satisfied. The proposal has been referred to the SDRP.
	<i>(2) Before determining the development application, the consent authority must refer the application to the design review panel for the local government area in which the development will be carried out for advice on the quality of the design of the development.</i>	Not applicable.
	<i>(3) This section does not apply if—</i>	Not applicable.

Section	Controls	Comment
	(a) a design review panel has not been constituted for the local government area in which the development will be carried out, or (b) a competitive design process has been held.	
148 – Non-discretionary development standards for residential development – the Act, s 4.15	(1) The object of this section is to identify development standards for particular matters relating to residential apartment development that, if complied with, prevent the consent authority from requiring more onerous standards for the matters. (2) The following are non-discretionary development standards— (a) the car parking for the building must be equal to, or greater than, the recommended minimum amount of car parking specified in Part 3J of the Apartment Design Guide, (b) the internal area for each apartment must be equal to, or greater than, the recommended minimum internal area for the apartment type specified in Part 4D of the Apartment Design Guide, (c) the ceiling heights for the building must be equal to, or greater than, the recommended minimum ceiling heights specified in Part 4C of the Apartment Design Guide.	Satisfied. The proposal demonstrates compliance with the ADG, see Appendix E.
149 – Apartment Design Guide prevails over development control plans	(1) A requirement, standard or control for residential apartment development that is specified in a development control plan and relates to the following matters has no effect if the Apartment Design Guide also specifies a requirement, standard or control in relation to the same matter— (a) visual privacy, (b) solar and daylight access, (c) common circulation and spaces, (d) apartment size and layout, (e) ceiling heights, (f) private open space and balconies, (g) natural ventilation, (h) storage. (2) This section applies regardless of when the development control plan was made.	Noted. The proposed SSDA is not subject to comply with any development controls plans. The proposal demonstrates compliance with the ADG in Appendix E. Not applicable.

4.5 Other Approvals

The other legislative approvals required for the proposal in addition to a development consent under Division 4.7 of the EP&A Act are outlined in **Table 13** below.

Table 13 Other Approvals

Matter	Consideration				
Approvals not required for SSD	Section 4.41 of the EP&A Act stipulates that certain authorisations are not required for State significant development. The following legislative approvals would otherwise be required if the Project was not State significant.				
	<table> <tr> <th>Legislation</th><th>Approval Otherwise Required</th></tr> <tr> <td colspan="2">Legislation that does not apply to State Significant Development</td></tr> </table>	Legislation	Approval Otherwise Required	Legislation that does not apply to State Significant Development	
Legislation	Approval Otherwise Required				
Legislation that does not apply to State Significant Development					

Matter	Consideration																		
	<table> <tr> <td>Fisheries Management Act 1994</td><td>No</td></tr> <tr> <td>Heritage Act 1977</td><td>No</td></tr> <tr> <td>National Parks and Wildlife Act 1974</td><td>No</td></tr> <tr> <td>Rural Fires Act 1997</td><td>No</td></tr> <tr> <td>Water Management Act 2000</td><td>No</td></tr> </table>	Fisheries Management Act 1994	No	Heritage Act 1977	No	National Parks and Wildlife Act 1974	No	Rural Fires Act 1997	No	Water Management Act 2000	No								
Fisheries Management Act 1994	No																		
Heritage Act 1977	No																		
National Parks and Wildlife Act 1974	No																		
Rural Fires Act 1997	No																		
Water Management Act 2000	No																		
Consistent Approvals	Section 4.42 of the EP&A Act stipulates that certain authorisations cannot be refused if they are necessary for carrying out State significant development. The following table lists legislative approvals that are required for the proposal and cannot be refused if the proposal is approved. <table> <tr> <th>Act</th><th>Approval Required</th></tr> <tr> <td colspan="2">Legislation that must be applied consistently</td></tr> <tr> <td>Fisheries Management Act 1994</td><td>No</td></tr> <tr> <td>Mine Subsidence Compensation Act 1961</td><td>No</td></tr> <tr> <td>Mining Act 1992</td><td>No</td></tr> <tr> <td>Petroleum (Onshore) Act 1991</td><td>No</td></tr> <tr> <td>Protection of the Environment Operations Act 1997</td><td>No</td></tr> <tr> <td>Roads Act 1993</td><td>Yes</td></tr> <tr> <td>Pipelines Act 1967</td><td>No</td></tr> </table>	Act	Approval Required	Legislation that must be applied consistently		Fisheries Management Act 1994	No	Mine Subsidence Compensation Act 1961	No	Mining Act 1992	No	Petroleum (Onshore) Act 1991	No	Protection of the Environment Operations Act 1997	No	Roads Act 1993	Yes	Pipelines Act 1967	No
Act	Approval Required																		
Legislation that must be applied consistently																			
Fisheries Management Act 1994	No																		
Mine Subsidence Compensation Act 1961	No																		
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Petroleum (Onshore) Act 1991	No																		
Protection of the Environment Operations Act 1997	No																		
Roads Act 1993	Yes																		
Pipelines Act 1967	No																		
EPBC Approval	The <i>Environmental Protection and Biodiversity Act 1999 Act</i> (EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places. These are known as matters of National Environmental Significance. If the proposal will, or is likely, to impact a matter of National Environmental Significance, then it is required to be referred to the Federal Department of the Environment for assessment to determine if it constitutes a 'controlled action' requiring EPBC approval. Presently, a bilateral agreement allows the Commonwealth Minister for the Environment to rely on the NSW environmental assessment process when assessing a controlled action under the EPBC Act. The proposal is not likely to impact a matter of National Environmental Significance. Therefore, the proposal is not required to be referred to the Federal Department of the Environment to determine if it constitutes a controlled action and the bilateral agreement applies.																		

4.6 Consideration of Design Excellence

This section provides an assessment of the proposal against the 4.33 *Consideration of Design Excellence* within Part 4.5 *Design Excellence* of the Parkland City SEPP.

(1) In considering whether development exhibits design excellence for the purposes of this Part, the consent authority must have regard to the following matters—

(a) whether the development responds to the physical and cultural connection of the local Aboriginal community to the land,

The proposal responds to the physical and cultural connection of the local Aboriginal community to the land through the Country led approach to the design. Hardy Hardy was engaged by the proponent to engage Traditional Custodians local knowledge holders. This then informed the landscape and overall design of the proposed development. This has resulted in a design that celebrates Country and is sensitive to the Dharug land on which the site is located. **Section 3.3** and the Connecting with Country Report at **Appendix RR** further detail the Connecting with Country approach to the development.

(b) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,

The proposal provides a high-quality design and built-form outcomes through its focus on a landscape-led design which was formulated on a Connecting to Country approach.

The proposal incorporates a sympathetic palette of materials, colours and finishes which exhibit a high-quality design response. The proposed palette of materials includes textured concrete finishes, brickwork, powder-coated aluminium details and glazing which are recessive and respond to the finishes present within Kelvin Park Homestead itself, particularly, rendered facades typical of the Georgian period.

The proposed materials chosen are durable and suitable for the proposed predominantly residential uses of the development and its locality. The materials chosen are low maintenance and robust. The building's design and positioning support the overall amenity outcomes including solar access and cross ventilation.

(c) whether the form and external appearance of the development will improve the quality and amenity of the public domain,

The Design Excellence Report at **Appendix E** and the Landscape Plan at **Appendix J** detail how the proposal, in particular its form and external appearance, will improve the quality and amenity of the public domain.

The public domain and landscaped areas have been designed to be inviting, attractive and accessible for all. The proposed public domain areas have been designed to ensure the required levels of solar access, shade, provision of amenities and wind protection are sufficient. The position of the retail tenancies at the site's western boundary paired with the pickup and drop off zone and seating areas will encourage people to well at the western boundary of the site neighbouring the Bradfield City Centre. This will result in a public domain that is multi-functional and activated.

The western interface has been designed to appear at a reduced scale through the division of the form into multiple smaller buildings as opposed to larger, bulkier buildings. The buildings have been designed at a fine-grain level and incorporate a vast palate of materials that complement each other and reflect the sites surrounding the Country.

The form of the buildings facilitates through site views of Kelvin Park Homestead from the public domain. Through site links are enabled through the careful positioning of the buildings on site and will encourage pedestrians from the western façade to walk through to the eastern end of the site. This will result in a site that is walkable, activated and at the human scale when perceived from the public domain. The site's public domain interface is further activated through the positioning of the retail tenancies which supports activation and integration of the site with the future envisioned and active character of Bradfield City Centre.

The edge treatments of the public domain effectively integrate the urban street with the interface to Kelvin Park Homestead at the eastern boundary. Deep soil areas have been strategically placed towards Kelvin Park Homestead to minimise the visual impact of the proposal and enhance the landscaped character adjacent to this State heritage item.

(d) whether the development detrimentally impacts on view corridors.

A Visual Impact Assessment (**VIA**) has been prepared by Ethos Urban (**Appendix T**) to identify, describe and assess the potential visual impacts of the proposal. The site has a unique blend of urban, natural and heritage interfaces. The proposal maintains visual connections to key views to reinforce the connection to Country as detailed in the draft Master Plan.

Kelvin Park Homestead is State heritage listed and is viewed from the site. The proposal has been cautious in the positioning of buildings on the site and has created through-site views to Kelvin Park Homestead from the site's western boundary through to the site's eastern boundary. The proposal will support the retention of views of Kelvin Park Homestead and Thompsons Creek beyond. The proposal's positioning of buildings does not impact the view corridor linking to the Aerotropolis Metro Station and Central Park within the Bradfield City Centre.

Mitigation measures have been provided in **Appendix D** and will ensure that the proposal's acceptability from a visual impact perspective.

(2) The consent authority must also have regard to how the development addresses the following matters—

(a) the suitability of the land for development,

The site is of a sufficient size to appropriately accommodate the new built form as proposed, whilst also supporting appropriate inter-building separation, side and rear setbacks and a high-quality landscaping strategy. The site is currently underutilised and accommodates one standalone residential dwelling. The site is not environmentally constrained (from a flood, heritage, archaeological and or contamination perspective) and the proposal represents a type and intensity of development envisioned for the site under the Aerotropolis planning framework.

(b) the existing and proposed uses and use mix,

The existing use of the site is residential. The proposed use of the site is proposed to expand the residential offering of the site with ancillary fine-grain retail. This aligns with the future intended use for the site under the Aerotropolis planning framework.

(c) Aboriginal heritage,

There are no known elements of Indigenous heritage on the site. Detailed testing and assessment have been undertaken as part of the EIS process and relevant mitigation measures have been implemented.

(d) the relationship of the development with other buildings (existing or proposed) on the same site or neighbouring sites in terms of separation, setbacks, amenity and urban form,

The layout and built form are described in detail in **Section 3.6** of this EIS. The massing of the built form has been carefully designed in response to the allowable scale and massing in the Aerotropolis Core, the adjoining Bradfield City Centre Masterplan to the west of the existing State heritage listed Kelvin Park Homestead to the east. The proposed development has been designed to respond to the land's natural topography. The developments' tallest buildings are located to the site's western boundary, closest to the future Bradfield City Centre and gradually step downwards towards Kelvin Park Homestead and Thompsons Creek beyond.

The proposal is generally consistent with the ADG. The proposal minorly departs from the building separation requirement (3F Visual Privacy) within the ADG and is justified in detail in **Section 6.1.4**. The proposal is consistent with the key ADG requirements including solar access and cross ventilation. **Appendix E** and **Section 6.4.1** provide a detailed assessment. The proposal is generally consistent with the DCP setbacks envisioned under the DCP which will support an appropriate relationship and amenity outcome between the site and future neighbouring development.

(e) the bulk, massing and modulation of buildings,

The bulk, massing and modulation of the proposed buildings is further detailed in **Section 6.1.1** of this EIS and is supported by the Design Excellence Report at **Appendix E**.

The proposed massing and the distribution of form across six individual buildings were carefully designed to improve the permeability at the ground level and reduce the bulk and scale of the development overall. The design of larger floor plates within each building (as opposed to the DCP approach of 650sqm floor plates) results in an improved distribution of the built form across the site. This approach results in a more modest scale rather than more, taller towers. The tallest buildings are positioned at the western boundary and gradually taper down towards the east.

The built form has been designed to embody a respectful interface to Kelvin Park Homestead achieved through reduced heights and forms adjacent to the site's eastern boundary. Additionally, the arrangement of buildings is designed to maintain sky views from the ground level while minimising the built form and frontage along the eastern boundary.

(f) street frontage heights,

The site's existing surroundings are predominately rural, therefore there is no established street frontage character or street frontage heights for the proposal to reflect. The street frontage heights have been designed to contribute to the articulation of form and reduce the perceived bulk and scale of each building component when viewed from the public domain.

(g) environmental performance and amenity standards, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,

A detailed assessment has been undertaken in **Section 6.3**, overall, the environmental performance of the proposal has been tested and is considered to be acceptable.

A Sustainability and Resilience Report (ESD) has been prepared by Jensen Hughes and is provided at **Appendix Y**. The report provides an assessment of the proposal against the principles of ESD, outlines the project's ESD performance targets and alignment with the relevant plans and policies, and describes the ESD framework and sustainable design principles being implemented to achieve the project targets. Section 6.20 further details the sustainable design targets the proposal meets.

As detailed in Section 6.13, an assessment of overshadowing was conducted by DKO and is detailed in the Design Report at **Appendix D**. DKO conducted a comparative assessment between a scheme that strictly adheres to the

Aerotropolis DCP (in terms of maximum floor plate sizes) and the proposed scheme to assess the impacts on overshadowing on Kelvin Park Homestead located east of the site. The shadow diagrams demonstrate that the proposed scheme results in improved overshadowing outcomes for Kelvin Park Homestead. A complaint scheme would be overshadowing the heritage cartilage of the item. Therefore, the proposal results in an improved outcome for the neighbouring State heritage item.

The proposed apartments have carefully been designed to deliver efficiency and functionality. The ADG requires living rooms and private open spaces of at least 70% of apartments to receive a minimum of 2 hours of direct sunlight between 9 am and 3 pm in mid-winter. The proposal demonstrates that 375 (70%) of the total proposed apartments achieve 2 hours of solar access between 9 am and 3 pm and a total of 59 (11%) of apartments do not achieve any direct solar access. See **Section 6.4.5** for a detailed assessment.

The proposal generally meets the building separation requirements of the ADG as defined in Section 3F *Visual Privacy*. See **Section 6.4** which details residential amenity including visual privacy.

Acoustic Logic has prepared a Noise and Vibration Impact Assessment (**NVIA**) (**Appendix P**), to identify and provide a quantitative and qualitative assessment of the noise and vibration-generating sources provided during the construction and operation of the project. See section 6.14 for the detailed noise and vibration assessment.

(h) the achievement of the principles of ecologically sustainable development,

A Sustainability and Resilience Report (ESD) has been prepared by Jensen Hughes and is provided at **Appendix Y**. The report provides an assessment of the proposal against the principles of ESD, outlines the project's ESD performance targets and alignment with the relevant plans and policies, and describes the ESD framework and sustainable design principles being implemented to achieve the project targets. See **Section 6.20** for a detailed assessment.

Key design features that will lead to the achievement of the abovementioned targets will include the following:

- The proposed development is committed to meeting and exceeding, where possible the performance standards with the National Construction Code (NCC) 2022 Volume One Section J.
- Commitment of a BASIX energy score of 61%.
- Commitment of water score of 56% (refer to the Water Score Memo at **Appendix OO**).
- Commitment to the thermal comfort specifications of the development in reaching an average NatHERS Star rating of 7.
- Waste Management Plan to show a 10% reduction in waste reduction and 85% reduction in construction waste.
- Minimum 100kW on-site Solar PV to offset residential common areas and central systems, with commitment for the whole development to be carbon neutral by 2030 by way of either expanding on on-site renewable energies and/or purchasing LGCs or entering a power purchase agreement.
- Kitchen taps, bathroom taps, showerheads, toilet flushers, dishwashers and washing machines all have the highest rating possible for residential use.
- Motion sensors used for the service rooms, switch rooms, fire stairs, lobbies and corridors.
- The pool will be heated by an electric pump heating system on a timer.

(i) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of pedestrian networks,

The proposal will improve pedestrian access to the site through the introduction of through-site links. See **Section 3.7** which further details vehicular access pedestrian access and movement for Stage 1 and Stage 2 of the proposal

(j) the impact on, and proposed improvements to, the public domain,

Significant landscape works are proposed throughout the site and will embellish the public domain between the proposed buildings. The landscaping works will facilitate pedestrian and public domain infrastructure features that will be characterised by multiple wayfinding pathways, seated areas, water features, perimeter planting, communal open spaces, and passive recreational play spaces. The public domain works are described in further detail in **Appendix J, Section 3.10** and **Section 6.6**.

The site's interface has been carefully designed to ensure it will seamlessly integrate into the future development within the Bradfield City Centre.

The buildings have been modulated to be tallest at the sites of the western boundary, however, at ground level, the design of the buildings is of a human scale and supports the pedestrian thoroughfare. Careful articulation, design consideration and finite details have been implemented into the design. This results in a public domain interface that is walkable, accessible and inviting. The pathways, plantings, seating areas and shared pick-up and drop-off zone is shared with pedestrians to ensure it is accessible to vehicles and walkable for pedestrians to access the site from the western façade.

Through site links encourage pedestrians to walk through the site and enjoy the amenity the site has to offer. Extensive testing has been undertaken to ensure the ground plan achieves adequate sunlight and does not result in any unacceptable amenity impacts. The public domain is activated by the two retail tenancies and encourages pedestrians to linger at the site's western boundary.

Wind impacts throughout the public domain have been tested and deemed acceptable, this ensures pedestrians can walk throughout the public domain comfortably.

(k) the impact on special character areas,

The proposal is not located within or in proximity to a special character area.

(l) achieving appropriate interfaces at ground level between the building and the public domain,

As detailed throughout the Design Excellence Report at **Appendix E**, the proposal has been cautiously designed to ensure the key site interfaces are not adversely impacted. The site has key interfaces to Kelvin Park Homestead to the east and in the future, will be bounded by Bradfield City Centre at its western boundary. As such, the proposal has been designed with a fine-grain level of detail to ensure the interfaces blend seamlessly with the existing and future development. The western boundary has been designed at a human scale through its detailed public domain and landscaping as described in **Appendix J**. A more sensitive interface has been designed to carefully transition in form between the low-scale character of Thompsons Creek and the Kelvin Park Homestead.

(m) architectural diversity where the development is to consist of more than 2 buildings.

The proposed buildings demonstrate architectural diversity through the proposal of three different architectural building styles. They are made up of the Planes, Buildings B and E, the Pavilions Buildings A, C and D and the Paperbarks Buildings A and F. Each grouping is unique and reflective of their positioning within the site and its key interfaces. Their description is further detailed in **Section 6.1.1**.

5.0 Community Engagement

This section describes the consultation undertaken and feedback received prior to the lodgement of the EIS and is supported by a Consultation Outcomes Report that has been prepared by Ethos Urban and is included at **Appendix QQ**.

5.1 Engagement undertaken

Ethos Urban have undertaken a range of community and stakeholder engagement to inform the preparation of this SSDA application. The consultation program included engagement with the local community, neighbours, key stakeholders, government authorities and agencies to present an overview of the proposed development and gather feedback during the preparation of the SSDA. Full consideration has been given to the SEARs during this development application process and to the SSD consultation guidelines.

The Consultation Outcomes Report identifies the proactive and strategic approach to communications and stakeholder engagement undertaken for the proposal. This approach allowed for a transparent, comprehensive engagement that was timely, genuine, constructive, and engaging.

Throughout this consultation, the following engagement activities and participation occurred:

5.1.1 Government Agency and Authority engagement

The following agencies and authorities were contacted by the Department of Planning, Housing, and Infrastructure (**DPHI**) for input in preparation for the SEARs.

- Civil Aviation Safety Authority.
- Heritage NSW.
- Liverpool City Council.
- NSW Department of Climate Change, Energy, the Environment and Water.
- NSW Environmental Protection Authority.
- NSW Rural Fire Service.
- Sydney Water.
- Water NSW.
- Western Parkland City Authority.

A detailed description of the engagement undertaken with the abovementioned agencies is provided in **Appendix QQ**. The project team undertook targeted outreach with key stakeholders to provide further opportunities for direct dialogue with the project team, as detailed in **Table 14** below.

Table 14 Stakeholder outreach and outcomes

Stakeholder	Purpose	Result and items raised
DPHI	To present a summary of the proposal, including the planning context and key planning controls, the site, design principles.	A meeting was held on 14 September 2023. A discussion was undertaken regarding alternate floor plates sizes and the unfeasible nature of strict adherence to control PO2 in Section 5.2.2 of the Aerotropolis DCP irrespective of the that the DCP does not technically apply to SSD development. A detailed assessment of the proposal against PO2 in Section 5.2.2 of the DCP is provided in Section 6.1.2 .
Western Parkland City Authority (WPCA)	To discuss the inconsistencies of the Bradfield City Masterplan the site's planned road and access arrangement (prepared in accordance with the Precinct Plan)	An initial meeting was held on 26 September 2023 to view the Bradfield City Centre Masterplan and present the initial concept scheme for the proposal where the road layouts were noted as being inconsistent with the Aerotropolis Precinct Plan. The draft Bradfield City Centre Masterplan was subsequently exhibited from, 5 February to 4 March 2024. Following a review of the draft Bradfield City Centre Masterplan, the applicant prepared a public submission on 4 March 2024 which is detailed in Section 1.4.1 .
Western Parkland City Authority (WPCA)	To better understand social infrastructure planning and delivery, to inform the Social Impact Assessment.	Meeting declined. The WCPA Social Infrastructure Plan is the best available information.

