

Statement of Environmental Effects

Sites 1-3 in Precinct 9, Edmondson Park

Lots 1-5, Edmondson Park NSW 2174

Submitted to Liverpool City Council

On behalf of UPG Edmondson Parkland Pty Ltd



'Gura Bulga'

Liz Belanjee Cameron

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

By using the green and blue colours to represent NSW, this painting unites the contrasting landscapes. The use of green recognizes tranquility and health. The colour cyan, a greenish-blue, sparks feelings of calmness and reminds us of the importance of nature, while various shades of blue hues denote emotions of new beginnings and growth. The use of emerald green in this image speaks of place as a fluid moving topography of rhythmical connection, echoed by densely layered patterning and symbolic shapes which project the hypnotic vibrations of the earth, waterways and skies.

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

We acknowledge the Gadigal people, of the Eora Nation, the Traditional Custodians of the land where this document was prepared, and all peoples and nations from lands affected.

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

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For Lodgement

15 December 2022

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- S** Pre-DA Feedback and Design Excellence Panel Feedback Response
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1.0 Introduction

This Statement of Environmental Effects (SEE) is submitted to Liverpool City Council on behalf of UPG Edmondson Parkland Pty Ltd in support of a Development Application (DA) for the development of Sites 1-3 at Edmondson Park to accommodate 178 new residential townhouses. Specifically, this DA seeks approval for:

- **Residential Townhouses:**

178 residential townhouses across Sites 1-3, as outlined below.

- Construction of 43 residential townhouses at Site 1, including:
 - 32x 4-bedroom townhouses.
 - 11x 3-bedroom townhouses.
- Construction of 63 residential townhouses at Site 2, including:
 - 33x 4-bedroom townhouses.
 - 30x 3-bedroom townhouses.
- Construction of 72 residential townhouses at Site 3, including:
 - 40x 4-bedroom townhouses.
 - 32x 3-bedroom townhouses.

- **Landscaping:**

Landscaping and public domain improvements, to be provided in the form of:

- Streetscape landscaping to:
 - The internal access roads that dissect Sites 1-3.
 - The shared zones and rear laneways that are internal to Sites 1-3.
- 8,738.3m² of deep soil planting zones and 3,107.2m² of contiguous / adjoining soil planting zones.

- **Rear Lanes**

Rear lanes and shared zones to provide vehicle access to the townhouses that are proposed across Sites 1-3.

- **Car Parking:**

Garages with 1-2 car parks at each townhouse, to provide a total of 258 car parking spaces across Sites 1-3.

- **Connection to Utilities and Services:**

Connection to and augmentation of underground services will be undertaken to service each residential townhouse.

This SEE has been prepared by Ethos Urban on behalf of UPG Edmondson Parkland Pty Ltd and is based on the architectural drawings provided by Cox Architecture (see **Appendix A**), in addition to other supporting technical information that is appended to this report (see Table of Contents).



1.1 Background

1.1.1 Edmondson Park

Edmondson Park was the first precinct to be planned and constructed as part of the South West Priority Growth Area that was established to plan for urban expansion at the city fringe. Edmondson Park is located to the north-west of the M5 Motorway and lies approximately 40 km to the south-west of Sydney CBD. The area subject to this application is within the Liverpool Local Government Area (LGA).

Edmondson Park is undergoing significant transformation from rural to urban land. The focal point for this evolution is the Edmondson Park Train Station. Edmondson Park will see the introduction of a new town centre featuring a diverse mix of commercial, mixed, retail and residential uses.

The planning context for Edmondson Park is further discussed below.

1.1.2 Edmondson Park Concept Approval (MP10_0118)

On 18 August 2011, the Planning Assessment Commission approved Concept Plan (MP 10_0118) and a concurrent Project Application (MP 10_0119) for the development of Edmondson Park South which provided for a development on approximately 413ha comprising:

- Residential development of 3,530 dwellings.
- Development of the Edmondson Park town centre including 35,000-45,000m² of retail, business and commercial floor space, along with associated uses, including a single 'landmark' development' of up to 30m in height within 300m of the proposed station.
- Protection of approximately 150ha of conservation lands within regional parklands.
- Adaptive relocation of three heritage listed 'Riley Newsum' pre-fabricated cottages, within the open space network, and retention of the Ingleburn Military Precinct and Mont St Quentin Oval.
- Upgrade of Campbelltown Road with a maximum road width of 38.8m, and construction of three signalised intersections with Campbelltown Road.
- A temporary sales and information office and temporary signage associated with the sale of land. • Site remediation works. • Demolition of a number of existing buildings across the site.
- Associated infrastructure.

To facilitate the orderly development of the Edmondson Park South precinct as envisaged under the Concept Plan, the precinct was listed under Appendix 16 of *State Environmental Planning Policy (State Significant Precincts) 2005*.

In 2021 the State Significant Precincts SEPP was repealed and replaced by *State Environmental Planning Policy (Precincts – Western Parkland City) 2021*. The SEPP, particularly Appendix 1 and accompanying Maps, zones the Edmondson Park precinct whilst providing maximum building height, FSR and minimum lot size development standards, as well as miscellaneous provisions.

1.1.3 Edmondson Park Concept Plan (MP10_0118): Modification History

Since the approval of the original Concept Plan, amendments thereto have been proposed with some approved as outlined in **Table 1** below.

Table 1 Modifications to MP10_0118

MOD	Overview	Status
MOD 1	Amend the timing for approval of a vegetation rehabilitation plan associated with remediation works.	Approved.
MOD 2	Modification in relation to the sales and information centre within Edmondson Park.	Approved.

MOD 3	Modification in relation to Sewerage Treatment Plan, Decommissioning and Remediation.	Approved.
MOD 4	Modifications in relation to maximum Gross Floor Area (GFA), maximum building height, number of dwellings, maximum parking rates etc.	Approved.
MOD 5	Revision to the Concept Plan boundary to include land owned by Landcom and the Office of Strategic Lands (OSL) and other modifications relating to school zone, road layout, dwelling yield and mix, building height and bushfire asset protection zones.	Pending: Awaiting Determination
MOD 6	Redistribute GFA within the Town Centre Core to reflect the further design development that has occurred since the original indicative scheme was developed.	Approved.
MOD 7	Modification to include a high school in the Edmondson Park Town Centre	Withdrawn.
MOD 8	Amendment to the Edmondson Park Frasers Town Centre Guidelines to reduce the car park rate for 2-bedroom dwellings in the Town Centre Core	Approved.
MOD 9	Modification to amend the Edmondson Park Frasers Town Centre Guidelines to reduce the car parking rate for two-bedroom dwellings within residential flat buildings in the Town Centre Core from 1.2 spaces per dwelling to 1 space per dwelling.	Withdrawn.
MOD 10	Modification to the Concept Plan, as it relates to Precinct 3 to increase dwelling numbers by 350 to a maximum of 600 (a total of 4,852 dwellings across the Concept Plan) and alter the road network hierarchy.	SEARs Issued.
MOD 11	Modification to the approved Design Guidelines to allow additional attached dwelling typologies with Residential Precincts 2 and 3.	Approved.
MOD 12	Modification to allow school lot within the town centre and relocate residential flat buildings from the town centre into Residential Precinct 3.	Pending: Awaiting Determination

1.1.4 Modified Concept Plan (MP10_0118: MOD 5)

Modification 5 to the Concept Plan (“**Mod 5**”) applies to the Landcom Town Centre North area of Edmondson Park which encompasses the site. The modification, lodged in September 2018, includes a variety of amendments to both the Concept Plan and the SEPP primarily relating to increasing residential yields and heights in the Town Centre North, modification to the road network and hierarchy, reduction in bushfire APZ’s in select locations and introduction of Design Guidelines, among other modifications.

At the time of preparing this DA, Mod 5 has not yet been determined, but is considered to have reasonable prospects for approval. The amendments proposed in Mod 5 are summarised below:

- The introduction of a maximum Gross Floor Area (GFA) control under the Concept Plan (to some parts).
- Increased minimum residential yields within the Landcom Town Centre North under the Concept Plan from 440 to 3,030-3,286;
- Increase to maximum permitted building heights, which now range between 21m and 50m (and up to 67m for one landmark building).
- Amended residential mix, which now primarily comprises of Residential Flat Buildings, Mixed-use Apartment Buildings, Mansion Apartments, Terrace Houses, Terrace Cottages, Detached Cottages and Studio Dwellings.
- Addition of the definition for ‘Studio Dwelling’ into Precincts SEPP, and allowing these Secondary Dwellings to be subdivided on to separate titles.
- New areas where Studio Dwellings are now permitted in the R1 General Residential Zone, and new areas where Residential Flat Buildings are now prohibited.
- Amended road layout, and public domain plan
- Exemption from the requirement for a Development Control Plan to be prepared, but only where the development is complimented by suitable Design Guidelines.

The following amendments were sought to the State Significant Precincts SEPP as part of Mod 5 (since repealed and replaced with the Precincts – Western Parkland City SEPP 2021):

- Amend the Floor Space Ratio Map to remove the FSR control applying to the Station Precinct, which is to be replaced with the equivalent GFA control allocated by quadrant;
- Amend the Height of Buildings Map as follows:
 - Within the Station Precinct, allow heights up to 50m, including heights up to 67m for one landmark building;
 - Within the Maxwells Creek Precinct, allow heights up to 28m;
 - Within the Parkland Precinct, allow heights up to 12m in Area 1 and up to 21m in a specified location; and
 - On the School Site, allow heights up to 21m.
- Amend the Land Zoning Map to specify areas in the R1 General Residential Zone where Studio Dwellings are permitted with consent, and areas where Residential Flat Buildings are prohibited;
- Insert the definition of Studio Dwellings into Clause 2 of Appendix 16 to the State Significant Precincts SEPP, allowing these Secondary Dwellings to be subdivided on to separate titles as follows: studio dwelling means a dwelling that:
 - is established in conjunction with another dwelling (the principal dwelling), and
 - is on its own lot of land, and
 - is erected above a garage that is on the same lot of land as the principal dwelling, whether the garage
- Insert additional wording to both Clauses 27 and 28 of Appendix 16 of State Significant Precincts SEPP to prevent a variation to the 12m height control standard in specified parts of the Parkland Precinct of the Town Centre North to ensure housing diversity is achieved and Residential Flat Buildings are not built in those locations;
- Insert additional wording to Clause 36 of Appendix 16 of the State Significant Precincts SEPP to create an exemption to the requirement for a Development Control Plan to be prepared where suitable Design Guidelines are prepared – i.e that the current Edmondson Park DCP does not apply to the site and development, instead it is governed by the Design Guidelines; and
- Insert additional Clause 39 to Appendix 16 of the State Significant Precincts SEPP to specify additional permitted uses for particular land including where studio dwellings are permitted and where residential flat buildings are prohibited to ensure housing diversity is achieved.

1.1.5 Repeal of Part 3A of the Environmental Planning and Assessment Act 1979

On 1 October 2011, Part 3A of the EP&A Act was repealed, however transitional arrangements were introduced to apply to approved Part 3A projects (i.e the Edmondson Park South Concept Plan).

Under Schedule 2, Clause 2 (Transitional Part 3A projects) of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017, the approved Concept Plan continues to have weight and force.

Reference is made to the following clauses which collectively have the effect of reinforcing the Concept Plan approval and placing rules on the determination of development application that relate to the Concept Plan [**our emphasis added**]:

3B Provisions applying with respect to approval of concept plans

- (1) *This clause applies to development (other than an approved project) for which a concept plan has been approved under Part 3A, before or after the repeal of Part 3A, and so applies whether or not the project or any stage of the project is or was a transitional Part 3A project.*
- (2) *After the repeal of Part 3A, the following provisions apply to any such development (whether or not a determination was made under section 75P (1) (b) when the concept plan was approved):*
 - (a) *if Part 4 applies to the carrying out of the development, the development is taken to be development that may be carried out with development consent under Part 4 (despite anything to the contrary in an environmental planning instrument),*
 - (b) *if Part 5 applies to the carrying out of the development, the development is taken to be development that may be carried out without development consent under Part 4 (despite anything to the contrary in an environmental planning instrument),*

- (c) any development standard that is within the terms of the approval of the concept plan has effect,*
- (d) a consent authority must not grant consent under Part 4 for the development unless it is satisfied that the development is generally consistent with the terms of the approval of the concept plan,*
- (e) a consent authority may grant consent under Part 4 for the development without complying with any requirement under any environmental planning instrument relating to a master plan,*
- (f) the provisions of any environmental planning instrument or any development control plan do not have effect to the extent to which they are inconsistent with the terms of the approval of the concept plan,*
- (g) this clause applies instead of section 75P (2), but any direction, order or determination made under section 75P (2) in connection with the concept plan continues to have effect.*

1.1.6 State Environmental Planning Policy (Precincts – Western Parkland City) 2021

The site forms part of the Edmondson Park South state significant precinct as defined in Appendix 1 of the SEPP.

Edmondson Park also forms part of the Southwest Growth Area, which includes new communities at Oran Park, Turner Road, Leppington, East Leppington, Catherine Field, Glenfield, and South Creek West.

Clause 3.11(b) of the State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (Precincts SEPP) stipulates the following in respect to Edmondson Park and the South West Growth Area:

- (a) The provisions of Campbelltown (Urban Area) Local Environmental Plan 2002, Liverpool Local Environmental Plan 2008 and Schedule 3 to State Environmental Planning Policy (Major Development) 2005 are specified for the land within **Edmondson Park Precinct** within the South West Growth Centre to which those instruments, or parts of instruments, apply.*

However, clause 5 of Appendix 1 provides that:

- (1) The only environmental planning instruments that apply, according to their terms, to land within the Edmondson Park South site are—*
 - (a) Chapter 2, and*
 - (b) all other State environmental planning policies.*

Accordingly, despite clause 3.11(b), the Liverpool LEP does not apply to the site.

The primary controls are the Concept Plan (as explained in Part 1.1.4 above) together with Appendix 1 of the SEPP to the extent that the provisions of Appendix 1 are not inconsistent with the Concept Plan.

1.1.7 Edmondson Park Landcom Town Centre: Precincts

The site is located within the northern component of Edmondson Park Landcom Town Centre, which was sold to entities within Urban Property Group. This part of the town centre is known as 'Edmondson Park Town Centre North' or 'Precinct 9', and is shown at **Figure 1**.

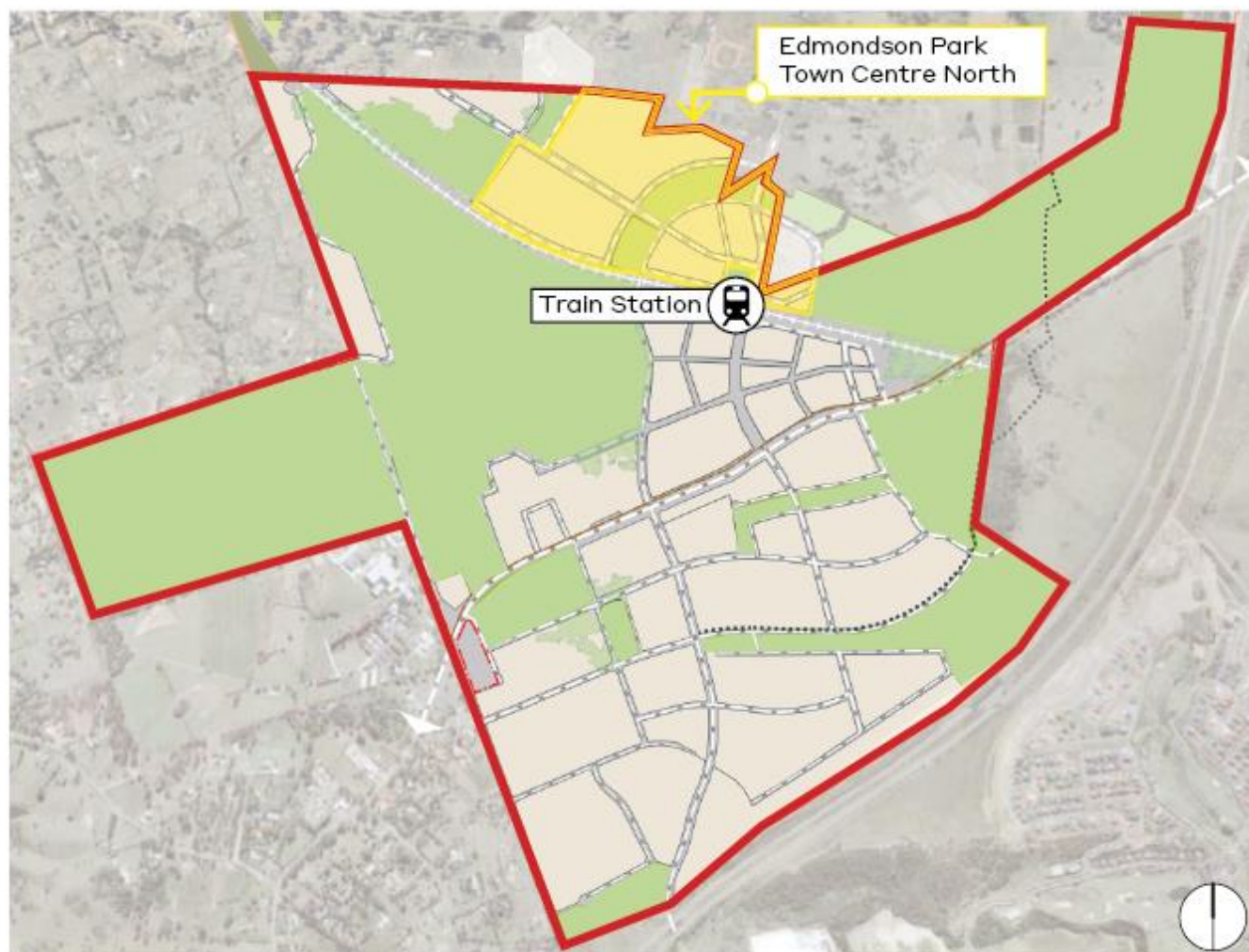


Figure 1 Edmondson Park Town Centre North

Source: Landcom (Modification 5 to the Concept Plan)

Edmondson Park Town Centre North comprises of three sub-precincts, which are known as the 'Station Precinct', 'Maxwells Creek Precinct' and the 'Parkland Precinct' (herein referred to as the 'Residential Precincts'). Sites 1-3 are located wholly within the Parkland Precinct, which is envisaged to accommodate a mix of low to medium density housing options.

1.1.8 Proponent Landholdings

Urban Property Group (UPG) have entered into a contract in relation to five development sites within Edmondson Park Town Centre North, which are known as 'Sites 1-5'. As mentioned, this DA relates to the proposed development of Sites 1-3. The location of Sites 1-3 in relation to other sites that are owned by UPG across Edmondson Park Town Centre North is shown at **Figure 2**.