Stakeholder	Purpose	Result and items raised
(SIA specific)	To discuss the Bradfield City Centre Masterplan	On 2 April 2024, the WPCA was contacted by the SIA project team to arrange an interview to discuss social infrastructure planning and sequencing for the area in the context of the Bradfield City Centre Masterplan. On 17 April 2024, a representative provided advice which is detailed in Appendix FF .
State Design Review Panel (SDRP)	Consultation with the NSW Government Architect is conducted via a series of State Design Review Panel (SDRP) meetings where expert panellists provide independent, consistent design quality advice on projects that have or will undergo assessment by the state. The project team has met twice with the SDRP	SDRP 1 Comments – 2 August 2023 - Implement 'start with Country' into overall design. - Ensure careful transition of landscape and built form design with neighbouring development. - Demonstrate compatibility of sites water management strategy with existing topography and water flows - Further development required on yield calculations, height, floor space/ area, housing diversity and place design.
		SDRP 2 Comments – 15 November 2023 - Ensure on going engagement of Aboriginal expertise, - Blend the natural and urban character through the development of the built form. - Design for future flexibility of the east-west link. - Include east-west link in stage 1. - Provide sufficient deep soil coverage. - Further develop the water management strategy. - Reduce car parking. - Target canopy coverage of 20%. - Strike balance between solar access and useability on apartment balcony layouts.
Liverpool City Council	To discuss delivery of local infrastructure.	Consultation with Liverpool City Council is underway in relation to the delivery of local infrastructure. Local contributions will be proposed via a Voluntary Planning Agreement (VPA) with Liverpool City Council. A Letter of Offer to this effect accompanies this application and has been distributed to Council. A date for a meeting is (at the time of writing) currently being scheduled.
Sydney Water	To discuss relevant servicing requirements.	The project team submitted a request for a feasibility assessment to Sydney Water on 3 August 2023. On 4 December 2203, Sydney Water provided a response to outline their relevant servicing requirements. SDG Development and their consultants will continue to engage Sydney Water as required as the project progresses.
Transport for NSW	To discuss traffic and transport impacts.	Consultation with Transport for NSW was led by TTPP on behalf of SDG Development with correspondence to be undertaken and continued as needed. SDG Development and their consultants will continue to engage with Transport for NSW as required.
Owner of 30 The Retreat, Bradfield (Kelvin Park Homestead)	The project team sought a meeting to discuss the proposal and feedback with the owner of Kelvin Park Homestead.	A meeting was held on 29 February 2024 and resulted in the following discussion items. - Views and visual impact of the development were discussed. - The owner appreciates the significant heritage values of Kelvin Paek Homestead and opens to the public annually. - The owner had no immediate plans for redevelopment to be undertaken.

5.1.2 SDRP Response

DKO has critically reviewed and incorporated the feedback provided during both SDRP meetings into the proposal's design. A comprehensive tabulated response addressing each item raised by the SDRP has been addressed, demonstrating how each comment has influenced the proposed design. This detailed response is located within the Design Report, specifically on pages 35 to 38 of the Appendix 1 located within **Appendix E**.

5.1.3 Community engagement

A summary of the community engagement undertaken is provided in **Table 15**.

Table 15 **Community engagement undertaken**

Activity	Details	Outcome	Items raised relevant to SIA
Community Letter	A community notification letter was delivered to approximately 88 letterboxes of surrounding residents and businesses on 16 March 2024.	Surrounding residents and businesses were notified.	The letter included information about the proposal and invited community members to join a webinar information session with the project team.
Community webinar	A 1 hour community webinar was held for community members to learn about the project, meet the project team, provide feedback on key topics, and ask questions. Neighbouring residents were invited via a letterbox drop.	Seven registered and three attended.	• Construction timing and duration. • Integration of Thompson's Creek into the design. • Timing of utilities infrastructure provision. • Interface with Bradfield City Centre master plan. • Queries were raised on who the developer of the site is.
Phone and email enquiries	A project enquiry 1800 number, email address and enquiry database for stakeholders was established and monitored. Responses to enquiries will continue until lodgement of the proposal.	One enquiry was made.	As of 29 April 2024, one enquiry was received during the consultation period seeking further information regarding the orientation of the site map provided on the community notification. This was explained and closed via phone and no further enquiries have been received since. The email and phone number will continue to operate until the lodgement of the final SSDA.
SIA survey	A short survey was sent via email to those who registered for the webinar and the owner of Kelvin Park Homestead. An initial email was sent 11 April 2024, followed up by a second email on 18 April 2024. The survey closed on 23 April 2024.	No submissions were received.	Not applicable.

5.1.4 Community webinar response

The concerns raised during the community webinar have been thoroughly examined and addressed within the project as outlined below.

- The Project Team notes that the proposed design is grounded in connecting with country design principles that seek to restore the natural creek line and flow of water across the site. As such Thompson's Creek is integrated as a natural asset to the new community 40 The Retreat. The proposed design transitions from high-density residential down to one-storey of Kelvin Park Drive and further Thompson's Creek.
- The Project Team notes that we are working with our services consultant and are in correspondence with Sydney Water, energy providers and Western Sydney Parkland Authority to ensure the development is coordinated to the provision of utilities. It was clarified that as part of the SSDA process, the relevant government agencies and services will be notified via a referral process. Feedback from these agencies is anticipated to inform the timing of the second stage of development.
- The Project Team notes that the Western Sydney Parkland Authority has recently exhibited a draft Master Plan for the Bradfield City Centre with the Western Sydney Aerotropolis Core Precinct. The draft Masterplan details what is envisioned for the Bradfield City Centre and how it will be connect to the Metro and surrounding land. It was noted that development within the Bradfield City Centre and it's interface of our project is largely out of our control. It was reiterated that this is a strategic plan that has been adopted by the State Government.
- It was clarified that SCG Development were the applicant of this SSDA and would be developing the site.

5.2 First Nations Engagement

First Nations engagement has been a crucial element throughout the design process for the project. The SSDA will be inclusive of a landscape-led approach informed by the design principle 'Start with Country' which will inform the site's built form and character.

Hardy Hardy, a First Nations design studio, was engaged to lead the Connection with Country workstream, which included a Walk on Country attended by representatives from the development and design team, SDRP, Arcadia landscape team and Dharug Traditional Owners. This process contributed to a holistic architectural response that gives Country an active voice in the design.

As a result, a series of Dharug Design Principles were developed and reflected in the overarching design and landscaping. Consultation was also undertaken with Aboriginal groups during the preparation of the Aboriginal Cultural Heritage Assessment (ACHAR), led by Artefact Consultants.

5.3 Engagement to be Carried Out

The applicant is committed to ongoing community consultation following the submission of the EIS. This includes during the proposal's exhibition and assessment and, if approved, following a determination.

5.3.1 Exhibition and Assessment

Following its submission, DPE will exhibit the EIS on the Major Projects NSW Website and invite submissions from government agencies and the public. Once the exhibition period is complete, DPHI may require the applicant to prepare a Submissions Report in response to issues raised. The applicant will continue to liaise with DPHI and stakeholders during the proposal's assessment to address potential queries.

5.3.2 Post Approval

The applicant will implement post-approval stakeholder consultation strategies in addition to the Conditions of Consent requirements. This will include continual liaison with and advisement of construction activities to adjoining landowners as required.

6.0 Assessment of Impacts

6.1 Built form and urban design

6.1.1 Urban design, bulk and scale

The massing and built form of the proposed development has been carefully designed in response to the allowable scale and massing in the Aerotropolis Core, the adjoining Bradfield City Centre Masterplan to the west of the site and the State heritage listed Kelvin Park Homestead to the east. The proposed development will have a maximum height of 39.90m and a GFA of 55,330 sqm.

The proposed development has been designed to respond to the land's natural topography. The developments' tallest buildings are located to the site's western boundary, closest to the future Bradfield City Centre and gradually step downwards towards Kelvin Park Homestead and Thompsons Creek beyond.

The gradual stepping of the built form improves solar access, overshadowing outcomes, and access to amenities for future residents. The built form has been designed to embody a respectful interface to Kelvin Park Homestead (by reducing the height and form directly adjacent to the site's eastern boundary) with a permeable arrangement of buildings that allow for sky views from the ground plane and a reduced built form and frontage to the eastern boundary, refer to **Figure 34**.

The proposed massing and the distribution of form across six individual buildings was carefully designed to improve the permeability at the ground level and reduce the bulk and scale of the development overall. The design of larger floor plates within each building (as opposed to the DCP approach of 650sqm floor plates) results in an improved distribution of the built form across the site. This approach results in a more modest scale rather than more, taller towers. The tallest buildings are positioned at the western boundary and gradually taper down towards the east, refer to **Figure 35**.

A reduced overshadowing impact on Kelvin Park Homestead at 3 pm on 21 June is a key benefit of the floor plate design. The approach results in higher amenity outcomes for future residents. Residents will have improved access to light, and cross-ventilation as discussed in **Section 6.4.2**.

Each building within the proposal is distinguished by a unique selection of materials, carefully chosen to enhance the visual impact of the proposal. This approach ensures that each building contributes distinctively to the overall aesthetic of the proposal, while also promoting a cohesive and harmonious architectural expression across the site.

1. Refining the massing forms and orientation that responds to the ground plane and movement of water
2. Diversity in massing proposed with various massing responses.
3. Transition of scale and character towards Thompson's Creek
4. Introduce vertical articulation to further breakdown the massing and defining the overall form

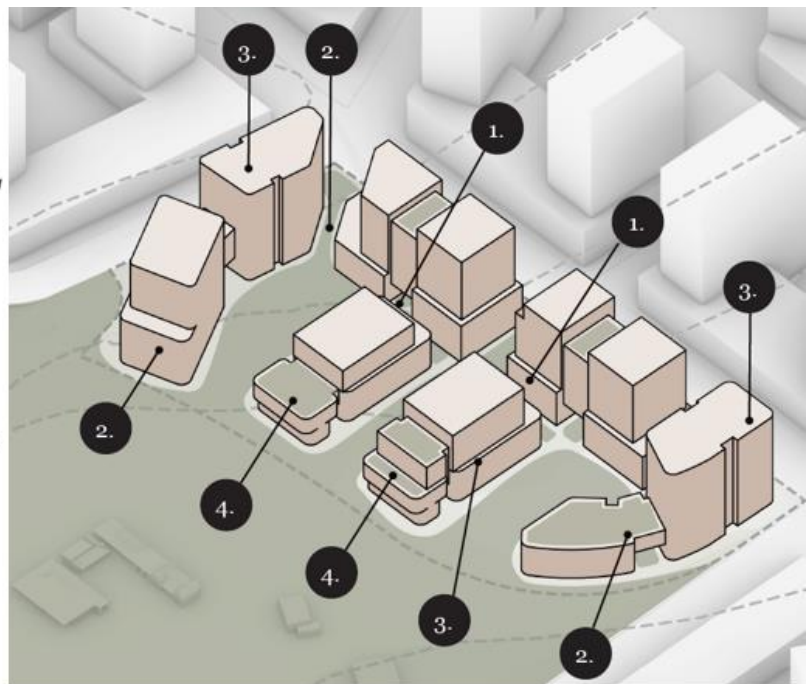


Figure 34 Built form design

Source: DKO

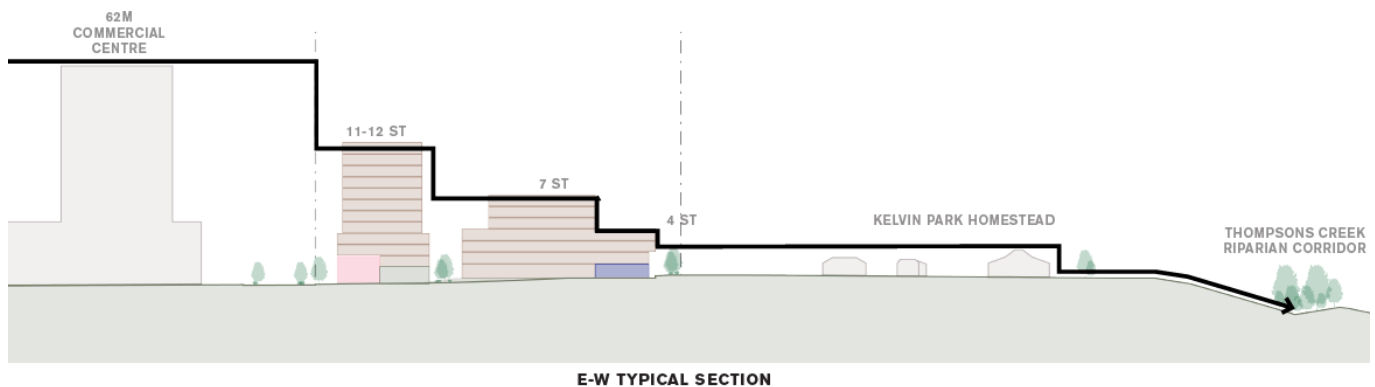


Figure 35 Scale and articulation of a typical section

Source: DKO

The podium definitions define street walls and highlight key corners of the site. The diverse building typologies respond to the site's immediate context and foster small communities. The layout of the buildings, in conjunction with the extensive landscaping, will create opportunities for social interaction in shared community spaces. The design approach rationale and the key built-form parameters are discussed in the Architectural Design Report (**Appendix E**) and in the sections below.

The Planes (Buildings B and E)

Located along the site's western boundary, the planes integrate with both the urban edge and the park's landscaped edge at the eastern boundary. The design is flexible to seamlessly interface with the two edge types and western suns. The design features horizontal planes across the buildings, blurring the lines between the built form and the natural landscape. Additionally, sculpted vertical fins serve to unify the buildings.

The Pavilions (Buildings A, C and D)

The Pavilions are located on the eastern edges of the site that interface Kelvin Park Homestead. The buildings are grounded by sympathetic design principles and are influenced by the natural landscape and Kelvin Park Homestead. The building mass terraces down towards the eastern boundary to respond to the bulk and scale of Kelvin Park Homestead. The lower levels lift through the utilisation of the columns to ground the building, and separations allow water to seemingly flow through.

The building line is further recessed inwards at each level to showcase the thinned slab edges which will be heavily vegetated to soften the edges and blur the intersection of landscape and building.

The Paperbarks (Buildings A and F)

The Paperbacks are strategically positioned at key corners of the site. Their unique design will serve as distinctive markers for the precinct amidst the other buildings. These buildings interface both the urban edge to the site's western boundary and the Kelvin Park interface. The buildings feature landscaped edges along the lower portions of the buildings which assist in harmonising the towers with the surroundings. These landscaped edges assist the transition between differing urban and park edges, seamlessly blending the building into the landscape. Taking inspiration from the Paperbark Tree, the building façade results in optimal solar access and privacy.

See **Figure 36** below for the proposed building configuration.



Figure 36 Building design

Source: DKO

6.1.2 Floor plate design

In developing the proposed residential tower floor plates, significant testing and analysis has been undertaken as detailed in the Design Excellence Report at **Appendix E**. The proposal seeks tower floor plates ranging from 597 to 1,043 sqm. This however results in a technical departure from PO2 of Section 5.2.2 Amenity and Sustainability of the Aerotropolis DCP which recommends a maximum floor plate size of 650 sqm above five storeys.

The massing approach that strictly adheres to the DCP is shown visually in **Figure 37**. The proposal's floor plates are shown in **Figure 38**), and include:

- Building A: 756 sqm;
- Building B: 1,040 sqm;
- Building C: 829 sqm;
- Building D: 597 sqm;
- Building E: 1,043 sqm;
- Building F1: 669 sqm; and
- Building F2: 675 sqm.

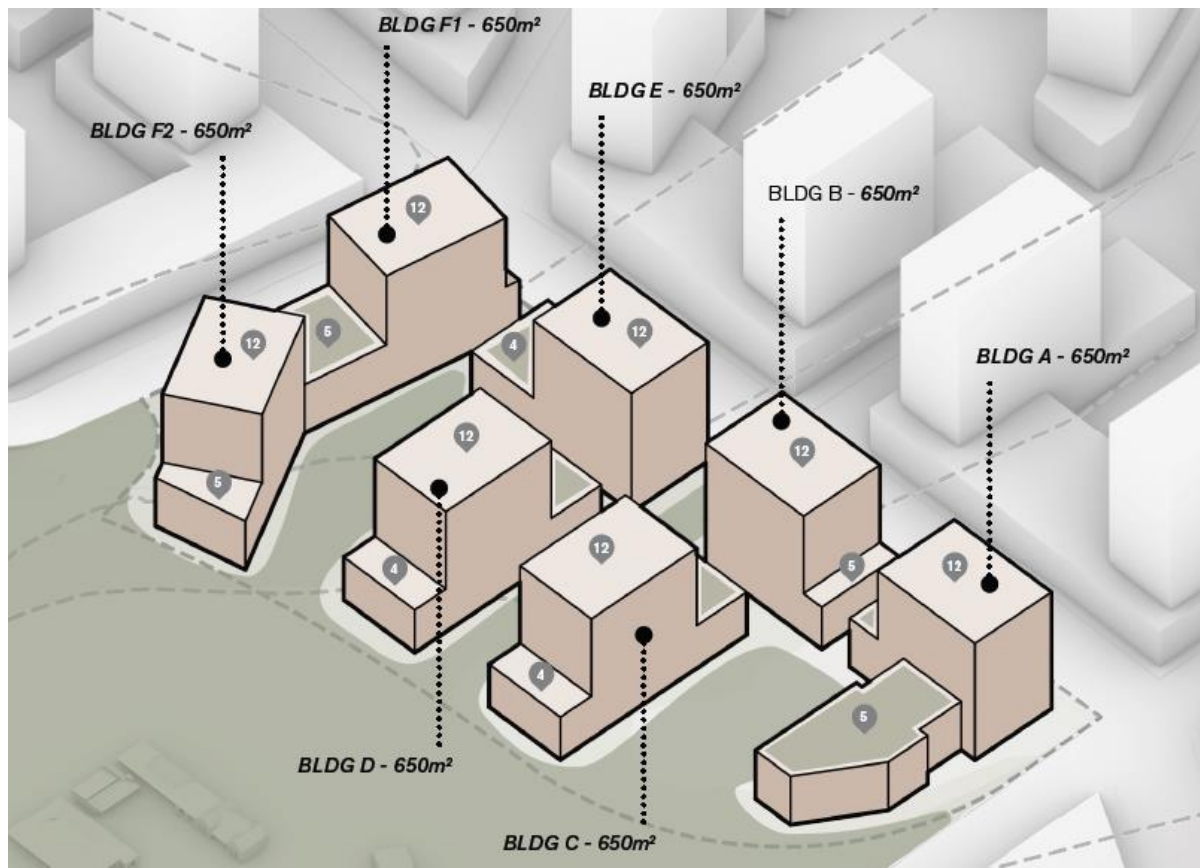


Figure 37 Massing approach with upper floor plates sizes of a maximum up to 650 sqm

Source: DKO

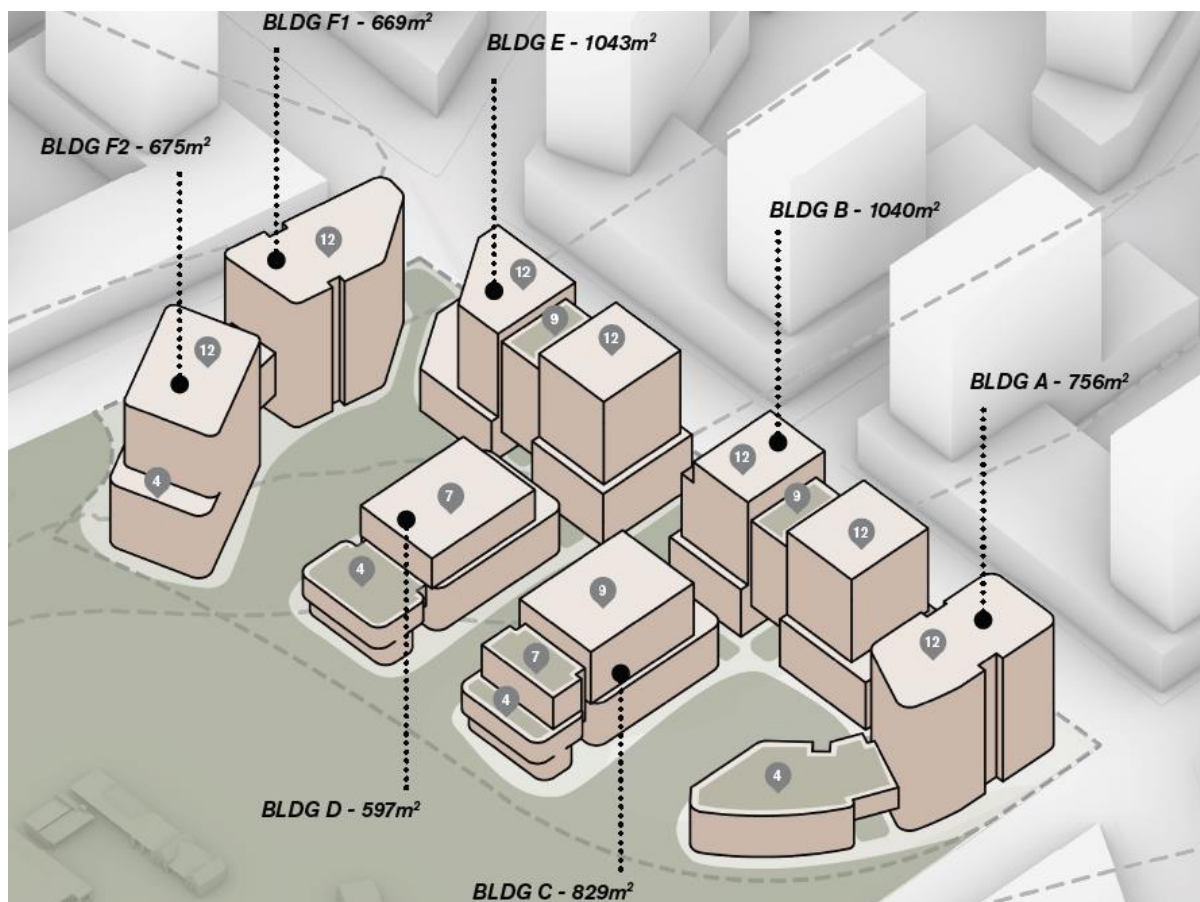


Figure 38 Proposed floor plate scheme

Source: DKO

The approach to the proposed floorplates is considered acceptable for the following key reasons.