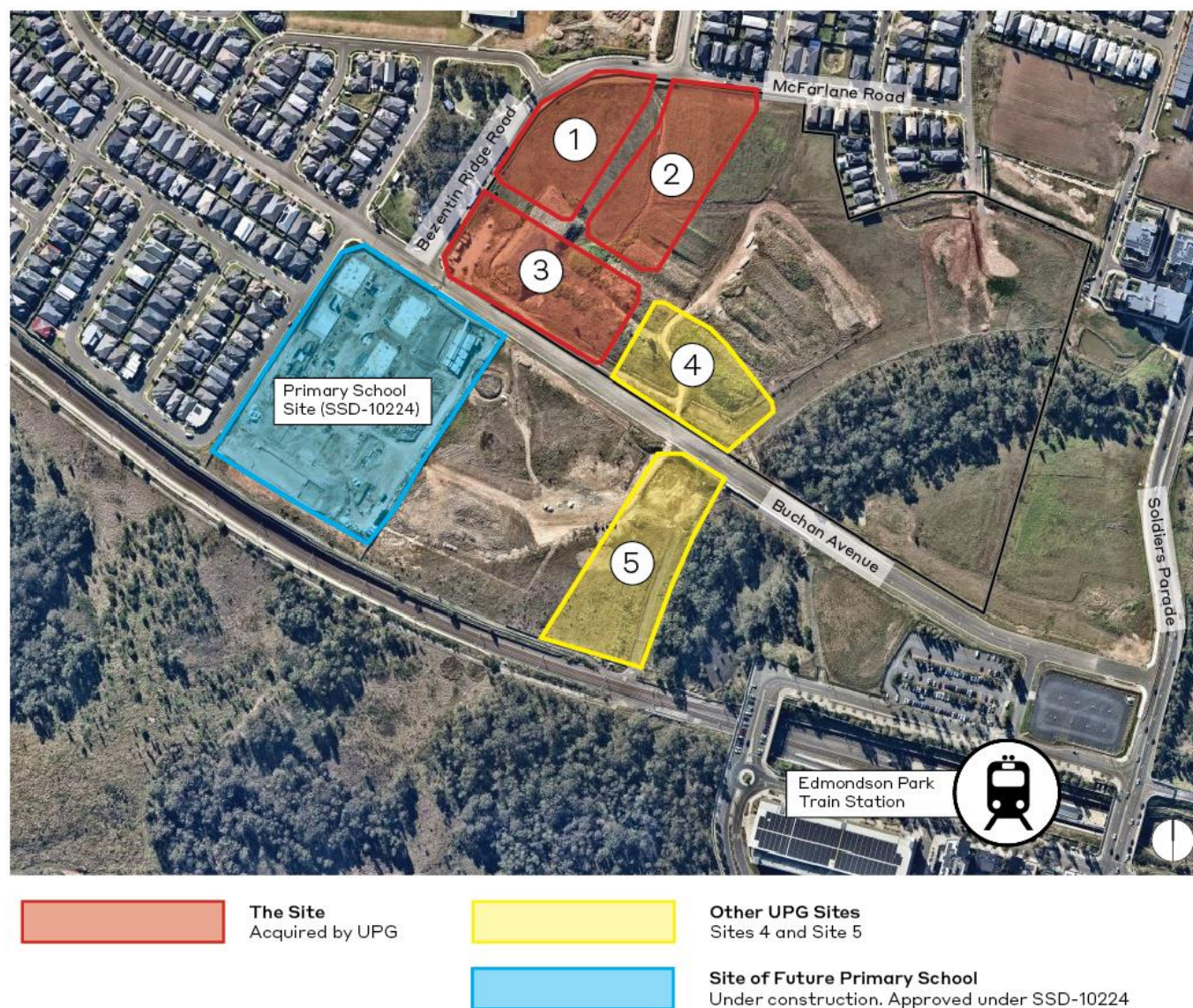


Figure 2 Edmondson Park Town Centre North: UPG Landholdings

Source: Ethos Urban (aerial underlay sourced from Nearmap)

1.2 Consultation

The proponent has engaged with the Liverpool Council Design Excellence Panel (DEP) and Council officers on separate occasions. Matters that have been raised in relation to this DA by the DEP and Council officers have been addressed at **Appendix S**. Feedback received from the DEP has also been addressed explicitly throughout the Design Report that is provided at **Appendix B**.

2.0 Site Analysis

2.1 Site Description

The site is located within Precinct 9, within the Landcom Town Centre North of the Edmondson Park South Concept Plan. The site is located within a sub-precinct that is known as the 'Parkland Precinct' under the Concept Plan.

Following the approval of DA-386/2021 on 15 September 2022, Lot 2 DP 1264963 and Lot 3 DP 1257105 (former lots) were subdivided into 8 new super lots and 2 residue lots. Five of these new super lots are sited within Sites 1-3, in addition to part of one residue lot (Lot 9) that will accommodate internal roads.

The site has a total area of 31,334m², which is broken down in relation to the individual areas of Sites 1-3 and each legal lot at **Table 2**. This table provides a notional area schedule that does not supersede the Site Survey (**Appendix E**).

The site is bounded by three existing street frontages and one future street frontage, which are described in list form below. These frontages are shown also at **Figure 3**.

- McFarlane Road (north)**

The north site boundary presents a frontage to McFarlane Road, which terminates at the intersection of Guillemont Road and Bezentin Ridge Road.

- Buchan Avenue (south)**

The south site boundary adjoins Buchan Avenue. This frontage will extend between the intersection of Buchan Avenue and Bezentin Ridge Road (west) and the intersection of Buchan Avenue and a future internal road (east, discussed below).

- Future Road from McFarlane Road to Buchan Avenue (east)**

The east site boundary will front a future internal road that will extend between McFarlane Road (north) and Buchan Avenue (south). This road was approved under DA-1070/2021 on 25 August 2022. Upon the completion of this road, there will be a street interface at each site boundary.

- Bezentin Ridge Road (west)**

The west site boundary presents a frontage to Bezentin Ridge Road, which separates the site from Clermont Park. This frontage extends from Buchan Avenue (south) to McFarlane Road (north), which curves towards the north site boundary.

Table 2 Lot Distribution: Sites 1-3

Development Site	Lots	Total Site Area
Site 1 8478m ²	Lot 1 (approved) 3656m ²	31,178m ² Incl. internal access roads.
	Lot 2 DP (approved) 4822m ²	
Site 2 11,060m ²	Lot 3 DP (approved) 11,060m ²	
Site 3 11,640m ²	Lot 4 DP (approved) 2743m ²	
	Lot 5 DP (approved) 8897m ²	



Figure 3 Site Aerial: Markup of Sites 1-3 and Street Frontages

Source: Ethos Urban (aerial underlay sourced from Nearmap)

2.2 Existing Site Condition and Grading

The site has been cleared of all established vegetation and does not accommodate any existing development. As mentioned, the site is included within the scope of the bulk earthworks that are approved under DA-504/2021 across the broader area of the Landcom Town Centre North (north-west of Maxwells Creek Riparian Corridor).

These earthworks will achieve necessary levels and benching requirements to enable the development that is proposed under this DA. Images of the site, as of 12 August 2022, are shown from **Figure 4** to **Figure 6**.



Figure 4 Image of Site 1: Facing South-West from McFarlane Road (12 August 2022)

Source: Ethos Urban



Figure 5 Image of Site 2: Facing South-West from McFarlane Road (12 August 2022)

Source: Ethos Urban



Figure 6 Image of Site 3: Facing South-East from Bezentin Ridge Road (12 August 2022)

Source: Ethos Urban

2.2.1 Temporary Stockpiles

There are 7 stockpiles that are sited within the area of Sites 1-3. The stockpiled land will be used by Landcom for site grading to ensure that it can accommodate the proposed development, in addition to the approved internal roads that dissect Sites 1-3. The location of the stockpiles within Sites 1-3 is shown at **Figure 6**.



Figure 7 Location of Temporary Stockpiles within Sites 1-3

Source: Ethos Urban (aerial underlay depicting stockpile locations provided by JBS&G)

2.3 Flooding

The site is not located on flood liable land. This is shown by the flood mapping that Council has completed in relation to the Austral, Kemps Creek, and Nepean River catchments. For reference, a marked-up extract of this flood mapping is shown at **Figure 8**.

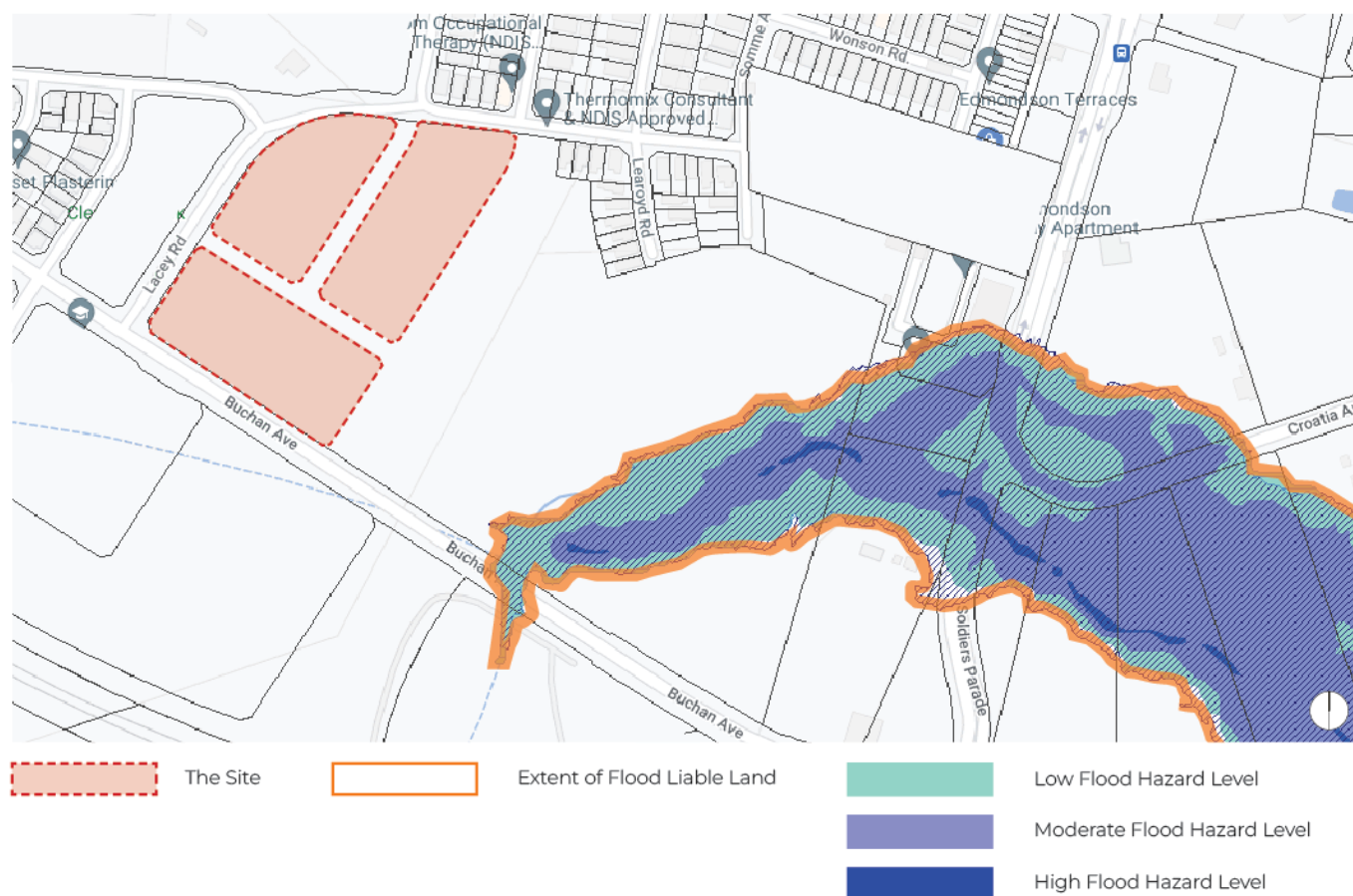


Figure 8 Location of Sites 1-3 and Flood Prone Land to the East

Source: Liverpool City Council (2022)

2.4 Geology and Hydrology

The existing geology and hydrogeological features of Edmondson Park South were considered within the Preliminary Geotechnical Investigation and Contamination/UXO Assessment Prepared by Golder and Associates in 2010 to support the Concept Plan.

The land comprising Edmondson Park Landcom Town Centre North was discussed to feature an underlay of Bringelly Shale (Wianamatta Group). The Bringelly Shale is comprised of shale, carbonaceous claystone, claystone, laminate, fine to medium grained lithic sandstone, rare coal and tuff. It is underlain by Ashfield Shale within the Wianamatta Group and subsequently Hawkesbury Sandstone. Soil landscapes at Edmondson Park South are identified as gently undulating, underlain by Wianamatta Group Shales, and being shallow to moderately deep.

The topography of Edmondson Park South consists of undulating landforms comprising rolling hills formed by a series of ridges and drainage channels – prior to the earthworks being undertaken by Landcom and development occurring to the South and Ed Square and residential precincts.

2.5 Site Contamination

Many contamination studies and environmental site investigations have been undertaken to assess the extent and nature of contaminants within the Edmondson Park South site, as well as within the Town Centre and residential precincts – North and South.

The Geotechnical, Contamination and UXO Site Suitability Assessment prepared by Golder Associates and dated 10 September 2010 for the Concept Plan, concluded that there was some form of localised contamination, potential unexploded ordinances, and small arms ammunition on what was then termed 'the Defence Site' which includes the Edmondson Park Frasers Town Centre (to the southern side of the rail corridor).

However, the Assessment noted that a NSW DECCW accredited Site Auditor was engaged by Defence in 2003 to carry out a non-statutory site audit of the Defence Lands. The Auditor concluded that the investigated and remediated areas were “considered suitable for residential land use with gardens and accessible soils (home grown produce contributing to less than 10% fruit and vegetable intake, no poultry)”.

The Concept Plan accordingly granted approval for implementation of the Remediation Action Plan and remediation of unexpected contamination finds in accordance with the protocols set out in the approved Contamination Management Plan. Consistency with the Concept Approval is demonstrated at **Section 4.0**.

A separate Environmental Site Assessment (ESA) has been prepared in support of this DA (**Appendix J**). The ESA is further discussed at **Section 4.9**.

2.6 Surrounding Development

To date, the immediate local area is undergoing a significant transformation due to the introduction of the south-west railway line and rapid housing growth across various release areas. As a result, the locale has evolved from a predominantly rural area to accommodate new urban communities.

As mentioned, Landcom completed the Concept Plan which contributed to the vision for the Precinct. The Concept Plan has guided development across the surrounding area, as outlined below:

- **North:**

The northern site boundary adjoins McFarlane Road. This road separates Sites 1-3 from residential development to the north-east and the grounds of St Francis Catholic College to the north/north-west, as outlined below.

To the north-east of Site 2, development across McFarlane Road has a low-rise residential character form where single-detached dwellings are the prevailing housing typology. Development to the north-east of Site 2 is shown at **Figure 9** (corner of Somme Avenue and McFarlane Road) and **Figure 10** (corner of McFarlane Road and Learoyd Road).

The grounds of St Francis Catholic College are located to the immediate north of Site 1 (north-west of Site 2) across McFarlane Road. This existing education use is further discussed at **Section 2.6.2**.

- **South:**

The southern site boundary adjoins Buchan Avenue. The Concept Plan identifies Buchan Avenue as a major thoroughfare that is envisaged to accommodate long-term bus services between surrounding residential areas and the Edmondson Park Train Station. It is understood that Buchan Avenue recently opened to public traffic. The southern site frontage to Buchan Avenue is shown at **Figure 11**.

Edmondson Park Primary School is under construction at the corner of Buchan Avenue and Faulkner Way. This primary school is sited to the immediate south of Sites 1-3 across Buchan Avenue, and is expected to open in early 2023. Refer to **Section 2.6.2**.

- **East:**

The eastern site boundary will adjoin an approved internal road that will extend between McFarlane Road (north) and Buchan Avenue (south).

The development site that is known as ‘Site 4’ is located across the approved internal to the immediate east of Site 3. This development site is the subject of a DA for a new residential apartment building and terraces. Land to the north of Site 4 is also located within the ‘Parkland Precinct’ that is envisaged by the Concept Plan. This land will be developed to accommodate residential townhouses in due course.

The Maxwells Creek Riparian Corridor is located further to the east of Sites 1-3. This riparian corridor will accommodate a future public open space. Refer to **Section 2.6.1**.

- **West:**

The western site boundary adjoins Bezentin Ridge Road. This road separates the Sites 1-3 from Clermont Park, which includes open lawns, play facilities and a forested area (refer to **Section 2.6.1**).

Development further to the east of Sites 1-3 has a low-rise residential character form where single-detached dwellings are the prevailing housing typology.

Public open spaces and education uses that are proximate to Sites 1-3 are identified at **Section 2.6.1** and **Section 2.6.2**. The site is also serviced by high-quality public and active transport infrastructures, as outlined at **Section 2.6.3**.



Figure 9 Low-Rise Residential Character Form: Facing north down Somme Avenue (12 August 2022)

Source: Ethos Urban



Figure 10 Low-Rise Residential Character Form: Facing north down Learoyd Road (12 August 2022)

Source: Ethos Urban



Figure 11 Facing South-East down Buchan Avenue at Site 3 Frontage (12 August 2022)

Source: Ethos Urban

2.6.1 Public Open Space

The growing residential community at Edmondson Park Town Centre North, which includes Sites 1-3, will benefit from a high-quality offering of public open spaces. There are two significant public open spaces that are located within the immediate vicinity of Sites 1-3. These spaces are identified in the subsections below.

Maxwells Creek Riparian Corridor (Future Public Open Space)

The Maxwells Creek North Riparian Corridor has an approximate total area of 4.41ha. The Edmondson Park South Concept Plan (MP10_0118, MOD 5) identifies the corridor as 'public open space for conservation'. The Landscape Concept Plan presents a mixture of public/recreation and conservation uses for this land, which include:

- Tree planting and landscaping.
- Bollard lighting.
- 3m-wide recreational path through the corridor.
- Perimeter fencing.
- Playground and skate park.

The Maxwells Creek Riparian Corridor is located ~200m to the east of Sites 1-3. The location of Sites 1-3 in relation to this future public open space offering is shown at **Figure 12**.

Clermont Park (Existing Public Open Space)

The western site boundary adjoins Bezentin Ridge Road. This road separates the Sites 1-3 from Clermont Park, which includes open lawn areas, a playground, seating and forested land towards the centre of the park. Clermont Park presents a break between Sites 1-3 and low-rise residential development to the west.

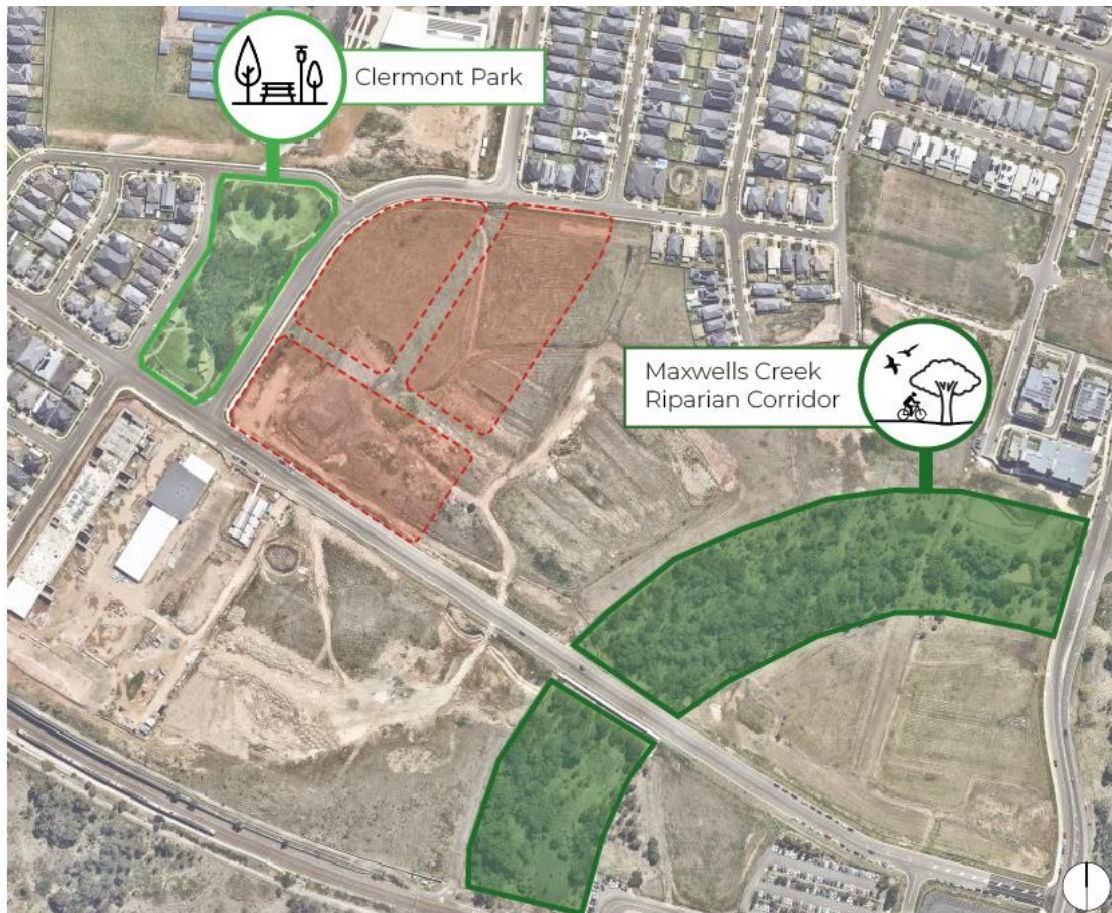


Figure 12 Immediate Public Open Spaces

Source: Ethos Urban (aerial underlay sourced from Nearmap)

2.6.2 Education Uses

Sites 1-3 and the broader community of Edmondson Park are serviced by a range of public and private education opportunities. Education uses that are located within the immediate vicinity of Sites 1-3 are summarised below.

- **Edmondson Park Primary School (Under Construction):**

As mentioned, Edmondson Park Primary School is sited to the immediate south-west of Sites 1-3 across Buchan Avenue. This primary school was approved under SSD-10224 on 15 December 2021.

The delivery of the school is on track for it to open in early 2021. Edmondson Park Primary School will have capacity for ~1000 school-age children.

- **St Francis Catholic College:**

As mentioned, St Francis Catholic College is sited to the immediate north/north-west of Sited 1-3 across McFarlane Road. This independent co-educational offering caters to primary and secondary school age children / adolescents. St Francis College was approved under SSD-8832, and was opened in 2017.

Additional learning spaces are under construction to date in line with a staged delivery program that includes 9 construction phases. The college will have capacity for ~1700 students once fully complete.

Images of Edmondson Park Primary School and St Francis Catholic College are provided at **Figure 13** and **Figure 14**.



Figure 13 Facing South-West to Edmondson Park School Site from Bezentin Rd Intersection (12 August 2022)

Source: Ethos Urban



Figure 14 Facing North-West to St Francis Catholic College near North Site Boundary (12 August 2022)

Source: Ethos Urban

2.6.3 Public and Active Transport Infrastructure

A range of high-frequency public transport services can be readily accessed from the site. Train and bus services within walking distance of the site are outlined below.

- **Train Services:**

The Edmondson Park Train Station is ~320m to the south-east of the site. The station is serviced by the T2 (Leppington/CBD) and T5 (Leppington/Richmond) lines. This provides direct access to the metropolitan centres of Parramatta and Sydney CBD.

The station is within a comfortable walking catchment from the site based on the Integrated Public Transport Service Planning Guidelines (IPT Guidelines).

- **Bus Services:**

Edmondson Park Train Station is serviced by the following high-frequency bus routes:

- 859 Carnes Hill to Edmondson Park Station. This route has 11 services during the AM Peak and 12 services during the PM Peak.
- 869 Ingleburn to Liverpool via Edmondson Park and Prestons. This route has 5 services during AM Peak and 12 services during the PM Peak.
- 868 Edmondson Park Station. This route has 4 services during AM Peak and 3 services during the PM Peak.

Further to the above, the site is serviced by an extensive shared path / cycle network that will be the subject of further expansion in accordance with the Concept Plan. The existing shared path / cycle network includes:

- **Buchan Avenue Shared Path (Under Construction)**

Buchan Avenue has opened to public vehicles, however it will also accommodate a Shared path that is currently under construction. This route will provide a connection from the site to surrounding neighbourhoods, and terminates at Soldiers Parade (east).

- **Soldiers Parade / Camden Valley Way Shared Paths:**

Soldiers Parade provides a shared path that extends further north to Camden Valley Way. This provides a connection to the shared path from Macarthur Station via Narellan to the M7 Cycleway.

- Existing public and active transport connections that service the site and surrounds are shown at **Figure 15**.

Future Improvements

The site will benefit from planned improvements to the transport network across south-west Sydney, including the planned extension of the existing T2 Train Line from Leppington to the T1 Train Line at St Marys. This will connect the site to new transport and employment opportunities associated with the Western Sydney Aerotropolis.

The expected route for this extension (subject to ongoing consultation) is shown at **Figure 16**.

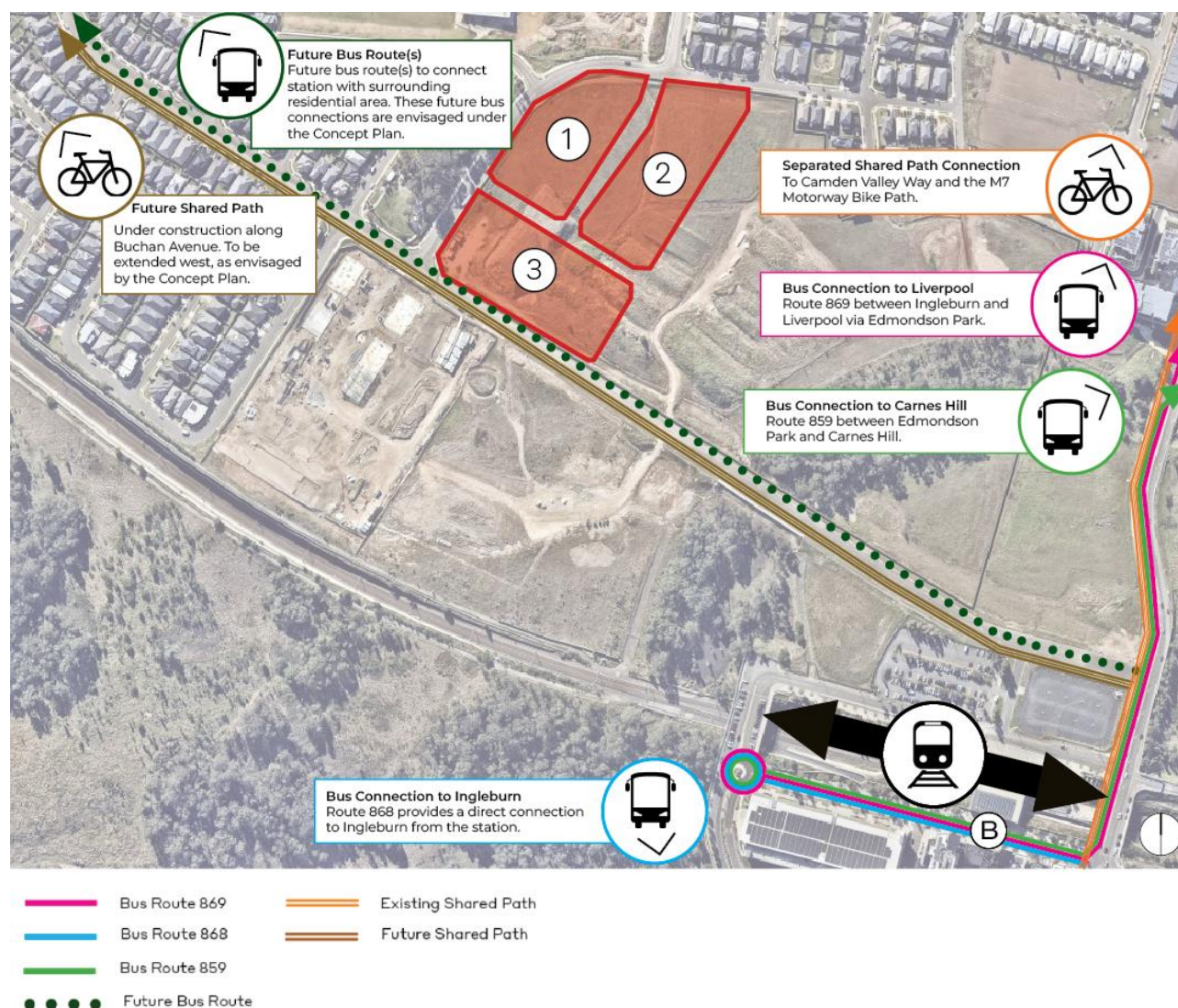


Figure 15 Surrounding Public and Active Transport Infrastructure

Source: Ethos Urban (aerial underlay sourced from Nearmap)



Figure 16 Future T2/Leppington Train Line Extension

Source: Transport for New South Wales

3.0 Description of Proposed Development

This chapter of the report provides a detailed description of the proposed development. The Architectural Drawings are provided at **Appendix A**.

3.1 Summary Overview

This DA seeks approval for the development of Sites 1-3 at Edmondson Park to accommodate 178 new residential townhouses. Specifically, this DA seeks approval for:

- **Residential Townhouses:**

178 residential townhouses across Sites 1-3, as outlined below.

- Construction of 43 residential townhouses at Site 1, including:
 - 32x 4-bedroom townhouses.
 - 11x 3-bedroom townhouses.
- Construction of 63 residential townhouses at Site 2, including:
 - 33x 4-bedroom townhouses.
 - 30x 3-bedroom townhouses.
- Construction of 72 residential townhouses at Site 3, including:
 - 40x 4-bedroom townhouses.
 - 32x 3-bedroom townhouses.

- **Landscaping:**

Landscaping and public domain improvements, to be provided in the form of:

- Streetscape landscaping to:
 - The internal access roads that dissect Sites 1-3.
 - The shared zones and rear laneways that are internal to Sites 1-3.
- 8,737.3m² of deep soil planting zones and 3,107.2m² of contiguous / adjoining soil planting zones.

- **Rear Lanes**

Rear lanes and shared zones to provide vehicle access to the townhouses that are proposed across Sites 1-3.

- **Car Parking:**

Garages with 1-2 car parks at each townhouse, to provide a total of 258 car parking spaces across Sites 1-3.

- **Connection to Utilities and Services:**

Connection to and augmentation of underground services will be undertaken to service each residential townhouse.

3.2 Sites 1-3: Description and Staging

This DA presents the third residential development that is proposed within UPG Edmondson Parklands Pty Ltd landholdings (Sites 1-5) within Edmondson Park Landcom Town Centre North. This DA is proposed in accordance with the Concept Plan, as proposed to be amended by MOD 5. While Mod 5 has not yet been determined, it is considered to have reasonable prospects. Reasonable regard for the relevant provisions from MOD 5 is warranted during Council's assessment of this DA.

The residential precincts will deliver a range of housing types including multi-dwelling housing, terraces and apartments, which has been earmarked for development through the concept Plan for more than a decade. The design of the dwellings and typologies is based on the Design Guidelines as proposed to be modified by Mod 5.

3.3 Numerical Breakdown

Table 3 Key Development Information

Component		Proposed Development
Site 1		
Townhouses	3-Bedroom Dwellings	11x 3-bedroom townhouses.
	4-Bedroom Dwellings	32x 4-bedroom townhouses.
Rear Lanes / Shared Zones		4x rear lanes and 1x shared zone.
Site 2		
Townhouses	3-Bedroom Dwellings	30x 3-bedroom townhouses.
	4-Bedroom Dwellings	33x 4-bedroom townhouses.
Rear Lanes / Shared Zones		3x rear lanes and 2x shared zones.
Site 3		
Townhouses	3-Bedroom Dwellings	32x 3-bedroom townhouses.
	4-Bedroom Dwellings	40x 4-bedroom townhouses.
Rear Lanes / Shared Zones		4x rear lanes and 2x shared zones.
Key Development Metrics		
Total GFA		25,140m ²
Avg. GFA per Townhouse		141.24m ²
Total Deep Soil Zone Coverage		8,737.3m ² (3,684.5m ² within the public domain and 5,052.8m ² within the private domain).
Total Contiguous Soil Planting Zone Coverage		3107.2m ²
Total No. Car Parking Spaces		258x car parking spaces within private garages. All townhouses will accommodate at least 1 parking space, and no more than 2 parking spaces.

3.4 Site Preparation and Grading

The site has been cleared of all established vegetation and does not accommodate any existing development. As mentioned, the site is included within the scope of the bulk earthworks that are approved under DA-504/2021 across the broader area of the Landcom Town Centre North (north-west of Maxwells Creek Riparian Corridor).

These approved works generally comprise cut and fill and grading to achieve necessary levels and benching requirements to facilitate the development of Sites 1-3, including the establishment of internal roads. It is noted that the construction of internal roads within the residue lot that dissects Sites 1-3 is not included in the scope of this DA. It has been established that the delivery of these roads is already approved. To provide access to the proposed townhouses from the approved access roads, it is proposed to deliver several rear lanes within Sites 1-3.

3.5 Built Form and Design

The proposed development of Sites 1-3 will deliver 178 residential townhouses. It has been established that 43 of these townhouses will be delivered at Site 1, 63 of these townhouses will be delivered at Site 2, and that 72 of these

townhouses will be delivered at Site 3. With the exception of 2 townhouse units within Site 3 (2-storeys), all of the proposed residential townhouses are 3-storeys in height.

The front and rear setbacks that are proposed for the residential townhouses are outlined at Section 4.3 of the Design Report (**Appendix B**). These setbacks have been proposed in accordance with Table 5 and Figure 10 of the Landcom Town Centre North Design Guidelines.

There are 15 different townhouse design typologies (refer to **Section 3.6**). These design typologies range in width, length, height, corner definition and facade design. Within each of these typologies are up to 6 different façade design variations. This variable approach has sought to deliver a non-monotonous design outcome that provides a variety of dwelling types. Through extensive design development, the proposal has achieved diversity in architectural modulation and expression across Sites 1-3.

Materials have been selected to achieve a visually coherent design outcome for Sites 1-3. A variety of brickwork has been incorporated within the façade design. This brickwork provides a tactile visual baseline for the character of the proposed development, with a variety of colours and textures for visual interest and variety.

A visual extract from the Design Report that depicts the varied design approach for the proposed townhouses is provided below at **Figure 17**, in addition to the photomontage overpage.



Figure 17 Design Report Extract: Six of the fifteen townhouse design typologies.

Source: Cox

Ethos
Urban

C O X



3.6 Townhouse Typologies

The proposed development of Sites 1-3 will accommodate 178 townhouses in the form of 15 different townhouse typologies (noting that the land use is defined as multi-unit housing). These design typologies range in width, length, height, corner definition and facade design. Within each of these typologies are up to 6 different façade design variations. The proposed townhouse typologies are summarised at **Table 4**, however further reference should be made to the design details that are provided within the Design Report (**Appendix B**) and the Architectural Plans (**Appendix A**).