Improved built-form distribution and fewer towers

The proposal reduces the number of towers across the site by increasing the tower plate size and redistributing built form. As a result, the number of storeys of built form along the western boundary, adjacent to the State heritage item is reduced, supporting a more sympathetic transition of form to a heritage item.

Heritage interface and views

In line with the above, the proposed massing steps down towards the State heritage Kelvin Park heritage item, creating a more sensitive interface and carefully transitioning of form between the low scale character of Thompsons Creek and the Kelvin Park Homestead, and the anticipated high density development of the Aerotropolis Core to the immediate west of the site.

Viewed from the new open space network along Thompsons Creek (View 1) and the new bridge over the Creek (View 2) (refer to **Figure 39**) in particular, the built form (and larger floor plates which create a wider and shorter form) provide a more sympathetic built form relationship to the character and scale of Kelvin Park Homestead.

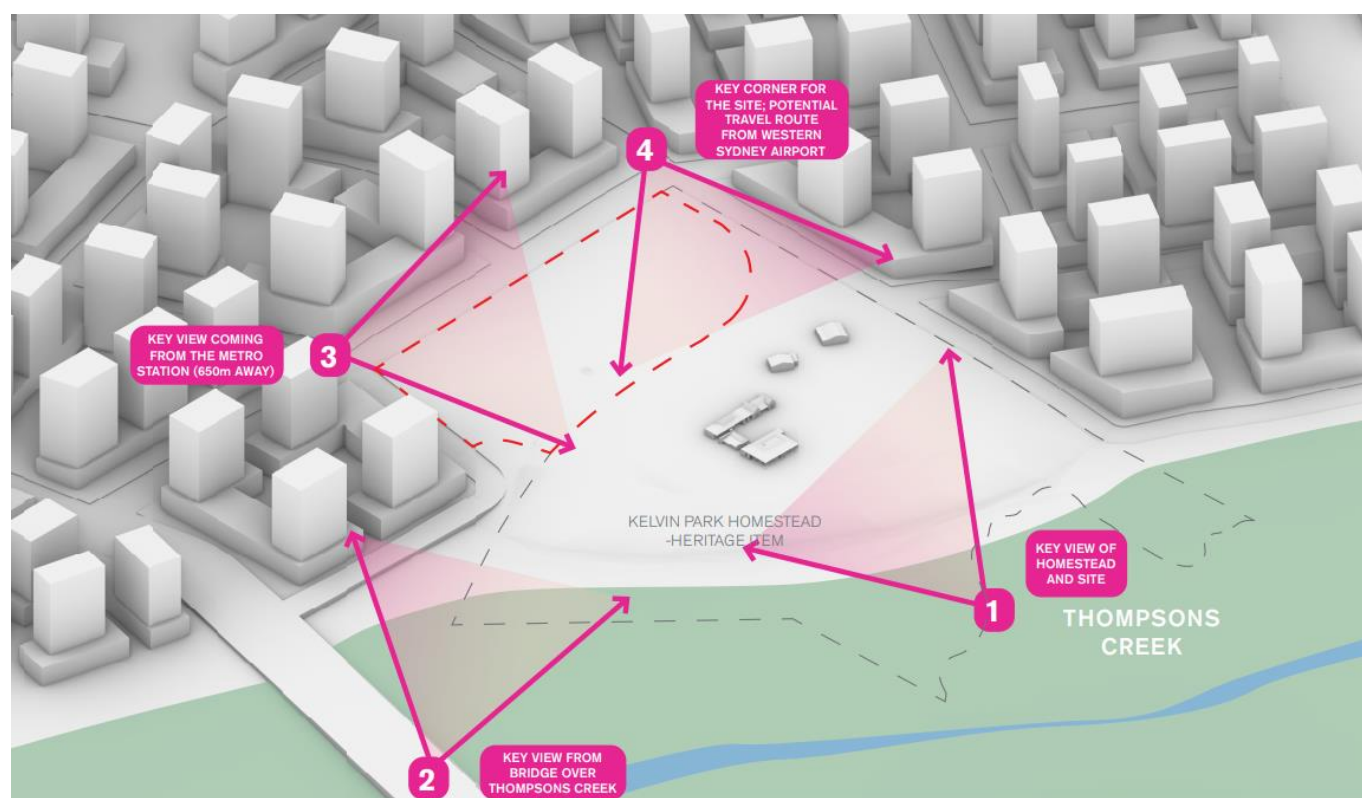


Figure 39 Key views

Source: DKO

Overshadowing

In a scheme that strictly adheres to the 650 sqm floor plates under the DCP, the proposal would create a greater amount of overshadowing to the Kelvin Park Homestead, including the built form of the homestead at 3:00pm on 21 June. Under the floor plates proposed, there is less overshadowing to the Homestead given the broader, shorter approach to form on the eastern end of the site.

Residential amenity and the Apartment Design Guide

The proposal is compliant with the ADG parameters of (amongst other things) building depth, cross ventilation, and solar access. The ADG's purpose is to support better design and planning for residential apartment design and provide design criteria for high density residential development.

Because of this, the proposal provides a strong amenity proposition even though it does not strictly adhere to the specific requirement of the Aerotropolis DCP in relation to maximum floor plate sizes over five storeys. The proposal is therefore not reliant on the DCP compliance to achieve a high level of residential amenity.

Performance outcomes and the flexible application of the DCP

Section 1.4.1 of The Aerotropolis DCP emphasises a performance-based approach to the application of the Aerotropolis DCP. Any variations to the DCP benchmark solutions must ensure consistency with the intent of the objectives and performance outcomes of the control.

The proposal achieves adequate solar access, cross ventilation and amenity as the proposal is consistent with the requirements of the ADG, as described above. The proposal ensures high-quality architecture, design and built-form outcomes that respond to the site's key characteristics and natural topography. As previously described, all dwellings achieve high-level amenity outcomes. A variety of housing types are proposed as well as high-quality landscaping throughout the proposal.

The objectives of 5.2 Built form of the Aerotropolis DCP are met through the following initiatives.

O1 Ensure high quality architecture, design and built form outcomes which respond to topography and site characteristics.

The proposal provides a high quality design and built form outcomes through its focus on a landscape led design which was formulated on a Connecting to Country approach. This is discussed in greater detail throughout the Design Excellence Report at **Appendix E**.

O2 To establish a high quality residential environment where all dwellings have a good level of amenity.

The proposal provides high quality residential amenity through its alignment with ADG controls addressing solar access, cross ventilation, visual privacy, communal open space and apartment size and layout. This is further discussed in **Section 6.4** of the EIS.

O3 To encourage a variety of housing forms within the mixed use residential areas of the Aerotropolis.

The proposal provides high density residential accommodation with a variety of unit sizes ranging from one to four bedroom apartments in an area envisaged for mixed use residential development within the Aerotropolis Core.

O4 Establish a consistent front building alignment and landscaped streetscape for mixed use residential areas of the Aerotropolis.

The proposal is generally consistent with the setback controls and is further discussed in **Section 6.1.4**. Along the sites frontage (western boundary), Buildings A, B, E and F provide a setback of 6 metres to facilitate a consistent building alignment.

It is also noted that the neighbouring draft Bradfield City Centre Master Plan also seeks to vary this DCP control to provide a greater degree of flexibility and variety of built forms in the future City Centre. The Pavilions

- Within the Pavilions, the proposed floor plates allow for a continuous planted edge to seamlessly integrate the Pavilions with Kelvin Park Homestead with the adjoining external communal garden space.
- The ground floorplates of the Pavilions separate which facilitate landscape and water to permeate through the fabric of the buildings. The results in extended greenery in the buildings and a continuation of immersion in the site's built form.
- The proposed floorplates allow for deep balconies which results in shading rather than larger external balconies for residents.
- Faceted edges to the west allow for improved privacy outcomes and increase building separation.
- On level 4 of the eastern building, the resident's amenity faces east onto the external rooftop communal open space which offers panoramic views of Kelvin Park Homestead and Thompsons Creek.

The Planes

- Each of the Plane's buildings features two cores with direct access to views upon entering the lift lobby. Typical floors accommodate 5-6 units per core to reduce corridor lengths.
- The floorplates of the Planes offer a variety of apartment types, including corner apartments and cross-through layouts.
- Fins on the buildings on the northern and southern facades are oriented to enhance privacy between units.
- On level 3, a landscaped edge along the southern building enhances privacy and building separation.
- At the rooftop level, a double-storey terrace utilises the lift overrun space with the building's external architectural design reflecting this change in typology.

The Paperbarks

- Each of the buildings features two cores which have direct access to views upon entering the lobby. The two cores provide an opportunity for cross-through apartments, thereby splitting the two massing blocks which result in a change in materiality and massing envelope.
- The proposed floor plate illustrated in **Figure 41** presents a variety of apartment types including corner apartments for cross-through layouts.
- The building facades present direct views outwards and offer optimal privacy and shading.

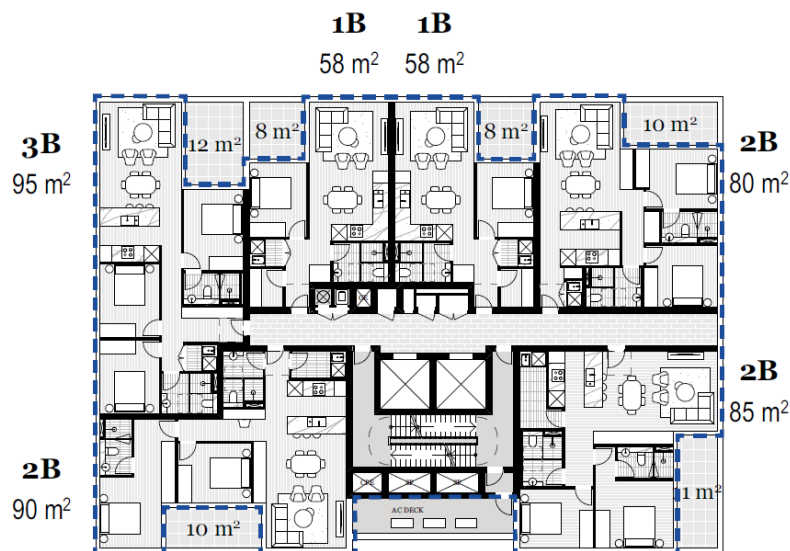


Figure 40 DCP complaint floorplate scheme: 650sqm (not proposed)

Source: DKO

PROPOSED SCHEME

APARTMENTS AMENITY AND ADG ANALYSIS

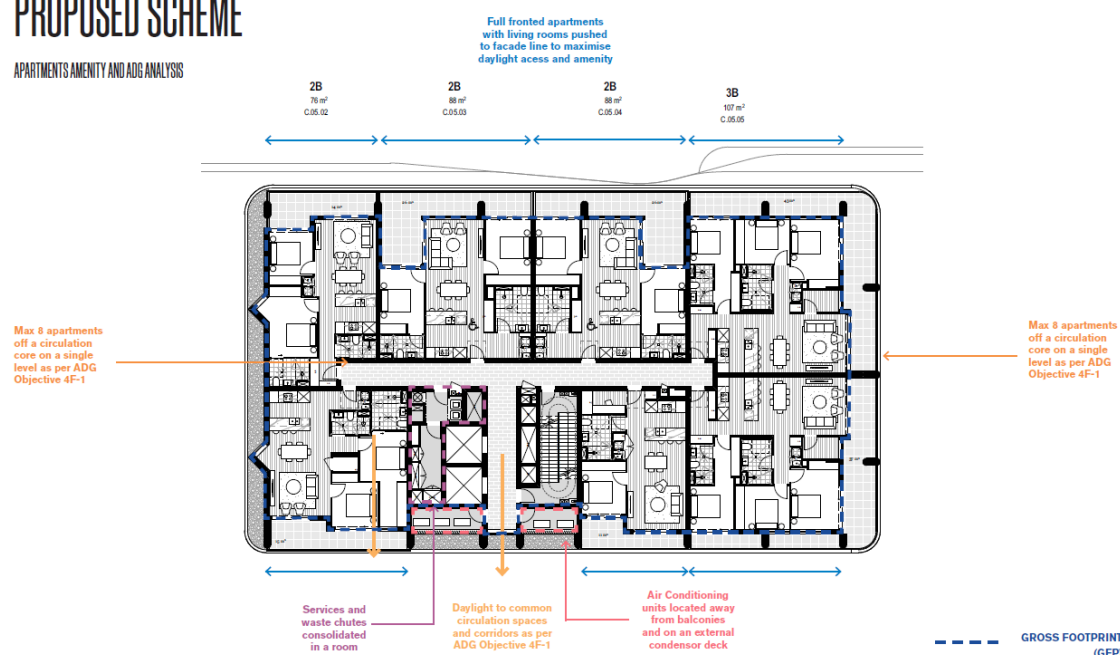


Figure 41 Proposed floorplate scheme

Source: DKO

6.1.3 Building heights

The height of the proposed buildings has been designed in response to the surrounding future context of the site, its key location in the Aerotropolis Core and its interface to the Kelvin Park Homestead. The site has a maximum mapped height of 56m as prescribed by the Aerotropolis Precinct Plan.

Stage 1 comprises maximum building heights between 30.40 metres and 39.80 metres. Stage 2 comprises building heights between 25.85 metres and 39.90 metres.

The tallest of the proposed buildings form the gateway into the site at the western boundary. These buildings are Building B and Building E.

The height of the maximum buildings is acceptable for the following reasons:

- The proposed varying building heights have been developed in consultation with the SDRP to ensure the proposal will result in an appropriate environmental outcome. The proposed building's heights have considered the site's future context, and its key location in the Aerotropolis Core while remaining sensitive to its interface with Kelvin Park Homestead. The proposal will provide a positive urban design outcome. More specifically:
 - Key views of Kelvin Park Homestead are maintained through the strategic positioning of the buildings.
 - The proposed bulk and scale of the development have been distributed carefully to ensure the development is compatible and reasonable when compared to the existing and future scale of the surrounding land.
- The proposed buildings are entirely consistent with the site's maximum building height of 56m as prescribed by the Precinct Plan. The proposal has a 39.80m maximum building height at the proposed tallest building located at the interface to the Bradfield City Centre. The remaining buildings are between 4 and 11 storeys and taper down towards the eastern boundary in response to State heritage item Kelvin Park Homestead.
- The proposed building heights provide an acceptable visual impact from the public domain and important heritage viewpoints within the surrounding area (refer to **Section 6.3.1**).
- The proposed building height is compatible with the site's surrounding future context which is envisioned to be a mixed-use residential zone within the Aerotropolis Core.

The heights of the proposed building are therefore considered to be appropriate on this basis.

6.1.4 Building setbacks

Building setbacks

Section 5.2.3 of the Aerotropolis DCP articulates building setbacks for residential housing and shop-top housing. PO1, number 4, requires the following benchmark solutions.

Residential flat buildings and shop-top housing is to meet the following front building setbacks:

a. Minimum front setbacks:

i. Residential flat building: 6m (balconies and other articulation may encroach up to 4.5m to the boundary).

ii. Shop top housing: 0m first floor setback and 4m above the first floor.

b. Secondary street (corner lot) setback:

i. Residential flat building: 6m.

ii. Shop top housing: 3m.

Buildings C, E and F are compliant with the minimum front and side setbacks controls of 6m. In these buildings, balconies and soft landscaping in some areas including the western frontage of Building E, the southern façade of Building F and the eastern facade of Building F encroach up to a maximum of 4.5m to the boundary. All encroachments are attributed to soft landscaping to soften the building edges or balcony design which is supported by the DCP.

Buildings A and B slightly exceed the 4.5m boundary setback (up to roughly 3.9m) at certain corners of the proposal. This includes in particular the north west and north east corner of Building A and the north west corner of Building B. The exceedances are attributed to the rounded edges of the buildings and are considered minor departures on balance given the proposal overall seeks to comply with the 4.5-6m setbacks provided by the DCP. These further exceedances of the 4.5m metre setback are justifiable as they are all inclusive of soft landscaping which results in softened building edges and assists in the overall articulation of the proposal. See **Figure 42**.

In areas of minor exceedances, the performance outcome of 5.2.3 Building setbacks continue to be achieved. Adequate upper-level building separation supports privacy, ventilation, and solar access. Building alignment of the overall proposal is maintained.

The shop-top housing buildings (Buildings B and E) provide a 4.5m setback above the ground floor are consistent with the requirement of a 4 metre setback above the first floor.



Figure 42 Example of setback exceedance (beyond 4.5m) at Building A

Source: DKO

6.2 Heritage and Archaeology

This section identifies and assesses the potential impact of the proposal on surrounding heritage items and neighbouring heritage conservation areas, heritage landscapes and potential items located on the site and in surrounding areas as identified in the *Heritage Act 1977* and other statutory registers.

6.2.1 Aboriginal cultural heritage

Artefact has prepared an Aboriginal Cultural Heritage Assessment Report (ACHAR) at **Appendix Z**. The ACHAR documents the process that has been undertaken for consulting with Aboriginal stakeholders, initiating and assessing Aboriginal cultural heritage associated with the site and the surroundings.

Potential impact on Aboriginal heritage

There are no previously recorded sites within the study area and the Archaeological Survey (**Appendix AA**) undertaken confirmed that the study area is unlikely to contain Aboriginal objects. Subject to these findings the proposal works are unlikely to directly or indirectly impact Aboriginal objects.

Summary of findings

The ACHAR has identified the following within the study area:

- No registered Aboriginal Heritage Information Management System (AHIMS) sites are located within the study area.
- No Aboriginal objects or areas of potential archaeological deposits (PAD) have been identified in the study area.

- The study area is situated within a disturbed landscape with no identified Aboriginal objects or areas of PAD. Consequently, the study area contains no research potential, representativeness, rarity, and educational values.
- The proposed works are unlikely to cause any direct or indirect impacts to Aboriginal objects.

Based on the findings of the ACHAR, further archaeological assessment is not recommended. However, recommendations are provided in **Appendix D** to include an unexpected finds procedure, and ongoing consultation recommendations.

6.2.2 Non-Indigenous Heritage

A Heritage Impact Statement (**HIS**) has been prepared by Urbis Heritage and is provided at **Appendix O**.

The site is not listed as a heritage item and is not located within a Heritage Conservation Area, however, is located adjacent to the heritage item 'Kelvin', which is listed on the following heritage registers:

- 'Kelvin', at 30 The Retreat, Bringelly, listed on the SEPP (Western Sydney Aerotropolis) 2020 as I3
- 'Kelvin', at 30 The Retreat, Bringelly, listed on the State Heritage Register (SHR) as SHR00046
- 'Kelvin, Outbuildings and Curtilage,' The Retreat, Bringelly,' listed on the Register of the National Estate (RNE), Place ID 3298 (non-statutory)
- 'Kelvin', listed on the Register of the National Trust (NSW) (non-statutory).

The HIS concludes that the proposal is sensitive and considerate of Kelvin Park Homestead to the east of the site. The proposed works do not include any works within the curtilage or cadastral boundaries of Kelvin (30 The Retreat, Bringelly) and would therefore have no direct impact on any significant built or landscaped elements.