Table 4 Breakdown of Townhouse Typologies

Key Metrics					Number of Dwellings			
Typology	Storeys	Bedrooms	Parking	Roof Terrace	Site 1	Site 2	Site 3	Total
A	3 storeys	4-bedroom	2 spaces	Yes	14 units	2 units	N/A	16 units
B	3 storeys	4-bedroom	1-2 spaces	Yes	4 units	1 unit	N/A	5 units
C	3 storeys	4-bedroom	1-2 spaces	No	1 unit	1 unit	N/A	2 units
D	3 storeys	4-bedroom	1-2 spaces	Yes	N/A	N/A	16 units	16 units
E	3 storeys	3-bedroom	1-2 spaces	No	N/A	N/A	6 units	6 units
F	3 storeys	4-bedroom	1-2 spaces	Yes	N/A	N/A	4 units	4 units
G	3 storeys	4-bedroom	1-2 spaces	No	5 units	7 units	N/A	12 units
H	3 storeys	4-bedroom	2 spaces	No	N/A	7 units	N/A	7 units
I	3 storeys	4-bedroom	1-2 spaces	No	4 units	10 units	N/A	14 units
J	3 storeys	4-bedroom	1 space	Yes	4 units	N/A	N/A	4 units
K	3 storeys	4-bedroom	2 spaces	No	N/A	5 units	N/A	5 units
L	3 storeys	3-bedroom	1 space	No	11 units	30 units	32 units	73 units
M	3 storeys	4-bedroom	1 space	Yes	N/A	N/A	10 units	10 units
N	3 storeys	4-bedroom	1-2 spaces	Yes	N/A	N/A	2 units	2 units
O	2-storeys	4-bedroom	2 spaces	Yes	N/A	N/A	2 units	2 units

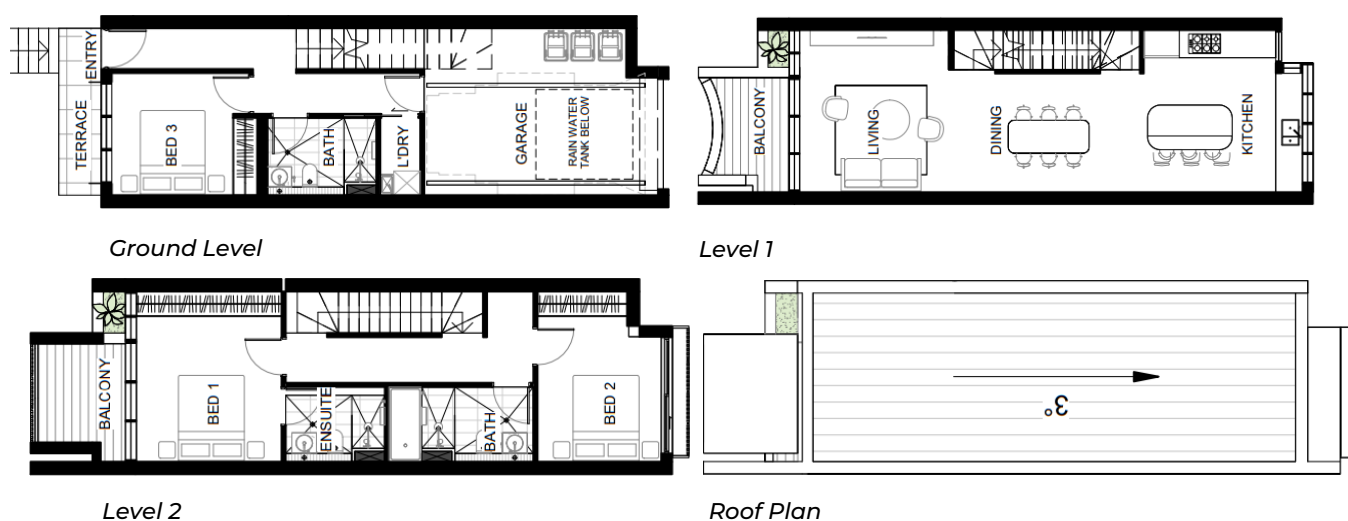


Figure 18 Typology L: Most prominent townhouse typology.

Source: Cox



Figure 19 Typology F: One of eight roof terrace typologies.

Source: Cox

3.7 Silver Level Design Quality Mark

32x 4-bedroom townhouses will incorporate Silver Level liveability features. These townhouses will achieve the Silver Level Design Quality Mark through satisfying the seven core design principles associated with this benchmark. These core design principles are listed below for reference.

1. A safe continuous and step free path of travel from the street entrance and / or parking area to a dwelling entrance that is level.
2. At least one, level (step-free) entrance into the dwelling.
3. Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
4. A toilet on the ground (or entry) level that provides easy access.
5. A bathroom that contains a hobless shower recess.
6. Reinforced walls around the toilet, shower and bath to support the safe installation of grabrails at a later date.
7. Stairways that are designed to reduce the likelihood of injury and also enable future adaptation.

The number of townhouses that will achieve the Silver Level Design Quality Mark (32) equates to 20% of the total number of townhouses proposed (178).

The location of each townhouse that will achieve the Silver Level Design Quality Mark is shown in the Architectural Plans (**Appendix A**). The Access Report (**Appendix O**) has also considered the above-listed design requirements.

3.8 Landscape and Public Domain

The landscape and public domain design strategy for Sites 1-3 is outlined by the Landscape DA Design Report (**Appendix C**) and the Landscape Detail Plans (**Appendix D**) that have been prepared to support this DA. The Landscape DA Design Report provides an overview of the landscape design approach that will be implemented across internal access roads, internal laneways, shared zones, and at the street interfaces that enclose Sites 1-3.

Street trees, turfed and planted verges and public domain street furniture have been proposed for the purpose of providing a high level of streetscape amenity. These elements will reinforce a 'green' design character for the proposed development of Sites 1-3.

3.8.1 Internal Streets, Shared Zones and Lanes

As outlined by the Landscape DA Design Report (**Appendix C**), the streetscape landscaping strategy has been broken into 5 design approaches that have been applied to:

- The collector roads that enclose Sites 1-3 to the east, north-east and south.
- The minor roads that dissect Sites 1-3, and the minor road that straddles the eastern extent of Site 2 and Site 3.
- Rear laneways within Sites 1-3.
- Pedestrian-priority access roads (Access Roads 2-4).
- The 'Village Street' typology that is envisaged for Access Road 1.

The landscape design approach for the above-listed street typologies is detailed throughout Section 2.2 of the Landscape DA Design Report, which includes section drawings for each street typology. The location of each street typology is shown in the extract at **Figure 20**.



Figure 20 Extract: Proposed Street Typologies

Source: Environmental Partnership

3.8.2 Street Trees

The provisional location of each street tree is shown in the Street Tree Masterplan that is provided within the Landscape DA Design Report at Figure 2.23. The proposed number and arrangement of street trees across Sites 1-3 will maximise tree canopy coverage.

This design objective has sought to support the tree canopy target for Greater Sydney (40%) that has been established by the Government Architect of NSW. Specifically, it is noted that the canopy coverage across the internal street network (>60%) will exceed this benchmark.

An extract showing the provisional location of each street tree is provided at **Figure 21** for reference.

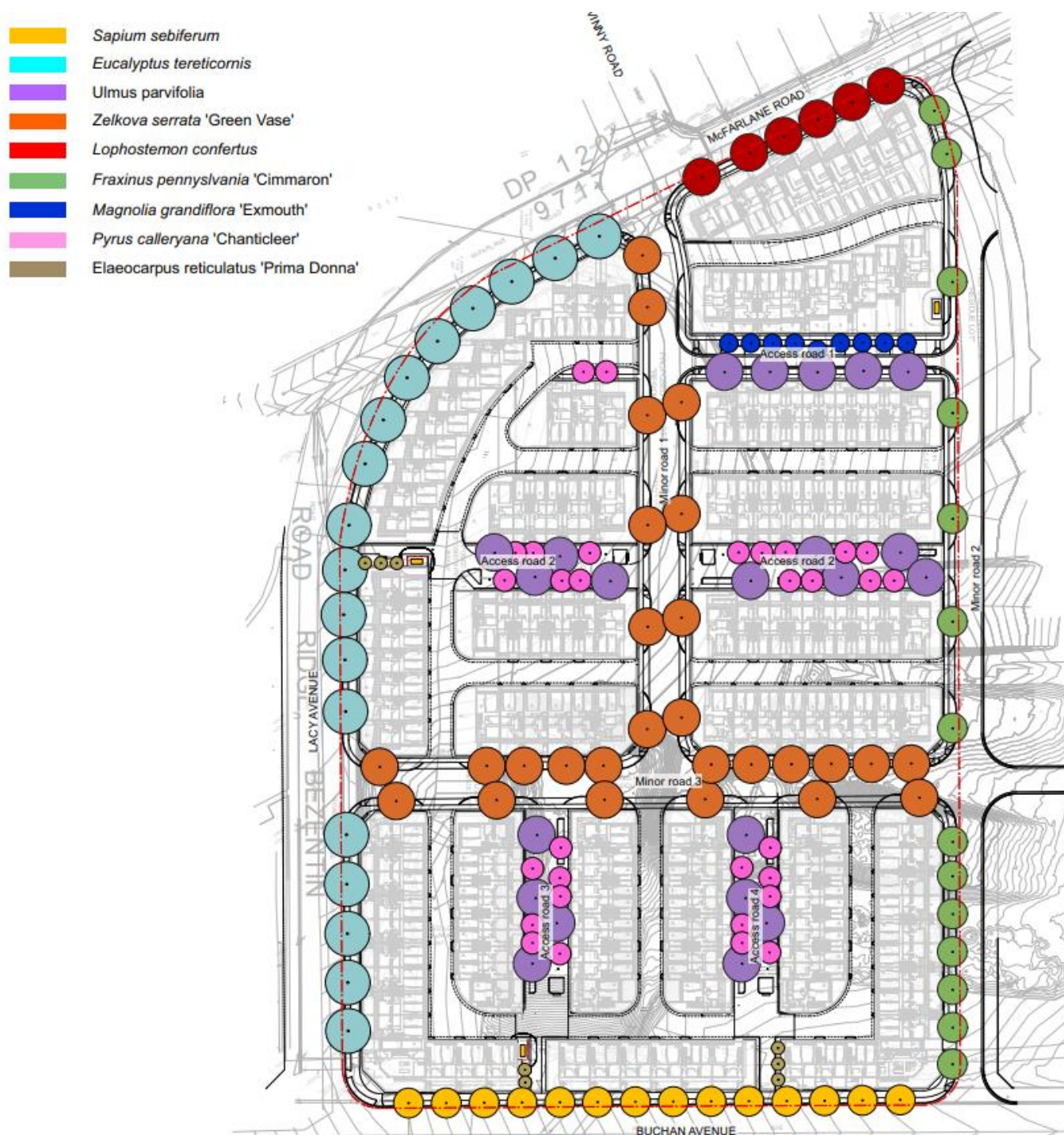


Figure 21 Extract: Street Tree Masterplan

Source: Environmental Partnership

3.8.3 Deep Soil Coverage

The proposed landscape design will deliver 3,684.5m² of deep soil planting zones and 3107.2m² of contiguous / adjoining soil planting zones within the public domain. In addition to this, 5,052.8m² of deep soil planting zones is provided within private open spaces at ground level. The extent of these planting zones is outlined at Section 2.4 of the Landscape DA Design Report (**Appendix C**).

The proposed deep soil and contiguous planting zones have been designed with reference to the Commonwealth Scientific and Industrial Research Organisation (CSIRO) *Soils for Landscape Development* handbook. The proposal satisfies the recommendations of this handbook, including in relation to the provision of contiguous planting zones next to tree pits where larger trees are needed to increase provide shaded spaces.

This forms part of the biophilic design approach that has underpinned the development of the landscape design scheme for the proposed development of Sites 1-3, which will introduce 'green spines' to maximise canopy coverage in order to counteract urban heat island effect.

An extract from the Landscape DA Design Report showing the extent of deep soil and contiguous planting zones that are proposed across Sites 1-3 has been provided at **Figure 22**.



Figure 22 Extract: Deep Soil and Contiguous Planting Zones

Source: Environmental Partnership

3.9 Waste Storage and Management

An Operational Waste Management Plan (OWMP) has been prepared by Elephants Foot. This management document is provided at **Appendix K**. The OWMP considers the operational phase of the proposed development.

Liverpool Council offers a three-bin service to single townhouse dwellings. It consists of separate bins for general waste, commingled recycling, and green waste (future FOGO). This existing service offering was considered as part of the proposed provision of bins for the proposed townhouses.

Townhouse residents will be provided with a bin storage area within each property for storage of individual waste, recycling and green waste (future FOGO) bins within each individual property.

3.9.1 Summary of Proposed Waste Storage Spaces and Management Arrangement

Each residential townhouse will include a bin storage area that is capable of accommodating the following bins:

- 1x 140L Medium Garbage Bin (MGB) for the storage of general waste.
- 1x 240L Medium Garbage Bin (MGB) for the storage of recycling waste.
- 1x 240L Medium Garbage Bin (MGB) for the storage of green waste (future FOGO).

Each bin storage area will be serviced by a direct route to kerbside waste collection points. The proposed development of Sites 1-3 will be designed to satisfy the requirements for bin moving paths, as outlined by Section 10 of the Operational Waste Management Plan (**Appendix K**).

Residents will be responsible for the transportation of bins to the kerbside for collection, and returning the bins to their property once emptied to resume use.

3.10 Utilities and Services

The following services and infrastructure have been accommodated for future connection to the site via the previous development applications undertaken by Landcom as part of the early and infrastructure works packages.

Adequate provision has been made within the road corridors. Connection/augmentation will be undertaken as required to service the proposed development.

3.11 Stormwater Management

The stormwater infrastructure that will service the proposed development is shown in the Civil Engineering Plans prepared by Enscape Studio, which are provided at **Appendix G**. An overview of the proposed stormwater infrastructure is provided within the Stormwater Management Plan Report (**Appendix F**).

The Civil Engineering Plans provide a preliminary outline of the arrangement of stormwater pipes, kerb inlets, and grated pits at the site. These stormwater management features are shown in relation to modelled overland flow paths across Sites 1-3. The preliminary stormwater management strategy for the site presents 3 stormwater drainage catchments, which are referenced as 'Catchment A' (Site 1), 'Catchment B' (Site 2), and 'Catchment C' (Site 3). Each catchment is serviced by a separate network of stormwater pipes, kerb inlets, and grated pits. The proposed stormwater drainage catchments are shown at **Figure 23**.

The stormwater drainage catchments (refer to **Figure 23**) are internal to Sites 1-3. Specifically, it is noted that the approved subdivision design and internal roads make provision for all upstream drainage to be conveyed in the public drainage network and as overland flow along the public road corridors.

As all stormwater runoff from the site will be channelled towards these public infrastructures, no stormwater discharge to private land is proposed. Accordingly, all legal discharge points are sited at locations that will facilitate this arrangement for the management of stormwater runoff.

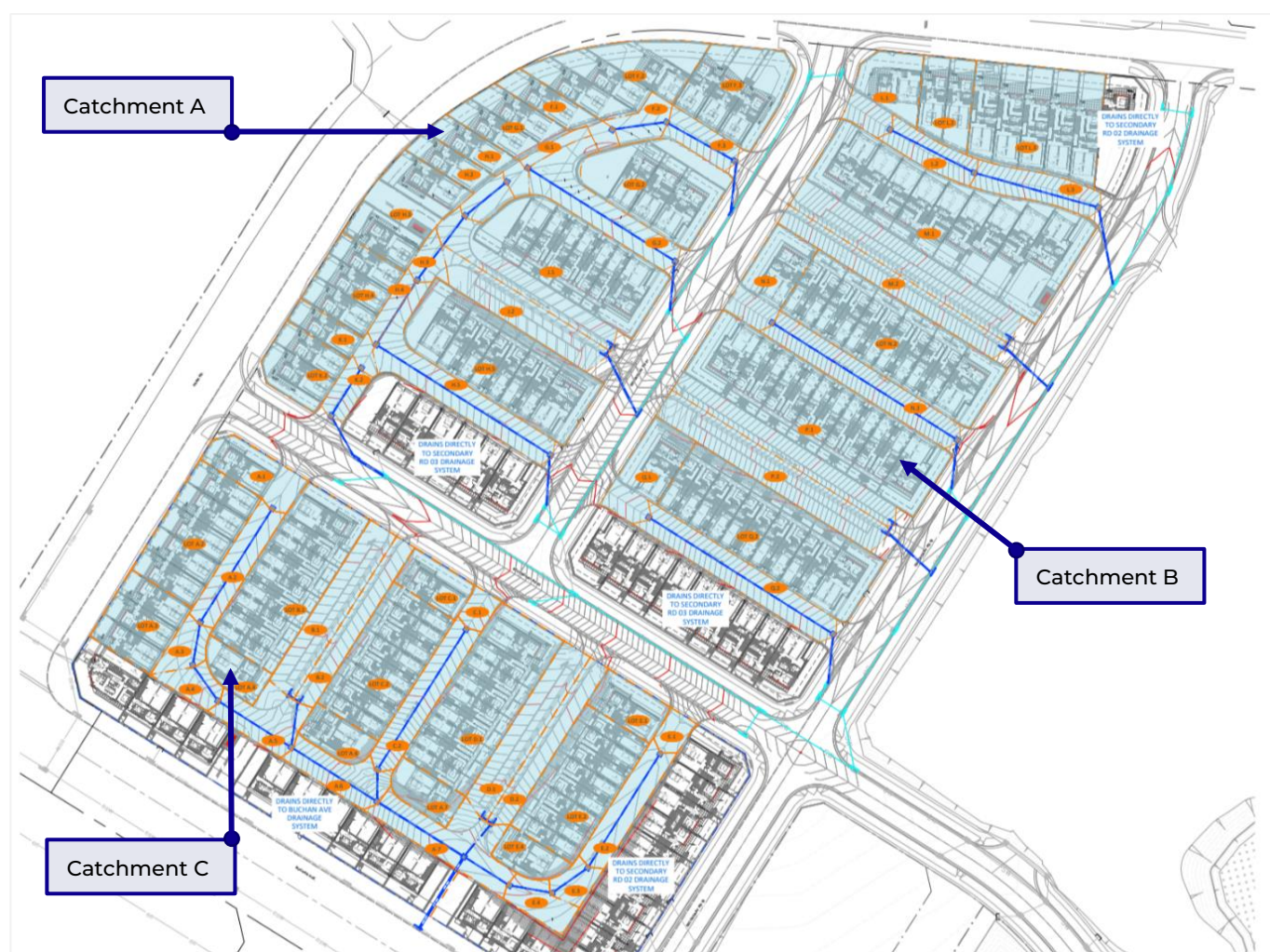


Figure 23 Sites 1-3: Proposed Internal Stormwater Management Catchments

Source: Enscape Studio

3.11.1 Design Requirements

The stormwater management requirements for Sites 1-3 are outlined by the *Water Cycle Management Plan* (2010) prepared by J. Wyndham Prince for the broader Edmondson Park release area. Other requirements for stormwater management that apply to Sites 1-3 are established by the *Edmondson Park Town Centre North–Super Lot Civil Engineering, Services & Infrastructure Report* prepared by IDC (June, 2021).

Section 3.0 of the Stormwater Management Plan Report (**Appendix F**) provides an overview of these requirements, which have been satisfied by the stormwater design for Sites 1-3 that is presented by this DA. The stormwater infrastructure has been designed to service the site efficiently during storm events, including 5–100-year Annual Recurrence Interval (ARI) storm events. This is further discussed at **Section 4.17**.

3.11.2 Construction Phase: Erosion and Sediment Controls

A preliminary overview of the proposed erosion and sediment control measures that will be implemented throughout the construction phase is provided at Section 6.0 of the Stormwater Management Plan Report (**Appendix F**). These preliminary measures include (but are by no means limited to):

- **Construction Exit Protections**

A shaker grid and wash down facility will be installed at all exits from the construction site. Vehicles leaving the area of works will have their wheels washed down and pass over the shaker grid to remove any spoil collected on their wheels and retaining the spoil on site. This measure is proposed to prevent spoil from being conveyed off-site by construction vehicles.