Urbis Heritage recommend the proposal be supported on heritage grounds for the following key reasons:

- The proposed works are an example of a high-quality design response that would have no adverse visual impact on the heritage significance of Kelvin for the following reasons:
 - The key significant elements associated with Kelvin are concentrated around the farm and homestead core, situated in the approximate centre of the existing heritage curtilage. The site and the proposal are situated at a respectful distance from the key central elements of Kelvin and will not overshadow or visually dominate the significant elements of Kelvin Park Homestead.
 - The proposal incorporates six distinct building forms which are adherent to the approved zoning and height limits of the site and are consistent with the desired future character of the Aerotropolis Precinct. The proposed siting of the buildings allows for appropriate setbacks, landscaping, through-site links, and view corridors which reduce the overall massing and bulk of the proposal.
 - The proposed built forms of the six buildings have also been designed to create a sympathetic transition to Kelvin Park Homestead. It is proposed to incorporate buildings of lesser height within the eastern half of the site, closer to Kelvin Park Homestead. This results in a minimised visual impact to the Kelvin Park Homestead interface.
 - The overall massing and scale of the proposal are further minimised by the sympathetic architectural form of the individual buildings. Building C, Building D (and the eastern portions of Buildings A and F) utilise a reduced height which, creates a gradual transition in height to the western portion of the site and provides an appropriate interface with Kelvin Park Homestead. This is further enhanced by the architectural forms of these buildings, in which podium forms with landscaped terraces that extend into the building form are utilised, further minimising the bulk and massing of the built form. This design response would result in the establishment of varied heights and forms which mitigates the appearance of the scale of the development and contributes to the high-quality architectural response of the site.
 - The proposed siting of the built forms, as above, ensures that view corridors to and from Kelvin are retained.
 - The proposed buildings have been sited to establish an east-west landscaped through-site link, which establishes direct views along its axis to the Kelvin homestead. This retains the significance of Kelvin Park Homestead as a major colonial homestead in the area.
 - The proposal incorporates a sympathetic palette of materials, colours and finishes which exhibit a high-quality design response. The proposed palette of materials includes textured concrete finishes, brickwork, powder-coated aluminium details and glazing which are recessive and respond to the finishes present within Kelvin Park Homestead itself, particularly, rendered facades typical of the Georgian period.

- The proposal is further mitigated by landscaping throughout the precinct, notably including endemic native plant species. These are concentrated along the eastern site boundary primarily, creating a visual landscaped buffer that further softens the interface between Kelvin Park Homestead and the subject site.

6.2.3 Historical Archaeology

Artefact has prepared a Historical Archaeological Assessment (HAA) (**Appendix HH**) which has been undertaken investigating and assessing both Aboriginal and European archaeology within the site.

The HAA concludes that the site has a low potential to contain archaeological remains. If archaeological remains survive, they are likely to be associated with early farming and agricultural activities such as lightweight undocumented ephemeral timber structures associated with herd management, post holes associated with fence lines, structures associated with water management including cisterns and evidence of land clearance and cultivation.

The site and surrounding area are within a zone that historically is characterised as rural. The dominant activities within the study area are likely to have been a mix of agricultural activities including pastoralism and farming associated with the Kelvin Estate. The HAA notes that if substantially intact and in situ archaeological remains definitively associated with Kelvin Farm are identified, the archaeological resource may meet the criteria for State significance. However, the proposed works will not directly impact the potential archaeological resources within the State Heritage Register listed item Kelvin Park Homestead (no. 13) adjacent to the study area.

The study area has nil potential to contain early European occupation of the site from 1788 – 1817. The HAA concludes that the site has a low potential for historical archaeological remains of local significance to be present within the site. If archaeology remains survive, they are likely to be associated with farming and agricultural activities such as lightweight undocumented ephemeral timber structures associated with herd management including cisterns and evidence of land clearance and cultivation.

Due to the low potential for substantial intact archaeological remains within the study area, it is assessed that the proposed works would result in neutral impacts on significant historical archaeological remains. Mitigation measures for ensuring the ongoing protection of the archaeology of the site are provided at **Appendix D**.

6.2.4 Archaeology

Artefact Heritage and Environment have prepared an Archaeological Survey Report (**ASR**) which is provided at **Appendix AA**. The ASR has been prepared in accordance with the relevant guidelines to identify, describe and assess any impacts on Aboriginal cultural heritage values on within the site.

The findings of the ASR are summarised below:

- No registered Aboriginal Heritage information management system sites were identified within the site.
- No Aboriginal objects or areas of potential archaeological deposit were identified.
- The site is situated within a disturbed landscape with no identified Aboriginal objects or areas of potential archaeological deposit. Consequently, the study area contains no research potential, representativeness, rarity, and educational values.

6.3 Environmental Amenity

6.3.1 Visual and View Impacts

A Visual Impact Assessment (**VIA**) has been prepared by Ethos Urban (**Appendix T**) to identify, describe and assess the potential visual impacts of the proposal.

The methodology used by this VIA is derived from the international standard 'Guidelines for Landscape and Visual Impact Assessment' version 3 (GLVIA3), the NSW Land and Environment Court (**LEC**) planning principle for 'impact on public domain views' established in *Rose Bay Marina Pty Limited v Woollahra Municipal Council & Anor [2013] NSWLEC 1046* (Rose Bay) and for 'Views - general principles' established in *Tenacity Consulting v Warringah Council [2004] NSWLEC 140*.

Figure 43 shows the views assessed by the VIA.

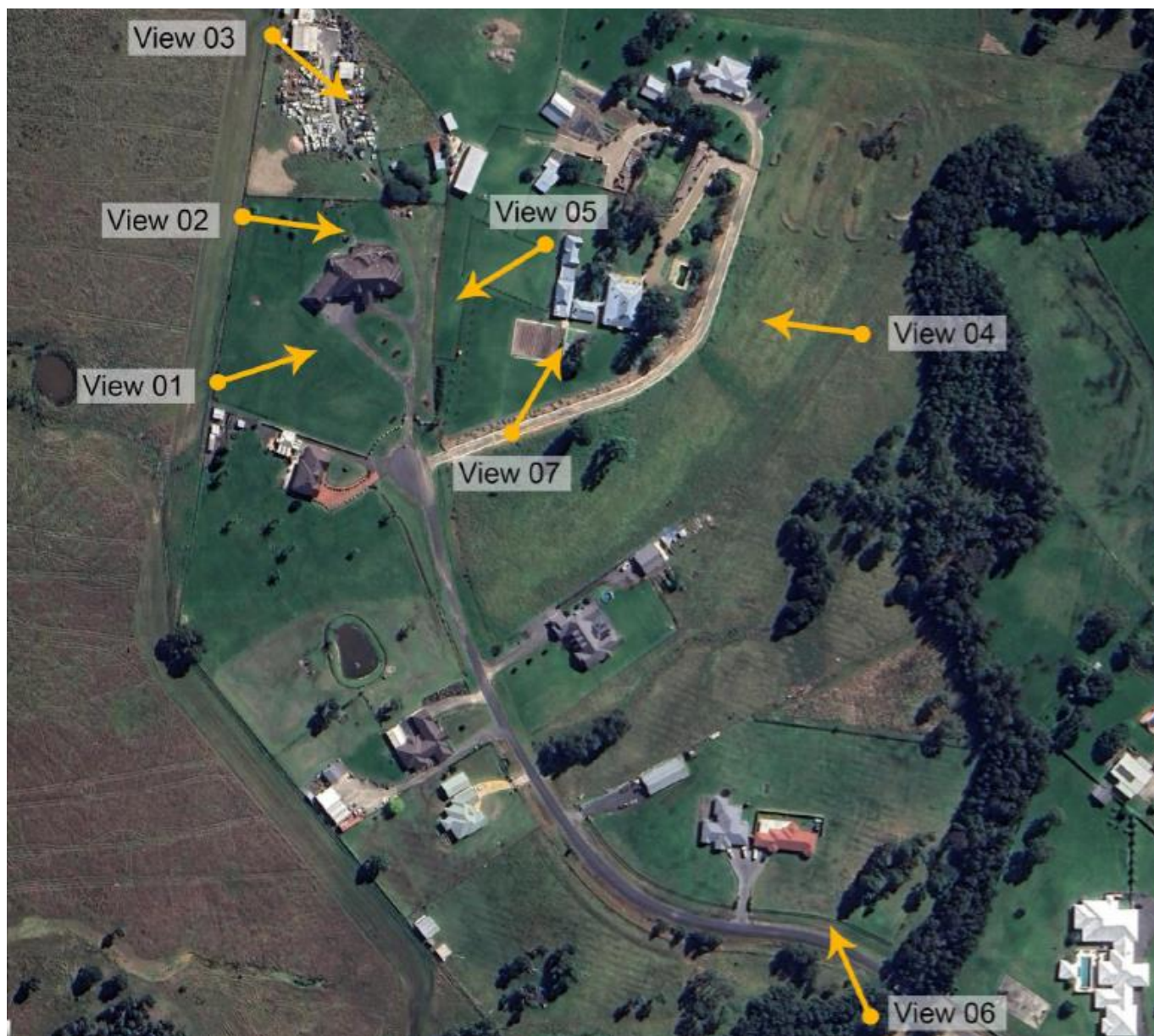


Figure 43 Key views

Source: Virtual Ideas

Figure 44 to **Figure 50** illustrate the visual impact of each of these views.



Figure 44 Viewpoint 1: New public road to the west of the site (south-west)

Source: Virtual Ideas based on the model provided by the WPCA



Figure 45 Viewpoint 2: New public road to west of site (west)

Source: Virtual Ideas based on the model provided by the WPCA



Figure 46 Viewpoint 3: New public road to west of site (north-west)

Source: Virtual Ideas based on the model provided by the WPCA



Figure 47 Viewpoint 4: Thompsons Creek regional open space corridor

Source: Virtual Ideas based on the model provided by the WPCA



Figure 48 Viewpoint 5: Kelvin Park Homestead

Source: Virtual Ideas based on the model provided by the WPCA



Figure 49 Viewpoint 6: Whitaker Road over Thompsons Creek Road

Source: Virtual Ideas based on the model provided by the WPCA



Figure 50 Viewpoint 7: South-west of Kelvin Park Homestead

Source: Virtual Ideas based on the model provided by the WPCA

Assessment of visual impact

The significance of visual impact ranges from medium to high due to the significant change of the visual setting from rural residential to urban. However, this is intended by the planning framework.

As can be seen from the images above of the proposal, the layout, massing, and design of the proposal have been deliberately composed to:

- Maintain visual connections to key views to reinforce the connection to Country as detailed in the draft Master Plan
- Will create new view corridors from the site's western boundary to increase the visibility of the State heritage listed Kelvin Park Homestead to the public domain, in particular from the proposed new road adjoining the site to the west (refer to views 1, 2 and 3).
- Achieve adequate separation distance and as such does not visually overwhelm Kelvin Park Homestead (refer view 5).
- While being seen against a backdrop of new, larger scale buildings in views from the east and south along Thompsons Creek, due to its distinct form and design enable the viewer to see, recognise and appreciate Kelvin Park Homestead (refer to views 4, 6 and 7).
- Does not impact the important view corridor linking to the Aerotropolis Metro Station and Central Park within the Bradfield City Centre.

Further, the mitigation measures provided in **Appendix D** will ensure the development acceptability from a visual impact perspective. It is also important to note that as the planning framework enables development of a similar scale to the proposal on the Kelvin Park Homestead site. As such it is the finding of the VIA that the visual impact of the proposal is acceptable.

6.4 Residential Amenity

A detailed ADG assessment against the proposal is provided within the Appendix of the Design Excellence Report titled AP8 SEPP65 and ADG Compliance (refer to **Appendix E**).

6.4.1 Visual Privacy

Building Separation

The proposal generally meets the building separation requirements of the ADG as defined in Section 3F *Visual Privacy*.

The ADG requires building separation of 3-6 metres up to four storeys (or 12 metres). The ground floor of the proposal achieves adequate building separation at the ground level between each building. All proposed buildings have separation distances from each other of 9 metres or greater between ground and Level 3.

Between Level 4 and Level 7, (up to 25 metres) the separation distances between buildings range from 9 metres between habitable rooms and balconies and 4- 5 metres to the boundary between non-habitable room.

Between Level 4 and Level 7 across the site (which is at a height of 5-8 storeys, including the ground floor), the ADG requires a separation of 18m (being 9m between each habitable room). The proposal adheres to this separation distances and provides 18m separation between Building A, B and C and between Building D, E and F. The separation between Building E and Building B is approximately 24m.

Over 9 storeys, the ADG requires 24m separation between buildings (being 12m between each habitable room). The proposal from Level 8 (being 9 storeys, including ground) provides the following separation distances:

- 18m between Building E and Building F;
- 18m between Building A and Building B;
- 24m between Building B and Building E; and
- 24m between Building C and Building D.

It is recognised that 18m separation distances above represent a departure from the ADG criteria. This has been mitigated through multiple design initiatives to ensure the objectives of the ADG control continue to be met (as detailed below). This includes in particular the angulation of windows between Building A and B and Buildings E and F (refer **Figure 51** below). The separation distances overall and irrespective of the departures from the 24m separation control are considered appropriate for the following reasons:

- As detailed above, window placements have been angled to ensure that view lines are not directly towards the opposing building. This ensures amenity is not affected by direct lines of sight, in accordance with the design guidance under 3F-1 (visual privacy);
- On balance, the reduced setbacks do not compromise the proposal's overall ability to achieve access to light and air, achieving the solar access and cross ventilation requirements of the ADG;
- Privacy screening has been incorporated to a greater extent in the areas of non-compliance to ensure overlooking into other apartments does not occur.
- A wider east-west pedestrian link with a building separation of 19 metres is proposed which exceeds the ADG required separation.
- The pedestrian through-site link is a wide pedestrian link connecting the site's western boundary to Kelvin Park Homestead. The massing along this link will be more than the required ADG separation.
- Prominent fins along the proposal's western edge establish a distinct rhythm and aid in unit separation.
- Triangulated vertical fins on the northern and southern facades orient views, increase privacy and enhance separation from adjacent buildings.
- Building E is supported by a faceted edge to the west for privacy and increased separation from the adjoining building (Building D).
- A 24-metre building separation is facilitated at the upper levels between Building C and Building D.
- On the typical levels of Buildings C and D, balconies facing the east-west link are set back to enhance privacy and building separation.

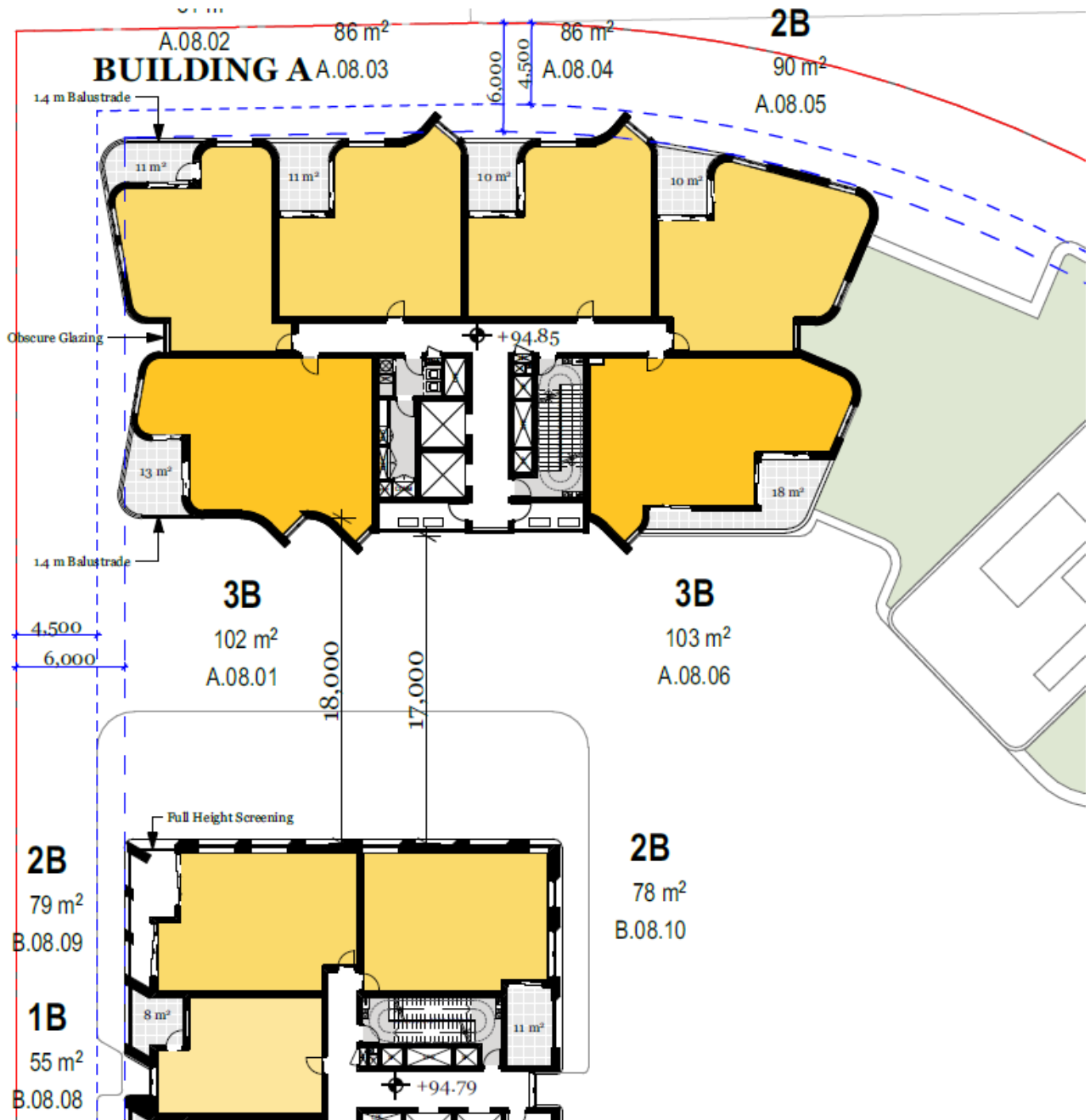


Figure 51 Typical floor plan – view orientation to mitigation 18m setback between Building A and B

Source: DKO

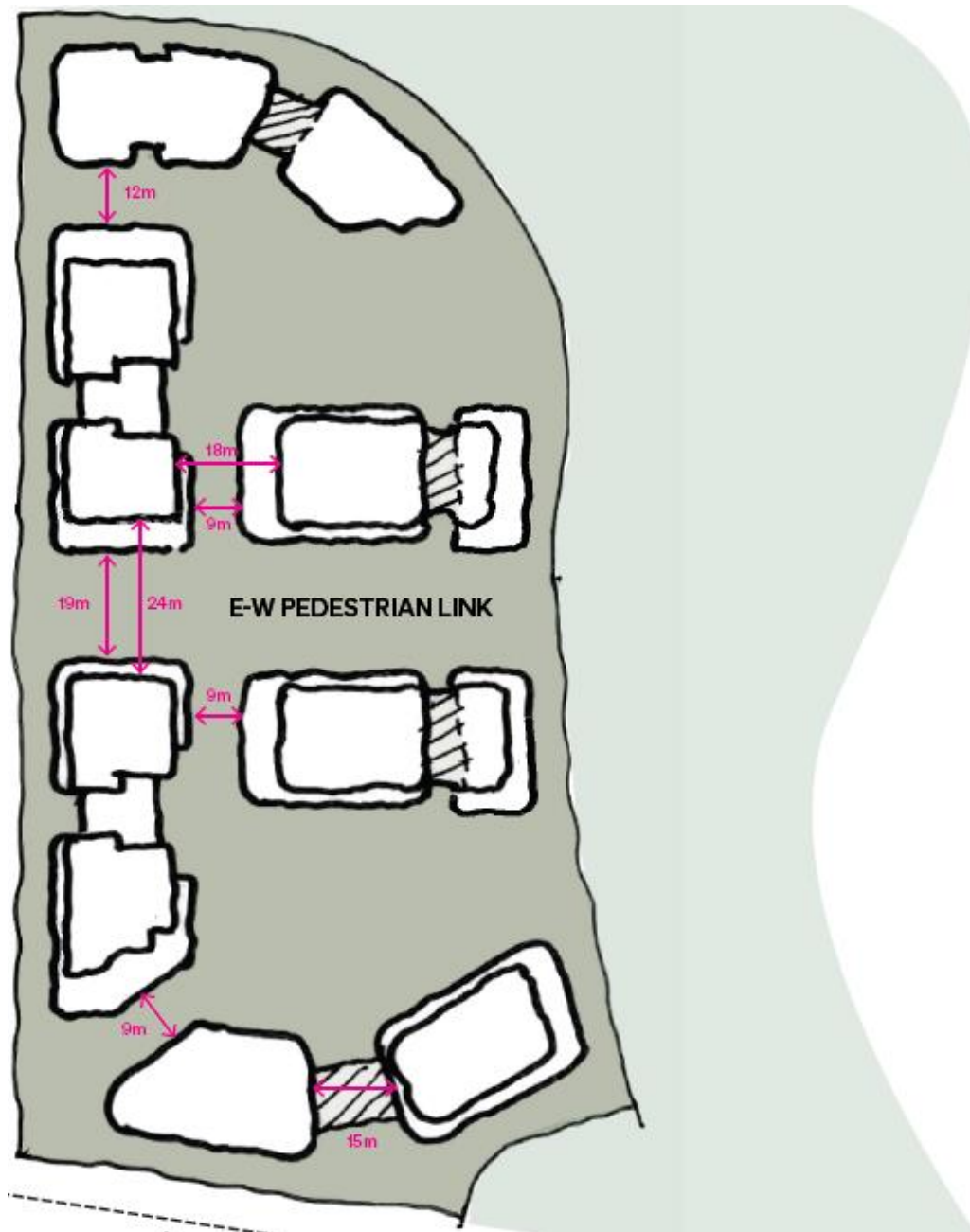


Figure 52 *Building Separation general overview*

Source: DKO

6.4.2 Communal open space

Various communal open spaces are envisaged throughout the proposal up to a total of 10,881sqm (52% of the site area). This exceeds the ADG requirement of 25% of the site area. Rooftops at the various podium levels further provide communal open spaces accessible to all residents as described in greater detail in **Section 3.8.4**.