- **Sediment Fences and other Downstream Sedimentation Barriers**

Erection of temporary sediment fences and the use of sandbags as necessary to prevent sediment from being conveyed off-site, including towards the Maxwells Creek Corridor. The Preliminary Erosion and Sediment Control Plan notes that these temporary installations will be the subject of regular inspection to ensure that they are functioning correctly.

- **Sandbags at Existing Roadside Drainage Inlets**

Sandbags will be placed around the periphery of all existing stormwater drainage infrastructure inlets to prevent sediment from inundating the public drainage system during the construction phase. As above, this measure will be the subject of regular inspection to ensure all sandbagging arrangements can minimise the conveyance of sediment into the public drainage system.

A Preliminary Erosion and Sediment Control Plan is attached to the Civil Engineering Design Drawings (**Appendix G**). This plan has been provided to demonstrate that appropriate erosion and sediment control measures, such as the above, can be readily implemented during the construction phase. In this regard, it is acknowledged that a Detailed Erosion and Sediment Control Plan will form part of the final construction management documentation that will take effect throughout the construction phase.

An extract of the Preliminary Erosion and Sediment Control Plan (Drawing C-02 of **Appendix G**) is provided at **Figure 24** for reference.

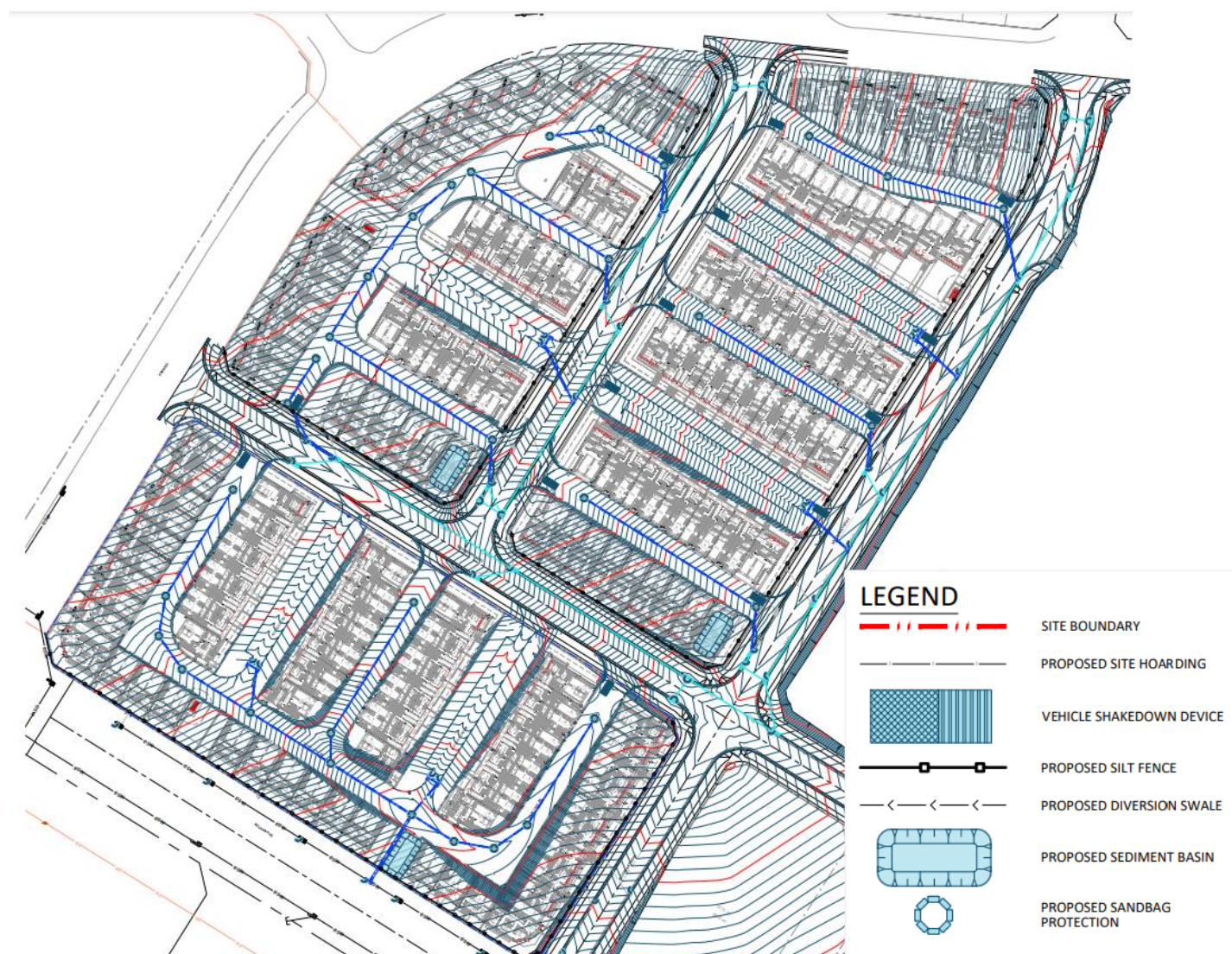


Figure 24 Preliminary Erosion and Sediment Control Plan

Source: Enscape Studios

4.0 Planning Assessment

This section considers the planning issues relevant to the proposed development and provides an assessment of the relevant matters prescribed in section 4.15(1) of the Environmental Planning and Assessment Act 1979 (EP&A Act). The DA's consistency and compliance with the relevant environmental planning instruments is considered in the sections below.

4.1 NSW Legislation and Policies

An assessment of the proposed development against relevant planning controls across the State Environmental Planning Policies, in addition to an assessment against relevant strategic plans, is provided at **Table 5**.

Table 5 Assessment Against NSW Legislation and Policies

Plan / Section	Comments	Compliance
Site 1		
Environment Protection & Biodiversity Conservation Act 1999 (EPBC Act)		
	The Site is Biodiversity Certified and is vacant. The proposed works on Sites 1-3 are limited to Biodiversity Certified land only.	Complies. Refer left.
State Legislation		
Environmental Planning and Assessment Act 1979		
Section 4.13	This sets out consultation and concurrence requirements for development under Part 4. Before granting consent to a DA, the consent authority is required to consult with, or obtain the concurrence from the Minister or public authority, in accordance with the relevant Acts, environmental planning instruments and/or the regulations.	Complies. The relevant referral agencies have been considered below. Referral is not required to any of these agencies.
Division 4.8	This Division contains requirements for Integrated Development. This DA is to be submitted as Integrated Development.	Not applicable. This DA is not integrated development.
Section 4.15	This section sets out those matters that a consent authority is to take into consideration in determining a development application.	Complies. Addressed by this SEE.
Water Management Act 2000		
	Sites 1-3 do not contain a mapped water body and are removed from the Maxwells Creek Riparian Corridor. There is no referral requirement for this DA under the Water Management Act 2000.	Not integrated development. Refer left.
NSW Rural Fires Act 1997		
	The proposed development is located on land that is identified as being bushfire prone land. Whilst the impacts and requirement for consideration and design for bushfire and the relevant Planning for Bushfire Protection 2019 has been considered, the application does not seek approval for the subdivision of bush fire prone land that could lawfully be used for residential or rural residential purposes, or for development of bush fire prone land for a special fire protection purpose. Further reference should be made to the Bushfire Report at Appendix I .	No referral requirement. Refer left.

Biodiversity Conservation Act 2021		
Edmondson Park is part of the Southwest Growth Centre (SWGC) and is Biodiversity Certified. Biodiversity certification offers a streamlined biodiversity assessment process for areas of land that are proposed for development.		Complies. No further assessment is required.
State Environmental Planning Policies		
SEPP (Transport and Infrastructure) 2021	<p>Clause 2.99 and Clause 2.100 of the SEPP Set out considerations for development that is within 25m of a rail corridor. The site is located ~150m away from the rail corridor to the south. Clause 2.99 and Clause 2.100 do not apply.</p> <p>The site does not adjoin an existing classified road and does not have a frontage to a street that is within a 90m travelling distance of an intersection with a classified road.</p> <p>The proposed development is not subject to any Transport for New South Wales (TfNSW) referral requirement under the SEPP (Transport and Infrastructure) 2021.</p>	No TfNSW referral requirement. Refer left.
SEPP 65 – Design Quality of Residential Apartment Buildings	<p>The proposed development does not include residential apartments. The provisions of SEPP 65 do not apply to this DA.</p> <p>Notwithstanding this, this DA has demonstrated that the proposed development will achieve a high-amenity design outcome for future residential occupants that will provide a positive contribution to the character of Edmondson Park Town Centre North.</p>	Not applicable. SEPP 65 does not relate to townhouses.
SEPP (BASIX) 2002	A BASIX Certificate has been prepared and accompanies the DA (refer to Appendix L).	Complies. Compliance is demonstrated at Appendix L.
SEPP (Precincts – Western Parklands City 2021)	Compliance with the SEPP (Precincts – Western Parkland City) is demonstrated at Section 4.1.1 .	Complies. Compliance is demonstrated at Section 4.1.1.
SEPP (Biodiversity and Conservation) 2021	<p>Edmondson Park is part of the Southwest Growth Centre (SWGC) and is Biodiversity Certified.</p> <p>Biodiversity certification offers a streamlined biodiversity assessment process for areas of land that are proposed for development.</p> <p>As mentioned previously, the site is vacant and site clearance is not proposed.</p>	Complies. Refer left.
SEPP (Resilience and Hazards) 2021	This DA is supported by an Environmental Site Assessment (ESI) at Appendix J . The ESI demonstrates that the site is and/or can readily be made suitable to accommodate the proposed residential townhouses.	Complies. Compliance is demonstrated at Appendix J.

4.1.1 SEPP (Precincts – Western Parkland City) 2021

Table 6 Assessment Against the SEPP (Precincts – Western Parkland City) 2021

Section	Comments	Compliance
The site is within the Edmondson Park South State Significant site under Appendix 1 of the SEPP (Precincts – Western Parkland City) 2021. An assessment against the relevant provisions of Appendix 1 is provided below.		
Clause 10 - Zone	The Site is zoned R1 General Residential. Townhouses are permitted within this land use zone. Despite being references as townhouses, the residential accommodation in this DA is defined as “multi-dwelling housing”.	Complies. Refer left.

Clause 18 - Height	As discussed at Section 4.2 , the proposed residential townhouses present a variation to the maximum permitted height control within Site 1 and Site 3.	Refer to Height Variation Request (Appendix Q).
Clause 19 – Floor Space Ratio	Sites 1-3 are not subject to an FSR control.	Not applicable. No FSR control.
Clause 26 – Flood Planning	Sites 1-3 are not located on flood-prone land. Design provision has been made for the resolution of flood planning matters as necessary (refer to Section 4.17)	Complies. Sites 1-3 are not located on flood-prone land.
Clause 31 – Preservation of Trees	The site has been cleared of all established vegetation. The proposal does not seek approval for the removal of any trees. Street trees will be provided as outlined at Section 3.8.2 . This will support tree canopy targets for Greater Sydney.	Complies. Refer left.
Clause 33 – Heritage Conservation	There are no indigenous or non-indigenous heritage items within or located in proximity to the site. The Statement of Commitments establishes protocols to be followed in the event of unexpected finds and other procedures. These will be enforced by a Construction Management Plan that will take effect throughout the duration of works.	Not applicable. Refer left.
Clause 34 – Public Utility Infrastructure	Confirmation has been obtained from relevant utility infrastructure suppliers that the site is capable of being adequately serviced.	Complies. Refer left.
Clause 36 – Development Control Plan	To guide future design and assist with the development assessment process Mod 5 proposes to introduce a set of site-specific Design Guidelines. The Concept Plan in conjunction with the Design Guidelines therefore makes the need for a separate DCP redundant (as specified in the proposed amendments to the SEPP).	Complies. Refer left.
Clause 37 – Relevant Acquisition Authority	The proposal does not include works to areas that are identified on the Land Reservation Acquisition Map.	Not applicable. Refer left.

4.2 Consistency with the Concept Plan

The Concept Plan was approved on 18 August 2011. The approval provides for mixed use development including commercial, residential and retail uses. Open space, and associated facilities/infrastructure are also provided for.

The transitional arrangements introduced during the NSW Government's repeal of the former EP&A Act's Part 3A provisions states that a consent authority must not grant consent to development unless it is satisfied that the development is "generally consistent" with the terms of an approved concept plan (Schedule 6A, Clause 3B(2)(d) of the EP&A Act).

The proposal in this DA is considered to be generally consistent with the Concept Plan as amended and will satisfy all relevant Statement of Commitments made in relation to the development as part of the Concept Plan. An assessment of the proposal's consistency with the approved Concept Plan Statement of Commitments is located at **Appendix P**.

4.2.1 Internal Road Layout

The proposed configuration of internal access roads and laneways is inconsistent with the Concept Plan (as proposed to be modified by MOD 5). As mentioned, the approval of MOD 5 is considered to have reasonable prospects. The proposed road configuration is considered to present a significant improvement to the provisional road layout under MOD 5.

Specifically, it is noted that the proposed internal road configuration is necessary to maximise pedestrian permeability across Sites 1-3. This will increase the level of pedestrian activity across the locale from what would have otherwise been provided for by the provisional road layout under MOD 5. This increase to pedestrian activity will in turn facilitate the passive surveillance of streetscapes that are within and adjoin Sites 1-3.

In addition, it is noted that the proposed road layout will not inhibit the delivery of dual-aspect (and corner) townhouses, which as discussed at Section 4.5.2, will facilitate the cross-ventilation of each townhouse.

Based on these discussion points, the proposed configuration of internal access roads is considered to compliment the intended effect of the provisional road layout under MOD 5. This is because improved levels of pedestrian permeability, streetscape activation, and passive surveillance will be achieved by the proposed development. Further reference should be made to the design rationale for the proposed internal street network, as outlined by the Design Report (**Appendix B**) and the Landscape DA Design Report (**Appendix C**).

4.3 Building Height

The SEPP (Precincts – Western Parkland City) 2021 imposes a maximum permitted building height of 12m across Sites 1-3. The proposed development will comply with this maximum permitted building height, notwithstanding a minor height variation that is proposed in relation to a select number of terraces within the area of Sites 1-3. It is acknowledged that the extent of the proposed variation relates to areas of the site that will be subject to an increased height limit of 21m, subject to the approval of MOD 5 which is considered to have reasonable prospects.

The proposed development relates to land that is located within the 'Edmondson Park South Site', which is subject to the provisions of Appendix 1 within the State Environmental Planning Policy (Precincts – Western Sydney Parkland City) 2021. Specifically, the provisions contained within Part 2 of Appendix 1 enables Council to grant consent for development even if the development contravenes a development standard, subject to satisfying the provisions contained within Clause 28.

Clause 28 of Part 2 aims to provide an appropriate degree of flexibility in applying certain development standards to achieve better outcomes for and from development.

Further reference should be made to the Height Variation Request (**Appendix R**), which establishes environmental planning grounds for the proposed height variation, which is supportable on planning merit. A height-compliant development scenario (subject to the approval of MOD 5) is shown at **Figure 25**.

While the approval of MOD 5 is considered to have reasonable prospects, it is understood that the appended Height Variation Request is required on technical planning grounds.

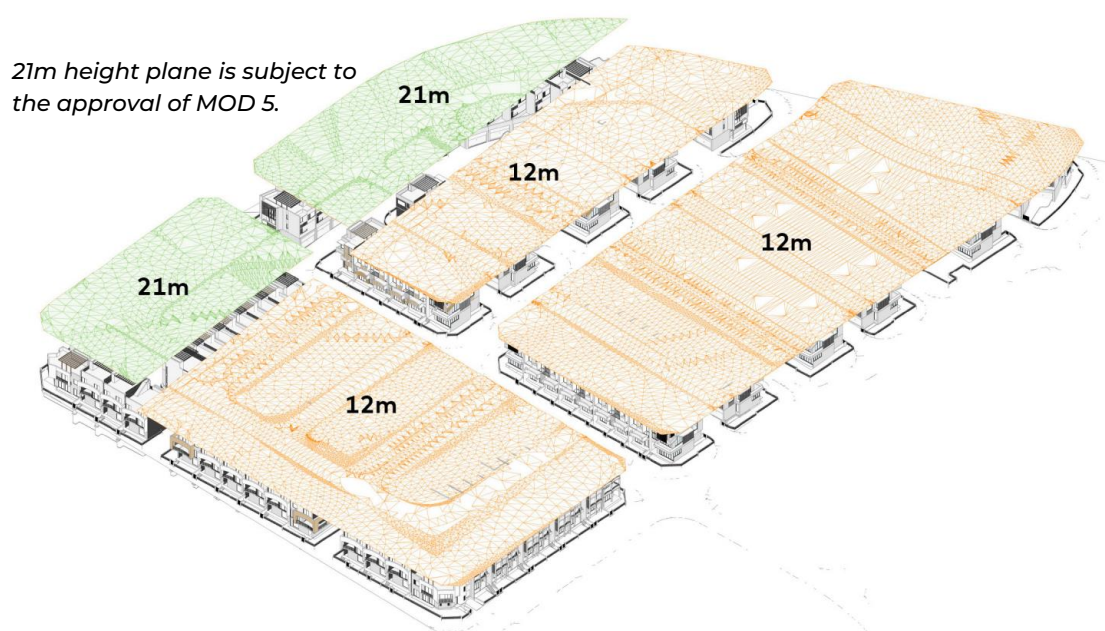


Figure 25 Design Report Extract: Height-Compliant Scenario (subject to the approval of MOD 5)

Source: Cox

4.4 Streetscape Amenity

The proposed development of Sites 1-3 will provide for a high level of streetscape amenity. It has been established that each townhouse design typology will include up to 6 different façade design variations. This has achieved diversity in architectural modulation and expression across Sites 1-3, as necessary to support a high-quality design outcome in regard to streetscape amenity.

Street trees, turfed and planted verges and public domain street furniture have also been incorporated in the landscape design proposal for Sites 1-3 (refer to **Section 3.8**). The proposed street trees will also support the tree canopy target for Greater Sydney (40%) that has been established by the Government Architect of NSW. Specifically, it is noted that the canopy coverage across the internal street network (>60%) will exceed this benchmark.

The landscaped streetscapes across Sites 1-3 are considered to incorporate features that will achieve an amenable public domain design outcome for the future residents of the Edmondson Park Town Centre North precinct. Traffic-calming design interventions are to be implemented to prioritise pedestrian movement across the internal access streets, as shown in the extract that is provided at **Figure 26**.

Further to the above, the proposed development of Sites 1-3 will provide passive surveillance in the form of sight lines from the street-facing aspects of the residential townhouses. This will achieve a public domain design outcome that promotes the safety of residents and the general public.

This will be further supported by the Crime Prevention Through Environmental Design (CPTED) principles that have been incorporated as part of the proposed development. CPTED principles that are relevant in the context of this DA are considered at **Section 4.19**.

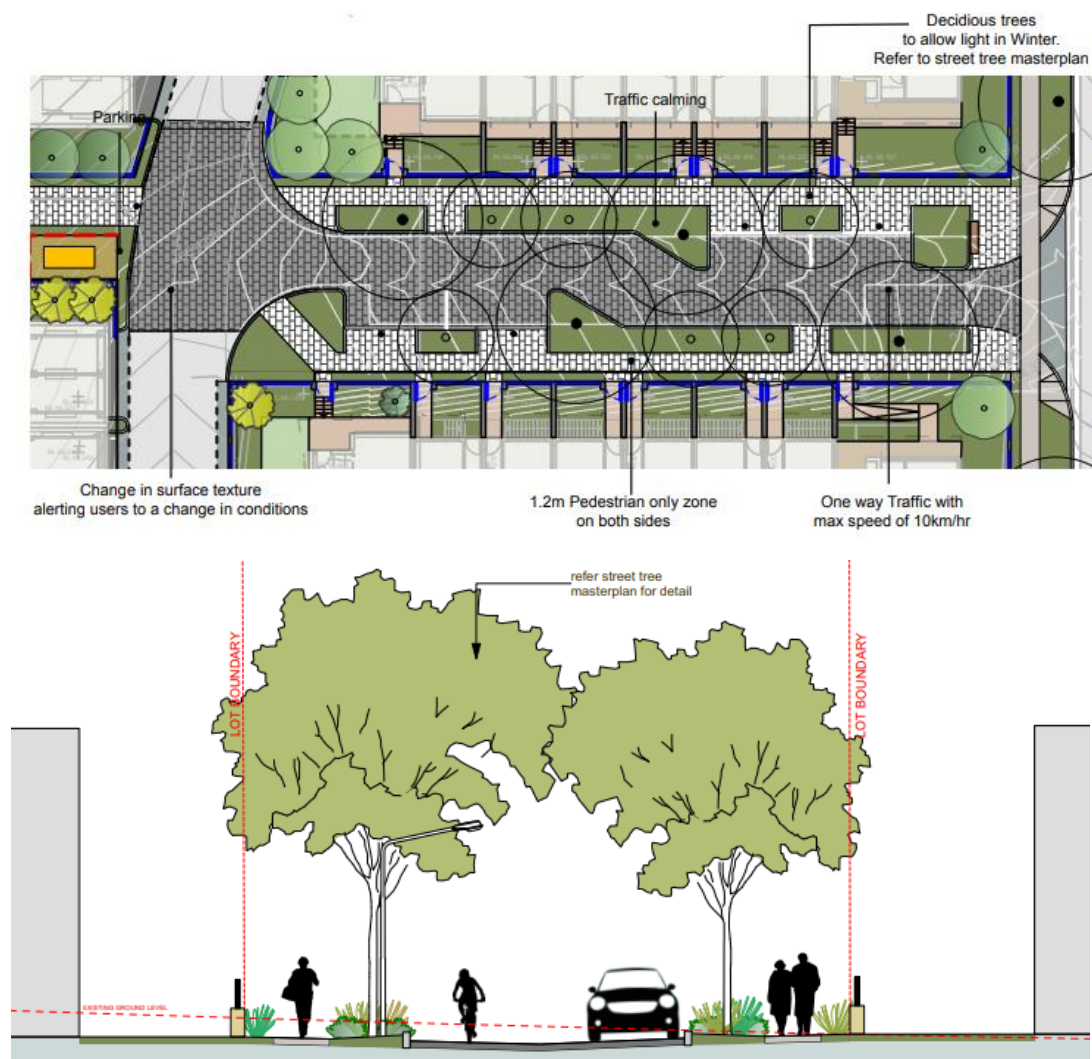


Figure 26 Extract: Traffic-Calming Design Interventions for Internal Access Roads (Indicative)

Source: Environmental Partnership



Figure 27 Design Report Extract: Streetscape Photomontages

Source: Cox

4.5 Residential Amenity

4.5.1 Solar Amenity

Solar access diagrams and shadow diagrams have been provided within the Architectural Plans (**Appendix A**) and the Design Report (**Appendix B**). The proposed development exceeds the requirement to provide direct solar access to a minimum of 70% of the residential townhouses between the hours of 9:00 am and 3:00 pm during winter solstice (June 21st). In particular, it is noted that:

- 147 of the 178 residential townhouses (82.5%) achieve or surpass the requirement for a minimum of 2hrs of direct solar access to be provided between 9:00 am and 3:00 pm on June 21st. This is achieved for at least one living room or 50% of the private open space for these townhouses.
- Private outdoor spaces and habitable rooms have been orientated to optimise solar amenity, and screening has been incorporated across the proposed façade design typologies where it is necessary to minimise solar heat gain.
- Rooftop terraces have been proposed where appropriate in regard to the maximum permitted building height that applies across Sites 1-3. These terraces will maximise solar exposure and provide access to high-amenity district views.

Solar amenity diagram extracts from the Design Report are provided at **Figure 28**.

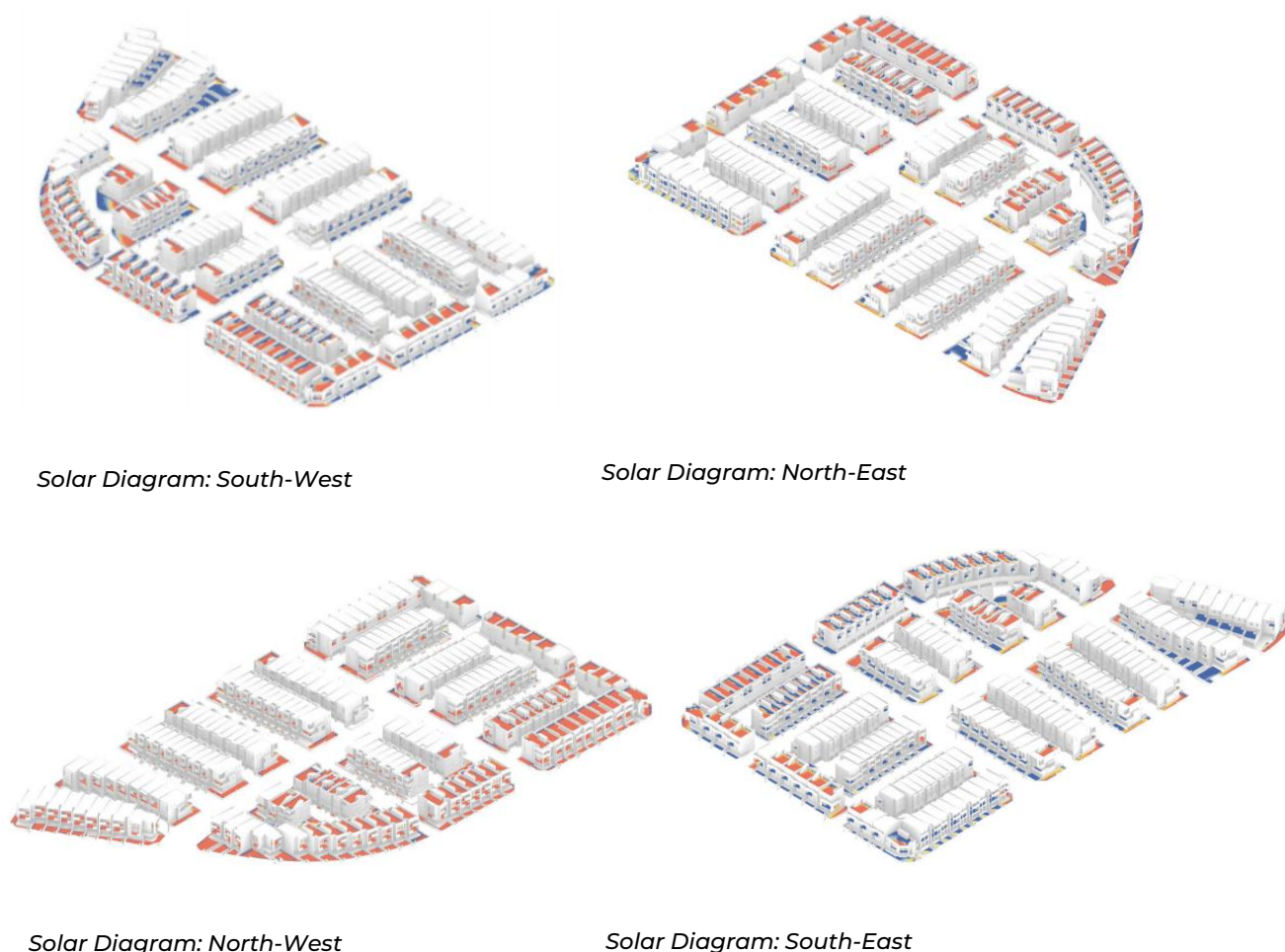


Figure 28 Design Report Extract: Solar Amenity Diagrams

Source: Cox

4.5.2 Cross Ventilation

Each of the proposed residential townhouses will at least dual aspect. Townhouses sited on corner lots will benefit from three exposed interfaces. This has been achieved by the proposed internal street network, which has optimised opportunities for cross ventilation across the development. There are no townhouses that are adjoined to the rear.

In order to ensure that the privacy of future residential occupants is not compromised, the proposed façade design typologies will incorporate screening where necessary to minimise overlooking. In this regard, it is noted that the dual aspect arrangement for the proposed townhouses will not result in an adverse reduction to the level of privacy that will be afforded to future residents.

4.5.3 Private Open Space

All of the proposed townhouses have been provided usable private open spaces both at ground level, and at balconies that will be accessed from internal living spaces. Specifically, the proposed townhouses will have up to 174m² of private open space. As outlined at Table 4, some townhouses will also benefit from the private open space offering of a roof level terrace. The proposed balconies and roof terraces will provide access to high-amenity district views.

Further reference should be made to the Typical Terrace Plans that are provided within the Architectural Plans (**Appendix A**). These plans provide a visual and numerical breakdown of the private open space quantum for each townhouse design typology.

4.6 Dwelling Density

The relevant planning controls (Precincts SEPP) for the site does not prescribe a floor space ratio (FSR). The density of development within the Landcom Town Centre North site, and other area of the Edmondson Park South Concept Plan have been identified within the Concept Plan (as proposed to be amended under MOD 5) to reflect the revised spatial layout proposed.

As at **Figure 29**, the site located within a catchment yield that has an overall target yield of 570 dwellings. As the site comprises only part of the area within this yield catchment, the assessment of density and compliance is applied proportionally, with regard given to neighbouring sites with separate building envelopes and densities. Overall, this DA seeks approval for 178 dwellings and therefore is within the allowance of density targets as nominated within the Concept Plan (as revised).

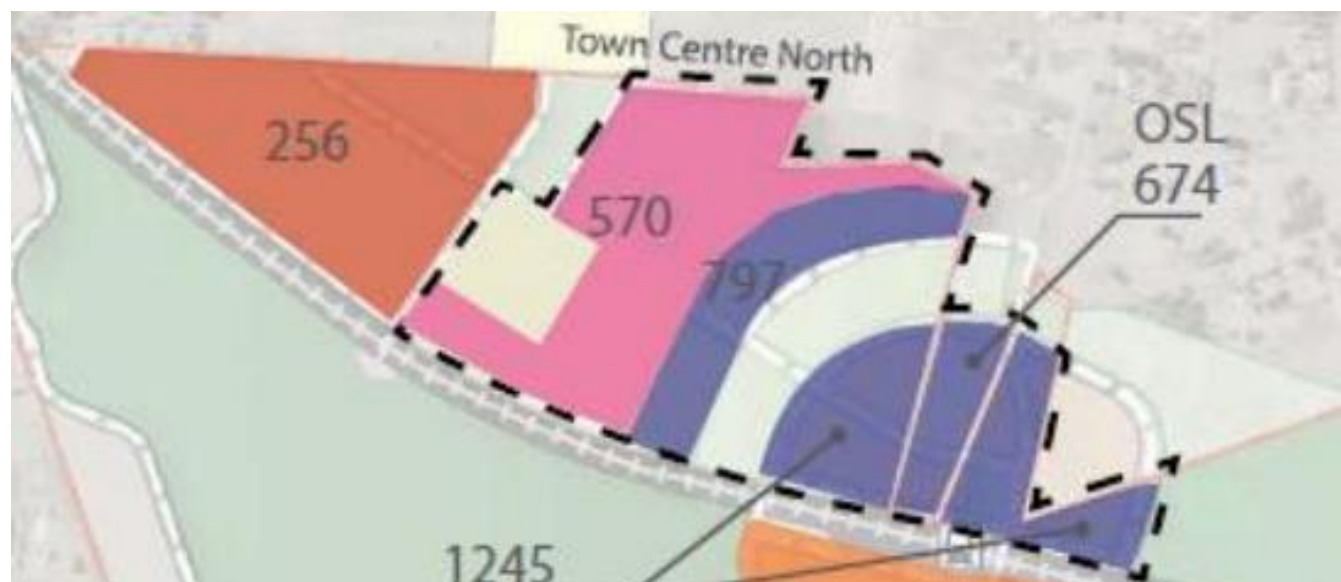


Figure 29 Proposed yield map which encapsulates Sites 1-3 within the area denoted in pink

Source: Concept Plan (Mod 5, under assessment)

4.7 Design Excellence Strategy – Landcom Town Centre North

Design excellence is an integral consideration during the day-to-day management of a project and is built into Landcom's objectives and their standard processes and procedures.

Landcom has prepared a Design Excellence Process, within the Design Excellence Strategy, to capture the reviews that are required to occur at key stages of the Town Centre North project – depending on the proponent (either Landcom or a developer). The Design Excellence Strategy was prepared as part of the Response to Submissions (RTS) package for MOD 5 of the Concept Plan, which was submitted to Council in August 2020.

This DA follows an extensive (and ongoing) dialogue between the Proponent and Landcom regarding the design excellence process that is being undertaken for the redevelopment of Sites 1-5. This process, as outlined by the Design Excellence Strategy, was communicated with the Liverpool Design Excellence Panel on 12 May 2022 (ref. PL-4/2022).

An extract of the Design Excellence Strategy is provided at **Figure 30**. A copy of the Design Excellence Strategy is provided at **Appendix T** for further reference.

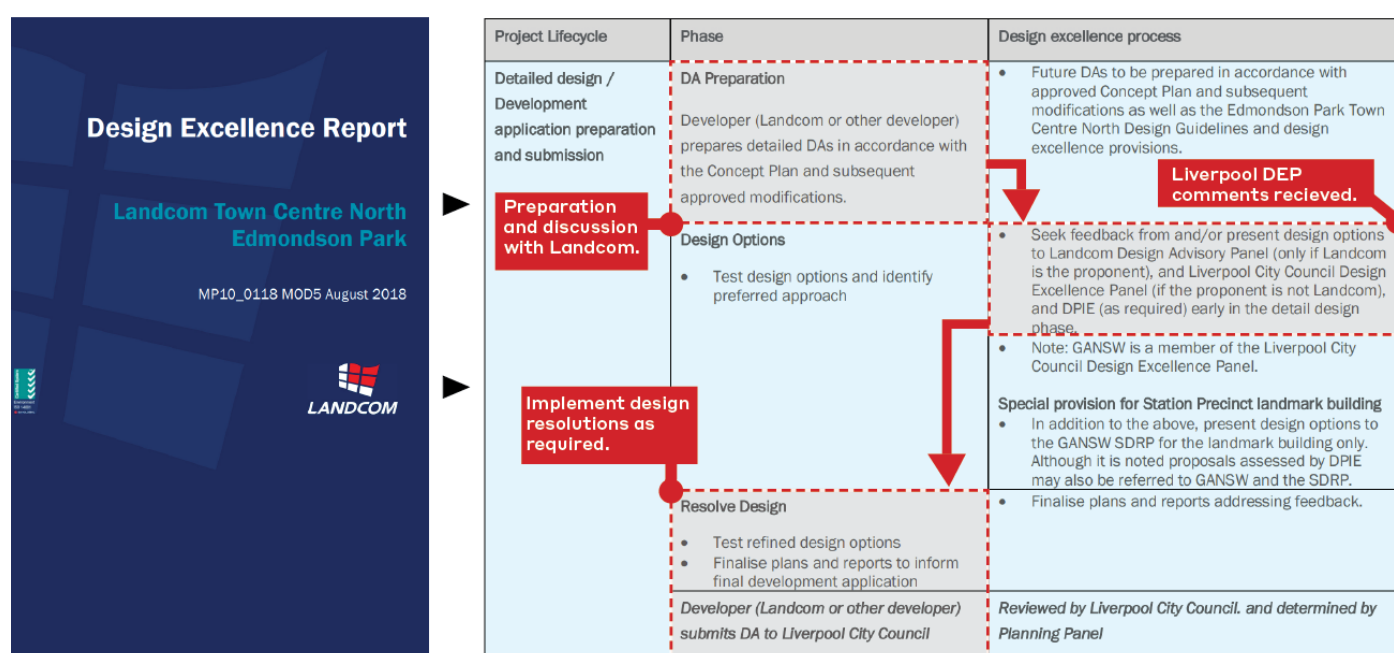


Figure 30 Design Excellence Strategy – Landcom Town Centre North, Edmondson Park

Source: Concept Plan (Mod 5, under assessment). Annotations contributed by Ethos Urban.

4.8 Landcom Town Centre North Design Guidelines

Subject to the approval of MOD 5 (under assessment), the Landcom Town Centre North Design Guidelines apply to Sites 1-3. The purpose of the Design Guidelines is to guide development of land within the Parkland Precinct and the Town Centre.

The proposal is consistent with the Design Guidelines in that it is generally consistent with the vision, key elements, urban structure and residential precinct built form guidelines established by Parts 2.0, 3.0 and 5.0 respectively. While the proposed configuration of internal roads and access lanes varies from the provisional road layout that is envisaged by MOD 5 (under assessment), it has been established that it will achieve an improved and rationalised outcome for Sites 1-3.

The residential precinct built form guidelines at Section 5.0 of the Guide provide performance criteria and design solutions for the residential townhouses that are proposed by this DA. The design solutions are the preferred way of demonstrating the performance criteria. Should a design solution seek an alternative solution, an alternative solution can be proposed which is to be assessed against the performance criteria.

The proposal is generally consistent with the built form design solutions, including in relation to:

- Building heights, setbacks, and separation distances.

- Provision of open space (public and private).
- Landscaping.
- The size of the proposed residential townhouses.
- Solar amenity.
- Environmental sustainability.
- The promotion of sustainable transport modes.