6.4.3 Deep soil

Section 3E of the ADG requires a 7% minimum of a site should be deep soil (sites greater than 1,500 sqm). The proposal greatly exceeds this requirement and proposes 33% of the site to be deep soil area.

6.4.4 Cross ventilation

Section 4B Natural Ventilation of the ADG requires at least 60% of apartments for the first nine storeys to be cross-ventilated.

The overall depth of a cross-over or cross through apartment is also not to exceed 18 meters. All apartments have been designed so as not to exceed an 18 metre depth when measuring apartments that meet the cross-ventilation requirement. 66% of the proposed apartments achieve cross ventilation.

6.4.5 Solar Access

The proposed apartments have carefully been designed to deliver efficiency and functionality. The ADG requires living rooms and private open spaces of at least 70% of apartments to receive a minimum of 2 hours of direct sunlight between 9 am and 3 pm in mid-winter. The proposal demonstrates that 375 (70%) of the total proposed apartments achieve 2 hours of solar access between 9 am and 3 pm and a total of 59 (11%) of apartments do not achieve any direct solar access.

The balcony depths and unit layout have been carefully designed to ensure solar access and plentiful balcony spaces can be provided. Further, generous natural light is spread extensively throughout the building corridors, lobbies, and internal amenity areas.

As part of the Design Excellence Report (**Appendix E**), DKO has undertaken solar analysis studies which study the requirements of passive solar access shading particularly on facades with minimum overshadowing from adjacent buildings.

As demonstrated in **Figure 53** the northern façade levels of the proposal are overshadowed by Building A. The western façade receives high solar amenity evenly across the western face, a high solid-to-glass ratio is required. Overshadowing on the lower levels of Building B will occur, while high levels of solar on the upper levels will require shading.

Building F, closest to the eastern boundary, is largely overshadowed. Closest to the eastern boundary, inset windows will be provided with overhand required for deeper balconies as it will not experience any overshadowing. The northwestern balconies on the corner will require deep balconies to assist in the minimisation of solar load during summer.

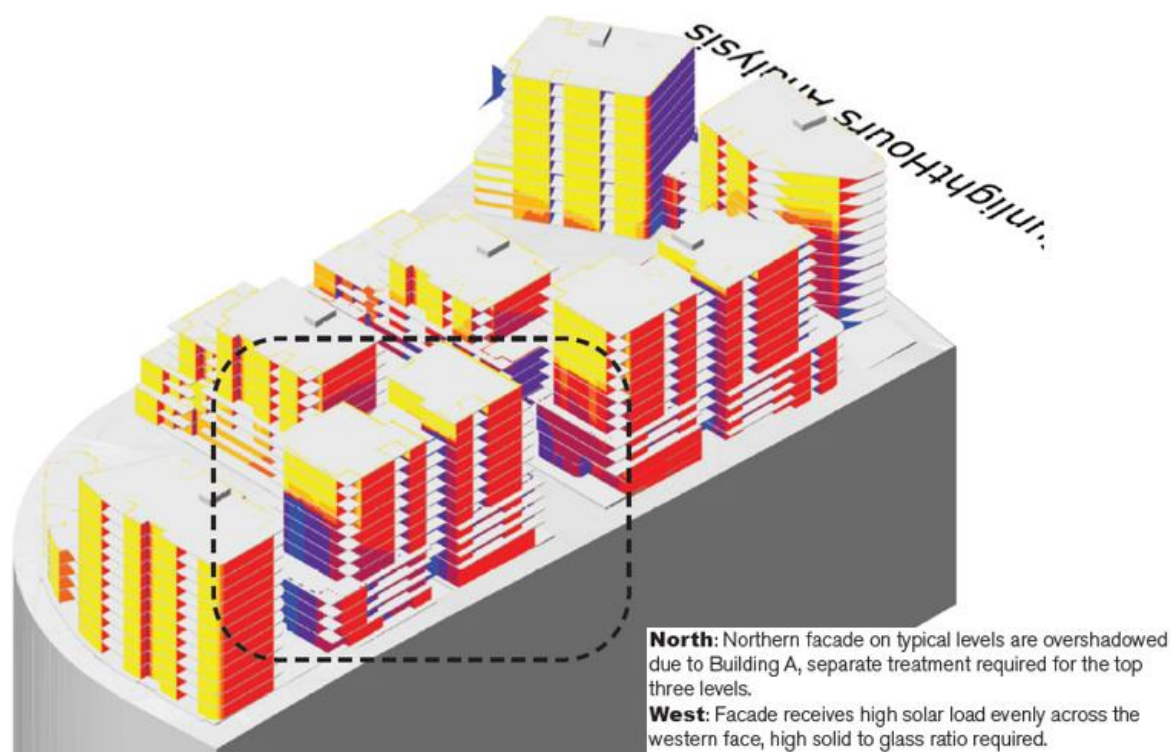


Figure 53 Solar access – north, west

Source: DKO

As demonstrated in **Appendix E** the solar access to the eastern façade is relatively even, and the northeastern corner will be shielded from the central buildings, see **Figure 54**. The eastern facades will require shading while the southern facades will require >50% solid-to-glass ratio to minimise heat loss. Building F is partially overshadowed by the southern portion of Building F. Despite the shift in Building F2, the southern façade receives no solar access, and a more than 50% solid-to-glazing ratio is required.

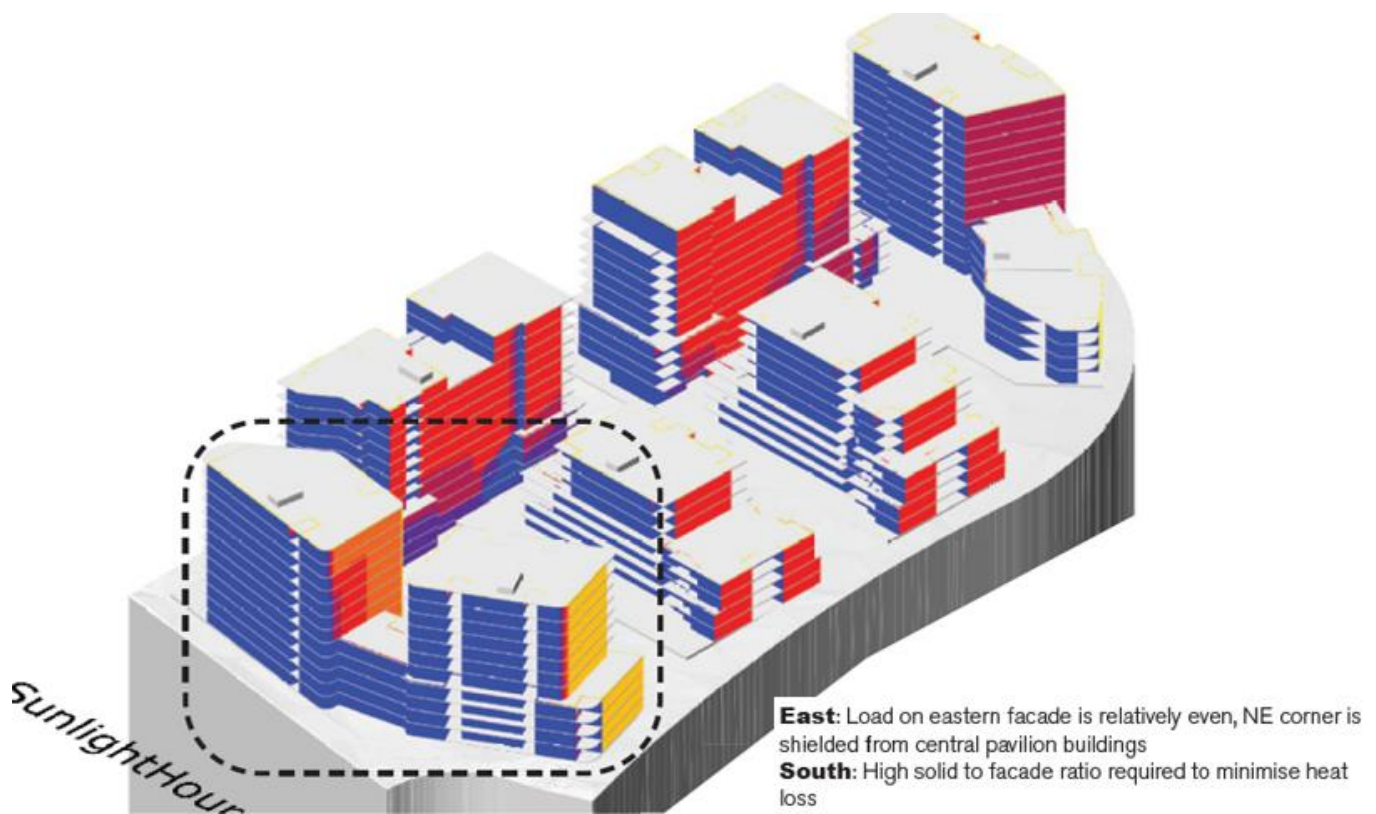


Figure 54 Solar access – south, east

Source: DKO

6.4.6 Bicycle and car parking

Section 3J of the ADG sets the requirements for cycle and car parking. As detailed in **Section 6.4.6**, the proposal complies with the required bicycle and car parking requirements.

6.4.7 Ceiling height

Section 4C of the ADG sets the parameters for ceiling heights in habitable rooms, non-habitable rooms and for developments located in mixed-use areas. As demonstrated in the Design Excellence Report Appendix within **Appendix E**, all ceiling heights are compliant with the ADG Requirements as 2.7 metre ceiling heights can be achieved through the proposal as well as 2.4 metre ceiling heights for non-habitable rooms.

6.4.8 Apartment size and layout

Section 4D of the ADG sets the requirements for the size and layout of apartments. Every habitable room must have a window in an external wall with a total minimum glass area of no less than 10% of the floor area of the room. Daylight and air may not be borrowed from another room. As detailed in **Appendix E**, compliance is achieved.

6.4.9 Private open space and balconies

Section 4E of the ADG sets the requirements for private open spaces and balconies. Apartments are to adhere to the following balcony dimensions.

- 1 bedroom – 8 sqm with min. 2m depth.
- 2 bedroom – 10 sqm with min. 2m depth.
- 3 bedroom – 12 sqm with min. 2.4m depth.

The proposals for private open spaces and balconies adhere to the above dimensions.

Ground floor

Ground floor units have private terraces secured by fencing and are enclosed with gardens. They have an appropriate balance between privacy for residents as well as site lines overlooking of the public domain. All units

have elevated levels to increase privacy. Further, the majority of the ground-level units have direct access from their private open space terraces to the public domain at the ground level.

Upper-level units

The units in the upper levels have access to private balconies which facilitate private open space. All balconies provide adequate private open space for future residents.

6.4.10 Common circulation and spaces

Section 4F sets the requirements regarding the maximum number of apartments of a circulation core on a single level. The requirement is eight apartments of a single core (or a maximum of 12 apartments off a single core if eight cannot be achieved). The proposal provides the below.

- Building A: Range of 3 – 7 Units per circulation core.
- Building B: Range of 3 – 5 Units per circulation core.
- Building C: Range of 5 – 11 Units per circulation core.
- Building D: Range of 5 – 10 Units per circulation core.
- Building E: Range of 3 – 5 Units per circulation core.
- Building F: Range of 5 – 7 Units per circulation core.

The above is justifiable considering the proposed floor plates achieve overall improved design outcomes including overshadowing, amenity, and solar access requirements. The proposed circulation cores will not result in any adverse impacts.

6.4.11 Storage

Section 4G of the ADG sets the parameters of storage requirements. The following are required (with 50% provided within the apartments) and are achieved in the proposal.

- Studio apartments require 4m² of storage area.
- One-bedroom dwellings require 6m³ of storage area.
- Two-bedroom dwellings require 8m³ of storage area.
- Three-bedroom dwellings require 10m³ of storage area.

6.5 Transport and Traffic Impact

A Traffic Impact Assessment (TIA) has been prepared by The Transport Planning Partnership (TTPP) and is provided at **Appendix G**. The TIA provides a strategy for access to the site for Stage 1 and Stage 2 during the construction and operation phases of the proposal and provides an assessment of the proposal overall from a traffic and parking perspective.

6.5.1 Operation

Car parking

Car parking provisions for the proposed mixed-use residential development have been calculated against the Aerotropolis DCP parking rates.

As demonstrated in **Table 16** below, the Aerotropolis DCP requires a maximum provision of up to 616 residential spaces, 134 visitor spaces and four retail spaces which comprise a total of 620 car parking spaces. 620 car parking spaces are proposed which is compliant with the Aerotropolis DCP.

A summary of the traffic generation estimates during Stage 1 and Stage 2 is provided in **Table 16**.

Table 16 Traffic Generation Estimate

Stage	Size	Parking Rate (Maximum Rate)	DCP Requirement
Stage 1			
	45 One-bedroom units	Within 800m walking distance of a metro station (Max Rate):	23

Stage	Size	Parking Rate (Maximum Rate)	DCP Requirement
Residential Flat Building	160 Two-bedroom units	* studio or 1 bedroom - 0.5 spaces/ dwelling	160
	49 Three bedroom units	* 2 bedrooms - 1 space/ dwelling	49
		*3 or more bedrooms - 1 space/ dwelling	
Visitor	254 Units	1 space per 4 dwellings	64
Retail	212m ²	1 space per 90m ² GFA	2
Stage 1 Total			298
Stage 2			
Residential Flat Buildings	59 One-bedroom units	Within 800m walking distance of a metro station (Max Rate):	30
	186 Two bedroom units	* studio or 1 bedroom - 0.5 spaces/ dwelling	186
	34 Three-bedroom units	* 2 bedrooms - 1 space/ dwelling	34
		*3 or more bedrooms - 1 space/ dwelling	
Visitor	279 Units	1 space per 4 dwellings	70
Retail	212m ²	1 space per 90m ² GFA	2
Stage 2 Total			322
Stage 1 and Stage 2 Total			620

Accessible Carparking

Table 17 below demonstrates spaces that 62 accessible spaces are required to be provided. The proposal will facilitate 63 accessible car parking spaces including 54 for residents, seven for visitors and two for retail which complies with the Aerotropolis DCP requirement.

Table 17 Accessible car parking

Accessible parking	Size	DCP Requirement	Parking Requirement
Residential	54 Adaptable units	1 space/ adaptable dwelling	54
Visitor (residential)	134 spaces	1 space per 20 visitor spaces	7
Retail	4 spaces	2% of all spaces	1

Loading Vehicles

During Stage 1, loading, including waste collection shall be undertaken within the private internal road accessed via The Retreat. All bins will be transported to the temporary bin collection enclosure on bin collection day as further detailed in **Section 6.19**.

Following the delivery of the road network at the site's western boundary, all loading and unloading activities will be undertaken on-site via loading areas located at the respective basements.

TTPP is satisfied that the loading vehicle arrangements are adequate and appropriate to manage the servicing requirements for the site noting that the temporary internal road would be provided with a turning bay for waste and service vehicles.

Road network impacts

TTPP has undertaken a Traffic Generation Assessment for the proposal.

The estimated proposal would generate up to 60 trips in the AM peak and 32 in the PM during Stage 1. In Stage 2, the proposal will generate a total of 126 trips in the AM peak and 67 trips in the PM peak.

Access Arrangements

The proposal has been designed to be consistent with the Western Sydney Aerotropolis Precinct Plan which indicates a collector road along the site's western boundary. However, this access arrangement is contrary to the draft Bradfield Master Plan. Consultation with the WPCA has been undertaken to propose a new access arrangement that can service this proposal and the Bradfield City Centre (refer to **Figure 55** and back to **Figure 12**).

This alternative solution would have fewer impacts on adjacent landowners (comparative to the road alignment proposed by the WPCA under the draft Bradfield Master Plan) and has been reviewed from a traffic perspective by TTPA. This alternative scenario is supportable of traffic grounds and can continue to meet the intent of the draft Bradfield City Centre Master Plan with consideration to provide good access options for sites abutting the city centre boundary in the vicinity of 40 The Retreat. This alternative scheme has already been the subject of consultation with both the WPCA and DPIE to demonstrate its suitability as a logical and approach access arrangement.



- 1 The proposed local road is designed to seamlessly connect with existing local roads, ensuring a continuous through connection without any dead-ends.
- 2 The park edge street aligns with a single landowner, ensuring consistency in street edge and streamlining construction timing and delivery.
- 3 Consolidating irregular lots under individual landowners creates opportunities and usable developable area.
- 4 Absence of indicative layout plan roads owned by private landowners creates opportunities for pedestrian through-site connections and flexibility in designing pedestrian-friendly streets linking to Thompson Creek.
- 5 Reduction of roads provide additional GFA for development and creates opportunity for building orientation, varying scales and public open space.

Developable Area Calculation

Gain	Reduction
+1,300	-3,300
+1,400	-1,400
+900	
+400	
+1,080	
+875	
Total +5,755	-4,700
	Gain +1,055

Figure 55 Alternative

Source: DKO

Green Travel Plan

A Green Travel Plan (**GTP**) has been prepared by TTPP and is included at **Appendix I**. The GTP sets out the measures that will be implemented to encourage and support sustainable travel modes and reduce reliance on private car use.

It is recognised that the proposal may be constructed before some of the public transport services are constructed. Consequently, TTPP has set a realistic target for the first five years when some of the public transport initiatives may be operational. A summary of the existing and modal splits for reach user type is provided in **Table 18** below. In TTPP's view, the proposed modal spout targets are considered realistic, and a significant achievement based on similar developments. It is accepted that the modal shift beyond these five years (2029) would intend to better align with the Aerotropolis targets.

Table 18 Proposed Mode Share Targets

Method of Travel	Mode Share Target
Car	83% (-5%)
Truck	9%
Walked Only	5% (+2%)
Train	2% (+2%)
Bus	1% (+1%)

6.5.2 Construction traffic

A Construction Traffic Management Plan (**CTMP**) has also been prepared by TTPP and is provided at **Appendix H**. The CTMP assesses the proposed access and operation of construction vehicles and their potential traffic impact on the surrounding area. A detailed CTMP will be developed following the appointment of the contractor and a stage a stage-specific Traffic Guidance Scheme will be prepared. The contractor will be responsible for monitoring and coordinating all vehicles entering and exiting the site.

Duration of works

Construction of each stage is expected to occur for a total period of 31 months. It is noted that the commencement of Stage 2 is subject to the provision of future road arrangements at the western boundary of the site.

The indicative construction staging is summarised in **Table 19** below.

Table 19 Indicative Construction Program

Construction Activity	Duration (months)
Demolition	1
Excavation and Site Preparation	4
Construction and Building works	24
Public Domain Works	2
Total	31

Work hours

Consistent with the standard construction hours in the Interim Construction Noise Guidelines, the construction would be undertaken within the following hours:

- Monday-Friday: 7:00 am-5:00 pm
- Saturday: 8:00 am-1:00 pm
- Sunday and public holidays: No works

Construction vehicle volumes

TTPP estimate the peak number of construction vehicles accessing the site on working days would be up to 8 truck movements (two-way) per hour during peak construction activities. The proposed construction activities are not expected to result in an adverse impact on the surrounding road network.

Construction vehicle routes

The proposed Stage 1 and Stage 2 vehicle construction routes are illustrated in **Figure 56** and **Figure 57** below. At this stage, it is unknown what road would have been delivered within the Western Sydney Aerotropolis during Stage 2, therefore the proposed routes are indicative. It is recognised that when the local road network has been constructed in the vicinity of the site, there would be opportunities to provide construction vehicles with access during Stage 2 via the WPC land to the west of the site, this access would be provided off Badgerys Creek Road.