An extended assessment against the Landcom Town Centre North Design Guidelines is provided at **Appendix Q** and **Appendix B**.

4.9 Contamination – Environmental Site Assessment

An Environmental Site Assessment (ESA) has been prepared by JBS&G for Sites 1-5. This ESA was prepared to support this DA for the development of Sites 1-3, in addition to the DAs that relate to Site 4 and Site 5. The ESA demonstrates that the Proponent's landholdings at Edmondson Park Town Centre North are suited to accommodate residential development.

The objective of the ESA was to assess the potential for contamination based on current and historical site activities, and to assess the suitability of the site for the proposed residential land use in accordance with the State Environmental Planning Policy (Resilience and Hazards) 2021. The scope of the ESA included:

- Desktop review of previous reports, local and regional background environmental information and available historical background information.
- Detailed inspection of the Proponent's landholdings (Sites 1-5) and the surrounding area.
- Development of a Conceptual Site Model (CSM), as specific to the environmental characterisation of the site and the proposed development.
- Providing conclusions in regard to the suitability of the site from a contamination viewpoint.
- Provide recommended actions to resolve any outstanding matters prior to the redevelopment of the site.

4.9.1 ESA – Conclusions and Recommendations

The ESA (**Appendix J**) provides the following conclusions, which indicate that Sites 1-3 present a suitable location for the proposed construction of 178 residential townhouses:

- Previous environmental data sets from studies that include the site provide reliable information that can be used to facilitate the ESA.
- Stockpiled material at the site meets all applicable human health and ecological criteria that are relevant in the context of the proposed development.
- The CSM did not identify any unacceptable health risks associated with the proposal. The CSM further demonstrated that existing material stockpiles on site are suitable for reuse to facilitate works on site.
- That on the basis of available historical data and the scope of the ESA that was undertaken in regard to Sites 1-5 (inclusive of the land on which the proposed development will be sited), that Sites 1-3 present a suitable location for residential development.

The ESA further recommended that an Unexpected Finds Protocol (UFP) should be prepared as part of the construction phase Environmental Management Plan (EMP) to establish a framework for management of any unexpected conditions. The UFP and EMP will be presented to Council prior to the issue of a Construction Certificate.

4.10 Groundwater

The scope of the ESA (**Appendix J**) did not include any further groundwater sampling at the site.

The ESA notes that previous site characterisation data from 2013 identified a range of elevated heavy metals concentrations. It is understood that these concentrations are representative of background geological conditions that are reported in groundwater across the local area.

Notwithstanding the above, it was found that due to regional geology, the depth of groundwater beneath development levels, and the absence of any beneficial users, that no further assessment of potential risks from groundwater is warranted in the context of this DA. The ESA concludes that there is no risk to any future sensitive site receptors.

4.11 Heritage

4.11.1 Non-Indigenous Heritage

There are no heritage items identified on the Site or in the immediate proximity. The Statement of Commitments establish protocols to be followed should any non-indigenous historical archaeological be discovered during site excavation.

These protocols will be incorporated into induction and site management plans to be adopted by the contractor prior to the commencement of any site works.

4.11.2 Aboriginal Heritage

The Aboriginal Cultural Heritage Assessment submitted with the original Concept Plan confirms there are no Aboriginal Heritage sites within proximity of the Site. In any event, the landowners and Landcom are committed to managing potential impacts to non-indigenous heritage throughout the ongoing development of the Landcom Town Centre North, including the residential precinct.

The Statement of Commitments establishes key protocols for the management and conservation of indigenous heritage in relation to salvage activities, construction activities, incident reporting and requirements for consultation with the Aboriginal community where necessary. These protocols will be incorporated into induction and site management plans to be adopted by the contractor prior to the commencement of any site works.

As shown at **Figure 31** (from the Mod 5 report) no Aboriginal heritage items or items of Aboriginal heritage significance (Aboriginal Heritage Information Management System (AHIMS)) were listed on these databases within the area of land that contains Sites 1-5.

As part of the report by Kelleher Nightingale Consulting in 2018 a visual inspection of the three previously recorded site locations within Landcom Town Centre North (EPCS10, SW2 and SWRL 14) confirmed that these sites are no longer extant. No Aboriginal objects remain at these locations.

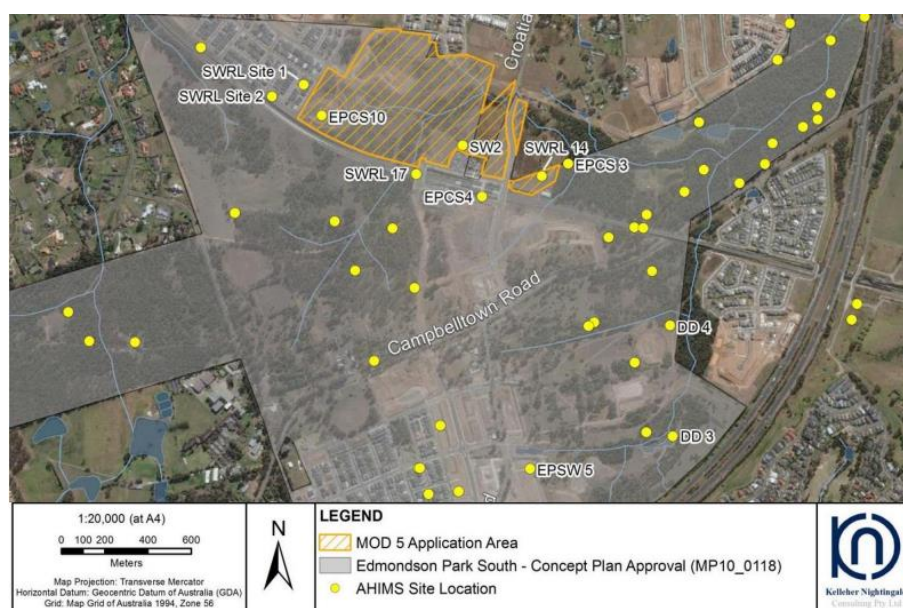


Figure 31 AHIMS Search Results

Source: Kelleher Nightingale Consulting – Concept Plan Mod 5 Aboriginal Heritage Assessment

4.12 Traffic and Transport

It has been established that the proposed townhouses will each accommodate 1-2 car parking spaces within private garages. In total, 258x car parking spaces have been proposed across Sites 1-3. The appended Transport Assessment (**Appendix H**) provides an assessment that is based on the provisional parking allowance of 356x car parking spaces that is proposed for Sites 1-3 under MOD 5 (under assessment). This provisional parking allowance is established by the *Edmondson Park South Concept Plan MOD 5 – Transport Management and Accessibility Plan* (4 June 2020) that was prepared by Aecom. This plan is referenced as the 'MOD 5 TMAP' throughout the Transport Assessment for this DA.

It is acknowledged that the proposed development is in deficit of this provisional maximum parking allowance by way of 98x car parking spaces. Due to this, the Transport Assessment that has been appended to this DA captures any potential traffic impact associated with the proposed development.

The Transport Assessment for this DA references the trip generation assumptions that have been made under MOD 5. These trip generation assumptions are set out in the *Traffic Impact Assessment Report–Edmondson Park Frasers Town Centre –Section 75W Modification* (5 February 2017) that was prepared by Ason Group. This report, which was initially submitted in support of MOD 4 (now approved), establishes the following traffic generation rates for medium density and high density residential development:

- **Medium Density:**
0.62 trips / hour / dwelling during both the AM Peak and PM Peak periods. This medium density trip generation assumption is most relevant in the context of this DA for the development of residential townhouses across Sites 1-3.
- **High Density:**
0.51 trips / hour / dwelling during both the AM Peak and PM Peak periods. This high density trip generation assumption is not relevant to the assessment of this DA.

As the above-listed trip generation forecasts are factored on the provisional parking allowance of 356x car parking spaces for Sites 1-3, it can be assumed with certainty that the proposal will not result in any additional adverse traffic impact outside of the scope of former traffic assessments and modelling that has been undertaken. This includes the precinct-wide traffic modelling undertaken by Aecom (included with MOD 4, which has been approved).

On this basis, the traffic and parking impacts associated with the proposed development are acceptable and reasonably anticipated in the context of Sites 1-3. Additional traffic modelling is not necessary to support this DA, which presents a suitable outcome for Sites 1-3 in regard to the capacity of the surrounding local road network.

4.13 Acoustic Amenity

A Noise and Vibration Impact Assessment has been prepared by ELAB Consulting. This assessment is provided at **Appendix M**, and addresses the following considerations:

- Noise and vibration generated from the rail corridor approximately 250m to the south.
- Noise impacts on surrounding local roads generated by the proposed development.
- Noise emissions from mechanical plants associated with the proposed development, including any impacts from these plants to noise-sensitive receivers.

The assessment criteria that informed the Noise and Vibration Impact Assessment, and the subsequent conclusions and recommendations that are outlined at the end of the assessment, are summarised at **Section 4.13.1** and **Section 4.13.2** below.

4.13.1 Relevant Noise and Vibration Criteria

The Noise and Vibration Impact Assessment (**Appendix M**) was prepared in accordance with the following legislative instruments and guidelines:

- Edmondson Park South Development Control Plan (DCP) 2012; - as guidance in addition to the Landcom Town Centre Design Guidelines.
- Development Near Rail Corridors and Busy Roads – Interim Guideline.
- NSW Road Noise Policy (RNP) 2011.
- NSW Noise Policy for Industry (NPI) 2017.

- Assessing vibration: A Technical Guideline 2006.
- State Environment Planning Policy (Infrastructure) 2021. Specifically, the assessment considered Section 2.100 (which was previously considered under clause 87 of the now repealed Infrastructure SEPP 2007).
- AS 1055.2 1997 Acoustics - Description and measurement of environmental noise – Part 2: Application to specific situations (AS 1055.2).

4.13.2 Conclusions and Recommendations

The Noise and Vibration Impact Assessment (**Appendix M**) provides the following conclusions and recommendations:

- Noise emissions from the rail corridor (south) and surrounding roads are not a relevant assessment matter for this DA. This is because the site is >80m from the rail corridor (south), and is not adjacent to any road that carries more than 20,000 vehicles per day.
- The predicted increase in peak traffic noise associated with the proposed development is within the limits that are prescribed by the NSW Road Noise Policy 2011. For this reason, the assessment concludes that traffic generated by the proposed development will not have an adverse impact on any residential receiver.
- To reduce the risk of intrusive and/or offensive noise emissions to the residential amenity of the proposed development, the following noise management measures are recommended:
 - Positioning mechanical plant away from nearby receivers.
 - Acoustic attenuators fitted to duct work
 - Screening around mechanical plant
 - Acoustic insulation within duct work.
- The predicted increase in peak traffic noise due to the development is less than 1dB(A), which does not exceed the limits outlined in the Road Noise Policy criteria. In this regard, noise emissions associated with vehicle traffic to/from the proposed development are considered to be acceptable in the urban context for this DA, and reasonably anticipated at Sites 1-3.

Subject to the recommendations above, the Noise and Vibration Impact Assessment (**Appendix M**) demonstrates that the proposal can readily achieve compliance with all applicable noise and vibration criteria controls. On this basis, it is concluded that the proposal presents an acceptable outcome in regard to acoustic amenity.

4.14 Ecology, Flora and Fauna

4.14.1 MOD 5 (Under Assessment)

The Concept Plan (as proposed to be amended by MOD 5) along with the Biodiversity Certification Order and Edmondson Park Conservation Agreement set up the framework for the clearance of existing trees within the developable area of the Town Centre (including the residential precincts) whilst retaining the native vegetation Reserves, including Maxwells Creek Riparian Corridor.

As part of the Concept Plan (as proposed to be amended by Mod 5), it was confirmed in the report prepared by AECOM that no additional vegetation or habitat will be impacted by the modifications, and therefore, the proposed amendment (Mod 5) would not exceed any of the identified thresholds in the relevant legislation. On this basis, the proposed development would not trigger the biodiversity offsets scheme (BOS) or Biodiversity assessment method (BAM) under the Biodiversity Conservation Act 2016 (BC Act 2016).

Notwithstanding the above, it is acknowledged that MOD 5 remains under assessment to date. In this regard, it is acknowledged that further assessment of impacts to ecological values is warranted in the context of this DA, which will be lodged prior to the determination of MOD 5. This is provided at **Section Error! Reference source not found.** below.

4.14.2 Ecology, Flora and Fauna: Further Discussion

The site has been cleared of all established vegetation and does not accommodate any existing development. This DA does not seek approval for tree removal, nor will it impact upon the extent of any high-value habitat.

It is also acknowledged that Council's GeoCortex Mapping indicates that Sites 1-3 are entirely biocertified. Within biocertified land, the need for site-by-site assessment of biodiversity impacts under State legislation is switched off for development applications (s8.4 of the BC Act 2016).

Further to the above, and as previously noted at **Section 3.11.2**, temporary sediment fences and sandbags will be used throughout the construction phase to prevent sediment from being conveyed off-site, including towards the Maxwells Creek Corridor. These temporary erosion and sediment control measures will be supported by a number of other interventions that are presented by the Preliminary Erosion and Sediment Control Plan (**Appendix F**).

Due to this, the proposed development, inclusive of works during the construction phase, is not considered to have any potential impact on ecologically sensitive lands within the Maxwells Creek Corridor. In this regard, the distance between the Maxwells Creek Corridor and Sites 1-3 should also be noted.

4.15 Bushfire Hazard Management

The proposed development is located on land that is identified as being bushfire prone land. A Bushfire Protection Assessment has been prepared by Travers Bushfire & Ecology. This assessment is provided at **Appendix I**.

The proposed development is identified as bushfire prone on the Liverpool City Council bushfire prone land map which triggers a formal assessment by Council in respect of the NSW Rural Fire Service (RFS) policy against the provisions of Planning for Bush Fire Protection 2019 (PBP) and the *Rural Fires Act 1997*.

The proposal is categorised by the NSW RFS as a multi-storey residential development and as outlined in section 8.2.2, must be assessed in accordance with PBP 2019, residential and rural residential subdivisions (Chapter 5). The detailed assessment has been undertaken in the attached Bushfire Assessment (**Appendix I**).

4.15.1 Overview of Bushfire Protection Measures

The below-listed bushfire protection measures have been proposed by Travers Bushfire & Ecology and have been incorporated into the development. It is expected that these will also be considered in the requisite referral to the NSW RFS during the assessment of the DA, and the subsequent condition of Consent.

- Defendable space in accordance with the performance requirements of PBP 2019.
- The presence of a 130m-wide Asset Protection Zone (APZ) off-site within the grassy woodland area that adjoins the Maxwells Creek Riparian Corridor, as described at Section 2.3 of the Bushfire Assessment (**Appendix I**).
- Provision of access for firefighting operations are compliant and in accordance with the acceptable solutions outlined in PBP 2019.
- Water, electricity and gas supply in compliance with the acceptable solutions outlined in PBP 2019.
- Construction of the residential building in accordance with Australian Standard AS3959 Construction of buildings in bushfire-prone areas 2018 (AS3959), and PBP 2019 – BAL 29.

Subject to the recommendations that are provided in the Bushfire Assessment (**Appendix I**), the proposal will comply with PBP 2019, and will satisfy Condition 1.24(e) of the Concept Plan. Further discussion in regard to the off-site APZ is provided at **Section Error! Reference source not found.**

4.15.2 Off-Site APZ (Managed Grassland, East)

The Bushfire Assessment (**Appendix I**) identifies the requirement for an off-site APZ in the form of managed grasslands between the east-adjacent development sites and the Maxwells Creek Corridor. Provision has been made for the establishment of this APZ under the concept plan and the future roads that will service Edmondson Park Town Centre North.

Specifically, it is acknowledged that the managed grassland area does not encroach upon land that is identified for development under the concept plan, notwithstanding a small portion of developable land some distance from Sites 1-3 (refer to **Figure 32**). The managed grassland protection zone and the road corridors that enclose Sites 1-3 afford an appropriate level of bushfire protection to the proposed development.

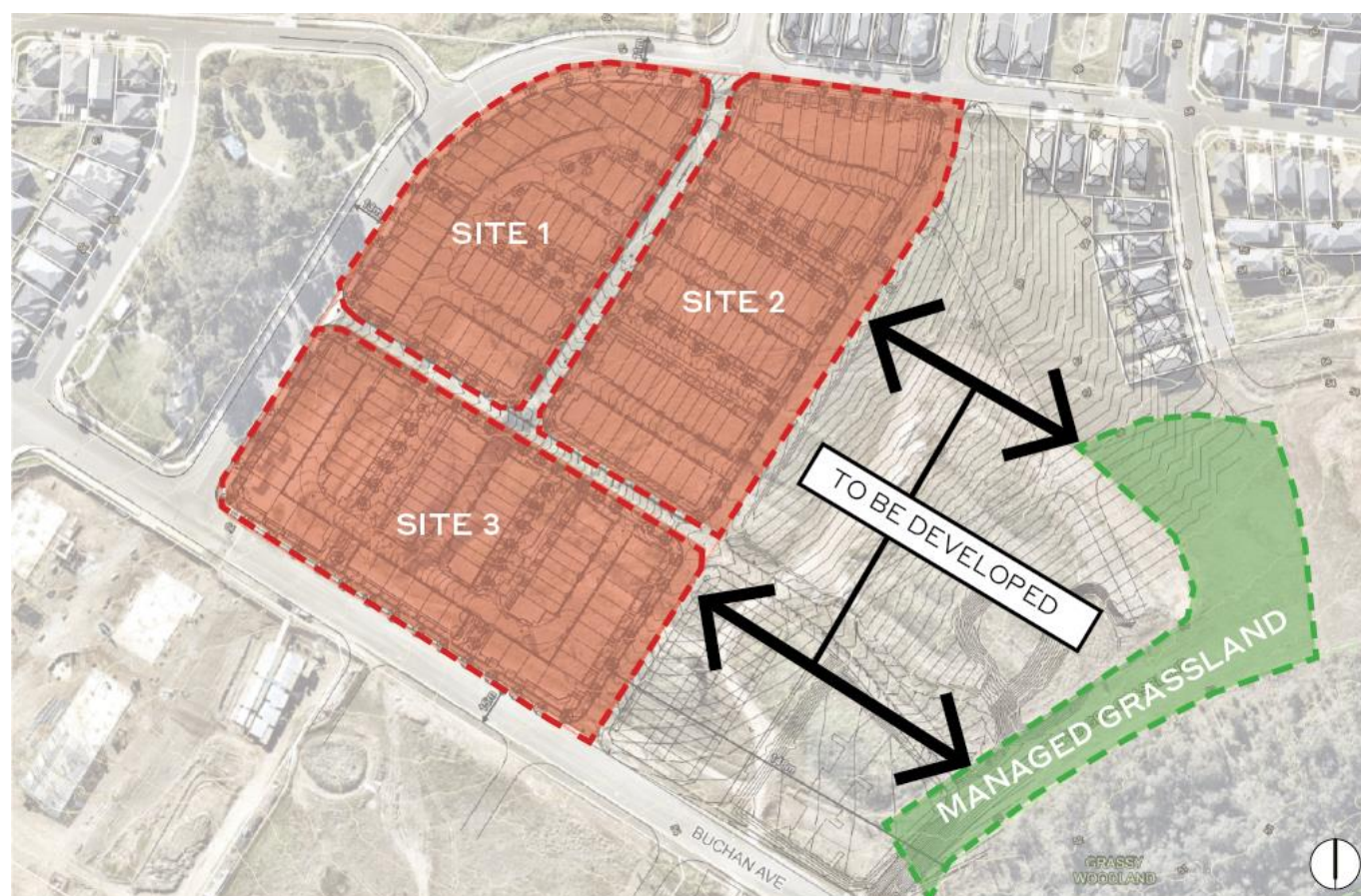


Figure 32 Off-Site Asset Protection Zone (Managed Grassland, East)

Source: Ethos Urban (aerial underlay prepared by Travers Bushfire and Ecology)

4.16 Water Cycle Management

4.16.1 MOD 5 (Under Assessment)

The proposed development of Sites 1-3 is not considered to have any adverse or material impact on the existing hydrologic analyses that were undertaken using the rainfall - runoff flood routing model XP-RAFTS (Runoff and Flow Training Simulation with XP Graphical Interface) for pre and post development flows to accompany the Environmental Assessment Report for Mod 5 of the Concept Plan.

Specifically, it is noted that the hydrological modelling for the Mod 5 study, by J Wyndham Prince who have been involved in the Edmondson Park Concept Plan for over a decade, built on the previous strategies that have been prepared in the Edmondson Park Precinct.

Notwithstanding the above, it is acknowledged that MOD 5 remains under assessment to date. Further assessment of the design interventions that are proposed for effective water cycle management is provided at **Section 4.16.2**, including the associated subsections.

4.16.2 Stormwater Management

The stormwater infrastructure that will service the proposed development is shown in the Civil Engineering Plans prepared by Enscape Studio, which are provided at **Appendix G**. An overview of the proposed stormwater infrastructure is provided within the Stormwater Management Plan Report (**Appendix F**).

The proposed stormwater design for Sites 1-3, including preliminary construction management measures for erosion and sediment control, is also summarised throughout **Section 3.11** of this report. A condensed assessment has been provided by the subsections below with regard for stormwater quality and stormwater quantity.

Stormwater Quality

The Stormwater Management Plan Report (**Appendix F**) and Civil Engineering Design Plans (**Appendix G**) propose a stormwater design for Sites 1-3 that complies with the *Water Cycle Management Plan* (2010) prepared by J. Wyndham Prince for the broader Edmondson Park release area.

The appended stormwater design documentation also confirms that the proposed development satisfies the applicable requirements of the *Edmondson Park Town Centre North–Super Lot Civil Engineering, Services & Infrastructure Report* prepared by IDC (June, 2021). This report states that:

“In accordance with the outcomes of the Water Cycle Management Plan [for the broader Edmondson Park release area as referenced above], we note that water quality requirements for the proposed DA works area are to ultimately be accommodated in a future regional raingarden.”

This raingarden, which is referenced as ‘Raingarden No. D5’, will be designed and constructed through a partnership between Landcom and Council. This raingarden will be delivered in due course.

It is understood that any works undertaken prior to the completion of the raingarden and other water quality treatment works will necessitate the temporary provision of an on-site water quality treatment device. As noted in the Stormwater Management Plan Report (**Appendix F**), this temporary requirement has been addressed by the proposed stormwater design, which will treat site runoff in the interim until regional water quality treatment works have been completed.

The Stormwater Management Plan has also made provision for the effective management of stormwater quality during the construction phase. A Preliminary Erosion and Sediment Control Plan is attached to the Civil Engineering Design Drawings (**Appendix G**). This plan has been provided to demonstrate that appropriate erosion and sediment control measures, including those listed at **Section 3.11.2**, can be readily implemented during the construction phase.

Rainwater Tanks

Rainwater harvesting tanks will be provided for each individual townhouse. This design intervention satisfies feedback that has been received from the Design Excellence Panel in regard to the adoption of sustainable design initiatives across the proposed development. Further reference should be made to the discussion that is provided at **Section 4.23**.

Stormwater Quantity and On-Site Detention

The *Edmondson Park Town Centre North – Super Lot Civil Engineering, Services & Infrastructure Report* establishes that provision of additional on-site stormwater detention facilities is not required for the proposed development of Sites 1-3. This is because undetained post-development stormwater flows from Sites 1-3 have already been accounted for in the design of the Maxwell’s Creek Regional Detention Basin.

It has been established at **Section 3.11** that no stormwater discharge to private land is proposed. All legal discharge points are sited at locations that will facilitate this arrangement for the management of stormwater runoff, which will utilise stormwater drainage infrastructure within the surrounding road reserves.

The stormwater infrastructure has also been designed to service the site efficiently during storm events, including 5–100-year ARI storm events. This is further discussed at **Section 4.17**.

4.17 Flood Planning and Storm Events

A Flood Impact Assessment has been provided at Section 4.0 of the Stormwater Management Plan Report (**Appendix F**). This section of the Stormwater Management Plan Report considers the proposed stormwater design and the insignificant nature of existing flood behaviour at the site to conclude that the site will not be impacted by flood water. In particular, the following is noted:

- **The proposed development is not sited on flood liable land.**

The site is not located on flood liable land. This is shown by the flood mapping that Council has completed in relation to the Austral, Kemps Creek, and Nepean River catchments. This has been previously established at **Section 2.3**, which includes a graphic depiction of the location of Sites 1-3 in relation to the flood liable land that is identified at the Maxwells Creek Corridor (**Figure 8**).

- **The proposed stormwater design can withstand storm events.**

It has been established in the Stormwater Management Plan Report (**Appendix F**) that the proposed in-ground (piped) and overland stormwater conveyance infrastructures will satisfy the stormwater drainage serviceability requirements during the 5-100-year ARI storm events.

- **The proposed stormwater design will prevent surface-level stormwater accumulation.**

Further to the above, it has been established that suitable stormwater management arrangements will be in place to prevent the accumulation of stormwater runoff at ground level. In this regard, the proposed development of Sites 1-3 is considered to present an amenable outcome for the site in relation to flood planning.

4.18 Operational Waste Management

An Operational Waste Management Plan (OWMP) has been prepared by Elephants Foot. This management document is provided at **Appendix K**. The OWMP considers the operational phase of the proposed development, as outlined by the sections below.

4.18.1 Townhouse Waste Procedures

The procedure for waste management will comprise of townhouse resident responsibility to manage their own individual bins for Council to collect on a regular scheduled basis. Townhouse residents will be provided with a bin storage area within each property for storage of individual waste and recycling bins for that property. It is expected that the resident bin storage area will be contained within the courtyard front setback area neatly, within a garage area or within a built enclosure of some capacity. Residents will be responsible for depositing their waste and recycling directly into their own private corresponding bins.

The Liverpool Council offers a three-bin service to single townhouse dwellings. It consists of separate bins for general waste, commingled recycling, and garden organics waste. Each townhouse dwelling is entitled to:

- 1x 140L yellow lid MGB for General Waste,
- 1x 240L yellow lid MGB for Recycling,
- 1x 240L green lid MGB for Garden Organics,

On that basis, the total recommended number of bins for this development is as follows:

- **General Waste - red lid bin:** 178 x 140L MGBs collected on a weekly basis
- **Recycling - yellow lid bin:** 178 x 240L MGBs collected on an alternate fortnightly basis
- **Garden organics - green lid bin:** 178 x 240L MGBs collected on an alternate fortnightly basis

It is expected that Council will collect each dwelling's bins from the kerbside in accordance with Council's collection schedule.

4.19 Crime Prevention through Environmental Design (CPTED)

The proposal has been designed having regard to Crime Prevention Through Environmental Design (CPTED) principles. These principles are discussed below.

Surveillance:

- Townhouse entries (including rear lane access) each address the streetscape, with habitable rooms and circulation spaces overlooking the public domain in this regard, providing a high degree of natural surveillance.
- Private open space areas are allowed for within the front setback areas of each townhouse where outdoor leisure and play is able to be facilitated, providing further opportunities for activation which will in turn provide overlooking of the streetscape and towards other properties.

Access Control:

- The townhouse typologies include front setback fences that are gated and provide a clear delineation of private and public space.
- Access to rear garages will be controlled by electronic security devices and systems linked to specific individual townhouses on a unique ownership arrangement.

- Access to the communal open space at the podium roof level of the RFB component will be restricted to residents of the development only.

Territorial Reinforcement:

- As mentioned above, the design of the front private open spaces and facades of the townhouses will be characterised by front fences that have been designed in a permeable nature, providing the perception that the site is privately owned without presenting an overly fortified front.
- The character of the townhouses have been designed with distinction as residential developments, clearly defining the use of the buildings and providing the perception that there is a vested private interest in the site that is activated in a residential manner.
- The townhouse orientations towards the streetscape, including habitable spaces and rooftops that are able to overlook the streetscape provide the perception that there are formal and informal guardians on site (owners, renters, visitors and the like), presenting a territorial presence to a degree.
- The ground level through-site link will be lit during the evening. This will provide adequate visibility and will minimise any potential association with antisocial behaviour.

Activity and Space Management:

- The streetscape is likely to be lit via public domain lighting. Adequate lighting, combined with the presence of formal and informal guardians on site will enable the perception of high visibility at the streetscape and may assist in minimising any potential association with antisocial behaviour.
- As with territorial reinforcement, occupants of the building are expected to maintain the property including any private open space maintenance, contributing to the perception that the townhouses will be cared for and may assist in minimising opportunities for crime.

4.20 BASIX

A BASIX certificate has been provided by the project as is included at **Appendix L**. The certificate demonstrates that the proposed development will satisfy the relevant requirements for water, thermal and energy efficiency.

4.21 Building Code Compliance (BCA/NCC)

The proposal can comply with the current Deemed-to-Satisfy (DTS) provisions of the BCA. Compliance with these requirements will be confirmed through ongoing design development, and prior to the issuing of a Construction Certificate.

4.22 Accessibility

The proposal can achieve the accessibility objectives and all mandatory accessibility requirements. Compliance with these requirements will be confirmed prior to the issue of a Construction Certificate. This has been demonstrated by the Access Report that is provided at **Appendix O**.

4.23 Sustainable Design

The proposed development of Sites 1-3 will demonstrate a high-quality outcome for sustainable design. This will promote Edmondson Park Town Centre North as a marketable and sustainable residential and lifestyle destination. Sustainable design initiatives that have been proposed are outlined by the Design Report (**Appendix B**). A summary of sustainable design elements that are proposed is provided in list form below.

- Rainwater harvesting tanks will be provided for each individual townhouse. As mentioned, this design intervention satisfies feedback that has been received from the Design Excellence Panel.
- The proposed street trees will support the tree canopy target for Greater Sydney (40%) that has been established by the Government Architect of NSW. Specifically, it is noted that the canopy coverage across the internal street network (>60%) will exceed this benchmark.
- The landscaped streetscapes across Sites 1-3 are considered to incorporate features that will achieve an amenable public domain design outcome for the future residents of the Edmondson Park Town Centre North precinct. Refer to **Section 4.4**.
- Private outdoor spaces and habitable rooms have been orientated to optimise solar amenity, and screening has been incorporated across the proposed façade design typologies where it is necessary to minimise solar heat gain.

- Opportunities for the provision of photovoltaic (PV) solar panels were explored as part of the design development process that preceded the submission of this DA. Due to the 12m height limit that applies across the majority of Sites 1-3, the delivery of PV solar panels is not viable. The additional height that will be allowed under MOD 5 (under assessment) across a small part of Site 1 and Site 3 has been used to provide roof level terraces. The benefit of providing these terraces has been well-established.

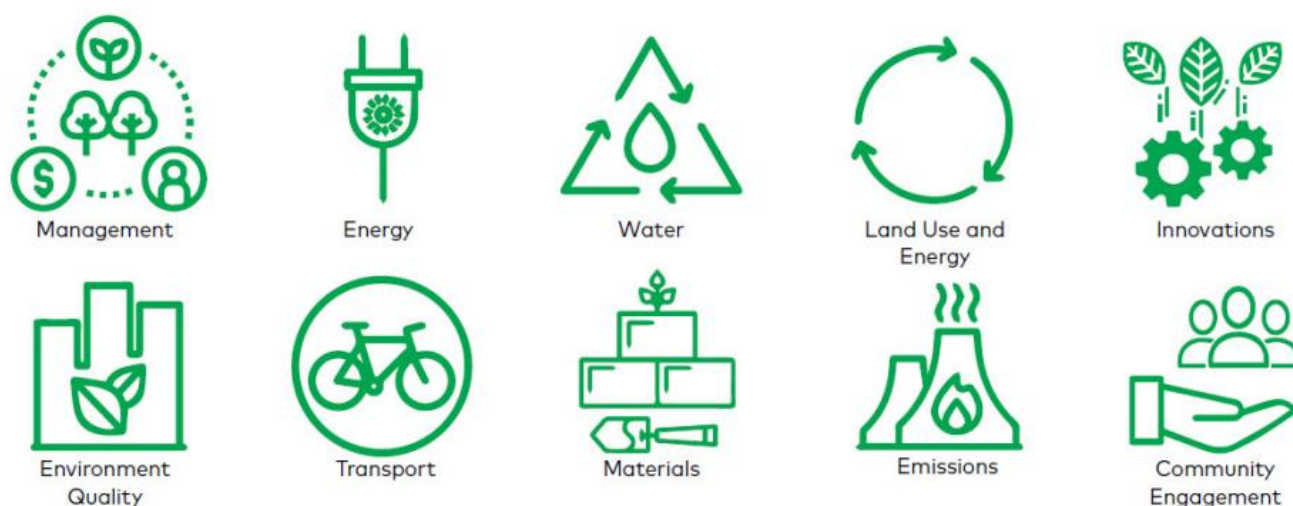


Figure 33 Overview of Sustainable Design Principles

Source: Cox

4.24 Affordable Dwellings

In accordance with commitment 70 of the Concept Plan, affordable dwellings will be available in the Landcom Town Centre North and Residential Precincts. Landcom is expected to meet this commitment through its delivery of the Landcom Town Centre North core, particularly in the more accessible and higher density residential developments. Landcom did not require Urban Property Group to make provision for affordable housing on the Site.

4.25 Social and Economic Impacts

The proposed development will have an overall positive social and economic impact on the surrounding area and local community. The proposal is considered to have a positive social and economic impact because:

- The capital investment associated with the proposal (refer to **Appendix N**) will have a positive economic impact. The proposal will also generate a considerable direct and indirect employment opportunities, particularly during the construction phase.
- It will provide a variety of dwelling types, including a range of apartment typologies and townhouses, to address the needs of existing and future residents in the local area.
- It will facilitate appropriate residential uplift at the site in proximity to public transport infrastructure. We further note that existing and planned public transport infrastructure will provide a high level of access to employment opportunities.
- Surrounding education uses and areas of open space compliment the proposed residential development, which will attract a range of demographic groups, including family households.
- Promotes local and state government initiatives in relation to urban growth and densification by increasing the density of residential housing in close proximity to services, employment and educational facilities.
- Achieve high environmental performance (water and energy) targets.
- The proposal will provide for the realisation of the above-mentioned benefits, noting the site has been vacant for some time.

Overall, the proposal will have a positive social and economic impact on the local area and the wider local government area. In regard to Pre-DA feedback that was issued by Liverpool City Council, it is concluded that the scope of this DA and the nature of the proposed residential development does not necessitate the preparation of an SIA.

4.26 Site Suitability

Having regard to the characteristics of the site and its location, the proposed development is considered to be appropriate in that:

- The proposed development presents a use and built form for the site that is permitted with consent under the State Environmental Planning Policy (Precincts – Western Parkland City) 2021. The site is also earmarked for residential development under the concept plan.
- The site provides suitable housing in close proximity to several educational establishments, quality open space within walkable distance, key transport corridors, and services around Landcom Town Centre North and South.
- The scale, height and form of the proposed development is generally compliant with the development controls and is consistent with the built form planning framework.
- The area and shape of the site present a suitable location for the proposed development.
- Future residents will benefit from access to Clermont Park and to the Maxwells Creek Public Open Space / Conservation Corridor, which will accommodate a number of public facilities, including a recreational path and a play area for children.
- The site will have access to all utility services to accommodate the demand generated by the proposed development.
- The proposed development will not result in any unacceptable or material environmental impacts in relation to adjoining and surrounding properties, particularly in terms of overshadowing, views, privacy and solar access – much of which has already been considered in the Concept Plan and Subsequent amendments.

4.27 Public Interest

The development is a generally compliant scheme and will increase the supply and choice of housing in a highly accessible location, identified as being appropriate for development.

The proposal will offer a significant opportunity to revitalise the site in a way that is generally consistent with Concept Plan, built form controls, and provisions of Landcom Town Centre North Design Guidelines and the ADG. For these reasons, the development is considered consistent with the public interest.

5.0 Conclusion

This DA seeks approval for the construction of 178 new residential townhouses across Sites 1-3 within the Landcom Town Centre North. Each townhouse will have a garage with 1-2 car parking spaces, which will provide a total of 258 car parking spaces across Sites 1-3. Vehicle access to each garage will be provided by access roads and rear lanes that will traverse each street block.

The proposed development presents a use for the site that is permitted with consent under the State Environmental Planning Policy (Precincts – Western Parkland City) 2021. The site is also identified for residential development under the Concept Plan. In this regard, the suitability of the site for the proposed development has been well-established.

The proposed development presents an important progression towards the goal to deliver high-quality housing stock at Landcom Town Centre North. This residential townhouse development will support the overall vision for this precinct, which was first introduced over 10 years ago. This DA is supportable in regard to the principles that underpin this vision, which are based on successful historical town centres, and seek to integrate contemporary planning and urban design to achieve high quality density, amenity and place making.

The proposed development is consistent with the Concept Plan and the Statement of Commitments as it relates to Sites 1-3. This SEE has demonstrated that the proposal will not result in any adverse or additional environmental impacts beyond the scope of the initial environmental assessment for the Concept Plan.

There are strong environmental planning grounds for the approval of this DA, which will not result in any adverse environment, social or economic impacts. In light of the assessment provided by this SEE and the appended documentation, it is without hesitation that we recommend this DA for approval.