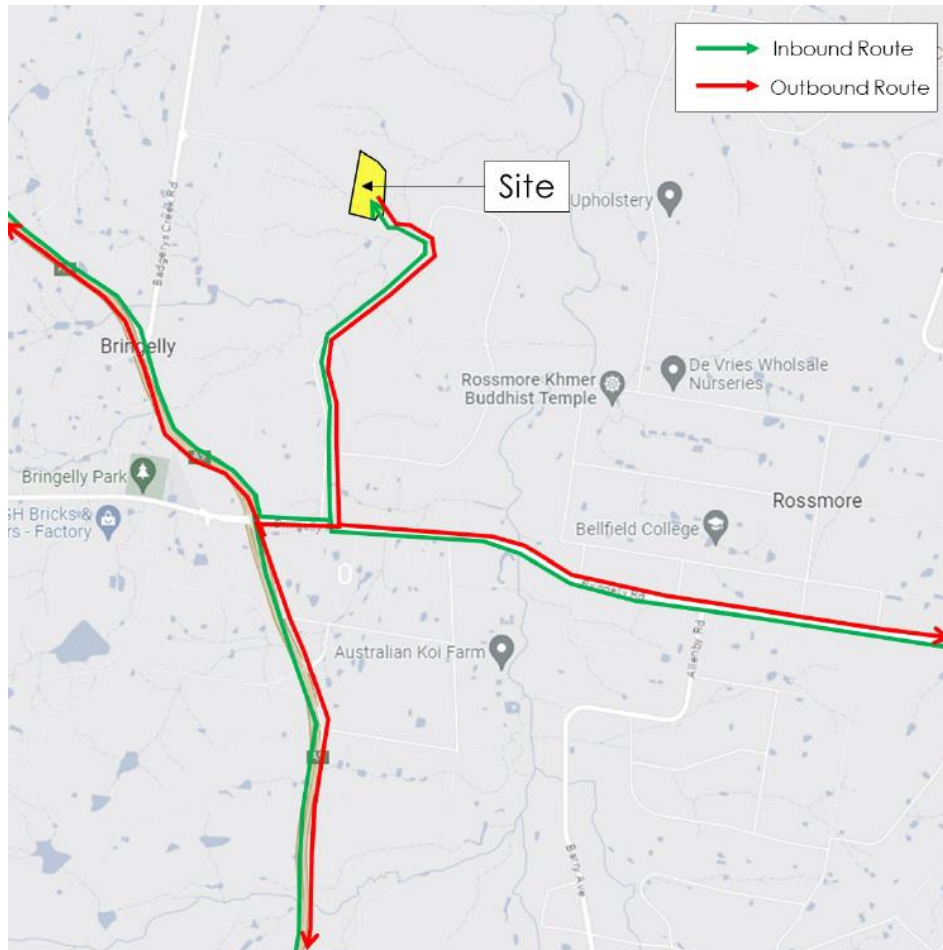


Figure 56 Stage 1 Vehicle Movement Plan

Source: TTPP

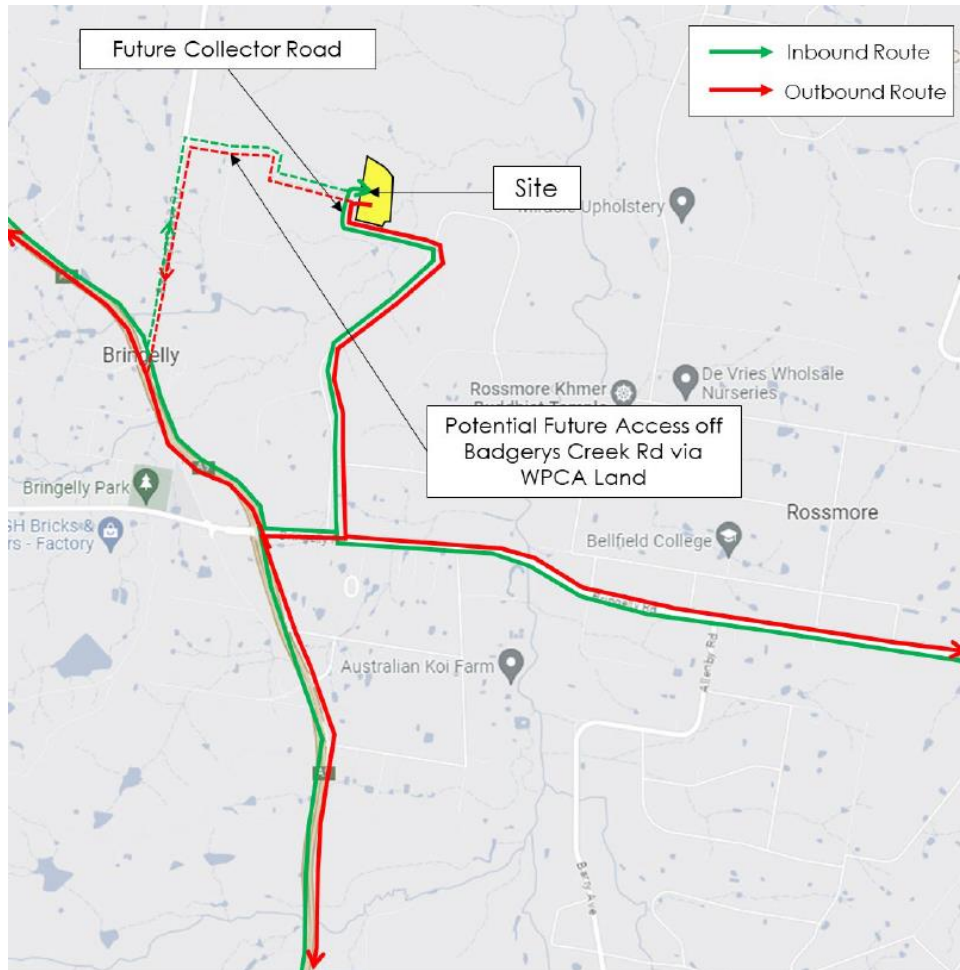


Figure 57 Stage 2 Vehicle Movement Plan (Indicative)

Source: TTPP

Work zone

No work zone will be required as part of the proposal. The construction of the roads to the west of the site falls outside the scope of the CTMP. All loading and unloading are expected to occur wholly within the site. In the instance that a work zone is required to accommodate the construction work, relevant applications will be managed with Liverpool City Council to obtain permit approvals for the required work zone.

Construction worker access

Limited on-site vehicle parking will be provided during construction. During Stage 1, there will be opportunities for workers to park within the Stage 2 development area which will be vacant during the construction of Stage 1. Upon the completion of basement car parking, there will be an opportunity for construction workers to park within the basement car park. The completed basement car park within Stage 1 of the development. All works will be encouraged to use public transport and or carpool to travel to and from the site where practically possible, noting that the Western Sydney Aerotropolis Metro Line is anticipated to open in 2026.

6.6 Public Domain and Landscaping

6.6.1 Site landscaping

A Landscape Plan has been prepared by Arcadia and is provided at **Appendix J**. Landscape is a key component of the proposal and has been integrated throughout the built form to provide high-quality amenities to future residents. Additional vegetation has been used to create diverse spaces and microclimates to enhance the biodiversity of the site. The landscape approach can be largely attributed to the incorporation of First Nations perspectives by using exclusively Indigenous species.

Woodlands

The Woodlands, located amongst Buildings A, B and C have been designed to incorporate the swale that runs through the ground plane. The Woodlands will be an intimate space that will enable future residents and visitors to feel consumed amongst lush greenery.

Ridgeline

The Ridgeline, located in the centre of the site between Buildings C and D, will connect the vertical landscape of the green building facades and rooftops with canopy trees. The Ridgeline will form a green corridor that encourages the public to walk from the pickup and drop-off zone at the western boundary through to the site's western interface.

Grasslands

The Grasslands, nestled between Buildings E, D and F emulate the experience of Cumberland Plains with large open spaces with pockets of vegetation and trees.

6.6.2 Public domain

The public domain and landscaped areas have been designed to be welcoming, attractive and accessible for all. The landscaping has been carefully designed to communicate different qualities, textures and colours that appear in Country.

The proposed public domain areas have been designed to achieve their intended uses including the required levels of solar access and shade, provision of amenities and wind protection. The proposed public domain areas maximise street activation at the site's western boundary. The positioning of the retail tenancies at the site's western boundary paired with the pickup and drop zone, seating areas and landscaping will encourage people to dwell at the western boundary of the site and closer to the future Bradfield high density areas. This will result in a public domain that is multi-functional and activated.

Appropriate edge treatments to the public domain blend the urban street with the site's interface to Kelvin Park Homestead at the eastern boundary. Deep soil areas have been maximised towards the Kelvin Park Homestead to minimise the proposal's visual impacts and positive landscaped character outcomes adjacent this State heritage item.

6.7 Site Servicing and Utilities

6.7.1 Stormwater management

Stormwater drainage will be managed as follows:

Stage 1

The interim southern portion of the site will drain to a temporary pond located on the southwest corner of the site. The outlet and overflow weir of the pond are directed to the south-west, in line with the overland flow path of the existing site. Most of the northern portion of the site will drain to a proposed on-site detention (OSD) tank located in the basement. The OSD will discharge flows in a controlled manner, temporarily to an existing table drain on The Retreat.

Stage 2

Stage 2 will drain to another OSD tank ('OSD South') in the southern basement. The OSD will discharge flows to stormwater infrastructure within the future roads and eventually to Sydney Water's regional stormwater infrastructure. Additionally, OSD North's temporary point of discharge will be decommissioned at Stage 2 and

will also be connected to the future road's stormwater infrastructure to be delivered as part of the future stages of road connectivity to be achieved under the Bradfield masterplan.

6.7.2 Utilities and Services

To support the interim / Stage 1 completion of the development site ahead of the Bradfield City Centre, it is proposed to relocate, alter, or augment infrastructure for the site including stormwater, sewer, water, and communications from The Retreat. This will be subject to further discussions and approval from the relevant asset owners and authorities.

The site is located directly east of the Bradfield City Centre; therefore, all future final / Stage 2 servicing will be delivered within adjacent road corridors once they are operational. AT&L have prepared a Civil and Utilities Infrastructure Report at **Appendix MM** and identify the following works:

- **Water** – As per Sydney Water's Feasibility Letter at **Appendix NN**, the ultimate servicing of potable water for the subject site will be from the new Badgerys Creek reservoir and trunk mains from that reservoir, which is currently proposed to be delivered in 2030/2031.

In the interim (Stage 1) Sydney Water's advice is to service the site via:

- A new Oran Park reservoir (WS0477 and WS0478) proposed to be delivered in 2025.
 - From the Oran Park reservoir, a Pressure Reducing Valve (PRV) on DN450 main in Badgerys Creek Road is required (proposed to be delivered by the mid-2024).
 - An extension main from the DN450 in Badgerys Creek Road to the proposal. The first section of the extension is expected to be delivered by the Western Parkland City Authority (WPCA) for the Bradfield development. A further extension of this main will be required from Bradfield to the subject site.
 - Once the ultimate servicing infrastructure is available, the development will disconnect from the interim arrangement and connect to the ultimate servicing infrastructure.
- **Sewer** – As per the Feasibility Letter provided by Sydney Water, the site is within the Thompsons Creek wastewater catchment within Western Sydney Aerotropolis Growth Area (WSAGA). Wastewater services will be provided to the WSAGA area via the new Advanced Water Recycling Centre (AWRC), and a new wastewater carrier east of the proposal.
 - The carrier will transfer flows to the AWRC via a proposed interim pumping station SP1228 and an ultimate pumping station SP1241.
 - The Thompsons Creek trunk wastewater infrastructure is currently in concept design stage and indicatively scheduled to be completed by 2027/2028.
- **Electricity** – It is proposed that two (2) kiosk substations will be delivered at Stage 1 and Stage 2 progressively. See **Figure 58**. For Stage 1, augmentation will be required from the existing electricity currently available from the electrical line owned by Endeavour Energy in proximity to the site

The following options are presented to service power to the site and is subject to further investigation by the services designer for the site and WPCA:

- Investigate whether the Bradfield City Centre electrical infrastructure has sufficient capacity to service the development and if so, what the timeline for delivery of infrastructure is.
 - If feeders are required from the Bradfield Zone Sub, WPCA is to confirm whether the proposal can utilised any spare ducts through the Bradfield City Centre or a suitable alignment that can be adopted by the proposal through the masterplan to service the development.
 - **Figure 59** presents the Bradfield Master Plan electrical layout which will be considered.
- **Telecommunications** – Optus, Telstra and NBN services will be available within the adjacent Bradfield City Centre. An extension of this infrastructure will be required from Bradfield Master Plan to the site.

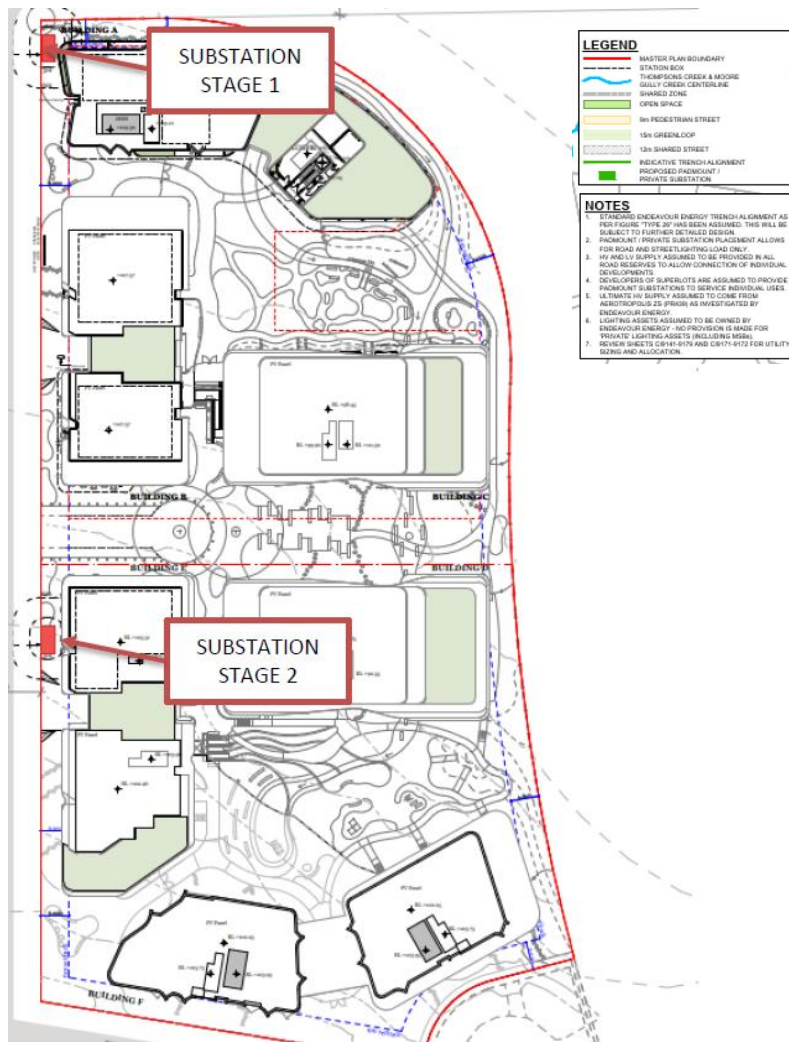


Figure 58 Electrical delivery staging

Source: AT&L

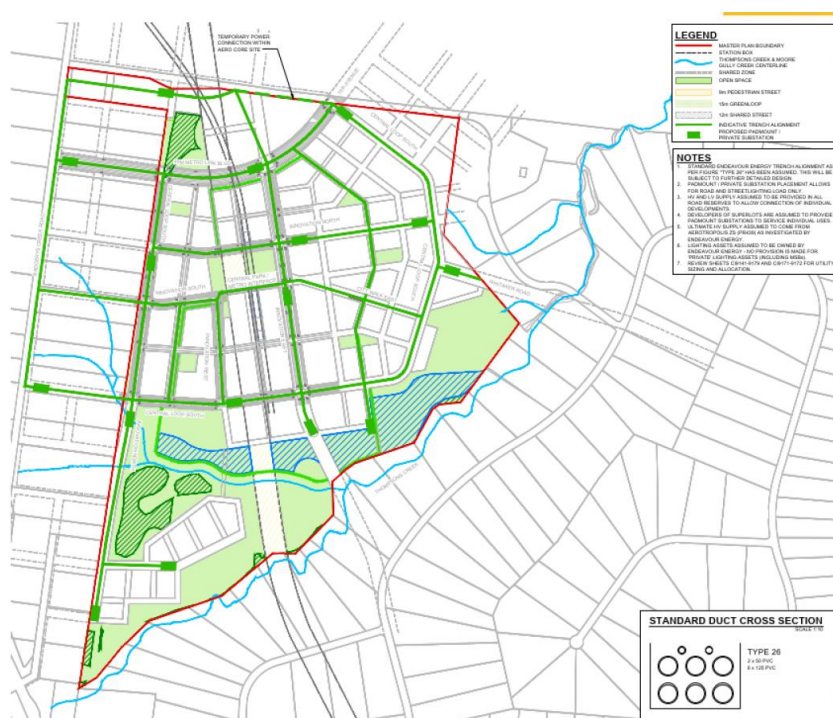


Figure 59 Bradfield Masterplan electrical layout

Source: AT&L

6.8 Accessibility

The access arrangements for all people, including those with a mobility impairment have been considered during the design process and in the architectural and landscape solutions for the site as well as in the transport strategies for the operation of the site.

ABE Consulting has prepared an Accessibility Review Report, provided at **Appendix N** to assess if the design of the proposal is equivalent to, or exceeds the principles of universal access considering all user groups and members of the public, visitors and staff for sensory impairment, mobility impairments and dexterity impairments.

The report provided a review of the relevant design documentation to determine the compliance status of proposal against the relevant standards of the Building Code of Australia 2022 (BCA), the Disability (Access to Premises – Buildings) Standards 2010 and the pertinent Australian Standards. The Accessibility Review Report has provided a review of the proposed adaptable units against the relevant requirements (AS4299-1995 Class C adaptable housing unit checklist).

ABE Consulting confirms that the recommendations and performance solutions proposed (see **Appendix D**) substantiate that the proposal can achieve compliance with the abovementioned BCA provisions.

6.9 Contamination

Environmental Consulting Services (**ESC**) has prepared a Preliminary Site Investigation (**PSI**) which is provided at **Appendix S**. The PSI evaluated the potential for contamination resulting from past activities on the site and determined the site's suitability for residential use.

To inform the PSI, twelve shallow test pits were excavated across the site. The results indicated concentrations of all contaminants were below health site assessment criteria for sensitive land use. However, a concentration of nickel was measured above the ecological investigation area criteria. This single exceedance was deemed insignificant. The material is likely to be removed during the excavation works of the proposal.

The groundwater analysis indicated some concentrations of metals above the assessment criteria for the protection of freshwater ecosystems. The concentrations are expected to represent background levels at this location. Based on the findings of the PSI, ESC considers the site suitable for the proposal following the implementation of the recommendations outlined in **Appendix D**.

6.10 Ground Conditions

Intrax Land have prepared a Preliminary Geotechnical Investigation which is provided at **Appendix Q**. The Preliminary Geotechnical Investigation has been prepared to determine the suitability of the site for the proposal and identify any specific requirements for construction management and building design.

The scope of work included in the Preliminary Geotechnical Investigation included the following:

- Preparation of health, safety, and environmental documents.
- Mobilisation of drilling crews onsite.
- Drilling of six boreholes to target depths of 10 metres to 15 metres below ground level.
- Dynamic cone penetrometer testing.
- Installation of three groundwater monitoring wells and data loggers.
- Laboratory testing of selected samples.
- Analysis and review of field geotechnical test information and the preparation of the Preliminary Geotechnical Investigation Report.

The Preliminary Geotechnical Investigation identified that the site is underlain by a relatively shallow siltstone or sandstone rock profile. Rock strength and weathering improve with depth, transitioning from residual clay soil near the surface, through clay below approximately 7 metres.

Overall, the Preliminary Geotechnical Investigation found that the ground conditions are suitable for the proposal and that the ground profile would permit typical construction practices for foundations and basement construction of the proposal.

The Preliminary Geotechnical Investigation recommends that additional geotechnical investigations are conducted and are provided in **Appendix D**.

6.11 Biodiversity

Narla has provided a Bio-certification Letter Report, attached to **Appendix BB**. The purpose of the letter is to determine if the site is located on biodiversity-certified land and to provide information to identify and demonstrate if the proposal is consistent with the biodiversity measures by the biodiversity certification.

Narla identified that the site is situated on Biodiversity Certified land. No further impact assessment under the Biodiversity Conservation Act of threatened species, populations or ecological communities is required for the proposal. Narla is satisfied that the proposal has been suitably positioned in areas of lower ecological value where feasible. Further, Narla notes that the Landscape Plan provided at **Appendix J**, details the inclusion of extensive native species plantings throughout the site which is expected to minimise impacts on biodiversity values.

6.12 Tree Removal

An Arboricultural Impact Assessment (**AIA**) has been prepared by CPS and is provided in **Appendix W**. The AIA was undertaken to assess the level of impact the development is likely to cause existing trees on the site in accordance with the provisions of AS4970-009 *Protection of trees and development sites*.

A site inspection was conducted by CPS on 19 March 2024 and assisted in the assessment process. All 15 trees located on the site were assessed as having a low retention value and have been recommended for removal. The trees are required for removal as they are within the footprint of the proposed buildings and basements. Tree 16, a small fruit tree (*Diospyros Kaki*) is located on the neighbouring site at 25 The Retreat and has been identified as having low retention value. The tree is however recommended for retention and protection as the proposal will not impact the tree.

CPS has provided several mitigation measures to ensure tree removal is appropriately carried out and will not result in any unacceptable impact. These measures are provided in **Appendix D**.

6.13 Overshadowing

An assessment of overshadowing was conducted by DKO is detailed in the Design Excellence Report at **Appendix E**. DKO conducted a comparative assessment between a scheme that strictly adheres the Aerotropolis DCP (in terms of maximum floor plate sizes) and the proposed scheme to assess the impacts on overshadowing on Kelvin Park Homestead located east of the site. See **Figure 60** and **Figure 61** to view the comparative overshadowing impacts.



Figure 60 Compliant scheme shadow diagrams

Source: DKO, edits by Ethos Urban

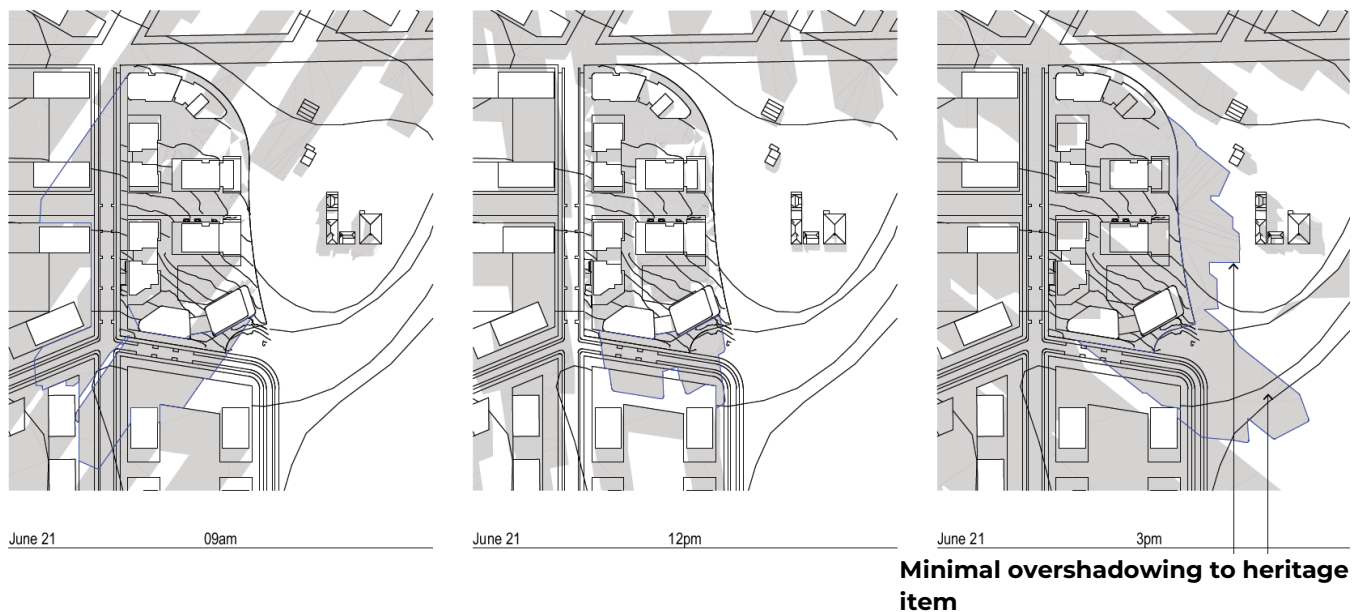


Figure 61 Proposed scheme shadow diagrams

Source: DKO, edits by Ethos Urban

The shadow diagrams demonstrate that a complaint scheme would result in some additional overshadowing of Kelvin Park Homestead, notably the Homestead itself. The proposed scheme casts a reduced shadow on the heritage item and does not overshadow the Homestead.

The proposal seeks to reduce the number of buildings across the site by increasing the tower plate size and redistributing the built form. The reduced number of towers and stepping built form down to the site's eastern boundary results in a refined scheme that produces improved overshadowing impacts to both the southern site and Kelvin Park Homestead.

There is an improved impact at 3 pm in mid-winter (June 21) through the design of the proposal. Between 9 am and 12 pm the proposal does not inhibit solar access to Kelvin Park Homestead. A fully compliant scheme would cast a shadow onto the heritage fabric within Kelvin Park Homestead, therefore the proposed scheme delivers an improved overshadowing outcome to Kelvin Park Homestead.

6.14 Noise and Vibration

Acoustic Logic has prepared a Noise and Vibration Impact Assessment (**NVIA**) (**Appendix P**), to identify and provide a quantitative and qualitative assessment of the noise and vibration generating sources provided during the construction and operation of the project.

6.14.1 Noise environment

The site is surrounded predominantly by rural farmland and low density residential development. The NVIA determined that the nearest noise receivers surrounding the proposal site are the following:

- Residential receiver 1: Single dwelling residential house to the east of the site (Kelvin Park Homestead).
- Residential receiver 2: Single dwelling residential house to the south of the site.

Figure 62 identifies the sensitive receivers surrounding the site.



Figure 62 Noise receivers

Source: Acoustic Logic

Unattended noise monitoring

Unattended noise monitoring was undertaken to obtain the existing background noise levels which assist in establishing noise goals applicable to the site ensuring the amenity for future residents and nearby developments.

Four unattended noise monitors were installed within the site, refer to **Figure 62** above. Noise unattended monitoring was undertaken between 3 November 2023 and 9 November 2023 and is detailed in **Table 20** below.

Table 20 Rating Background Noise and Traffic Noise Level Summary

Location	Time	Rating Background Noise Level dB (A)
M1 – south-east	Day (7 am-6 pm)	31
	Evening (6 pm-10 pm)	37 (31*)
	Night (10 pm – 7 am)	29
M2 – south-west	Day (7 am-6 pm)	30
	Evening (6 pm-10 pm)	34 (30*)
	Night (10 pm – 7 am)	26
M3 – north-west	Day (7 am-6 pm)	30
	Evening	37 (30*)

Location	Time	Rating Background Noise Level dB (A)
M4 – northeast	(6 pm-10 pm)	
	Night	26
	(10 pm – 7 am)	
	Day	30
	(7 am-6 pm)	
	Evening	36 (30*)
	(6 pm-10 pm)	
	Night	29
	(10 pm – 7 am)	

Attended noise measurements

Attended noise measurements were conducted to supplement the unattended noise monitoring data. The attended noise measurements were conducted on 3 November between 11:00 am to 12:00 pm. The measured noise levels are provided in **Table 21**.

Table 21 Measured attended noise levels

Site	Time	Measurement location	Measured Noise Level dB(A)
40 The Retreat, Bringelly	11:00 am – 12:00 pm	A1	41

Source: Acoustic Logic

6.14.2 Noise Emission

The intent of the amenity noise limit is the absolute noise level that is consistent with the prevailing land use. The recommended noise amenity area for the residential development proposed surrounding the site is 'suburban residential'. The proposed amenity noise levels are appropriate for the surrounding receives as demonstrated in **Table 22**.

Table 22 Project amenity noise levels

Receiver type	Time	Recommended Noise Level dB (A) Leq	Proposed Amenity Noise Level dB (A) Leq
Residential – suburban	Day	55	53
	Evening	45	43
	Night	40	38
Commercial premises	When in use	65	63

Source: Acoustic Logic

6.14.3 Construction

A preliminary construction and noise vibration assessment has been carried out by Acoustic Logic and is summarised in this section. A detailed assessment is typically conducted once the proposed construction activities and equipment are finalised.

Noise

The most significant noise or vibration generated during the construction will be building structure works. **Table 23** presents the predicted noise level for typical construction equipment expected to be used during the construction of the proposal.

Table 23 Predicted noise generation to receivers south of the site

Activity	Predicted Level dB (A) Leq	Assessment
Concrete Pump	76-90	Exceeds highly noise affected level
Trucks	66-80	Exceeds noise affecting management levels
Bobcat	71-85	Generally exceeds highly noise-affected area
Crane/hoist (electric)	51-65	Exceeds noise-affecting management levels, below high noise affected areas at all times
Powered Hand Tools (externally)	61-75	Exceeds noise-affecting management levels, below high noise-affected areas at all times

Source: Acoustic Logic

Without mitigation, noise at the sensitive receivers surrounding the set will exceed the highly noise-affected level. Significant demolition is not proposed as the site mostly consists of a vast lawn. Groundworks are expected to deliver basement levels. During structural works, concrete pumps are anticipated to generate the highest noise impact.

Mitigation measures have been identified by Acoustic Logic to minimise impacts resulting from construction noise which have been outlined in **Appendix D**.

Vibration

Given the distance from nearby receivers, vibration impacts to all receivers are expected to be minimised or within the recommended levels.

6.15 Flooding and Stormwater Impact

AT&L has prepared a Flood Impact and Risk Assessment Report (**FIRA**) which is provided in **Appendix CC**. The FIRA details the flood risk of the site and the associated management strategies as well as the method or the proposed stormwater drainage on-site detention and water-sensitive urban design strategies.

6.15.1 Flooding

A local TUFLOW model has been developed to simulate flood behaviour under pre-development conditions. The digital elevation model (DEM) was created by combining available LiDAR data (from the online ELVIS Foundation Spatial Data platform). Rainfall on grid was utilised to simulate the inflows for pre-development conditions. This method directly applies rainfall data onto the DEM, representing the terrain under a pre-development scenario. The downstream boundary condition was adopted as free discharge.

The assessment of flooding under proposal conditions was undertaken by modifying the TUFLOW model to represent the proposed earthworks, civil infrastructure and development as follows:

- The DEM represents the proposed roadworks, trunk drainage channels, detention basins and on-lot works under the ultimate developed conditions for the proposal.
- Inflows to the TUFLOW model were exported from the hydrological models and input as rainfall on grid to simulate the inflows for post-development conditions.
- Downstream boundary conditions were adopted as free discharge at normal depth.

The proposed trunk drainage channels within the proposal, have been incorporated into the proposed developed condition model.

The INSW South Creek Sector Review Flood Assessment (Advisian 2020) aims to define the current flood conditions, assess the impact of future development and blue-green infrastructure, and inform the flood management and land use planning for projects in the Western Sydney Aerotropolis and Bradfield. It utilises updated hydrologic and hydraulic models to evaluate flood characteristics under various development scenarios.

Based on the existing flood information identified in the study, the proposal is located outside the extent of the 1% AEP and Probable Maximum Flood (PMF). The appropriate PMF level adjacent to the site upstream (southern) side of The Retreat is 60mAHD, compared to a minimum ground level at the site of approximately RL 63m AHD.

The proposal will result in changes to flood behaviour within the site. The stormwater drainage systems (incorporating naturalised trunk drainage) have been designed to convey peak flows up to 1% AEP - refer to **Figure 63**. On-site stormwater detention tanks and basins have been designed to satisfy the Western Sydney Aerotropolis DCP control for peak flow attenuation.

No measures other than the proposed stormwater drainage systems, trunk drainage channels and OSD basins incorporated into the proposal site will be required to mitigate potential flood risks.

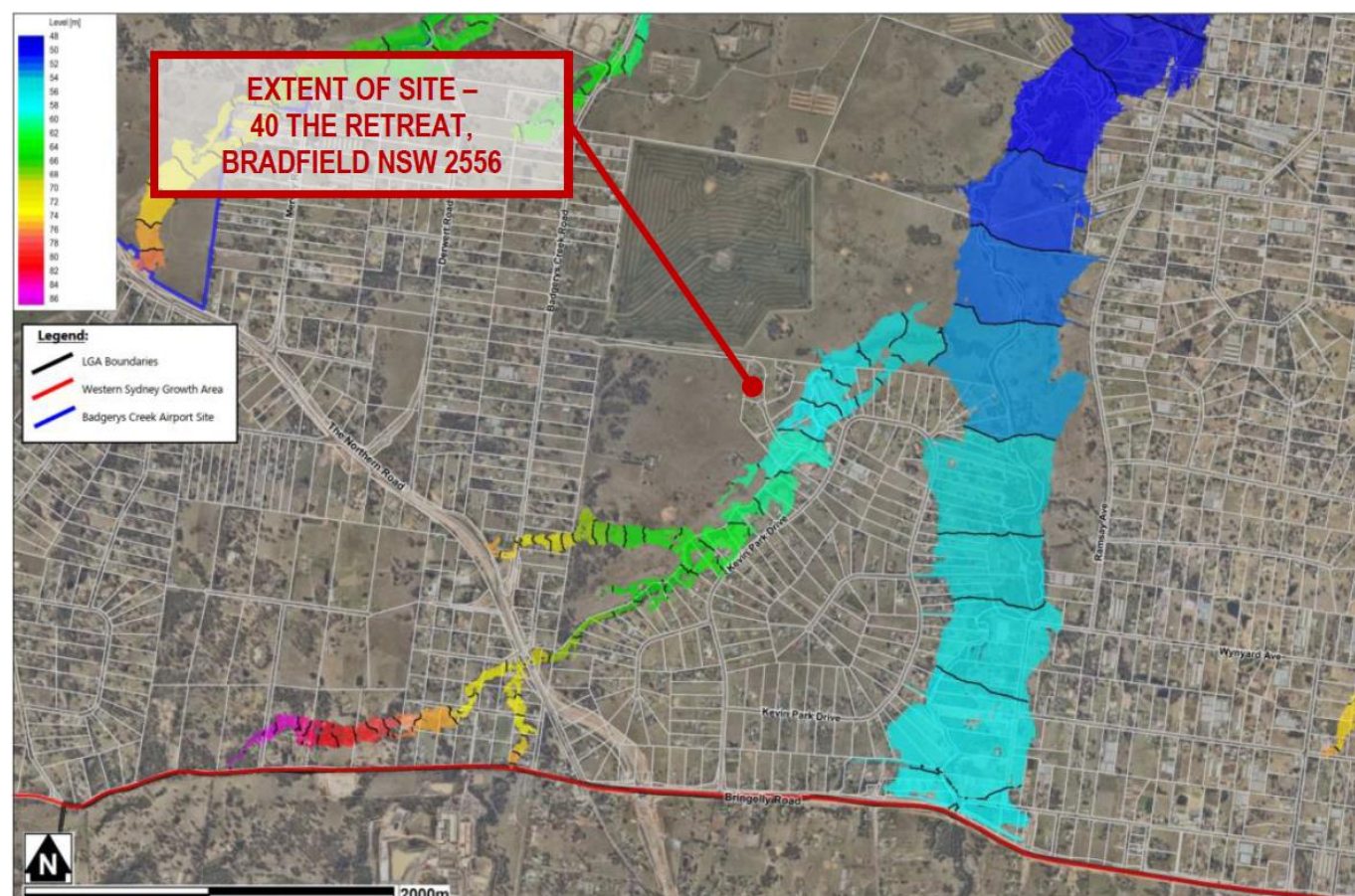


Figure 63 1% AEP Flood Depth

Source: Advisian 2022, AT&L

6.15.2 Stormwater

The ultimate stormwater plan for the proposal incorporates two OSD basins within the site. These two OSD basins have been designed to attenuate inflows from the proposed development and will discharge into a trunk drainage pipe (nominal diameter 375mm, subject to detailed design) that will ultimately discharge to the existing table drain via a level spreader south of the site. The detention tanks have been sized to attenuate peak flows for a range of design storm events between (and including) the 5% AEP and 1% AEP.

Based on the assessment of flood risk and flood impact documented in the FIRA, the proposed development addresses the relevant objectives and controls for flood-prone land identified in the Western Sydney Aerotropolis DCP. With measures to convey the attenuate surface water runoff within the development site, the site is appropriate for development.

6.16 Bushfire

The site is located within the Liverpool Bushfire Prone Land map to contain Category 2 (buffer zone) Bushfire Prone Vegetation. The proposed development is for residential purposes and is required to comply with the provisions of Section 4.14 of the EP&A 1979. ABPP has prepared a Bushfire Protection Assessment which is provided at **Appendix KK**. A site inspection was undertaken by ABPP on 11 April 2024.

The Bushfire Protection Assessment examines the temporary Asset Protection Zone setback requirement to the Category 3 vegetation on the land to the west and north and temporary fire-fighting access requirements, pending development of the adjoining land to the west and north and construction of the road network as foreseen in the Western Sydney Aerotropolis Master Plan. The properties to the east, southeast and south of the site contain maintained lawns and landscaped gardens. This vegetation does not constitute bushfire-prone vegetation and is not a hazard to the proposal.

As per the Aerotropolis Precinct Plan, the Bradfield City Centre, west of the site will be transformed into a commercial and mixed-use residential centre. The future development of Bradfield City Centre will remove the grassland vegetation and grassland fire hazard at the site.

Stage 1 of the development is likely to proceed prior to the development of the adjoining land and the construction of the new road network. Therefore, the establishment of an Asset Protection Zone facilitates protection from a grass fire is required.

The design of the proposal does not permit the establishment of a complying width of the Asset Protection Zone within the development site. Therefore, pending removal of the grassland hazard from the adjoining land, the development will occur with Building C in Stage 1A constructed in the eastern portion of the site, providing a complying Asset Protection Zone to the hazard on the land to the west and north. This matter is proposed to form a mitigation measure to be resolved with the neighbouring WPCA formally prior to any Construction Certificate.

6.17 Hazards

The proposal does not include the storage of hazardous or dangerous goods and or uses which would be deemed to be hazardous or offensive under *State Environmental Planning Policy (Resilience and Hazards) 2021*. Therefore, no further assessment is required to assess hazardous materials.

6.18 Wind Impacts

This SSDA is accompanied by a Pedestrian Wind Assessment (PWA) by RWDI provided at **Appendix U** . The PWA presents the results of a detailed investigation into the proposed development's impact on the wind environment based on an efficient desktop estimation of wind conditions.

6.18.1 Wind criteria

The PWA adopts a Safety Criterion and a Pedestrian Comfort Criteria (refer to **Table 24**). The safety criterion is applied to pedestrian safety where excessive gusts can adversely affect a pedestrian’s balance and footing.

Table 24 Wind Comfort and Safety Criteria

Category	Description
Comfort	
Sitting < 10km/h	Calm or light breezes desired for outdoor seating areas where one can read a paper without having it blown away.
Standing <14km/h	Gentle breezes suitable for main building entrances, bus stops and locations where pedestrians may linger (private and communal terraces).
Strolling <17km/h	Moderate winds that would be appropriate for strolling along a downtown street, plaza or park and where the objective is not to linger.
Walking <20km/h	High winds that can be tolerated if one's objective is to walk, run or cycle without lingering. Also suitable for certain sporting activities.
Uncomfortable >20km/h	None of comfort categories above are met. Represents conditions that might be dangerous to the elderly and children and are of a considerable discomfort to others.
Safety	

Category	Description
Safety criterion	If strong winds, greater than 83 km/h (23m/s) occur more than 0.1% of the time or 9 hours per year, the wind conditions are considered severe and can impact the footing of individuals using the space.

6.18.2 Wind assessment

The Pedestrian Wind Assessment (PWA) concludes that the site is relatively exposed to all seasonal winds attributed to its locational to open terrain in all directions. The PWA recognises the Aerotropolis Metro Station and future surrounding developments are unlikely to protect the development from the prevailing southwest winds. It is noted that the Thompson Creek tree line will serve as a natural barrier and will assist in the mitigation of the ground-level winds from the south and southeast. The anticipated wind conditions are summarised below:

- The position of the taller buildings along the various streets can provide shelter to most internal spaces within Buildings C and D and the communal outdoor spaces surrounding these buildings. Wind impacts in these locations are likely to be small.
- The taller buildings around the site's perimeter are likely to intercept and redirect winds towards the ground level. These winds are likely to impact ground level conditions around exposed corners of building concerns.
- Wind channelling within corridors may comprise overall comfort levels, particularly surrounding the retail tenancies and lobby entrances. Wind channelling is likely to persist within the through-site links under Building A and F throughout the year.
- Upper-level communal open spaces are anticipated to experience diverse wind conditions. Some spaces will be shielded with others expected to be exposed during winter months.
- Most private balconies are recessed within the proposed buildings and will benefit from comfortable wind conditions throughout the year. Some balconies located on corners of Buildings A, B, E and F are anticipated to be exposed to stronger winds.

As such, RWDI recommended wind treatments to ensure an acceptable outcome as provided in **Appendix D**. The PWA concludes that through targeted mitigation strategies and design recommendations the challenges addressed in the report can efficiently be addressed. Further, the landscaping scheme presents opportunities to further improve the wind impacts.

6.19 Waste

6.19.1 Construction waste

A Construction and Demolition Waste Management Plan (**CDWMP**) has been prepared by Foresight Environmental and is provided at **Appendix II**. The CDWMP is required to assess the volumes and waste management of waste during the construction and demolition phases of development.

The CDWP details the type, volumes, and disposal methods for all waste material during the construction phase. It provides details regarding the responsibility of the head contractor to lawfully dispose of waste and ensure that reports of the management and capacity of facilities to receive waste are recorded. Records will be kept of potentially hazardous waste. Records of both recycled and general waste volumes being transferred offsite or reused onsite will also be recorded.

The site manager is responsible for ensuring there is a secure location on site for materials to be reused on-site and for separated materials for recycling off-site. The site manager has a number of other responsibilities such as skip bin identification, managing contractors and managing coordination procedures. Further detail is provided in the CDWMP.

All site employees and subcontractors are required to attend a site-specific induction which will outline the component of the CWMP and explain the site-specific practicalities and waste reduction and recycling strategies. All employees are required to have a clear understanding of which materials are being reused/recycled and which are to be stockpiled.

6.19.2 Operational waste

An Operational Waste Management Plan (**OWMP**) has been prepared by Foresight Environmental and is provided at **Appendix EE**. Based on the waste estimate detailed in the OWMP, the below section details the recommended bin systems and collection frequencies to effectively manage the anticipated waste. The systems and collection frequency demonstrate a capable capacity for the projected waste generation. Strata management will monitor the systems and increase in consultation with the appointed waste contractors.

Residential

Stage 1

General waste will travel down a waste chute from each floor and empty into the corresponding waste room. Each waste chute will empty into a 660L bin on a linear track system. There will be five waste storage rooms to service the three buildings during Stage 1. All waste will be transferred to a waste holding area for collection by the waste contractor. Further details are provided in **Appendix EE**.

Prior to collection, the total general waste and mixed recycling bins from the waste holding area (**WHA**) will need to be transferred to the temporary bin collection area on street level. A tug vehicle with a trailer that can pull multiple bins will be needed, and the number of transfers/trips from the WHA will depend on how many bins can be moved at once.

The appointed Council waste contractor will be able to access the site from 'The Retreat' cul de sac road, and then drive forwards into the development and to the temporary bin collection point. The MRV will stop there temporarily to empty all bins and return empty bins to the collection point. Strata management and cleaners will then return empty bins to the WHA using the tug vehicle.

Stage 2

Upon completion of Stage 2, and once fully operational, waste will be collected from within the basements. The MRV path of travel is shown in **Figure 64** below.

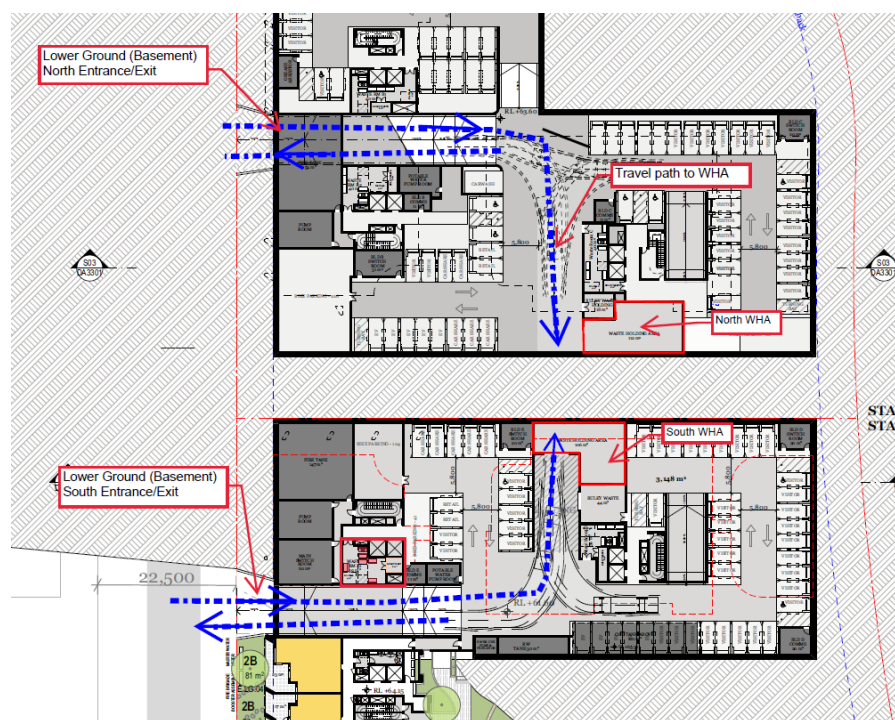


Figure 64 MRV path of travel residential Stage 2

Source: Foresight Environmental

Retail

Both retail tenancies' waste storage areas are 12m² which is adequate to house the recommended equipment. Waste is recommended to be collected twice a week. Waste includes general waste, organics, paper/cardboard and mixed recycling and is anticipated to produce a total of 4,658 litres total waste per week.

Stage 1

Waste will be transferred from the waste storage area to the temporary bin collection area. Before collection, retail staff will transfer bins to the basement 2 waste storage room. From the basement 2 waste storage room waste will then be taken up to the temporary waste storage area with the residential bins on collection days. After collection, empty bins will be returned to the basement 2 waste storage room and retail staff will collect and return them to the retail waste storage area. This arrangement is temporary until the future surrounding roads are complete.

Stage 2

Upon completion of the proposed development and once fully operational, retail waste will be collected by a contractor medium rigid vehicle (MRV) directly from both basement waste storage rooms which will be accessed from the future local roads at the site's western boundary.

The details of the OWMP confirm that the waste facilities and operational strategy for the proposed development can adequately cater for the operational waste management requirements of the Aerotropolis DCP Sustainability

6.20 Sustainability

A Sustainability and Resilience Report (ESD) has been prepared by Jensen Hughes and is provided at **Appendix Y**. The report provides an assessment of the proposal against the principles of ESD, outlines the project's ESD performance targets and alignment with the relevant plans and policies, and describes the ESD framework and sustainable design principles being implemented to achieve the project targets.

The development has been prepared in accordance with Section 4.7 of the Aerotropolis Precinct Plan. The ESD demonstrates how the development minimises greenhouse gas emissions reflecting the Governments goal of net zero emissions by 2050 and consumption of energy, water (including water-sensitive urban design) and material resources.

Key design features that will lead to the achievement of the abovementioned targets will include the following:

- The proposed development is committed to meeting and exceeding, where possible the performance standards with the National Construction Code (NCC) 2022 Volume One Section J.
- Commitment of a BASIX energy score of 61%.
- Commitment of water score of 56% (refer to the Water Score Memo at **Appendix OO**).
- Commitment to the thermal comfort specifications of the development in reaching an average NatHERS Star rating of 7.
- Waste Management Plan to show 10% reduction of waste reduction and 85% reduction in construction waste.
- Minimum 100kW on-site Solar PV to offset residential common areas and central systems, with commitment for the whole development to be carbon neutral by 2030 by way of either expanding on on-site renewable energies and/or purchasing LGCs or entering a power purchase agreement.
- Kitchen taps, bathroom taps, showerheads, toilet flushers, dishwashers and washing machines all have the highest rating possible for residential use.
- Motion sensors used for the service rooms, switch rooms, fire stairs, lobbies and corridors.
- The pool will be heated by an electric pump heating system on a timer.

Further, a NCC Section J Report has been provided at **Appendix GG**.

6.21 Social Impact

A detailed Social Impact Assessment (**SIA**) has been prepared by Ethos Urban and is provided at **Appendix FF**. This report considers and identifies the key potential impacts and social benefits of the proposal.

The key potential impacts associated with the project have been identified as the following:

Construction impacts

- Noise, dust, and vibration impacts during construction impacting nearby community members' way of life and health and wellbeing. This may affect nearby people with long-term health conditions, affect daily routines, and/or people's sleep (therefore health and well-being).
- Cumulative construction impacts from nearby projects leading to potential 'construction fatigue' – affecting people's mental health, physical well-being, accessibility if footpaths or roads are closed or on-street parking is

affected, as well as way of life and surroundings (such as their ability to enjoy their outdoor areas if there is ongoing noise or dust).

Operational impacts

- The significant change of the proposed development, in the context of the broader development of Bradfield City Centre / Aerotropolis Core, could impact the sense of place, way of life, accessibility, and community.
- There is a lot of uncertainty around the timing of social infrastructure within Bradfield City Centre. Prolonged poor access will reduce opportunities for community building and increase reliance on cars to access infrastructure in other larger centres.

However, the above potential impacts are largely temporary or can be appropriately mitigated through the various environmental mitigation measures at **Appendix D**. Further, the most significant social benefits of the proposal are as follows:

- The key benefit of the project relates to the addition of 533 new apartments over a diverse mix of sizes in a time of great need.
- The development of Bradfield City Centre will see future residents of the development have greater accessibility to a range of services, transport options, jobs, and social infrastructure. This will provide better access, with some potentially needing to travel less, while also providing opportunities for community building and connection.
- Provision of greater housing availability and choice through providing access to high-quality, high-density accommodation of a range of sizes, to meet the needs of a growing population.

Overall, the SIA finds that the development during the construction phase will have temporary and short-term negative impacts and can be mitigated through appropriate mitigation measures (**Appendix D**). During the operation phase, Ethos Urban consider the overall impacts to be positive.

6.22 Safety and Security

A Crime Prevention Through Environmental Design Report (**CPTED**) has been prepared by Ethos Urban and is provided at **Appendix V**. The CPTED details the project policy and crime context for the project and makes recommendations about the necessary CPTED strategies to reduce opportunities for crime to occur.

This strategy includes a detailed assessment, which includes:

- A review of Safety By Design Manual by the NSW Police Force.
- Collection and analysis of local and NSW State crime statistics from the Bureau of Crime Statistics and Research (BOSCAR).
- A crime risk assessment, in accordance with the current NSW policy and practice, of matters of surveillance, lighting and technical supervision, territorial reinforcement, environmental maintenance, activity and space management, access control, and design, definition and designation.

This assessment has found that, with the implementation of the recommendations outlined in the CPTED Report, the crime risk rating of the site would be 'moderate', a product of the existing rural context of the site. While the redevelopment of the site will likely increase the population on-site, and thereby increasing potential new opportunities for crime, purely by the increase of use and occupancy of the site, the assessment finds that the proposed layout and design of the proposal is generally consistent with the principles of CPTED.

Mitigation measures relating to crime risk on the site are outlined at **Appendix D**.

6.23 BASIX

A BASIX Certificate and associated Assessment Report are included at **Appendix JJ**. They demonstrate the proposal's consistency with the relevant BASIX, NATHER and water targets. It is noted that the Precinct Plan aims for a water score of 60% reduction in water usage compared to a benchmark project, exceeding the mandatory 40% reduction legislated in the Environmental Planning and Assessment Regulation 2021 and State Environmental Planning Policy (Sustainable Buildings) 2022.

Despite utilising all feasible water-saving options, the proposal currently achieves a 56% reduction, making it a substantial improvement over the legislated requirement but falling short of the ambitious Precinct Plan target. This target is however currently not feasible for this proposal. However, significant potential exists to reach the 60% target by connecting to the planned Local Advanced Water Recycling Centre (**AWRC**) once it becomes

operational in 2026. Currently, BASIX does not recognise the AWRC, but when this option becomes available, the proposal is expected to meet the WSAP goal within the BASIX framework.

6.24 Building Code of Australia

A BCA Assessment Report was prepared by Jensen Hughes and is provided at **Appendix M**.

The BCA Assessment report confirms that the development is largely consistent with the Deemed to Satisfy provisions of the code. Its assessment is based on the Guide to National Construction Code 2019, Amendment 1, Building Code of Australia, and the National Construction Code (Volume 1).

The compliance with the National Construction Code will be achieved through a combination of Performance Solutions and Deemed to Satisfy Solutions which are detailed in the BCA Assessment Report.

6.25 Fire Engineering

A Fire Engineering Strategy Report (**FESR**) has been prepared by Jensen Hughes and is provided at **Appendix SS**. The report presents a summary of the proposed performance solutions based on the Architectural Drawings provided by DKO at **Appendix B** and BCA Assessment Report at **Appendix M**. The FESR has adequately reviewed the relevant documentation and has provided adequate fire engineering performance-based solutions.

7.0 Project Justification

The EP&A Act specifies that a justification must be made having regard to biophysical, economic, and social considerations and the principles of ecologically sustainable development, including both positive and negative impacts.

The proposal comprises a mixed-use residential development. It details the assessment against the relevant framework for the new mixed-use buildings and public spaces to deliver a suitable development outcome in Bradfield.

The design process was led by the Designing with Country Framework and the *Recognise Country: Guidelines for Development in the Aerotropolis*. The development approach was shaped by a landscape-led design which was strongly influenced by the design principle 'Start with Country'. This sensitive approach led to the proposal's responsive built form, character, and highly vegetated ground plan.

This assessment focuses on the impact of the proposed development. Accordingly, the assessment is detailed and has provided a detailed assessment against the Design Excellence Report (**Appendix E**) and supporting consultant inputs which represent the proposed outcomes and effects of the proposal.

Various components of the biophysical, social, and economic environments, as well as the proposals alignment with the objects of the EP&A Act.

7.1 Ecologically sustainable development

The EP&A Regulation lists 4 principles of ecologically sustainable development to be considered in assessing a project. They are:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

An analysis of these principles follows.

7.1.1 Precautionary principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts to avoid, wherever practicable, serious or irreversible damage to the environment.

This EIS has not identified any serious threat of irreversible damage to the environment and therefore the precautionary principle is not relevant to the proposal. The proposal will deliver a high standard of ESD outcomes and initiatives within the proposal boundary, as described above, and will minimise environmental impacts in areas of energy, water, and materials efficiency.

7.1.2 Intergenerational equity

Intergenerational equity is concerned with ensuring that the health, diversity, and productivity of the environment are maintained or enhanced for the benefit of future generations. The proposal has been designed to benefit both the existing and future generations by:

- Ensuring the health, diversity and productivity of the environment are maintained through the implementation of passive and active design measures that reduce operational energy and water use from the proposal.
- Reducing energy, water, and waste to ensure that the health, diversity, and productivity of the environment are maintained for the benefit of future generations.
- Implementing safeguards and management measures to protect environmental values.
- Facilitating job creation near homes and public transport.

The proposal has integrated short and long-term social, financial, and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long-term implications such as waste disposal would be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports.

7.1.3 Conservation of biological diversity and ecological integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration.

The proposal would not have any significant effect on the biological diversity and ecological integrity of the proposal. Before the commencement of construction works, a detailed Construction Management Plan will also be in place to ensure works do not adversely affect the site.

7.1.4 Improved valuation and pricing of environmental resources

The principles of improved valuation and pricing of environmental resources require consideration of all environmental resources that may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling, and managing waste during construction and operation would be implemented to ensure resources are used responsibly in the first instance.

Measures have been detailed in the mitigation measures at **Appendix D** and have been detailed throughout this EIS to ensure no environmental resources in the locality are adversely impacted during the construction or operational phases of the development.

7.2 Environmental Planning and Assessment Act 1979 - Objects of the Act

This EIS has examined and considered all possible matters affecting or that are likely to affect the environment because of the proposal. The project is consistent with the relevant Objects of the EP&A Act, as outlined in **Section 4.0** and will not result in any unjust or significant environmental impact.

7.3 Environmental Planning and Assessment Act 1979 - Clause 4.15 Evaluation

The following section assesses the proposal against the relevant heads of consideration listed in Section 4.15 of the EP&A Act.

7.3.1 Environmental Planning Instruments

As described in **Section 4.0** the proposal against the relevant heads of the consideration listed in Section 4.15 of the EP&A Act.

- Environmental Planning and Assessment Act 1979.
- Environmental Planning and Assessment Regulation 2021.
- Biodiversity Conservation Act 2016.
- State Environmental Planning Policy (Precincts – Western Parkland City).
- State Environmental Planning Policy (Housing) 2021.
- State Environmental Planning Policy (Sustainable Buildings) 2021.
- State Environmental Planning Policy (Transport and Infrastructure) 2021.
- State Environmental Planning Policy (Resilience and Hazards) 2021.
- State Environmental Planning Policy (Biodiversity and Conservation) 2021.

The Statutory Compliance Table at **Appendix C** further outlines the relevant statutory requirements of each EPI and the location in the EIS where those requirements have been assessed. Those statutory requirements that are yet to be assessed in the EIS are addressed below.

7.3.2 EP&A Regulation

The EIS has addressed the specification criteria within Sections 190 and 192 of the EP&A Regulation. Similarly, the EIS has addressed the principles of ecologically sustainable development through the precautionary principle (and other considerations), which assesses the threats of any serious or irreversible environmental damage (see

above). As required by Section 4.41 of the EP&A Act, no additional approvals will be required at this stage to enable the project.

7.4 Likely impacts of the development

7.4.1 Social and Economic

The social and economic impacts and benefits associated with the proposal include:

- The key benefit of the project relates to the addition of 533 new apartments over a diverse mix of sizes in a time of great need.
- The development of Bradfield City Centre will see future residents of the development have greater accessibility to a range of services, transport options, jobs, and social infrastructure. This will provide better access, with some potentially needing to travel less, while also providing opportunities for community building and connection.
- Provision of greater housing availability and choice through providing access to high-quality, high-density accommodation of a range of sizes, to meet the needs of a growing population.
- The proposal will improve pedestrian access to the site through the introduction of through-site links;
- The proposal will provide additional economic and social benefits for the Aerotropolis Core by providing employment opportunities during the construction and operational phases;
- The proposal will be inclusive of multiple publicly accessible spaces and retail floor space at ground level which will active the site; and
- The predominantly residential development will provide housing in close proximity to the Aerotropolis Metro and the Western Sydney International (Nancy-Bird Walton) Airport (both currently under construction).

The assessment's negative impacts can adequately be mitigated through mitigation measures as detailed in **Appendix D**.

7.4.2 Biophysical

The environmental impact assessment of the proposal has demonstrated that:

- The proposal will generate limited environmental impacts, due to the nature of the site being historically rural farmland as well as minimal vegetation present throughout the site;
- The proposal will not have a significant impact on any threatened flora and fauna species; and
- The risks associated with the development are capable of being appropriately mitigated through the mitigation measures outlined in **Appendix D**.

7.5 Suitability for the Site

Having regard to the characteristics of the proposal and its location within the Aerotropolis Core precinct, the proposal is considered suitable for the site and within the public interest.

The site is located within the Aerotropolis Core Precinct as part of the Western Sydney Aerotropolis. The precinct is envisioned to support the new Metro Station by supported by mixed-use and commercial development, and civic and open spaces with supporting building heights up to 60m.

- The site is situated approximately 650m from the Aerotropolis Station which forms part of the Sydney Metro, Western Sydney Airport Line. This will allow future residents of the site to travel by car, foot, or bike to public transport to the Aerotropolis Metro Station.
- Directly supports and aligns with the Aerotropolis Core Precinct Plan as the project seeks to facilitate a mixed-use residential development, for which the site is intended.
- The proposed development maintains view corridors to the neighbouring State heritage item, Kelvin Park Homestead.
- The proposed development has been designed in a manner that minimises impacts on its surroundings and has been designed to improve the natural, historical, and environmental qualities of the site.

The site is also considered to be highly suitable for the proposal in that:

- The site is zoned B4 Mixed Use which permits mixed-use residential development, and the project meets the objectives of this land use zone.

- There is sufficient infrastructure (with associated service augmentation) to support the initial stage of development.
- Will be well serviced by future public transport arrangements comprising walking and cycling routes including the future regional cycle path and the Aerotropolis Metro Station.
- It is of sufficient size to appropriately accommodate the new built form as proposed.
- The site neighbours the future Bradfield City Centre and therefore is ideally positioned to host a development that contributes to the Western Sydney Economy and supports housing for the significant amount of jobs planned for the Bradfield City Centre.

7.6 Public Interest

Having regard to the public interest, the proposed development is in the public interest for the following reasons:

- The proposed development will provide a diverse range of high-quality residential apartments of varying sizes and configurations.
- The design and orientation of the buildings ensure that the development maximises amenity for future and surrounding occupiers. The height, massing and modulation of the development are highly resolved and will contribute positively to the site's context in the Aerotropolis Core.
- The proposal seeks to transform an existing underutilised, well-located site, through the provision of high retail tenancies, that will support future development and activate the ground level.
- The development provides for an embellished public realm, through the provision of generous through-site links and a new various landscaped public open space. The public domain enhancements will foster community and encourage social interaction between residents, workers, visitors, and the public.
- The proposed development is sensitive to the neighbouring State heritage item 'Kelvin Park Homestead'. The proposed built form is respectful of the heritage item and has resulted in a sensitive proposal that has been skilfully and appositely designed.
- The proposed development responds to the desired future character of the area as envisioned by the Aerotropolis planning framework.
- The proposal provides opportunities to better integrate with the surrounding developing area including connections to the future road network at the site's western boundary.
- The proposed development will not result in any significant environmental impact that cannot be appropriately mitigated or managed through the adherence to Mitigation Measures detailed in **Appendix D**, conditions of consent and any further mitigation measures during the construction and operational phases of the development.

8.0 Conclusion

The Environmental Impact Statement (**EIS**) has been prepared to consider the natural environment, built environment and social and economic impacts of the proposed mixed-use residential development on land at 40 The Retreat, Bradfield. The EIS has addressed the issues outlined in the Secretary's Environmental Assessment Requirements (**Appendix A**) and accords with section 190 and 192 of the EP&A Regulation.

Having regard to environmental, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified for the following reasons:

- The proposed development is permissible with consent and meets the relevant statutory requirements of the relevant environmental planning instruments, including Chapter 4 of State Environmental Planning Policy (Precincts – western Sydney Parkland City) 2021.
- The proposed development represents a significant residential investment in the Aerotropolis Core within the broader Aerotropolis Precinct.
- The proposed development facilitates significant improvement of the public domain within the site allowing for improved through-site connections that lead to Kelvin Park Homestead, and Thompson Creek beyond.
- The proposed development will support construction jobs during the construction stages of the development.
- The proposed development will not result in adverse environmental impacts, with appropriate mitigation measures that will minimise any potential impact.
- The proposed development has been prepared in general accordance with the Aerotropolis Precinct Plan and Development Control Plan 2022.

The proposal is consistent with the principles of ecological sustainable development as defined by section 193 of the EP&A Regulation.

Given the merits described above, and the significant benefits associated with the proposed development, it is requested that the application be approved.